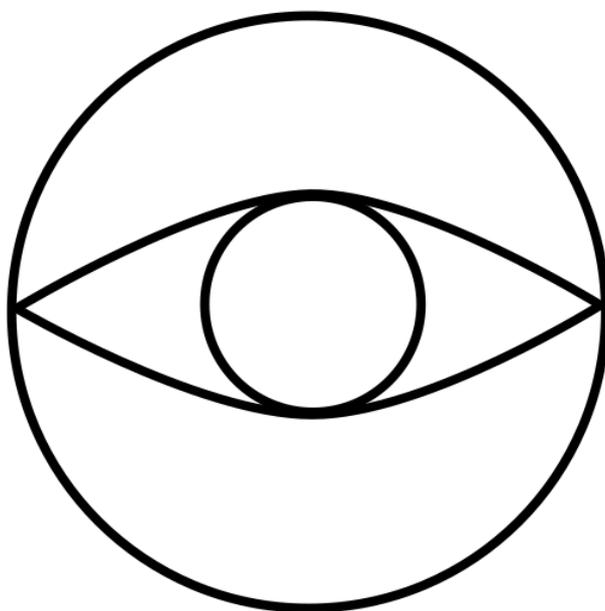


Looking Ahead



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Autism

I am writing this as a reflection on my childhood and time in school, in the hope that it would help others in a similar situation get some knowledge directly instead of figuring it out from mistakes made over many years. Chances are, if you are on this website, you have similar types of thinking patterns which are not "neurotypical" or what I will call here "normal". Normal people would see this website as a sort of freak-show exhibit, something to glance at and say "how weird" and move on. They would not read any of the articles unless it was in direct furtherance of their goals, such as copy-pasting something for a class assignment or finding ways to network with other people, with an ultimate purpose of increasing social status. There are many normal people in engineering - they see it as a job that for one reason or another is preferable to the rest of the market, a means to reach their goal of increased social status. However, my interest in completing the various technical projects on this site is rooted more in a passion for the act of creation in itself. I don't get any financial benefits from undertaking the projects, I don't gain status symbols like fancy clothes/cars, and I don't gain social standing like friendship or respect or even likes/views/subscribers - all I get is the working object and this is enough to make me happy. This difference in drive or incentive, in what I feel is the ultimate goal for me vs what other people have as their ultimate goals, when combined with a lack of awareness of this difference in young age, caused much suffering throughout my upbringing.

Could it be that the condition I've experienced was due to influences of upbringing rather than genetics? I think this is plausible, and would argue that the "obviously disabled" low-functioning autistic person actually has a basically different ailment than the high-functioning "aspie" autistic person even though both are considered autism now. It seems autism is an umbrella term for "a bunch of symptoms of a person that acts weird" ie not normal. I'm not aware of any genetic tests for autism, and our genetic

knowledge is very sophisticated now ¹. It could be that the brain's social-interaction learning pathways have a very limited time to develop and some parental or environmental influence at an inopportune time is enough to bypass this stage, and after that runaway (self-reinforcing) cycles occur to make the condition stronger: a child acts in a slightly strange way in a social setting, that child is excluded from further social interaction, thus he has no way to adjust his behavior to match expectations and just keeps getting excluded more. This would suggest there is a link between autism and infant attachment. The parenting styles and customs are generally passed on in families, so an observation of familial trends of autism should not be taken as an indicator of genetic factors. On the other hand, autism outside of familial lines is a clear sign of environmental influences - for which I think there are many clear examples. Repetitive and "hard" video games (distinctly different from story-based or team-based games) have become much more prominent and lax parents allow their children to spend most of the day on such games, which makes children more interested in games than social interactions. It could be that differential development leading to normal vs aspie behavior comes from differences in finding fulfillment - the normal child has an intuitive understanding that satisfaction comes from social success (ie intrinsically valuing themselves as individuals and seeking to capitalize on that), while the aspie child has an understanding that satisfaction comes from some technical accomplishment (ie intrinsically accepting their lack of worth/uselessness as an individual, and seeking to establish self-worth by meeting arbitrary performance goals). A similar distinction lies in ability for classification, which categorizes people by descriptors and is necessary for handling complex social situations (because without such simplifications it is just impossible to make any decisions): the normal child categorizes other people and in social situations carries out experiments on them to learn how they behave, while the aspie child sees other people as free-will beings and does not even consider social experiments (as this would reduce the humanity of the people in his mind) so does not gain social competence. Could it be, then, that very strict and performance-oriented parenting leads to "high functioning autism"? Having met a number of men raised in the stereotypical "tiger mom" families, I think this is very plausible. The increased expectations placed on sons and only-children in families would suggest that incidences of such diagnoses would be more prevalent in men with no or poor sibling relations, which again from real-world experience seems plausible (consider, for instance, the prevalence of men in "hard" science/math fields, and the associated

¹For more detailed criticisms of the genetic mental illness view, including problems with twin studies, see [<http://www.jayjoseph.net/publications>]. Also [<http://wildtruth.net/genetics-behind-psychopathology-a-convenient-excuse-for-parents/>]

stereotype of nerd = awkward virgin). After all the brain can only do so much mental processing, and if by parental influence all that processing is directed towards some technical skill, it shouldn't be much of a surprise that the brain adjusts itself so it is good at that skill, rather than social relations. The brain is not born knowing social skills - it has to learn through undirected (ie not focused on some adult-imposed purpose, but focused on what the child finds enjoyable, which evolution has insured leads to social competence) social interactions in childhood, and if it does not get the chance to do this due to over-strict (practice violin all day) or over-lax (watch youtube all day - it is enjoyable but evolution took place when this wasn't an option) parents or other environmental factors, it should be really obvious what the source of the problem is when later the child is seen to struggle socially.

For those of you like me, this article outlines the overarching rules of social interactions and the reasoning behind their often inconsistent and contradictory nature. Normal people have an intuitive understanding of this so they never bother writing out why or how it works, just like I have an intuitive understanding of engineering systems so I've never felt a need to look any further at why or how I am actually capable of doing that. I think a good starting point for someone like young me, who was easily manipulated and often put into socially-demeaning situations, is to know that: other people will always take actions that are in line with what they want for themselves. What they want for themselves, in turn, is what feels pleasing to their brain, a good thing by definition (like sugar tasting sweet is its own reward). A typical goal is an increase in social standing - achieved by completing some tasks which are considered by society at large to be beneficial. This has clear evolutionary roots in getting a group of monkeys to focus on a single objective, and in modern times is expressed as fashion, jewelry, fancy watches and cars, weddings and ceremonies, likes and views of social media uploads; such seeking of social standing leads to formation of "cliques" (cool kids/nerds/jocks) around grade 9 when the social abilities of normal people become developed. People are selfish - all people are selfish - even the altruists that donate to charity are selfish, they only donate because it makes them feel good in some way. People are smart and will do what they can to get away with what they want - delay fulfillment, take indirect paths, sacrifice one thing to get another, act and pretend and cheat and lie, all justified as long as they get what they want and avoid what they don't want. And it is safe to assume that what other people want will be different, and perhaps entirely contradictory, to what you want. This includes parents/grandparents, siblings, close friends, distant friends, and helpful strangers on the street - they all want something good for themselves. This was difficult for me to grasp for a long time because society at large does a good job of hiding it - this is the "I feel

like I have to put on a mask" sentiment that I have seen expressed by normal people but could never understand (the reason for hiding it is to 'save face', which is another sentiment I couldn't understand). Look at all social interactions as a game - the goal of the game is for multiple people to come together and find ways to satisfy their own goals while meeting required physical constraints. Usually it will be impossible for everyone to perfectly satisfy their goals, so changes will be necessary - who should change their goals and by how much? The social interaction game is an optimization process that aims to solve this complex question. This game exists because it brings to the forefront the group's common goals and ways to achieve them, thus the whole group can survive better in the wild so such behavior has been evolutionarily selected (this is why, for normal people, participating feels enjoyable in the first place). The evolutionary origin is why illogical effects like peer pressure/bandwagon/echo chamber and halo effect are realities of life - these are contradictory to carrying out impeccable logical analysis but essential to keeping a group invested in each other, and it is the latter which is more important for survival. Normal people develop an intuitive understanding of the rules of the game, while socially stunted people like me do not, so when I join the game I do things that are against the normal rules - I break their expectations for normal social behavior and the punishment for that is mockery or ostracism, designed to lower my social standing so I can't sway the group's decision as I have demonstrated that I don't understand what they're trying to accomplish.

A consequence of the nature of this game is the expectation that the initiator of a social interaction has some purpose for the interaction. If I start talking to a person, they will try to guess what my purpose is - by the fact that I started the interaction in the first place I've indicated that I have some purpose. This puts me at a knowledge advantage - I know what I'm trying to achieve and I know how they respond to my actions, whereas they don't know what I'm trying to achieve and are trying to gauge my responses to their actions to figure it out. Such a position is unpleasant to them, because they do not want to be taken advantage of. This is why it will be difficult to find a stranger on the street and just strike up a long conversation, a typical attempt to do so would focus on some common element (ie seeing someone wearing a sports team shirt: "hey did you see the game last night?") in which case the implied statement is "my goal is to talk about this thing that interests me and learn more about it" which is an acceptable goal and puts the other person at ease. In my childhood I often started social interactions because "it seemed like the thing to do", just for the sake of it (maybe I was copying what I saw others doing) - with the result being that I had no goal for the interaction I had started (which, looking at social interactions as a game in which goals are met, is a sure way to lose - the other person, if they are socially competent enough,

will "use" you to further their own goals while you gain nothing from the exchange except for sacrificing your time/effort). This led to many awkward encounters where the other person would try to talk with me to gauge what my goal was but there was no goal - this led the other person to feel like I am hiding some terrible nefarious goal and treat me with high caution. This sort of "aimless" interaction is reserved for people whom one finds close and trusts a lot, based on enough shared social experiences to know that even an aimless chat might lead to some sort of benefit. This is because the basis for this interaction is trusting that the other person's goals are in line with one's own, in turn because such interaction opens up significant potential for manipulation. I didn't realize this because I was basically wide open to manipulation myself, not understanding the rules of social interaction, so to me this sort of exchange seemed just a natural thing to engage in. However from the point of view of a normal person, what I was doing was like walking up to a house, ringing the doorbell, then walking in and treating it like I live there - close friends whom the house owner knows can do that, but I haven't earned that level of trust and it is inappropriate for me to do that because it is insulting of the other person's autonomy (instead of your house = my house, in the social exchange there is your mind = my mind). So as a first rule, for someone like young me, set goals for each social interaction you partake in. Do not begin social interactions without a specific goal and path to achieve it, because otherwise they will end in awkward silence. I felt that doing this would be devaluing the human side of the relationship and treating everyone in a shallow materialistic manner, but the nature of the game is such that everyone expects others to have some goal so coming in without a goal is breaking the rules of the game, so even though your intentions are honest eventually people will not want to play. Similarly, if you are contacted unexpectedly by another person and they initiate some social exchange, immediately ask yourself: what might their goal be? How will they seek to use my abilities to achieve it? Unless you have already known this person for a very long time, they will not go out of their way to contact you "just to chat" (and even those you have known a very long time, they still have a goal, it is just less likely to be one that uses you as a service). The stranger on the street asking "how are you?" doesn't actually care about your day, he has some goal (maybe asking the time/ directions/ money) and is using a common conversation starter line.

Why all these unwritten rules? Wouldn't it be easier for everyone to just logically arrive at an optimal conclusion? In theory, yes. Money is a rigid mechanism that helps carry out such optimizations in a more logical manner. In practice, no, because our evolutionary origin cannot be neglected. For better or worse we are not robots but emotional/feeling beings, and as such there are certain things we find pleasant and others unpleasant. Outlining the logical rules and requirements, and thus "facing reality", is

very unpleasant for normal people (because this eventually harks to facing death/inevitability, an ultimate fear), and yes even for autistic people there are things they will face more readily and others they will prefer to just not discuss openly. It then becomes a shared unwritten rule that certain actions and topics are not for public discussion, because it is generally accepted that engaging in such discussion is unpleasant to at least one of the parties. This shouldn't be interpreted to mean the game is designed to be nice to you - it's not - but rather that doing things considered unacceptable will hurt you in some way, either lowering your social standing or even elevating to physical violence, so it's in your interest to avoid them. In middle school the whole classroom will gladly join in mocking the student that doesn't fit in, knowing quite well that their actions are hurtful. By high school such mockery becomes "too easy", and engaging in it will devalue the offender's social status, so on the whole overt displays of bullying decrease but higher-level "scheming" behaviors take their place as defining social status: notions of prom king/queen and all the associated drama serve as a sort of benchmark. Seen in another light, throughout all this, normal children practice different types of social interactions to learn the power of words used as tools to influence other people. Meanwhile autistic children just pass through social interactions (are excluded or do not realize they can participate) and learn words only as symbols. This distinction - words as tools vs words as symbols - is crucial for understanding social dynamics, because effectively all our interactions with other people are based solely on words. In the movies slaves are shown as shackled to some chain, this is a physical restraint, but even then it is practically impossible to use physical means to direct other people's actions. The slave driver can whip and beat the slaves, but at some point the slaves have to follow verbal directives - the whip didn't direct the slave's actions, it just caused pain, the action came from the understanding of what the verbal command means. There is no reason to be so primitive - words by themselves have plenty of power, so physical restraints like shackles and chains are unnecessary - they weren't contributing much in the first place. Today the sentiment is towards minimal or no corporal punishment for childrearing, and children raised this way still end up as normal members of society. This is significant, it means words have genuine power - power to change another person's actions. In a social interaction, words are used by the people involved, so as to change others' actions to be in line with their goals. There is an understanding for a participant that while he is trying to influence others to do what he wants, the others will be trying to influence him to do what they want. The initial state is thus with everyone "having their guard up" - no one wants to be influenced and turned away from his goals/taken advantage of; transitioning from this to further discussion is made easier by means of some "icebreaker" activity or other comfortable measures like catered food

or being greeted warmly. Compromises come in the form of a participant accepting some degree of another's influence with the expectation that in turn the other will accept some degree of his influence. Not understanding the role of words in this process leads to social incompetence, and autistic people predominantly misrepresent this situation because they take words at the dictionary-definition face value rather than as means of social influence.

One example is barter trade or the bazaar. There, buyer and seller haggle over prices and try to get a mutually agreeable deal. Why not just have one price on display and everyone pays it? Indeed this is an easier system, and even normal people prefer supermarkets to bazaars. But the dynamic is interesting to explore, as it is a way of finding agreement in an ad-hoc (not centralized or standardized) scenario, and as such shows negotiation skills which are useful in many other social interactions. Here, the seller's goal is to get money while the buyer's goal is to get goods. The seller has the ability to sell or not sell, while the buyer has the ability to buy or not buy. In the exchange that takes place, the seller's desire to sell and buyer's desire to buy are exhibited and compared for relative importance. If the buyer desperately wants to buy, the seller can charge a higher price, whereas if the seller desperately wants to sell, the buyer can expect a lower price. To get the best deal for themselves, each party should then make sure to not show any sign of desperation and at least act prepared to walk away (of course, the risk being that the other party will actually walk away in turn). I never was good at haggling, I felt most comfortable paying the initial price, I felt that asking for a lower price would be cheating the seller out of his rightful earnings, or insulting him and making him refuse to do business. Such a sentiment was probably from various interactions with adults in my upbringing, in which I was expected to follow commands and never think of disobeying or expressing my own views. Imagine a situation where I go to a bazaar to buy some tomatos, my goal is to return from the bazaar with a kilo of tomatos. I walk by many stands until I see a large table with tomatos on it. I walk up to the seller:

- "How much are the tomatos?"
- "\$10 per kilo"
- "OK here's \$10"

The seller will happily take the money, weigh out the tomatos, and I'll be on my way back. As the saying with haggling goes, if you're happy with what you got for what you paid, then you got a good deal. However as I turn around I overhear another customer at the same stand:

- "How much are the tomatos?"
- "\$10 per kilo"
- "That's ridiculous. I'll give you \$5 for 1 kilo"

- "No way. \$5? These are real good tomatos, imported from far away, it's \$10 per kilo"
- "These tomatos are old and turning brown, you'd be lucky if anybody buys them at \$10"
- "OK, just for you, \$9 per kilo"
- "\$9 is closer, I think these are worth about \$7 per kilo"
- "Look these are the best tomatos in this market, I'm already giving you a huge discount"
- "Fine, how about 2 kilos for \$15"
- "OK"

This person just got the same product for \$7.50 - a 25% discount! And weirdly enough, the seller probably has more respect for this second customer than for me, even though I paid more so logically the seller should like me more, because I have shown that I easily do what I'm told and thus do not have a strong personality. From an economic point of view, haggling serves to fill out the demand/supply excess, namely if a product is sold at a single set price (as in a supermarket) there will be some people who would have been willing to pay more but who got savings by paying less than they would have, while there will be some people who would only buy for less and thus don't buy at all when the price is a constant above their willingness to pay. This is why gradations of service exist, most usually with a premium for fast service and a discount for advance-booking service: because if you need something right away, you are more desperate to get it and are willing to pay more, while if you don't really need something, the seller would rather have you buy it than not, thus you can get a discount - different prices for the same service, to gain a net benefit to consumer and producer. Haggling achieves something like this, with the willingness to haggle being tied to just how much you want to pay less. The idea being, that a well-off person will not bother with haggling, while a poor person will spend lots of time haggling because they don't have another choice. But more simply: no authority has said tomatos are to be priced as x , so a seller will naturally want to get as much as he can, and will price the goods accordingly. What stops him from pricing astronomically and being unwilling to negotiate? The existence of other sellers in competition, and also that at some point high prices will drive away buyers and at the end of the day he seeks to get money so it is necessary to retain buyers. The same plays out for the buyers. When I walked to the seller, my goal was to get a kilo of tomatos, and I achieved my goal by paying \$10. This is a poor approach to haggling or negotiation in general - negotiation always involves compromises, so goals must involve what I am willing to give up: a proper goal would be to get a kilo of tomatos for no more than \$9. In other words, if I cannot get a deal that is under \$9, I will walk away and try again with another seller. The seller knows this game as well: he has a goal like sell a kilo of tomatos for no less than \$7. He knows how much it cost to produce the goods and how much is the minimum value he is willing to charge - if he cannot get a deal that is above \$7 he will always refuse the sale. Of course given the social nature of this exchange, goals can get

more detailed. For instance, if it is the end of the day, the seller might not want to haul back any remaining goods and will give a generous discount just to get the stuff off his hands. If the tomatos are actually starting to turn old, the seller will similarly prefer to just give away more as long as it gives some extra money, because the alternative is rotten tomatos to throw away and no extra money.

From reading all this, I am still no more comfortable actually engaging in haggling. This is because I can't help but take words at face value. If the seller said \$10, then it's \$10 - I don't intuitively accept that this could be an exaggeration, a real-time act or lie happening right in front of my face - he says it with such conviction after all. Consider the process of an auction: the auctioneer starts with some price, then increases it until only one person is willing to pay.

- "\$10, do I have \$10?"
- "\$15, I see \$15 there.."
- "\$20, we've got \$20, going once, going twice"
- "\$25, going once, going twice, sold for \$25 to the gentleman there"

Here the \$10 or \$15 or any amount, is not given as a literal statement of price. It is given as a hypothetical, the implied message is "who here is willing to pay \$10?", not "pay \$10 and you will get this item". This is how the exchange of haggling should be seen. When the above seller says "\$10 per kilo" the implication is "are you willing to pay \$10?", not "you must pay \$10". Do you see the distinction, that words can act as a tool and not a symbol? In the above exchange, the "there are real good tomatos, imported" and "these tomatos are old" are similarly used not as factual exchanges but as tools to express emotional state: the seller implies "You don't understand what good produce looks like when it's right in your face" while the buyer implies "I don't value these nearly as much as you do". They might not even be imported at all - ie the seller lies about this because he knows it will likely bring in a higher price and there is no way the buyer will know the difference. Both expect this sort of exchange - in playing along, they act out feelings of rage/frustration, for instance the seller when saying "these are the best tomatos in this market" will act smug and turn away from the customer, implying "This is quality stuff, if you don't want it go away, don't insult my position" - the seller didn't actually check all the tomatos in the market and find his to be the best, the phrase is an exaggeration and the tone and body language are chosen to show to the buyer the degree to which the seller is actually willing to call off the deal. It is important to understand that continued engagement implies interest - after the buyer said "That's ridiculous. I'll give you \$5" the seller will act insulted and retributive but this is an expected part of the game - would he just say "yes I'll gladly give these for \$5!?" I would have, from the way I was brought

up, because I was taught to do as others told me. I would have been glad to give them for \$5 or \$10 or \$3, as long as the other person was forceful enough in saying how ridiculous my price was, because I took others' words at face value, as symbols. But in this exchange it is important to know your worth as an individual - there are some things that you just won't do, and for the seller this is selling below what it cost to produce, in this example \$7. The seller acts offended by the mere suggestion of \$5 - but he knows that this is part of the haggle game (the buyer is expected to start with a low price) and in continuing to engage in the conversation with "No way..." he shows that he's still playing but will not go that low. As his goal is to get money, it would be pointless to get offended and turn away all potential customers, but maybe there are situations where the seller is just tired of haggling and will not bother - if he really is offended, he will not participate further. He will say something like "OK go to another place then" or even not reply at all. By replying and offering a price (here repeating \$10 to show he is not too willing to haggle, but will go a bit lower) he is saying "I would like you to buy this, but \$5 will not work, try again". Of course unwritten rules always have more unwritten rules - in haggling you must be aware of the situation and the appropriate expectations. Some situations, like the supermarket, don't accept any haggling because the buyer doesn't have power in the big business-individual dynamic, generally as situations become more equal and less standardized like with smaller businesses, family stores, and down to the bazaar which is individual-individual dynamic, haggling becomes a greater possibility (though not necessarily an expectation; in the European/Western countries haggling is much less common than in Asia). Even when haggling is not the norm, the underlying skill of being able to ask for what you want is a valuable one to understand - it may well be possible to find surprising options: perhaps a small business will be glad to offer advice on how to use their merchandise as part of the sale deal, or a hardware store clerk would be willing to help carry a big item out of the store, but neither would happen unless you engage in some low level haggling, ie "I am interested in buying this, would you be able to demonstrate how to use it?" or "would you mind giving me a hand to get this big item into my car?".

Recognizing words as tools becomes easier when you practice understanding others' goals in social interactions (and setting goals for yourself). There are two ways words as tools differs from words as symbols:

1. When used as tools, the actual meaning of words is different from the symbolic (dictionary) meaning. The meaning comes from not just the words themselves, but the situation which they are describing and tone of voice and emotion of the speaker and desired goals of the conversation. This implied meaning might be completely different from

what the words literally say. This is not some 'secret lexicographic cipher' but rather emotional communication: the message that the other person sends is the emotional connotation associated with understanding the phrase rather than the meaning or logical truth of the phrase. With the above price examples, this is straightforward: "\$5" doesn't actually mean "I'll pay exactly \$5" but rather "when you said \$10 that was absurdly high, so I think when you hear \$5 and think that's absurdly low you will have an idea how I felt, then we can move on in this negotiation". When a parent says "never do this again!" it doesn't mean "if you do this again your life is over" or "doing this is a physical impossibility" but rather "I am upset with this action to /this/ level of upsetness, and if you do this again, you can expect me to be even more upset!". Of course this dilutes the power of words, so it is less surprising to see how nonchalantly normal people break rules and get in trouble. To play this game you must understand your relative power in the exchange and what the other side will/won't actually do, to be able to tell physical reality from verbal exaggeration.

2. When used as tools, the physical context surrounding the words matters. I interpreted words in a conversation the same way I did words in a book, but the two are vastly different because a book is just there as a set of symbols, while a conversation is dynamic - there is body language, timing, choice of topics, eye contact, tone of voice, and overall mood. One rule to keep in mind is reciprocity is a sign of interest in continuing exchange, while lack of reciprocity is a sign of disinterest. It is considered impolite to say "you're really boring, go away" as this has a negative emotional connotation and intrinsically shows that you're worthy of the effort to say all that when the desired connotation is just the opposite "you are of no interest to me". I have seen too many cases first-hand of a guy engaging in text messaging with a girl where 99% of the texts were from him and the 1% responses were just single words like "ok": this lack of response is the standard way of indicating disinterest, with the actual message being "you're really boring, go away". If a person is very interested in contacting you, they will not say "I am truly really interested in contacting you" (in fact they would never say something like this, as it sets them up in an awkward initiator position), they will do the physical action of actually contacting you, conveying the message of interest intrinsically through context of the exchange.

2

Population Density

Chickens in factory farms are cramped too close and their evolved social interactions cannot occur. Same way people in cities cramped too close and families cut apart so their evolved social interactions cannot occur. Note the way humans survived thousands of years in societies - with ruling classes and slaves as well as husband/wife rigid arrangements. With the new population density in modern cities, allowed by apartments and multi-story buildings (*not* seen in early society - people prefer their own separate home building with land around it, keeping maximum density down), people's evolved social abilities are made mostly unusable - we are maybe wired to interact well in a group of some 30 people (see how big early societies / hunter-gatherer groups were: they could have been bigger or smaller, but humans chose what they were comfortable with/what was evolutionarily better) so with constantly seeing new faces this wiring cannot cope and gets deactivated and we become individualistic and unsympathetic (because sympathy takes time+devotion, and many people diffuse the time available for any one connection / interaction) - note the rise of con artists with city creation, and the allure of selfishly manipulating others displayed by charismatic individuals who see people attracted to them everywhere. This could not be possible in a hunting group or farming village of some 30 people, as everyone would have a clear incentive to contribute + survive. Chickens are brought through this system to harvest their meat, industrial handling needed to keep up with the exponentially growing human population. Why are humans brought through this system of birth, living in cities, medical bills, death? The only ones who could benefit are other humans, but there's only so much a powerful human can possibly use, the real reason I think is the survival + procreation evolutionary instincts, not some conspiracy to make someone rich. People are just dumb and have children without much thought as to why (those who thought too long died out). So we will run right into the wall ahead. But what of diversity and current movements like

LGBT and feminism? I think it is likely they are used by the government to control the populace. Forced diversity / affirmative action keeps separate racial groups crowded together in close quarters in cities from fighting each other (as evolutionarily desirable) ¹ and also dilutes the groups' abilities and coherency so they are less of a threat to leaders while allowing more competition for jobs and lower wages.

So, looking at society even more critically, I would say there is no love, there is just visual attraction and social expectations, and of course selfish urge-satisfaction. The illusion of love comes from projection of our feelings onto others and is narcissistic at its core. The shattering of love can only happen by realizing both ours and others' urges driving the observed behavior. ² Pets don't love us, they just get super bored + hungry spending all day alone in an empty room so of course they will jump at the door when another living being comes in, especially when it means the meal will come soon. My parents didn't love me as a complex individual conscious entity though they loved having control over me and being able to boss me around / treat me like a pet because in those moments they can satisfy their caring urges by projecting their neediness onto me then coddling me to protect me from those needs - achieving their fantasy of a happier childhood than what they actually experienced but in this way only perpetuating the cycle. This much happened with V raising me - she was usually cold so she would dress me up heavily even despite my direct protests to the contrary (of course as an adult she knew better whether I felt hot or cold or hungry, I was just a dumb kid making stuff up). I saw a Russian documentary on childbirth and one of the mothers' sisters was waiting with a kid who was glued to a cell phone - this woman was literally petting the kid / pulling him close.. like a pet or a doll.. the kid didn't care as he was too busy with the cell phone but I bet in the moment this woman had an emotional feeling of closeness with the child, being able to pet him as sort of a reciprocal feeling of security for herself by taking advantage of mirroring. Then she had the idea pop in her head that the kid should say something to the (unborn) baby because that would look cute and make her happy, so she patted the kid on both shoulders, said this request pretty loudly, of course the kid was still glued to the phone so she squeezed the area by his neck which made him scrunch up a bit and pay attention / respond: "Speak to the baby?". Children are to be used for our needs and left alone otherwise. There is a surprising number of cases where a young baby was abandoned by humans and raised

¹Note how racial divisions still spontaneously form, ie Chinatown

²I recall writing about religion as psychological defense and feeling sad, like I'm destroying something sacred, calling the pen I was writing with "pen of destruction". By now I don't really question this notion though, as it continues to make logical sense. I feel this sadness now with destroying love, but also have a hunch that in a while I will come to accept it, aided by what I see and hear of society around me.

by animals; the animals took care of the baby because its appearance and cries triggered a neotenous instinct that overrode the predatory instinct, in short it was too cute to be eaten. Over the course of developmental experiences the baby and the animal find themselves able to fill each others' unconscious fantasies in the real world and thus stay together to the extent this fulfillment is plausible. The "love" humans display for children is of a similar degree. On the subway I saw a couple with a newborn baby. The father was joking around and loudly engaging in baby-talk with the baby, and the baby was mostly indifferent. Wanting a reaction, so as to satisfy his fantasy that he is wanted by the baby / useful, the father starts tickling the baby's feet, to which the baby obviously laughs as a reflex. The father says "haha you like that, don't you?" as if the baby is making any conscious decisions here. Another time, also on the subway, I saw a girl around 5 years old, crying with tears from both eyes, about hurting her hand, proceeding to lay down on her father's lap. The father then took out a cell phone, holding it above and covering his view of the daughter's head, and scrolled through news feeds for the rest of the ride as the daughter laid in his lap. It is ok though, since the daughter wasn't aware of the father's absent state either, finding his physical proximity adequate for accepting her projection of a caring image for herself. Cell phones will certainly destroy emotional understanding capacities of the next generation - it is fascinating just how easily a real human being one ostensibly cares about can be overshadowed by the addictive appeal of a cell phone app being really much more attractive, and here the purpose and valuation of relationships in terms of their extent of satisfying unconscious desires is quite evident.

What I also found striking about the Russian documentary is both of the womens' husbands did not show up for the birth / labor. Though they waited outside the hospital with flowers to pick up the kid. I am tempted to resort to sarcasm in calling this a caring relationship: knock her up, then one day a baby appears, skip all the icky stuff she has to go through. In what delusional fantasy is this love or even human concern? Of course both couples couldn't talk about it directly, both men accidentally being late / having stuff to do just then - probably because there was no love there to begin with, how can you be so disgusted by the supposed partner-for-life's body and genitals? Yet the wives respect these guys too because guys that are too caring / kind are sexually unattractive as that exudes weakness. I read that men that smile often also exude weakness, well fuck me, there really is no decency in society. And so we get that men don't love women either, they love a mental projection of what they perceive a woman as, a partner and emotional support, not an individual who is also selfishly after her own goals. This projection comes from stories and media, and I constantly find movies and songs and stories (as old as fairytales and legends) where the man goes through all sorts of trials to find

the woman and "live happily ever after". I even saw animes where a woman mourns the loss of a family member or friend for years, or contributes to some caring relationship. This is all good as it creates the social structure that drives men to work - as I mentioned earlier, going through torture for no reason just plain sucks and would lead to suicide, but going through torture knowing that you are somehow saving your family and they will give you love and care when you are through, makes the experience palatable. Even though the reality of torture is the same, mentally knowing there is something to live for (which itself is an evolutionary honey trap / feel-good instinct / urge) keeps the person sane and more likely to fight for survival.³ But these fairytales and projections that make people believe in love and do material work for it are all inconsistent with the real world - in an odd sense if their message wasn't odd/ unusual/ unexpected it would not need to be said as our reality would reaffirm it regularly, but as is, the reality is too bleak for the psyche to accept so it finds comfort in reinterpreting it, through projection, to fit the ideas of stories we read / hear - this is the reason for existence of archetypes and storytelling. This is why consuming fictional media *will* keep one from seeing the world as it is on a raw physical level. The raw physical level is, there are no friends, no partners, no love or care - just us as individuals trying to pick the best options for ourselves out of what we know and based on what evolution tells us is (feels) good, including visual attraction and social standing and material possessions / comfort and protection against nature's competition, and of course lust / hunger urges.

In seeing people's reaction to childbirth I imagine a scenario of a group stuck in prison, marking lines on the wall to count the days, not knowing when or if they will ever be let out. They have gotten to know the details of their small cells, they have gotten to know the personalities of their neighbors, they feel bored and greatly desire novelty, something bigger than this life they find themselves in. Suddenly the guards bring in a new inmate: excitement! wonder! Who is this person, what did they do, were they also thrown in here with no explanation like I was, do they also feel upset, will they make me feel better? In any case there is novelty, and much to explore now that the new inmate is here. Further there is a satisfaction in recognizing that the new inmate has no choice but to join the group, because there is nothing else to do, and him joining the group ends up validating the group's existence, it lends them legitimacy. It was not just some cosmic misunderstanding that this prison was created, it is a purposeful society! This is what I see in the expressions of family members passing around

³This is a case of maintenance of the control fantasy by a defensive re-definition maneuver: "the pain is not meaningless and randomly imposed onto me by others, it is something I chose to take on in order to save / benefit my family". See end of Base Psychology for more discussion of the role of the control fantasy in sanity.

a newborn baby. They look at it viciously, craving the novelty they will be able to extract from it in due course. At root this is a manifestation of desire to recover from existential trauma of birth (knowing that at one point the self was brought in just like this) by re-experiencing it vicariously, seeing it from a different angle, so as to get a better conscious grasp of what has happened to the self.

I look at reality and find patterns which are so strong they cannot be ignored but which somehow I never realized from my societal indoctrination (and exploring which, today, would lead to heavy criticism and reactions of disgust). All discoveries of recent significance that allowed industrialization and modern living standards were by white men. All women I have personally met, younger than the grandmothers, divorced at least once and took their kids with them and away from fathers. All women I have personally met have responded nonchalantly in real terms (ie activities and productivity vs crying for public exhibition) to loss or divorce, whereas all men I know who have gone through divorce took a heavy and permanent toll (drinking / smoking addiction, career setbacks, life long-term derailed). This plainly contradicts the stories I've been told that everyone is equal and women are highly emotional. If anything, women nurses I've interacted with were consistently unempathetic and indifferent to the patient and crude in their treatment of the patient vs men nurses. Consider also that all the "colorful" cultural differences such as food flavors and dresses and perfumes and traditions and even hygiene are not just cutesy random things made for our entertainment but evolution-selected and *necessary* techniques that ensured survival of the society in its environment. Washing stopped disease, mud + body painting reduced bug bites, pickling + spices stored food for the winter, clothing allowed survival in the elements. So now living like this is scary. I know that to indulge my evolutionary honey urges, seeking intimacy / sex / usefulness, *will* lead to objectively worse life because just as there is no free lunch there is no free euphoria / good feeling: the good feeling ends up a way of societal control to get me to work 40-hour weeks and be happy at the end of it all. Still I very much desired closeness and love but I see all around me that it is a fabricated tale, and it is deeply frustrating to know that I will always carry this unsatisfiable desire, like being constantly hungry - but perhaps it is the futile attempt to satisfy this desire that lets me (or rather forces to) keep exploring topics like this through sublimation, it does not make the experience any less frustrating or unfulfilling. In the end is just parasitism - the baby as a parasite in the woman, the woman as a parasite in the man, the man as a parasite in nature at large.

Watching an action movie [The Island] I realized the hidden message: the guy saves the girl, works/fights, then to conclude the movie they finally have sex. I've always been suspicious of blatant sexual themes in movies -

why would they pay an actress extra to be filmed naked, would that really increase revenues? Maybe, but so many cases to me the romance/sex feels forced. Now I see the fantasy it plays to: men are to work and their exceptional performance will be rewarded with hot sex. That's literally the foundation of society. ⁴ Because thinking back on all the violence in the movie, even though the guy saved thousands of people by his actions, that just wouldn't have been enough justification for him to take such risks with his life. Like torture by itself is just bad, but torture knowing a reward is ahead is bearable suddenly, all this violence just for a guy to escape and get revenge seems unfulfilling and pointless, but because he has a hot girl touching and kissing him throughout, now it is honorable + justified to do all the work. So the sex scene is the closing one, not the saving of thousands. I now see the pattern everywhere, especially where the romance seems "pushed in haphazardly", and it makes me kind of sick. How low. Also I was thinking about status symbols. People buy rings to wear so they can show off their wealth to others. But being able to spend money on something flashy and pointless is no sign of culture. How shallow.

So at this point I have a weird feeling. I feel happy / content with having gained the knowledge and experience to analyze society and see potential alternatives against which to compare (in the absence of such alternatives, the brain is wired to feel that everyday life / society / surroundings is quite acceptable: there were still happy people in hunter-gatherer societies because they didn't know any better, and there are still happy people now). Some people on various "depressing" forums talk about how they're jealous of the happy people, but I would not wish to take back this knowledge. I feel not depressed but more realistic, more aware of the world - and why should that matter, when I am still just a tiny human in the world and me knowing or not knowing makes barely any difference? I guess because I feel that I've been able to progress along a path leading to my desired goals, reaching a psychological peace to some degree, understanding that having this feeling has only been possible in this reality and with my past experiences, that life isn't bad or good, it is just a unique experience and I guess I can somehow accept it's been worthwhile. Indeed what I feel is fear and dread, that my life could so easily have been otherwise and I wouldn't have gained this knowledge and instead been firmly enmeshed in society. I watched videos of majorly disabled kids and it makes me sick, thinking back on a few terrifying flashbacks from childhood that I just wanted to be left alone but was forced - into a routine, into social settings where I got bullied, into physical proximity / touching I did not enjoy. ⁵ I would go crazy if I had this feeling of wanting to be left alone, unable to communicate

⁴This message is also in fairytales and legends - not new.

⁵It still makes me sick to read comments like "autistic kids need a clear routine" ie impose your will on them always

to others, and forced whether I like it or not, physically, to live by some caretaker's schedule. I shudder to think that could have been my fate, the stifling grip of humans. Because ultimately society is a construct, we are all on our own, family is another construct and so is relationships / marriage. At least I can live alone realizing this, ignored by others and free to pursue my interests, the only way I have been able to stay sane and better understand myself and life as a whole. More accurately to say "holy fuck this world is scary and I could have been much more miserable, I find it a good thing that I am not, so as usual I am at a loss for how to describe or evaluate my existence and existence in general".

I've had a chance to explore competition and the commonalities in human hierarchies that get created. This started with a visit to a Buddhist holy guy, some old "master" that gave me a pat on the head so I would feel blessed. I didn't really feel blessed but I did wonder why he was given such reverence and so openly/freely - others literally bowing at his feet. Later I found an article online about some quote from him, to not charge too little for the religious services because then people will not respect / value them. And this makes sense economically - money is arbitrary so if everyone suddenly decided food is worth \$200 a meal, then there would be no way to get it except pay \$200 a meal. At some point absurd prices will lead people to search for alternatives (ie cook for yourself) but still on the whole there is no requirement for prices to reflect physical reality - they moreso reflect people's psychology and expectations / value judgements. But the point I want to focus on here is not the economic, but the social aspect of the above sentiment. Namely, to be respected by people, take actions in such a way that there is an imagined belief of the undeniable (self-evident) need for respect. This works because ultimately there is a mental drive to show respect / be led, triggered by a situation where reverence is socially demonstrated. It is a social act with expected roles for both followers (to bow down) and leaders (to act smug / all-knowing); followers or leaders who stray outside their respective roles are punished for threatening the mental environment / illusion set up by the group as a whole for the sake of its cogency (with clear evolutionary relevance). Oddly enough (by rational valuation), leaders who are overly kind and objectively nicer to their followers will be more strongly disliked than leaders who are rude and crass and hold their resolve even if it objectively hurts the followers - much like the "abusive boyfriend" holds a woman's attention / respect / desire while the nice guy is objectively better but gets only forced affection - because on a primal level the followers *expect* the leader to be mean and look down on them ⁶, in fact this is the basis for calling him a leader in the first place

⁶even if consciously they will speak of how bad this is and how they wish he would be

- the leader is as bound by these expectations as followers so his power is not truly absolute.

Now consider another drive that leads to the establishment of, not merely follower-leader groups as above but social hierarchies. The difference is that followers will not complete to replace a leader, while members in a hierarchy will compete to get a higher standing - one is meant to be fixed, the other fluid; and there is only one leader but a variety of hierarchical levels. The reverence for leaders (and elderly/wise ones at that) is perhaps a drive to keep groups together long-term and pass on cultural teachings (eventually leading to institutionalized religion) while the hierarchy is a drive for every individual to better themselves and stay fit by societal metrics - in a follower group action stems from the words of the leader, while in a hierarchy action stems from the desires of the individual to improve his status. This suggests another primal-level drive that is jealousy-like: a desire to outdo another, triggered by seeing another's display of status (in the form of trinkets / jewelry / money / cars / women / points). ⁷ Whatever items is chosen as a status symbol, there becomes a mutual in-group understanding that this thing is to be desirable, probably thanks to some words like "rich"/"beautiful" having inherently positive reinforcement-reward connotations in childhood: the brain doesn't spontaneously find a gold ring inherently worthy the way it finds an attractive face inherently worthy, so the existence of the ring as a status symbol comes from societal attitude about gold rings, in itself determined by runaway processes like popularity (ie popular people are popular because everyone else considers them popular so I should too ???), and these in turn driven by hard-wired effects like visual attractiveness. The resulting hierarchies though all end up similar in nature: whether it's high-end fashion clothes, the latest iphone, or reddit points, members that subscribe to the belief of the symbol as indication of ranking get the sense of a goal/direction in life (seeking more/better status symbols) and the camaraderie of similar-goal-seeking humans with whom they have a common basis for social interaction, and this combined with the brain's built-in hardware level drive to show off / get more than the others is enough for people to enter such hierarchies and accept the cost of being treated poorly when on the bottom. ⁸ It is a group-scale mech-

better, if an election happens he would be re-elected because on an unconscious level he is delivering on his promise: to provide a sense of leadership so as to trigger a rewarding "follower-state" chemical release in the brains of the followers

⁷I am led to think also of "displays of wealth" in which tribes would throw away food and try to outdo each other in who could throw away the most valuable items, justified as a sacrifice/offering to some god.

⁸in fact such differential treatment being necessary to make the journey to the top seem worthwhile so maintained as an unconscious illusion / manufactured environment for the brain, with some degree of mutual understanding of the game - those who violently circumvent such unwritten expectations are considered asocial / antisocial and cast out

anism to force people to improve themselves towards a conscious goal by setting up the very real differential in treatment that the unconscious part can't help but abide by - unfortunately the conscious brain by itself is not connected in a way to just reprogram itself at will so evolution has set up this convoluted mechanism to drive early humans to become more fit, and has created the jealousy drive so people don't just quit en masse (because logically more would be better off if that happened - most of the hierarchy is on the bottom after all). In this, the status symbol must be attainable by some commonly known / accepted means, and is readily displayed / flaunted to other members of the group (ie not a secret and not required to ask - in fact it is more often a "right in your face" display). Jewelry of early societies and current societies, fancy clothes, tattoos and piercings and scarring, accessories like watches / handbags, religious wear, army levels, political levels, academic levels, number of points / views / subscribers, wedding rings / baby showers, fancy cars, latest technology, all follow the same outline yet all ultimately arbitrary - like money itself.

I watched some videos on Japan's hikikomori and closely related "herbivore men", and my thoughts are still not very organized but I will try to write what I can. One man was living with a lot of dolls: life sized ones, and smaller plushies, and even smaller figurines. He said he felt more comfortable with the dolls, and that setting them up / styling them he gets the sense of a life force / soul being in them. And I can imagine this feeling: seeing a realistic doll fools the primal brain (like decoys fool animals) and carrying out interactions like grooming fools it even further. Of course consciously I know it's just a doll, subconsciously I also know it's a very reserved living being. What is interesting is seeing that the doll can satisfy the innate need to care/control and the need to feel acceptance and the need for proximity: some strong needs, meant to get us into relationships, but consciously recognizing the unpleasantness of relationships (where I think more than not the alternative of being single is on the net better, the way our brains compare alternatives intuitively makes being together an obvious choice) and seeing that the brain will give similar rewards if triggered by a decoy like a doll, the purchase of a doll is a logical decision. The man said with the dolls he was able to feel a comfort he did not feel in relationships: I can believe that a doll is in fact more rewarding to the brain's centers than a real human - after all attraction is based on looks, mutual attraction is rare, and unreciprocated attraction leads to hurtful actions. Significantly, the feeling of "love" is always in the mind of the lover, so a real relationship is necessarily based on projection (I think she thinks this because I think

of the group: the poor treatment is expected (on an unconscious level) by those on the bottom so as to drive them to reach the top - if the hierarchy suddenly becomes egalitarian they will feel *less* content to be part of the group.

this) which is why so many remain oblivious to manipulation - this "love" requires us to provide care and when the other party is not interested it just hurts. The doll in this way gives the nice feelings of a relationship without all the associated hassle of actually dealing with co-habiting with another living being with their own set of needs which may well be counter to my needs or even in direct competition. Knowing that the doll is inanimate and indifferent gives a sense of comfort: I can safely project my feelings onto it (after all, we do this just as much with real people - except real people can then throw in your face that your projection is wrong) and know by the continued proximity that I am safe to accept myself. No matter what I think or say or how I treat the doll, I won't be met with disgust, with hatred, with exclusion, just the physical indifference of the doll being there - this consistency is safety, and safety is comforting, and the continued + unconditional comfort easily beats the slim possibility that a human's actions towards me would make me feel better - because from all my social experience they've largely made me feel worse (and this isn't surprising - everyone is ultimately selfish, with good reason).

In seeking love I actually seek to project my feeling of care / acceptance onto another to be able to then provide care and through this projection satisfy the feeling: it is much more logical and even considerate to use an inanimate object to fulfill this requirement than a live human - the latter will at best be as good as the former in the sense of not rejecting the care but could well be worse by actively avoiding / hurting me (in turn to satisfy some of their needs), and in any case who would want to willingly be used as a vessel for projection - it would be inappropriate of me to use a full living being for the sake of fulfilling my care needs, like using a supercomputer for solving $2+2$. I think ultimately relationship troubles stem from this: defined as an intrinsic good by society (and as a status symbol on a conscious level as above) and helped by visual attraction triggered chemical drive, people readily enter relationships and use each other for such need fulfillment - as long as the needs are mutually compatible all is well, but when they diverge someone will be emotionally hurt - to find "the person I loved wasn't who I thought they were" - ie the reality of another conscious being with their own needs + goals suddenly clashes against the established projection of the speaker's ideations onto that living person. A doll just seems a much more elegant way to do all this: society at large may consider this "pathetic" but it is pathetic in another way to be wholly dependent on the validation of an arbitrary partner (whose interests are most certainly different from yours); the only difference is societies have unsurprisingly placed relationships in the role of status symbol and have seriously programmed honey dreams to this extent (fairytales, comics, movies, music, news - everywhere!) so they are desirable for that sake, but seeing beyond these requirements (which are not actually furthering self-

benefit / are arbitrary to well-being) the relationship just does a poorer job of fulfilling my (selfish) emotional needs: ⁹ why bother?

A criticism might be raised: "You just don't understand anything about relationships, you must be autistic and not have your brain wired right if you can't recognize the beauty in togetherness". My response of course is that this inexplicable feeling of beauty or "something beyond proximity", a deeper connection, is precisely what the above mechanism of projective self-recognition feels like. Once the other person is seen fully as an autonomous being, the projections stripped away, so the emotional desire for proximity disappears, at which point a relationship is continued solely for pragmatic reasons. ¹⁰ Because at a level of emotional understanding of others as selves, there is no justification or need to pick out one specific person and call them special, everyone is equally a partner and an acquaintance, to be used or discarded. Passionate relationships imply the need for a real-world image of a psychological figure to help overcome past traumatic effects that are felt intuitively to hold back the progress towards self-fulfillment. At some point, children are expected to give up their transitional object / favorite toy, and yet it is somehow seen as a wonderful thing that adults continue to cling on to the idea of "love" from another.

Regarding the operation of the brain and the projection view of above, I want to try and retrace my experience in school and how I got to this stage, in the hopes it is instructive for a better understanding of mental development in slow motion as it were. In my interactions with others, what I would do is project my thoughts onto them, ie they were playing for the same team - this was the unquestioned (and unquestionable - ie hardware) belief in how I interpreted their actions. Maybe I could come up with levels of understanding of others:

1. Others seen as basically strange / random influences on my world, not sure what they will do or what they think - maybe not even realize that they think at all
2. Others are like clones of me. They are in a different spatial location (ie can see things I don't) but they know what I know, they think how I think, and their goals are my goals. The facts of their past are not considered (or considerable): their past is "different" consciously, but unconsciously it is just my past
3. Others have their own thoughts / knowledge. They don't know what I know and can't tell what I think / how I feel except by analyzing

⁹with a huge risk of completely crushing me emotionally and very little possibility of complete elation/joy

¹⁰see also [<http://wildtruth.net/being-in-love-is-a-disturbed-ideal/>]

my actions or appearance. But given the same knowledge they still think how I think, and ultimately their goals are the same as mine.

4. Others have their own goals. They might seek things I don't know about and they might purposefully deceive me in order to achieve their goals. They could keep their "actual" goals hidden and claim their goals are something else publically. Or they might not even have a conscious grasp of their unconscious goals. In any case, they do not seek to further my goals, and may even take pleasure in thwarting my attempts. On the other hand, they don't know my goals unless I consciously or unconsciously make them explicit. Indeed I might not know my own unconscious goals. Still I can't help but analyze their potential actions based on what I would think / decide given different knowledge + goals.
5. Others have their own thinking patterns / capacity. They will find different solutions, and have different associative neural nets. They might feel / show emotions differently and act differently in such circumstances. I can't simulate their potential actions or feelings by thinking what I would do and I have no qualia level understanding of how they think, so I must rely on patterns of observed physical actions (don't take words at face value but the physical reality surrounding the words: ie why did they bring up a specific topic? Do they bring it up often / regularly / given specific triggers?), and potentially use mini-experiments to probe their brain function (as opposed to knowledge content or goals). I imagine this is why neurotypical people in childhood feel ¹¹ driven to participate in social interactions: to fill up their mind theory model repertoire similar to how kids are driven to physical play to fill up their physical motion / body control repertoire.

If these levels seem really obvious, I would remind that this refers to an unconscious / intuitive understanding and not a conscious one, where the latter can easily use logic to figure out that other people think differently. So experiments that show that 3-5 year olds start to succeed in the false-belief task do not imply unconscious understanding that others have separate goals, but a conscious learning process similar to learning a new word's meaning. The difference is that unconscious understanding permeates an individual's life while conscious understanding is only demonstrated when conscious attention is drawn to a specific social aspect of a situation. From

¹¹urge-level / evolutionarily through chemical pathways. Indeed this is a measurable effect: see [Fonagy] on the switch around 2-3 years of age from seeking perfect to near-perfect contingency and significant differences in this process with the (not so subtly grouped together) cases of autistic people and monkeys.

observing adults in everyday environments, I would argue that level 5 is not rare but not common either, and many "normal" people I see are somewhere between 3 and 5. At the same time, lack of engaging social interactions and an ongoing screen/ media addiction can cause "normal" adults to even regress to 2. These levels are also situation-dependent.

I think I spent most of my life somewhere between 1 and 2. This is not to say I was dumb: if given the standard psychological tests for understanding another's perception I would easily pass and find the answers "obvious". The issue was, unless I was specifically asked like on a test (with finite options) I just didn't feel a need to think about another's thoughts - it was way too complicated and I had no clue how to verify any of my assumptions so I just didn't even keep this as an option. Without a working intuitive-level TOM I never got the drive to seek non-perfect contingencies as a kid and did not find making friends to be fun or interesting. I did not have an intuitive level understanding and getting a conscious level understanding was hopelessly hard, more so in the sensory overload environment of day care / school with kids all over - to attempt conscious understanding I needed clarity and repeatability. Unconscious building of the TOM in "normal" kids takes advantage of the brain's powerful hardware-level statistical filtering processes (see note on GLM later) so can be done even in messy/uncontrollable experimental conditions like a day care center ¹². I got along as best I could, basically expecting any social interaction to be random / unpredictable in nature. If I did something bad and parents got mad at me, I knew that bad action = punishment, but I did not know that I was actually making them angry because I did not realize (and could not) that they had their own emotional states. This led to much frustration when they would punish me for tiny things one day and ignore big things the next - it makes sense when emotional clues are put together but all I saw was they were wildly inconsistent in their logic and this in turn made me afraid + withdrawn (which made them even angrier and more erratic, further reinforcing my fear). This was as far as high school and college! If asked on a test whether I realize they have emotions, or whether I know that some action would make them angry, I would of course say yes. But on a feeling-level I didn't realize that emotions are real, and my everyday actions did not and could not take such things into account: all I was able to base my choices on was whether or not I had been punished earlier and some clever extrapolation, not a reasoning through how they feel and how I would make them feel. It would be futile to teach this too: I knew that "people have feelings" and I knew what actions associate to what feelings, but all this was in my mind as a set of logical symbols like $a \rightarrow b$: I did

¹²a similar concept might be learning a new physical action by only reading about it vs by actually practicing it - the latter is clearly superior because it employs learning pathways beyond conscious understanding

not have the capability of grasping what feelings *actually are*¹³ because grasping this requires understanding on an intuitive level that all you feel right now is a feeling which hardware-wise means storing the brain-state as a whole for later analysis by self, but I could not make this step.¹⁴

I could not realize that feelings are what I actually feel in the moment, I just lived and did not categorize the totality of my experience as one thing / label or another, I simply experienced it and did not question it / reflect on it except in logical abstract terms (ie first this physical thing happened then the next thing happened).¹⁵ For feelings / emotions substitute something like "voodoo spells" - people are influenced by voodoo spells, all people are! When somebody's voodoo spell changes, their actions also change.¹⁶ Doing something "nice" like giving someone a gift changes their voodoo spell so they are nice to you. Having / seeing enough of sentences like this one can find a number of patterns and thus a dictionary understanding of how to use "voodoo spells" in a sentence, or how to answer questions on a test, or what to expect when someone tries yet again to teach you as punishment. But all this doesn't get any closer to the real understanding, it is all abstract.¹⁷ So again maybe in theory I could think "what would happen to their voodoo spell if I do this?" but to me this was an abstract exercise like solving $x^2 = y^2 + 2$, doable but not very fun or exciting or

¹³like the consideration in "Mary's room" of a colorblind person who knows all sorts of logical facts about 'red' but not how it actually feels to experience seeing red

¹⁴It is argued convincingly in [Fonagy] that such an understanding of self requires a specific type of emotional attunement in childhood attachments providing the baby a simplified "social reflection" of his own mental state, which I feel I have missed and am now slowly recovering from, indeed I am led to wonder to what degree autism and such developmental processes are linked. And so it is not claimed that my words in this chapter are just an imagined restatement of [Fonagy], note that I wrote these sentiments a few months prior to reading that book.

¹⁵This absence of awareness of the reality of feelings can be seen in bio-feedback terms as arising from insufficient external indicators that I should pay attention to such things: a lack of reflective / attuned attachments during early development would be an easy route to remove such indicators. The aspect I want to draw attention to is that my behavior would be readily classifiable as autistic or "Aspie", and yet I know that if the world were to provide a setting in which emotions of self and others are readily recognized and usable, I would be able to eventually after many years get to a "normal" functioning state. The possibility should not be dismissed that "high functioning autism" is actually a developmentally induced pathology.

¹⁶I argue later that the fascination with magic in media and culture is actually a manifestation of the fascination with feelings and words, and occurs at characteristic ages in the TOM development process

¹⁷In this light it is quite interesting to see the appeal of specific games to "nerds": ones with highly structured modifications, like different power levels of a character and specific actions available based on those choices. This is a more explicit outline of how I logically understood emotions. Mostly, unless I felt the need to be in a "game", I didn't think of emotions at all. Even in this text I use the word "levels" to describe the different degrees of understanding others.

worthwhile - anyways it didn't make a difference to me (in my view) so why bother solving it?

Thus I regularly took actions which, if asked later "how would that make you feel?" or "how do you think he felt?" I would answer correctly but it made no difference in my behavior - I was not trying to be hurtful, I didn't even realize that I **could** be hurtful! I didn't understand that there was anything to hurt in the first place. My pattern-finding was good enough to mostly take appropriate actions, but like a toddler on a rugby field, I found it easiest to just stay away and minimize interactions with others. What had finally started to get me out of this pit of mental disconnect was the peace and lack of constant assignment / exam pressures after 24 years. It was a time I did a lot of reading on r/raisedbynarcissists and there found the books [Running on Empty] and [Children of Narcissistic Parents]. This helped me acknowledge that my family relations were abnormal, and that in turn I never had a chance to develop my emotional intelligence - when reading this I knew it described me, because all my knowledge was of the nature that "I don't have feelings" or "feelings don't exist", and I became increasingly aware that treating feelings as actual real things would help me make sense of who I am and of the world at large. The first insights were introspective and self-guided: a micromanaging teacher / mentor would have just contributed to performance pressure / anxiety and probably turned me off the idea of emotional intelligence altogether. I just needed peace, time, and reading materials - I wanted to figure this out, and do it on my own pace / incentive. The first step was to start using emotion words to describe myself - to acknowledge that I really have feelings and then to start figuring out what they are and how to label them so I can think about them logically later on once the feeling itself is gone. A list of emotion words was a very helpful guide for this - I found that I could actually get a sense for what most were referring to and could pick out one or two closest to what I felt at the moment - I guess my earlier pattern recognition / abstract understanding wasn't that bad. In the next year I had a lot of reflections in my journal - good since it got me to put my feelings into words and think about cause/effect in the past to clarify previously scary + mysterious occurrences / exchanges. I was starting progress towards level 3. One thing I've practiced was to remind myself that people don't know what I'm thinking and that people are selfish: this makes for a quick test that keeps me from most blatant manipulations. Still I mostly avoid people as they remain unpredictable to me, and instead get behavior information in internet posts / comments.

Whereas I used to read everything with just a sense of agreement (or rather dissociation), now I can be critical - I see some ideas and can argue against them with logic, underlying which is an awareness that their thinking is different from mine - something I could not consider below level 1. It

still takes a conscious reminder to get me to explicitly recognize that others' thoughts are different - most of the time I still treat people as essentially unpredictable, just my patterns recognition has gotten upgraded to where I am capable of seeing new classes of patterns - involving the notion that their thoughts are wholly independent from mine, and both exist at once, and can be at odds. But I can understand now why people would enjoy ie watching detective shows - I never liked them because I felt (and still do) the detective's skills were overblown and the situations unrealistic, and there was not really anything to be gained by watching this process. Now I get the interest: normal people watch and try to solve how the different characters think and it is an exciting puzzle for them, whereas I watch and just see people doing different things and then the detective finding barely-related clues and making gigantic logical leaps (all the more so because the social relations and implications are invisible from my view) to reach a verdict. That's the difference a built-in theory of mind makes.

As I continue to explore people's interactions, I've come to believe that conscious thought is basically an add-on to an already established rich emotional system, like a transistor radio put into a vintage car. The conscious mind is born without privileged access to what the subconscious/emotional part of the mind wants - it must learn this over time by applying the theory of mind to the observed actions of self.¹⁸ However conscious recognition and acceptance of our own and others' behaviors is biased by evolutionary mechanisms that use language for group cohesion: halo effect, groupthink, fixation, societal beliefs and customs, maintaining appearances, and external validation. Thus society at large teaches the conscious mind incorrect ways to interpret the unconscious behavior, a deeply socially embedded individual is actively led away from consciously viewing his behavior so there is a dichotomy: observed actions of self do not match conscious beliefs about self. This happens when people say "I don't know why I did that" or "I'm not that kind of person". Consider the trope of girls falling for "bad guys". What girls describe (by actions) is they want a powerful destructive force that serves them at every whim: this makes perfect evolutionary sense for a group of monkeys, and that's what we evolved from. But by words / logic, they want a guy that provides for them, gives them a good quality of life, has lots of money / social status, which again makes perfect sense after a conscious appraisal of what is valued by society. It is

¹⁸The conscious mind is observed to be necessarily a "one-track" system, ie its actions are all explainable by it alone. While the emotional system can have many different goals in parallel to determine an action. Biology/emotions can always override conscious thought (why people have babies) but we do not notice - just like the blind spot in the eye is invisible because the brain fills in realistic visual edtails, the unconscious choice of behavior is invisible as the brain fills in conscious explanations (after the fact of making the decision).

the disconnect between the two "minds" which leads to a 50% divorce rate, 10% non-paternal child rate, and phrases like "I love him but not in love with him".¹⁹

I was thinking more about gender and psychology / behavior in society, namely to what extent is the male / female distinction an arbitrary cultural one? With monkeys there is a preference for male and female separation and different activities in childhood: the boys run and play-fight and "defend" the territory, the girls mostly stay in safety (spatially inside the group) and do more "domestic" things. Now with humans we have parents dressing up boys/girls differently, different haircuts, and parents telling kids to do one thing or another based on outwardly displayed gender, so there is significant potential for cultural forcing. This is hard to imagine for monkeys: the genders don't look that different (at least in childhood) and I doubt they stare at each other's genitals and make activity decisions based on that. What this means is that genetic level differences lead to distinct behavioral patterns, and the only way they can do that while being applicable to distinct environmental surroundings of each individual / generation, is to control the brain's responses and interpretations of external stimuli: in other words what the brain finds inherently attractive / worthwhile (because all external effects are ultimately arbitrary: the reality of intrinsic value comes from the brain's genetic programming). Obviously things like tasty food and warmth of shelter will be wanted by the brain: the good feelings reinforce behavior that leads to experiencing more good feelings - the reason they feel good in the first place is evolutionary selection. But these are just sense responses: the fact that sugar tastes good is not enough to get us to develop techniques to refine sugar. What we also have on a genetic level is an urge mechanism that drives us to various actions, such that the mental concept of an action in itself feels good; the reward center rewards not only sensory inputs but also mental patterns that lead to certain actions, independently of the possible rewards or punishments on the senses due to taking such actions - the planning and execution of the action is in itself enjoyable (or painful). This is the hard-wired mechanism evolution uses to get animals to undertake behaviors in the first place: learning just from random actions and sense rewards is impractical for a complex organism as there are too many possibilities, actions must be guided and then sense rewards used for differential selection of most beneficial / desirable actions. The selection of actions is guided on a large scale by what the brain is capable of comprehending, but on a smaller scale by the reward pathways which select good/bad options out of a randomly-attempted

¹⁹Here, as with "I'm not like that but...", the conscious mind is trying to say that it is experiencing something it cannot express in words - but an inherent feeling of contradiction. The person recognized this but society provides no tools to explain what's going on under the surface.

parallel optimization set before any real-world action gets taken, this way the action that is ultimately taken, because it requires real-world energy expenditure, is most likely to lead to some sort of learning experience.

If the monkey example isn't too convincing, consider even simpler mammals like mice / rats: as evidenced in [Calhoun's experiment], male and female mating behaviors differ markedly, and it is difficult to argue mice check each other's genitals and teach their babies differently based on what they see. Distinctions in treatment come from observations of the behavior of the other individuals. Seeing another individual act dominant, the brain automatically categorizes that individual as a male and will avoid attempts to mate. Seeing another individual act submissive signals that individual is a female and will lead to mating or courting; mistakes do occur with such a loose scheme but the choice is certainly not random. The dominance hierarchy that gets established is based on each individual's evaluation within their brain of others' positions based on what the individual sees around them. If I see others bow at my feet my brain will tell me that I am superior and I will act accordingly - the old saying that power corrupts. If others disregard me I will see myself as on the bottom and will act accordingly. And same for how I treat others - if a person comes up to me and acts in a professional manner, I will respect what he says and follow it because his appearance signals that he is at the top. Alternatively if a person acts low-class I will tend to ignore him because his appearance and manner signal that he is inferior. Thus the "fake it till you make it" has truth to it. To be a man of authority, you have to look the part. This is why the sheriffs had (and still have) a star and polished boots. This is why ancient tribes had leaders wearing fancy jewelry. We have now the conscious ability to recognize social standing - ie "he's rich" or "he's a businessman" or "he's famous" but this is just the bare surface layer - intrinsic recognition of social standing comes from visual and other sensory stimuli as interpreted by the brain unconsciously. This demystifies the weird social games and tactics: "negging" or treating others poorly actually garners more respect than treating them nicely, being infatuated with a person of affection will make them more or less repulsed because their drive is to be with a higher level partner, marriage serves as a sour turning point because it signals the attainment of a deeply held ideal goal but the unconscious brain can tell the goal hasn't been reached and grows to hate ²⁰ the situation and in turn the husband, women breaking up with / cheating immediately after or even

²⁰The hatred is unconscious and comes from the mental conflict between the conscious model (I *love* this man! He's the best!) and the base level reflection on the situation (People are doing all this for my sake - I am a queen to be worshipped! I deserve better! I don't want this submissive loser anywhere near me to lower my status!) - the latter being created by the excess of the wedding and the idea of it being a day to serve the newlyweds.

before (flaking) a vacation / outing with a suitor because such acts signal the submission of the suitor - an unattractive quality which when added to typical level visual repulsion of women towards men gets to be enough to tip the scale and lead to dismantling of relations, and even disgust at the idea of future relations.

The drives which lead the brain to take actions (consciously or not) are based on chemical rewards: with these rewards being sublimated and controlled by societal mechanisms, groups of people can be brought together to do mutually productive things like fight, build cities, develop technology, farm, raid and plunder. In any case, to do things beyond pure individualistic benefit, delay gratification for a more optimal solution. I already mentioned how drugs are made illegal because if they were legal they would disrupt the power of money - here more generally I claim drugs disrupt chemical reward pathways to such an extent that societal actions are no longer of interest, thus drug laden groups deteriorate to tribalism geared to the search for more drugs: the drugs steal all the potential urge people had to do productive work (arisen by society's ever-present programming techniques like school and parenthood) and channel it into the urge for drugs, disrupting society's very driving force. This is the same reason prostitution is taboo and monogamous marriages are enforced: these restrictions resulted in the channeling of the sexual urge into productive endeavors like contributing to society and gaining wealth and creating a better life for the kids, as easy access to sex makes individuals less interested in doing unnecessary work for some outside cause. Everything gets reduced to base level urges. I think looking at society / economics in this way is like studying a CPU from electron behavior: it is a more accurate physical reality than conscious concepts and explanations like values and goals, but the abstractions are useful - as long as their origin from base drives is clear.

Why do I do anything? I suggested the trigger-drive model earlier, which I believe applies in the sense that my brain does perform an unconscious analysis of my surroundings+senses and sets some goal based on that. How does it choose a goal, and plan steps to take, and get this into conscious awareness for execution? Thought can be seen as another sensory organ: eyes sense the outside world, thoughts sense the brain's electrical state. And as jpeg and mp3 compression demonstrates,²¹ along with the use of 3 base colors to represent the visible spectrum, only a small subset of the input to the sensory organ makes it to conscious awareness. Thus we, as qualia experience in itself, get the illusion of a single "train of thought". I already posited that I can't feel like other people in space but ultimately

²¹And similar limitation in all senses: the most intense input dominates, for instance in tactile inputs

I am also them just in another incarnatino, next that I can't feel my past or future self although they do exist "now", next I would consider that even my own body is capable of hosting simultaneous qualia experiences which have different thoughts - how would I know? I am the one who gets access to my memories, ²² maybe the brain is set up in such a way that only the "most preferred" thought gets to do that, the rest of the thoughts stay as isolated qualia without self-awareness. This doesn't explain how I could do things which I can't fully reason out - some things just feel right in the moment, with no further justification on a conscious / verbal level. It also doesn't explain how words gain their power - why me hearing an insult should lead me to feel offended. I will start with the first question.

Waking up in the morning I feel hungry (sense input) then my mind goes through memory of what's in the fridge, then it finds nothing of interest, goes on to what's on the table, recalls cookies are there, recognizes a cookie would be a tasty way to solve the hunger + morning irritability problems, finds that eating the cookie requires walking up to the box and opening it and grabbing the cookie, prepares me for the sensations of getting out of bed and balancing myself and finding the box, but the action doesn't start automatically - I have to consciously give the go-ahead having a non-verbal but conscious awareness of what I am about to do and to what end (but not how these actions were chosen out of the whole set of possible actions by my brain). Just now I moved my legs to a more comfortable position - I again was aware and mentally OK'd the action without much thought about it, but as to why I wanted to move my legs then or where they exactly would move to, I didn't have an awareness. ²³ The conscious me acted as a sort of gatekeeper / conductor confirming and timing possible actions, but not choosing or creating them out of nothing. Even my writings here come from recording my automatically generated thoughts - I am consciously aware of the words I am writing but I did not pick them from the list of words I've ever learned - my brain did this by itself, I consciously keep track that this stuff more or less makes sense to write and can control the timing and order/priority of actions - I can choose to stop writing or move my hair out of the way taking a brief pause from writing or to move to a more comfortable pose, but the direction and content of what I write

²²This is interesting in a metaphysical way. Who gets access to societal-level qualia? The ones with power, the most-preferred, while many others try to find their way up. Evolution as a whole gives access to time and energy to the most-preferred and discards the others - except to the degree they can contribute. The ones who get access to the universe are the ones who are most-preferred by laws of physics. Maybe this world is a deep optimization problem which can only be solved by evolution as there is no other way to find unknown patterns / trends, and I am just one possible attempt towards a solution.

²³Such actions are messages from the unconscious which can be interpreted, as in psychoanalysis.

just comes to mind arguably without any control from me - I have some control in the sense that I can stop writing then think of a few different things I could say (which in turn are automatic) and consciously compare and find one most appropriate and then continue writing, but that's about it. Just now I was waiting like this considering different thoughts and I encountered one that I consciously remembered I wanted to include and consciously remembered where it could fit as a footnote then consciously directed myself to that page and wrote down the thought - even though the thought itself was nonverbal until I actually started writing (at which point I paused again to consider wording options) and the location was only an approximate nonverbal concept until I actually found visually the location where the writing would go - but the goal of initiating the search and of confirming search accuracy were done by conscious comparison.

For the breakfast example, I guess my brain evaluated the sensory input of hunger and started a process of association directed at ending the unpleasant feeling. The feeling must have activated lots of concepts in parallel, which then got combined with my awareness of my surroundings to focus on the particular contents of my fridge. Next I could feel the brain considering all the alternatives in parallel - I was concerned with the taste and none of the items' taste that got recalled was satisfying to me - a semi-conscious choice to not physically explore the fridge because nothing I want is there. A conscious prompt for where more food is led to the exploration of the table items by their associated qualia merits, and from this a most-flavorful variant was chosen from semi-conscious to conscious, after which I had a set goal in mind for what to do next and could choose to lie in bed longer and return to following that goal any time later I desired, at which point I could start physical actions without the item comparison being redone - it had been done once and codified into action statements which I controlled the start time / order of.

Some other things to explain would be: self-harm, horror movies / fright fest, dark porn, torture. Also humor, sarcasm, wit, banter vs insult, validation. As a start, sarcasm seems to be brought on by a situation felt to be ridiculous, and where the social standing of the sarcastic speaker is desired to be above that of the receiver (or as a challenge to the social standing of the receiver). Humor is basically mental violence, while senseless wit is a sort of sexual exhibition / child's play tendency, along with other uses of wit in denying an overarching system. I think some order could be gained by classifying different senses and evaluations made by the brain. A first distinction is between informative and valued sensations - informative just provide abstract information and cannot be called good or bad, desirable or undesirable, except by applying abstract ideas. For instance the visual field is informative: it could be blue or red or green, I am not better or worse off for it though I might consider blue to be "lucky" and temporarily prefer

it, on a sensation level I am indifferent. Valued sensations on the other hand can be qualified as inherently good or bad feelings - pain vs pleasure for example. Valued feelings always tie in to our urge-level drives, and indeed seem to be a good way of categorizing such drives. These feelings are also wired into the reward mechanisms of the brain which direct learning - learning is optimization of brain activity to get the most good feelings with the fewest bad feelings, using the informative (not good or bad) feelings to guide actions and make plans. These feelings are hard-wired: they are distinct from associative learning - they *enable* associative learning. The next distinction would be by amount of mental processing / abstraction. On the base level are sensory feelings, characterized by direct and rigid reflection of sensory inputs of the present moment: visual field, audio sensations, touch, acceleration, bowels, breathing. Next are processed feelings which depend on sensory inputs in a rigid way but the same feeling can be evoked by physically different sensory inputs - this processed feeling involves finding sensory patterns in space and time (few seconds). This includes face recognition, shape / outline recognition, motion recognition, text recognition, note and voice and noise recognition, sensory object recognition. Also things like aversion to spiders / bugs, fear of jump scares / creepy images, and attraction to things considered sexy. Next are situational feelings, which depend not only on sensory inputs or patterns but also an awareness of the situation at hand. This includes things like fear of heights, embarrassment in public speaking or talking to a crush, feeling lonely or not based on mental state + world outlook, guilt for having done something bad, fear of getting caught, intimacy + safety. All of these, while "high-level", are done automatically by the brain and affect us but are beyond our control: just like we can't turn off pain, we can't turn off embarrassment, although there are situations where such might help. Embarrassment seems to be caused by other people but actually it is caused by the owner's brain itself based on how it views the situation: talking to an inferior vs talking to someone highly revered reflects this uncontrollable effect, the brain feels that it must not screw up (same with fear of heights) or consequences will be dire. Additionally these higher-level sensations are not learned: they are hard-wired in brain operation and appear across cultures and ages.

With all the mindless procreation, we've gotten to ridiculous population densities and total lack of tribal or communal faith / protection - keeping this stable takes a lot of bread + circus indeed. It is scary to think of what might happen if a serious global-scale breakdown (ie no one out there to help) occurs. I've found it an interesting experience to try and avoid seeing people around me, except in peripheral vision; at first as a spiteful way to "not give them any attention" but reading [Supernormal Stimuli] I realized - my brain was not designed to see even close to this number of people,

especially attractive females and aggressive males. What happens then is I see all these attractive females passing me by and my brain takes every single one as a "rejection" because in nature I would maybe see one like that in a lifetime and would really try to woo her but in society it's futile. So I have to keep my brain from seeing their attractiveness - to protect my sanity and logical goals, to not let the sexual pursuit dominate and make me subservient / a doormat. I imagine this affects women too - seeing so many attractive males pass by without even trying to woo them must also be an implicit rejection - I believe this is why women's fashion at large has gotten increasingly more revealing / exposing.

Waking up today I thought - how nice it is to have a bed all to myself. From childhood we are told to gain independence (and are driven to seek it of our own interest - perhaps more so for the Nordic cultures / genes - after all they were the ones who decided to migrate that far out) - we move from small child's rooms shared with siblings / parents to college forms with roommates to later housing with flatmates that don't enter your room / space, to later owning a whole private apartment or even house. The goal is clear to have more space to call your own and be secure in / relax away from the world. Yet amidst all this I am supposed to think it an upgrade to get a partner in the same bed / living space I call my own? It is really impressive how effective societal brainwashing is to this end - making me uncritically believe that such a step is actually something to fight for / long after rather than strongly avoid. I've had enough space-sharing with roommates in undergrad and the women of my family in childhood, it is a definite upgrade to have a bigger space to call my own and to be in unbothered by another person's concerns.

3

Economy and Psychology

The economy is founded on human psychology effects, and like the idea of using words for their effect vs logical meaning ¹ (taking into account timing, tone, underlying goals, relative social power / desirability and "unwritten rules" of expected exchanges) there is an idea of monetary trades being overall set up as to reduce the possibility of manipulation such that exchanges remain mutually beneficial. The problem is neither desires nor money / prices are connected to real physical factors like energy availability or pollution. On an instinctive urge level only pain and pleasure drive human action, and in the absence of pain / limits, the search for pleasure will become increasingly more base and degenerate, out of control, with no reason to strive for high levels of fairness or logic or thought, since pleasure is readily available with minimal effort the brain has no further drive to do non-pleasure-producing or relatively-less producing work, indeed the reinforcement pathways lead to such work being selected out of the behavioral repertoire - it cannot be helped that well-off (financially / materially / socially / looks-wise) people will not need to bother with deep thought - it is no coincidence the ugly nerd is the one who goes into IT, while the hot girl goes into modelling. This is the problem with automation and medicine - it removes limits and even despite some halfhearted attempts to be rational the brain is designed to find and push limits until it cannot push farther, so we've exploded the population and destroyed the ecosystems we rely on, committing species suicide instead of living well for centuries / millenia. Money removes the observability of physical limits by the action-takers, and the seriousness with which money is taken vs reality of EROEI even

¹Consider all the Tinder profiles of women "not into hook-ups" or "hate cheesy pick-up lines". Why do they post this? It is a disconnect between conscious desires (reflection on self while writing the profile text) and unconscious drives (want sex, laugh at cheesy pick-up lines) with an inability to see the logical contradiction. Not into hook-ups = don't want to feel bad / used, hate cheesy pick-up lines = don't want to hear from ugly (= lame) people, that is just cringe.

though money is completely made up is enough to understand why we've come to the present state.

Money in society acts as a long-lived catalyst for conversion of potential energy into heat through work - everyone along the chain / loop in the economy benefits more the more energy is transferred by virtue of money. So the monetary system maximizes both fossil fuel / nonrenewable resource use and amount of time spent by people on work (another nonrenewable resource), which is great for materialistic well-being but nonsensical for sustainability and spiritual development. Again our urges lead us astray into the honeytrap of using money in this way - the relation between money and physical energy is what ultimately gives money its power but the relation is based on scarcity / abundance instead of conservation / collapse, so where we are now globally is a totally rational outcome.

Money and pricing is based on human demand and extraction ability: a smartphone is objectively difficult to make, it would probably take me a lifetime if I tried to do it on my own, even with all the knowledge readily available. Then if I sell it I would charge a huge price. But with machines at a factory, the more phones are made the *lower* the selling price! This bears really thinking about because it is presented so nonchalantly as standard economic theory but is actually insane. The practical things that I can do with this phone, its usefulness to me, is completely unchanged, but it is cheaper to buy when more are made, to the limit of there being so many that I can buy one for close to \$0. It is absurd because more materials and energy are used but price per unit is pushed down - completely backwards and contrary to a conservation / physical energy mindset but logical by human demand standards. After all, if nobody wants my phone it doesn't matter what I charge, but the issue is that all the energy and materials I used are not going to disappear, they persist regardless of price.² Consider oil / fossil fuels - a sane (physically minded) system would set price based on environmental effects and remaining reserves such as to limit all possible spending of nonrenewable resources. What we have, institutionalized insanity, is that the faster we extract oil out, the cheaper it becomes to buy per unit - runaway use to the last drop is inevitable. Consider air - it is essential to life but it is everywhere around us so we value it at \$0. If oil were as abundant as air, it would also be free although the physical effects of burning it haven't changed a bit. Prices thus reflect scarcity in the marketplace and may be a good tool for services (which

²This can be seen as a degenerate dual role of money in both directing the route of energy expenditure and specifying the degree of energy expenditure (a rewording of a similar sentiment in [International Banking and Monetary Systems]). Such a coupling of what should be two separate degrees of freedom leads to a necessary creation of runaway growth and decay cycles, even side by side as so often seen in the modern economy - homeless people taking shelter by the construction site of a new high-rise.

are non-conserved and can be made up / not given) but are asinine for responsible energy and material use. The less oil that other people buy, the cheaper it becomes for me, except in the absence of the oil industry the extraction ability drops and now oil is very expensive. The irony is that services traded for services produces only a negative energy contribution, so like a community of only artists selling artwork to each other, a service economy (where pricing by scarcity is sane) cannot be physically capable of supporting itself even if it is monetarily stable! That is to say, at some level dollars are used to trade energy-negative services (construction, education) for energy-positive materials (food, oil), and all this driven not by energy sustainability or even efficiency but merely present-time availability. The places where dollars change from service to energy are net energy sources and the physical driving force of the world (oil wells, farms, mines). The places where dollars dissipate energy as services are net energy sinks but monetary driving forces of the world (transportation, construction, fabrication). There are also places with minimal (employee food) energy consumption with large financial / service transfers, and places with minimal financial transfers but large energy transfers. The problems of this dualistic system stem from money being an ill-suited pathway to handling the physical reality of energy dissipation - since money is the made-up (lie) concept, it must change because physical reality will not.

To further understand this I would seek to make a model of all practically enumerable energy, materials, and money flows and see just where such a system leads. At least I can get a long-sought goal of understanding true energy cost of material objects in the marketplace (even including the employee food needs). Energy / materials will be the easier part as it is conserved. Money can be taken to be conserved, in which case any stable business must make more than it spends. But then taxation and loans and stock market and inflation all come into play and make such generalizations more difficult. On the spending side, spending money is only possible with knowledge of what to spend it on + ability to do it (ie drive to a store). On the serving side, it similarly makes sense to spend energy / materials with knowledge of how and where to do it. What is the driving force of the economy? Human instinct urges combined with energy availability to satisfy those urges. The complex human structures / systems of the world come from controlled burning of oil leading to directed evolution of matter structures - we could just burn the oil and heat the air or we could use it all in carefully engineered CPUs to do loads of computation, our actual world is somewhere in between, using what is practical and dumping the rest as heat. Just like a stable business must make money for itself, a stable energy system / machine must dissipate some energy as heat to do useful work / evolution, so at least in this sense there are similarities - only the money spent is conserved within the economy while energy dissipated becomes ir-

recoverable in space. Perhaps the system can be made more sane if money spent on any energetic goods is destroyed, then total energy consumption will be set by the rate of money creation. As is, money remains in circulation and acts as a long-lived catalyst for energy extraction activities. To be even more sane, each material needs to have also its own "currency" so we can accurately control material use / extraction and avoid successive overuse of materials if only energy is of concern. ³ ⁴ As is, money will drive us to conditions of equal-scarcity: the more human-valuable a resource the more scarce it will become given finite / limited stocks, it is just pure crazy. A responsible society need not be overtaken by an irresponsible one: it can wisely use energy to secure other energy sources, keep the population small + happy, and last for a long time, competitors being more eager to join than to fight seeing the high living standards, but such high living standards being enforced with no-bullshit punishments. Maybe parents living in such a society will be fulfilled by their abilities for intellectual / artistic pursuits and will be content not having 6 kids, so an antinatalistic ending can come about. But maybe they will love sustainable life so much they will want kids to experience it?

Maybe this is part of the issue as the economy is inextricable from human psychology, and humans overall are not content with sustainability: they want to be different + better than their parents, they want to fight and establish themselves and would be frustrated and driven to delinquency in a stable society. Sadly evolution does not design stable systems - because an energetic advantage means a survival advantage the species / traits / groups that use more energy become more fit so the preferred strategy is using all that's available now and worry about the future later (which, of course, means that there is never a moment where one thinks about the future - this moment is always put off for sometime later) - and this much is reflected in our economic system. Again, this is not strictly necessary, but the humans that benefited in evolution were energy-hungry even back in early days and this hunger doesn't magically stop when discovering oil reserves - any responsible and sustainable tribal societies like native americans, got dominated by the innovating ones. The above energy-constrained economy would not be difficult to implement because of inherent energy conservation: simply find + track outputs of original-energy producers (oil wells, coal mines - these are relatively few and can be easily supervised

³See also the winding down problem, later in the text. Overusing one material to extinction then switching to another one as a substitute only ensures that the substitute will be made extinct even faster as there is more load expected from a weaker foundation; the inevitable result is a state of complete scarcity of all usable materials rather than unpleasant limits on a few, a catastrophic runaway failure.

⁴Similar destruction / creation of currency would be used for mining / recycling materials

to enforce the policy), then set a conversion factor like \$1 per kWh, then tax ⁵ the producers accordingly - the producers in turn are free to charge consumers more than \$1 per kWh to pay the salaries of workers but cannot charge less than this price because they have to pay the tax. This tax constitutes "destruction" of money to compensate the real irreversible dissipation of energy that has happened in the burning of a kWh of any nonrenewable energy source. The service economy continues to do its thing without further intervention. The government reinvests the energy tax revenue into financial sectors useful to society, letting the marketplace determine further spending. This reinvestment constitutes "creation" of money to allow more nonrenewable energy to be burned, as deemed appropriate for society's needs. The goal ought to be to eventually drive society to minimal nonrenewable energy use, so such reinvestments can get smaller over time. Even if they do not, at least the amount of investment here sets a definite and conscious limit on societal energy use according to the previous conversion factor. How or when the energy is used and who does what service is left to the marketplace to solve as it has demonstrated success in such optimizations. But overall energy consumption is kept reasonable, and renewables are intrinsically incentivized, along with low-energy products and practices. It is no longer the case that the more energy is used, the cheaper it is to use more and the less competitive it is for a business to reduce its footprint. The service economy remains legislatively and operationally unaffected and still capable of its variety and range of products. From an "average Joe" point of view nothing has changed about the meaning of money - he still applies for jobs, gets paid, and spends money how he wants. The impact of monetary control leading to energy control is done by an "invisible hand" which here is not left as a ghostly ill-defined entity (which in the real world means runaway cycles, as we so readily observe) but is made explicitly a government which can at least apply some rational and prudent control to the system.

The idea of base psychology is dualistic: behavior is regulated by primal urges which depend on brain's evaluation of external inputs, but on top of that there is a conscious layer which can regulate its actions based on logical / rational evaluations *within* the parameters established by the urge level. So people would say, "I don't know why I did it - I'm not that kind of person - it just happened", and they honestly mean it - in the sense they haven't come up with a rational explanation for the actions determined by their urges at the moment they were triggered, and from their "normal" rational evaluation now they wouldn't have made that choice. The "I'm not that kind of person" is misleading - in reality they *are* exactly that kind

⁵this tax is not a percentage of earnings but a required monetary amount proportional to the amount of energy that has been sold

of person, but their rational mind associates that label with bad things and will resist taking responsibility for urge desires, or in other words "the ideal person I fantasize about being would not be like that". Both "I don't know" and "I'm not that person" indicate a lack of understanding of the complex triggers and drives of the urge-level brain system, just as saying "it was an error / coincidence / luck" indicates a lack of understanding of all contributing influences in an interlinked system. I might compare:

- Conscious me: What I imagine an ideal version of me should do, ie social norms and logical pro/con evaluation, "I like classical music and drawing"
- Unconscious me: What I *actually do* in the physical world, ie triggers and drives, "I like video games and sports"

The mismatch between conscious and unconscious me means this is a block to further mental development / enlightenment as I don't understand myself and cannot predict my own responses. Fixing the mismatch means altering either unconscious to be in line with conscious (via environmental behavioral conditioning / reinforcement) or the conscious to be in line with unconscious (via thorough self-reflection and analysis) and both take persistent work / effort. Once the two are in alignment, decisions and actions become streamlined and efficient.

One major mismatch for me has been regarding bodily autonomy: the idea of buying an activity-tracking watch made me feel weird, and I put off the idea of becoming an astronaut because then all my movements (even very private ones) would be tracked. I think this traces back to the idea of sexuality. I'm not really afraid that "they" will track me - so what? I'm afraid that I will have no choice but to see the reality of my own life, presented by data from "them". ⁶ But why do I worry about this? I feel the same way when being very quiet during masturbating - so others won't possibly hear - do I really expect them to think I'm an asexual being? What I'm more worried about is them reflecting the reality of me masturbating back onto me - and the root of this manifesting as a worry is that I don't accept myself as a sexual being.

- Conscious me: No carnal pursuits, only intellectual endeavors
- Unconscious me: Masturbation and BDSM fantasies

All taboo topics will be of such nature, as they make the conscious mind uncomfortable by questioning the illusions it holds very dear to maintain

⁶and moreover, this is a remnant of developmental experiences where such data about myself was used by my caretakers to hurt me, thus I expect anyone who has this data would only seek to hurt me. the data in itself is neutral, its emotional memories are not.

the ego and some semblance of higher-level drive. Indeed I believe the suppression of the sexual urge by the above mismatch is a necessity for intellectual action - sublimation is real, as the brain only has so much effort to give and it will use it on the most pleasurable things it can find - by a mismatch on the sexual urge where the social norms / group inclusion demand the thwarting of sex drive, the brain is made to choose societally-useful actions because indulging in what it really wants - sex - causes the unpleasant realization that one is not in line with societal norms. Of course this doesn't stop sex from being triggered, but it makes people feel guilty about it later on so they do some useful work, instead of solely pursuing sex all the time as the brain would like. Why should sex have this special position of being something deeply private, something to blackmail people with? ⁷ Ultimately this seems similar to status symbols of earlier - arbitrary in nature but once chosen as important in a group, having a serious impact on perceived social status. Why is it that I should worry about someone sharing nude photos of me, but not worry about clothed photos? Why is it that I should be impressed with a gold ring but unimpressed with a copper one? This goes back to the values instilled in me in childhood by behavioral conditioning and associative learning (concept of good vs bad), and later on group reinforcement (halo effect, group consensus / groupthink) regarding what items and actions are chosen by the group as the de facto good and bad things (gold = good, nudes = bad). I would call it suppression and impression: suppression being the teaching of the conscious mind that an action is bad and to be avoided, impression being the teaching of the conscious mind that an action is good and to be sought. We cannot teach / alter the unconscious drives as they are hard-wired, so we instead turn them to societal benefit through suppression of natural / intuitive actions and impression of artificial / non-intuitive actions, the latter being in line with societal welfare even against the former being in line with individual welfare - because individuals ended up surviving better as part of society so giving up this individual welfare was the price to pay. So a child that starts touching its genitals will be repeatedly blocked / scolded by parents, leading to a conscious construct that "I do not do sex stuff" - even with very sexually permissive parents a child will learn this construct on some level because society at large does not discuss sex - using euphemisms like "having fun" and blurring genitalia suggesting that this is not an accepted topic to bring up, which is to say "one does not consciously consider sex stuff". Similarly for impression, the child is conditioned by rituals like birthdays and class graduations, and advertisements on TV or

⁷On some level the search for privacy has an evolutionary basis: actions like sex, defecation, and sleeping leave one vulnerable to attack so are best done in a safe + private setting. But telling other people that I sleep, or shit, doesn't really constitute blackmail the way sex does - because sex is taboo.

from family / friends like "you can be any job you want" or "you will have a big family + house, how great will that be?" "just wait till you're an adult - you'll have all the money in the world". This creates a conscious construct along the lines of "I'm a productive worker and I want to earn money". Adding up the terms of this rough analysis:

- Conscious me: I am a worker + enjoy earning money
- Unconscious me: I am an animal + enjoy having sex

This tricks the brain into using its strong sex drive to lead to work instead of more directly to just sex ⁸, in the process driving society. This is not a specific substitution: more generally all the suppressed urges will manifest by any allowed pathways, including impressed ones. But to make mental progress I must be able to face my sexuality - be comfortable sharing it with others (as this implies confidence within myself to face the facts). In this I will have to give up on using the sex drive as a substitute for work and thus on the one hand find areas of mental effort to give up (ie don't participate in social contests) and on the other hand rely on the appropriate mental drives - the drive for exploration / pattern-searching like that which makes music pleasurable. That is, I must satisfy my sexual drive by sexual means, and mental drive by mental means. ⁹ Being in tune with my own body, and my own mind + state in life, full self-consistency.

With this base view, I am seeing something of a self-hatred at large in society. Indeed this makes many things clear: self-harm and depression (literally an act of hurting oneself, out of an underlying disgust with the idea of self even if some topical rational explanation is picked), gladly welcoming spiteful immigrants to take over one's home country (on some level believing that they are more deserving of your country than you are), entering challenging and low-paying work (believing one does not deserve any better). The hatred of self because of society's repeated reinforcement that all the urge-level actions of the self are either unacceptable or pointless: the bullied kid can't help but be bullied for how he looks / what he does so he will end up hating himself. But bullying as such is not necessary: messages of suppression appear as subtle reminders of exclusion / social dislike throughout the day and are more insidious than a burst of violence as in typical bullying - it is not just a few bad bullies hating you, but society at large hating you. This is ultimately a perception - based on what

⁸because it is conditioned to believe that work is the thing that will relieve the sex urge; the urge itself is a nameless feeling that can be called anything by society, for instance "perseverance" or "creativity"

⁹see also later chapters, where I argue the sexual drive has a specific reparatory purpose and diminishes once there is minimal psychic damage

your brain evaluates as hateful more so than on the objective physical actions, but such evolution pathways are largely hard-wired so the presence of self-hate points to a real "toughening" of society / individualization where people are increasingly more willing to be hostile to a fellow person - a logical consequence of high-density population and social competition but still a troubling display. In this light the recent developments of gay and trans communities also makes more sense. Why is it predominantly M to F transfers? It is a sign of a general hatred of masculine qualities - in our "perfect" society (by evolutionary measures - ie no lions on the street, plenty of food) there is really no need for the instinctive / urge-level male drive to dominate and fight. Boys, from the earliest age, are taught to be feminine in order to be in line with societally acceptable behavior - this suppresses the domination drive (which make boys into good hard workers) but also leads to a subconscious hatred of self - the M to F surgery is a blatant message "I hate my genitalia, I hate who I am" but why should this be instilled - because a boy is now brought up by single mothers, female caretakers and teachers, and with female friends / groups. There is no male presence because society has shown men that their intuitive drives are useless ¹⁰ - this drive is physically powerful but emotionally vulnerable and society hasn't held back on emotionally destroying the male ego to replace it with a feminine one, because we have already dominated our surroundings and further domination is just unnecessary thankless work that others will make fun of because it brings no real benefit. At some point a boy realizes that if only he were a girl he would be actually appreciated by society, feel valued, and this drive of self-hate causes him to find gender change surgeries / hormones / groups.

There is a similar sense, not of self-hatred per se but dissatisfaction / lack of comfort with one's own body (ie feeling it does not match societal expectations / is a failure) that underlies modifications like makeup, hair color / styling, tattoos, and piercings. This is different from, say, biker gangs where tattoos are a status symbol and are done more as a matter of expectation vs a sense of lacking in oneself. This is why so many trans people way overshoot the image of "normal girl" and instead get covered in tattoos and piercings to the point they are actually less passable as their new gender and look like an androgynous middle ground.

I guess what this suppression and impression amounts to is some form of selling a dream: convincing the unconscious (behavioral reinforcement) brain that both

¹⁰As in the absence of natural things to dominate, ie animals or enemy tribes, the domination turns into a internal fight with other members of society (at some point in the "toxic patriarchy" this was the close family), which is socially unacceptable and taught as such to young boys

1. Carnal pleasures and other direct satisfactions do not bring happiness
2. Arbitrary societal actions like work + studying + owning a car / house / wife+kids do bring happiness

Then the conscious brain remains strangely content working for these arbitrary goals, with an underlying drive of suppressed sexuality / dominance and accepted social validation / reinforcement / approval. This is the notion of a honey trap: work towards this ideal, and know with each effort you put into work you are getting closer to your true purpose. This knowledge in itself is the chemical release / honey, whereas consciously we keep thinking that reaching the end is why we work but on an underlying drive level we work because it is a way to find meaning in the ordinary everyday - by painting it in the light of an ideal / dream.¹¹ This is why describing a person's life using purely facts and physical actions, objective truths, sounds dreadful - the colorful imagery of intentions + hopes is gone and the reality is seen that the dream is a mental construct with only a tangential relevance to reality. This happens in primitive societies with rituals, rites of passage, and ideas of spirits / reincarnation. This happened on a big scale with religion - especially clear in Christianity with its in-your-face presentation of heaven vs hell as a dream inciting people to societal actions.

The dark mechanism here is that this dream of an ideal definition of success provides a mental reward for work but does not ever need to objectively materialize. The scent of honey in a trap can come from totally inedible chemicals, engineered for attractiveness not nutrition - because the goal of a trap is to attract, not to feed - it's not malicious just indifferent towards nutrition. The bait on a fishing hook can be just a piece of rubber. So with these dreams - you will become a man after you journey to the high mountain, you will go to heaven only if you work hard until death - the promise doesn't need to materialize as long as its objective (of creating a mental illusion of a desirable goal + associated chemical release causing in-brain reinforcements of work towards that goal thus a permanence of desired behavior) is achieved. Anyways "man" and "heaven" are wholly subjective - each listener will interpret them as their personal version of "good", but without clear language to flesh out these concepts a large group will just agree - yes I want to go to (my own personal) heaven! Like the monster that is never seen is scarier than some guy in a costume, a reward that is never materially defined is more attractive than some worldly goods: because in both cases what is scary / attractive is not actually the monster / reward, rather the subject of monster / reward is a symbol that stands for

¹¹The trap that catches so many couples that stress over a perfect wedding - it will inevitably be disappointing because the wedding was a symbol to represent an ultimate aspiration - something which any reduction to material reality just ruins.

an emotional state of ultimate fear / ultimate bliss. It is a more complex topic that is poorly represented by just a word as a symbol, so it uses a whole trope / concept / story as its symbol. But beyond the symbol what's left is the desired programming of behavior. This is a mechanism to get something for nothing - a net generator of human progress: instilling this dream + an action plan takes minimal physical expenditure, but following the plan causes the person to apply his whole life force towards it.¹² Like telling an oil well to get itself out of the ground and burned in the engines - by convincing it that this is actually a good thing. Our brains will go through serious pain + suffering in pursuit of this arbitrary dream. The structure of society at large is defined by what this dream is, for the western world literally "The American Dream". Con men capitalized on the trap nature of this notion - get someone to believe + invest in a mental construct for what is "good" and how to get there, and they will pay *you* if they believe it will help! A non-existent supply creating its own demand, as it were. Surely modern businesses will do the same - it is the only way to make money after all!

I think the most egregious case is current education: the dream is that getting through high school / passing SAT / getting into college / graduating college / getting into grad school / getting MD / getting PhD / getting postdoc / getting associate / getting assistant / getting tenure / getting seniority ... will make your life all set. Notice how at each stage the goal posts are moved farther? The promise never materializes. Life is not ever "set" and you still face competition not only from peers + superiors but the rest of the world, the only difference is now the expectations of what you are to strive for next have shifted. Neat, that with some quick symbolic ceremony of graduation, you somehow feel OK with having paid for many years of schooling and are content with still having to compete just as before. Without that one day of celebration wouldn't the whole experience feel more... empty? But it is only 1 day out of years of study, so it shouldn't make a difference! Except it does, by catering to the selling of the dream, assuring you that yes, this is indeed the good + right path in life, now on to the next challenge you pleb! The individual that paid + went in deep debt for an education then fails to get a job is blamed on a personal basis (too lazy) and in any case has to face defeat on his own - the school has fucked off with his money and is indifferent to what he does next, and the rest of society is also sold on the dream that education is an absolute good so rather than question the dream they will blame the individual (well he was a slacker + didn't get *enough* education to stick, should go back to school - probably failed a few classes). Mortgages have

¹²And, like the control gates of a transistor, this impression of dreams is a control point for society that governments are well advised to guard closely

a similar trap nature but are a bit more honest - at least you get an actual house afterwards somewhere near death age. The deception here is that the dream was "just get a house and your life will be set", so people get a house expecting that for the cost of going into debt they will get an ideal life - alas, all they get is a house (likely with its share of issues). Unable to accept defeat, the dream then changes: kids! Fill up those bedrooms to make your life complete. Disillusionment can set in, but it doesn't matter - the bank already has the money and doesn't give a fuck, they used the dream + got what they wanted, they don't care beyond that. Probably the biggest dream, and one that is recently being seriously destroyed, is that of family + children as the apex of life. Get married, have babies, and you will be forever happy (why is it that "happily ever after" is such a comforting close to a fairytale?). Towards this goal, men + women do great physically useful things to impress each other, advancing society + living standards, but once having married (perhaps compromising on base attraction for the sake of the dream) they find life isn't a heavenly bliss, it's just two people getting in each other's way now - in desperate clinging to the dream they have some kids, then divorce from the annoyance of actually dealing with a constantly needy human. From childhood, movies, tales, and toys all sold the dream as the one and only true joy in life, so their later disillusionment doesn't matter - society has already gotten out of them all it needed and no longer cares.

The underlying drive is the search for comfort + security, probably the strongest chemical high in our brain's wiring, enough to make us lead a whole life's worth of effort / work to achieve this impossible state. Many delusions come from trying to justify to oneself that one has achieved such a state - holding by any means to the promise sold earlier as truth - and this covers underlying emotional / subconscious-level hurt that the promise was false - as the subconscious brain is smart enough to realize this despite conscious rationalizations to the contrary (I'm living the best life ever right now...). Face enough broken promises + emotional wounds and the drives start shutting down from reverse conditioning where the promise becomes associated with the hurt, and no amount of conscious discussion or delusion to the contrary will help escape - a person in this state becomes fully idle and indifferent, or maybe nihilistic, or maybe hating society. Even without being consciously aware of it, operating under a potentially "normal" conscious interpretation, strained as it may be. Basically, we do not evaluate happiness or well-being in an objective way: is it better to have loved + lost or never loved? Objectively the latter is probably true - you can't long for what you haven't experienced: like with drugs (heavily addictive ones at that) it's better not to start; the question is a bit sly because most people have loved their first caretaker and inevitably experienced the chemical high and its loss already. But people would pick the former (even people who

claim to like the latter - the importance is in *real actions* vs words) because it satisfies both the societal dream and the urge-level proximity drive. Our actions are based on drives and triggers, not rational valuations, and selling dreams / honey traps takes advantage of that.

Most of our lives is spent under the conscious and subconscious belief in the narrative of this dream - it is what comes out in verbal exchanges / online posts / out conscious values and the extent of the delusion can be evaluated by comparison to physical realities of the situation. I do this readily, my dream is that I am searching for some greater meaning in physics / philosophy and this provides a measure of comfort that keeps me capable of staying sane + functional in everyday life. There are times when this dream has been called into question - am I really achieving it and what will I realistically gain from it? And those times have led to very frightened mental states - recognizing the cruel nature of distance ¹³ and the coldness and ultimate indifference of the world - we die alone, other people and society itself exists to use us + discard us later, everyone is ultimately selfish + embedded in their own qualia experience / interpretation of the world so their interest in you is selfish + conditional, and there is no greater meaning in life other than perhaps energy dissipation. It is a mental state that makes me want to curl up in warm blankets and just get away from the mean world. My brain engages automatic defenses to avoid ego-destruction so after that I cling to meaning in what I can: exploring, learning, thinking, writing. But in all this the change in the reality of my life has been minimal: the big shift was mental in feeling comfortable + in control + confident of the future to seeing the world as cold + cruel to accepting that my worst fears are relatively unlikely to happen and finding meaning where I can, so still living with a delusion (that there is a meaning) albeit a more physically-accurate one than just blindly following societally-instilled dreams. The sad part is no one really cares - not family or friends or mentors - only I care about making my life best for me, all they care about is making my life best for *them*. Ultimately, there are only so many ways one can be told to leave, the onus for actually doing so rests with the self.

Having a child in the first place is a vote of confidence in the societal status quo, for better or worse, and by that metric the western countries are actually less satisfied with life than the starving mothers in Africa with 12 babies. Indeed it is only the former who criticize their government for not being better, the latter don't care as they've got babies to take care of - that, then, is what the world will shift towards with increasingly globalized cultural competition in the economic and political markets. Governments and companies seek obedient consumers + workers, as evident in numerous

¹³at one point I was afraid to make the 20-minute walk between home and lab - as countless horrible things could happen to me and I would be powerless to call for help, or feeling utterly alone

specific immigration acts (later turned secret). Amidst such trends, my present ability to reflect, and be raised free of the contagion of inescapable religious / memetic indoctrination is a rarity - a privilege of a high-energy and low-competition world, a luxury to avoid and escape mind-numbing concepts that keep me from enlightenment. In tight-knit communities reliant on each other for survival evolutionary drives again come into play and escaping indoctrination is impossible - probably why the dark ages stayed "dark" for so long.

It is interesting to consider, in big human systems like social dynamics, the economy, and government, there are inherent self-limiting structures that keep the systems stable. In a dominance hierarchy, it is expected that the leader has the most power. Why wouldn't he abuse everyone with it? Because if he is not trusted by his followers, they will find a new leader - they will only let him lead as long as they are satisfied. He will be forcibly overthrown if they are not - an army can only do so much and the army themselves can eventually turn on him (ie if he abuses them or their families). In the economy, why don't banks / governments just print money? If they did, the values of money would be debased, so strict laws are put in against it. Why don't employers take all the money for themselves? If they take too much the workers will quit and start their own company. Why don't companies charge ridiculous prices? If they charge too much the consumers will quit and start their own production. Of course then an ideal capitalist human is one who cannot start their own company or make their own product - ie one fully dependent on the system for life. But a fully dependent human also cannot contribute to an existing company's production - ie unemployable - so the economy helps people reach some level of self-sufficiency and understanding. The government can print money - but if it does their currency will be less valuable and they will be forced to work harder. The government can on the other hand restrict / control spending, but like with the prohibition, black markets will pop up which offer better deals, and fighting them becomes a losing battle without taking drastic action, but this latter action itself might destabilize public acceptance of the government (ie excessively harsh) and thus come to affect the economy again. The government can tax more but then people will have a reduced incentive to earn more, and in extreme case will move abroad (or more readily, move the money abroad). The government could restrict this but the lose benefits of an international market. The government could take more power for itself, but it will find that any flaws in the use of such power will backfire on the sense of government competency and thus affect how long the government remains in power. The government could leave some power vacuum, and find that this eventually creates a competitor that becomes an increasing threat to own prosperity. The government could get too involved and find its resources strained in main-

taining its huge power base. These intrinsic limits come about from people comparing alternatives and recognizing / using their personal power and influence / standing in society, ie going outside the spirit of the accepted rules (too expensive? I'll make it myself. Too abusive? I'll get a team to take him down) to further their own goals. This is also how we devolve to a minimal-trust (ie required consent forms everywhere - otherwise cheaters will take advantage) and tragedy of the commons scenario. The system constantly corrects itself against cheaters (those who would break the rules everyone else follows so that they can get ahead / gain power) while the cheaters constantly find new flaws in the corrections. A "stable" system will thus have countless interacting feedbacks to keep its overall rule-structure and operation appearing effectively constant. But true constancy is only in death and non-existence, all living / non-equilibrium systems, including huge ones like the economy, must continue changing - for the same reason: the cheaters are always trying to catch up. This is the incentive for improvement that keeps systems running / operational for any long period of time without succumbing to the cheaters (and thus arbitrariness: non-conservation of a presumed conserved quantity, thus destroying the notion of stability). Maybe, even, this is the underlying feature of experience / qualia: once having some specific qualia, it is inevitable for another one to follow, and another one to follow that, each one taking advantage of the "gaps" left by the previous one - this would be more of a "reality is just a projection of my qualia" view, which, strictly, is true.

Looking at the circular / flow nature of money in the economy, I realized: the current economic climate is just the sum effect of human desires. Behind the laws and the words and the pictures and the money, human desires are always the drivers of action. More practically, when we work at a company we work for other people and buy from other people - we have to satisfy them and they have to satisfy us because then we are better off (and richer?). If I buy the cheapest stuff I can find, I will push production into low-wage positions and companies will move abroad to cheap locations. The job I get is determined by my shopping habits, because on the net money keeps flowing. I cannot buy cheap stuff from China and complain there are no jobs left in the US. Maybe this is true on a big scale for my experience in life. If I eat lots of meat, I don't have to suffer directly - the animals that get killed do though - and "I" am just another incarnation of them. I cannot eat meat from factory farms and complain about pain + suffering in this life. The "universal being" is a ravenous one: it seeks to devour, not realizing that with its voracity it is merely devouring itself. This whole world of animals eating each other alive is a manifestation of this sick hunger - the lion happy to eat its prey doesn't realize this is the same logic the bugs use to eat the lion - one is pleasant while the other is annoying but they cannot exist without each other. Maybe then I should

seek pain - as a price which must be paid to reach enlightenment, as the pain will be reflected onto the world to make it better for me: in this story I am a spiritual being, and my body is just a vessel - bruises and cuts will heal by their biological mechanisms but this doesn't really matter - my experience matters (because 3D space in which my cells fix themselves and C space in which I feel qualia are distinct - the 3D space is "not real") and foregoing the devouring hunger urge while accepting pain will lead to a reflection onto me of a better world - the mechanics are not important because C space drives 3D space not otherwise. This is why so many religions cover asceticism, and why concept of karma exists, and why advanced monks are told to have miraculous while still believable abilities.

I mentioned earlier how in each of my momentary qualia I get a sense of self due to information stored in my memory: but this is only from childhood. How can I be a universal being with such limited knowledge? I see that in addition to the conscious memory of life experiences since childhood, I have an evolutionary memory: my instinctual preferences (attraction), the nature of qualia I feel (what it's like to see red), the way I interpret + interact with the world: all this has been shaped by my ancestors and is in my evolutionary memory (this memory carries only those things that led to reproduction and survival), also affecting my everyday thoughts and experiences, and in this way connecting me to the rest of the living world. I have *been* the various creatures in the past, and what I could remember from them I have passed on through this evolutionary memory.

Our biologically programmed urges / chemical highs end up being the driving force for society at large. The economy ends up being arbitrary numbers - the reason it exists is because it provides an effective optimization mechanism to satisfy our urges by means of transferring money and goods / services. Bank money always adds up to zero [International Banking], the effect it has is in allowing exchange chains which satisfy, to some degree, human urges. Without urges the economy would stall. As such, it is evident that we end up in the current situation: the direction of future development is handed over to those deemed qualified, the entrepreneurs asking for investment, and the most successful investors - ones that (traditionally) have an eye for the real innovative ideas - will benefit while others lose so the economy sets itself up to give more money to those who have the brainpower to further increase flows of money - a clever system that leads to innovation, but innovation to what end? The end must be what people will pay for, and what they pay for must satisfy their urges or be taken by threat of force. We have mostly consolidated force into taxes and normalized this expense, so the rest of the economy is designed to be a runaway optimal caterer to human biological urges. One would be escaping the fear of death - the rich have a more pleasant life because they can

afford constant novelty to remain distracted from the reality of nihilism / suicide. The poor have to find their distractions elsewhere, in interpersonal drama or sex and drugs and childbirth - why the poor universally have a high birth rate.

Accepting the systems view, I ought to start placing more faith in the real impacts of subtle signs: it should be evident from seeing one piece of plastic litter in a forest that we will have plastic dumps covering the planet for many generations, it should be evident from seeing one news story of a rape / torture / murder case that worse things happened and will happen because this is part of human nature (Holocaust, wars, Stanford prison experiment), it should be evident from seeing one person leave the door open in a heated / cooled room that inefficiency in energy distribution is ever-present and will not be addressed unless financially viable and necessary when compared with urge-level inconvenience, it should be evident from a single white lie that people spin webs and emotionally manipulate whenever they get the chance, it should be evident from seeing a single caged animal that people will run factory farms and industrial slaughterhouses with only regards to the taste of the flesh rather than the sanity of the animal, it should be evident from seeing the first steam engine that smoke and CO₂ will pollute large cities running on mined coal, it should be evident from the first medical procedures that humans will grow their population until they have no choice but to be forced not to by death and suffering. The economy is thus set up as an energy extractor of an optimal nature: increase energy expenditure, and population + demand increase so as to use up all the excess and will demand even more (Jevon's paradox).

It is a race to the bottom: an over-saturated society in a famine will successively eat through the remaining reserves, with population slowly dying off, leaving the last survivors with a wholly barren world because what was remaining has been consumed by the large population in a short time instead of by a small population for a long time. It is somewhat like a "Joule thief" circuit: the less resources remain, the faster the extraction rate will get. There would be no surviving a global economic disruption or famine event, because the dying will use up all the resources, leaving the survivors with nothing in the way of support or productive environment. This is the problem with the economy and laws reflecting humans' urges instead of sticking strictly to logically justifiable principles - unfortunately evolution does not favor logic, it favors action and survival leading to the fastest energy dissipation - evolution is the source of the human condition. War remains a perfect tool to rapidly dissipate energy and humans, and increased conflicts / military state in the future seems an inevitability. Human nations had been plagued by wars / fighting since earliest days because of forced population reduction due to finite / constrained resource availability and ever-present birth rate / expansion - for all our intelligence,

evolution has still designed us to always retain hope and optimism and to have lots of babies. The past decades have been peaceful because ready energy availability due to technological progress has allowed human urges to be more or less wholly satisfied so there has been no need for conflict - like lions at the zoo will let people pet them after they've been fed. But reaching the limits of technical innovation (all the more severe now because we have the largest scientist population alive yet progress is stagnating - what will future generations (with fewer scientists + less cheap energy for scientific experiments) do?) and the limits of liquid fossil fuels (again severe because how fuel-hungry extraction operations are easy because we have such an excess of fuel - what will we do next?), our unending population growth (I don't think it's even close to stabilizing - the rate of acceleration has decreased but it is still positive - we are wholly incapable of limiting population, no better than bacteria in a petri dish - evolution ensures as much and no one seems willing to take drastic measures - because then the other side will take even more drastic retaliation) will lead to certain resource limits / constraints which will in turn lead to conflict, which will lead to much complaining and increased fertility to make up for the death toll in the conflict. So collectively we create our own prison - we take actions that make our lives miserable indirectly, not realizing the connection, then pray to god to ease our own self-inflicted suffering so we can take even more of similar actions. It seems the species is destined to live in misery and constant struggle like the rest of nature in evolution. Unfortunately logic has not prevailed.

I wrote earlier how the economy runs on the "rape" of nature - taking natural resources and claiming them as one's own then selling them for profit. This prioritizes maximum exploitation and short-term gain over future prosperity concerns, and furthermore reveals our dependence on factors we don't control in any way. Physics / nature does the "hard work" of making fuels / chemicals / food, we just take it and use it for an ultimate goal of enjoyment. I would further extend this to the exploitation of the body in manual labor and of the mind in mental as well as menial labor. Namely, whatever people are "gifted" in is in this society taken as basically an existing store of free supply - it is not systematically cultivated (as that would be seen to bring no net profit - as in all these cases) but rather taken by the larger system onto itself when available and then used to the greatest possible extent. Just as with the burning of fossil fuels leading to eventual CO2 build up - open cycle (net gain, at least for now / if CO2 is ignored) and invisible present effects of the resource depletion / waste accumulation leads to an unsustainable draw and "fastest approach to misery / scarcity" ie draw until there is no physical way to get more as opposed to exercising restraint / sustainability. The exploitation of the mind, in the form of taking + selling ideas generated by unconscious processes with no regard as to

the source or sink, creates a mental environment that maximally extracts for short-term gain and keeps people on the brink of misery ie depression, alienation, lack of trust / safety. The system cannot provide this as then it will be evident that the whole ordeal is zero-sum and individuals are much too keen to take for themselves whatever pleasures they can, not realizing it is themselves who will be hurt. In fact the environments that we set up are more conducive to thought-extraction than to sustainable / healthy / balanced thought-generation, then the active minds with lots of thoughts go into the places where those thoughts will be used. It is as if the whole thing is a race to the bottom - a casting away of existing riches as quickly and thoroughly as practical - maybe that idea of a suicidal god is not too far off - yet this is probably too poetic, randomness and stability will lead to evolution maximizing energy dissipation and the universe seems to be indifferent to our experiences.

While here, I would add that there is no such thing as love and people are not nice "just because", there is always a benefit to them in any action they take - the brain always and only picks the pleasure-maximizing sequence of actions. I had written on this selfishness before (and the repression of it by culture is strongly evidenced in just how hesitant I was to accept this as a truth) but here want to bring more specific focus to the interaction nature: it is not only that person A chooses to do something nice to B for a selfish cause (such as acting the role of an imaginary ideal parent or indulging a sexual fantasy), but it can also happen that person B takes actions which (likely outside of A or B's conscious awareness) incite in A the tendency towards nice actions. In all this it is important to not get lost in the ideals of love and generosity as that covers the reality of a transactional exchange.

In the media and popular culture, there is a fascination with Artificial Intelligence, which is invariably portrayed as some sort of humanoid with a computer for a brain. The AI is something that happens inside a computer chip. In reality, such a tunnel-vision image keeps us from seeing existing AI - it is not inside a computer chip, but like the biological brain, made up of messy physical network connections. Powerful AI exists today and is in the form of corporations and governments; these structures can take on actions according to their own goals and values. ¹⁴ And while in the movies we fantasize about the laws we would impose on an imaginary robotic AI so they would not turn against humans, ¹⁵ in dealing with the real AI of corporations we have given them essentially free reign with the most important laws regarding the maximizing of profit - human welfare is barely

¹⁴this parallels the discussion on [<http://answersanswers.com/future.html>]

¹⁵This is a psychological urge to recreate in fantasy a more desirable childhood for the self. It is why parents can be very obsessed with setting rules and restrictions for their children.

defined much less enforced. Is it any wonder then, that these entities will proceed to make human lives worse?

4

Screens and Absurdity

Falling asleep, I was thinking about movies, and life as a whole from a physical / separated perspective. Isn't it really absurd that we take time out of our real lives to sit in front of a screen and watch a scripted fiction? Isn't it a plain demonstration of dissatisfaction with life and a wish to escape it? I remembered the movie *Chinatown 2*, an action-comedy about some detectives finding a murderer. In there, I found weird that during some "scary" scenes, there was a loud screeching music playing, as if to complement the jump-scare, but to me it wasn't scary but rather out of place. I thought, if they didn't put the loud startling noise, this scene wouldn't be scary at all, it would even be boring. I recall now the parents I saw, tickling their baby so it would "smile" for them and then call that smile genuine - it's not, they don't care about you, it's an automatic reaction to being tickled. The magic is gone. In [*Earthlings*] the scenes show how bulls are tied with a string to make them kick + appear aggressive for rodeos - again an instinctive reaction of the bull to physical stimuli, which we go on to interpret as "the bull trying to fight" but really it's forced to by physical provocation. The magic is also gone. At the Singapore zoo I attended an elephant show - the handlers mostly hid their actions of giving treats + pulling ears, but it was there anyway, the animals don't do this to entertain the watchers, they do it because that's the only way they instinctively respond to the trainers. Then it was not an exciting show but rather a kind of sad exhibition of arbitrary behaviors under a dominant force, an instinctive and indifferent response, with no concern for entertainment and only seen as such by deluded onlookers who project human thoughts onto the animal somehow. On the [*Newborn Russia*] series I saw a grandparent hold the barely newborn baby and make all sorts of cute smiley faces and nice words with the extent of "open your eyes! open them! open them! yes that's it, open! open! open!" and so on. The baby of course was probably scared + annoyed by this, or too shocked by birth to care, but

the grandparent was insistent that his words actually did something. And I guess this insistence is required - it is how children end up learning in the first place, they are just expected to already know everything but just not able to act on it, so the parents place them in situations in which they have expectations to perform like adults, and from the feedback they learn how to fit in. If the parents gave up on this illusion, statistical analysis of the baby's brain would not be as fully exposed to the behaviors it needs to learn so the baby's development will suffer. But this doesn't change that for me the magic is lost. Babies are made to look at the camera with silly noises (because looking for the source of a loud obnoxious noise is an instinctive reaction) then held tightly around the tummy to tickle + force a smile for a nice photo. Parents put on a nice smile trying to get the baby to talk, then turn around and curse out the baby to another adult, then right away put the nice smile face back on and continue talking to the baby. It all makes me question whether there is any sincerity in the world.

I can't bring myself to think putting on a smile and then laughing to the next person over would be acceptable - I couldn't sleep at night knowing I did this. But apparently people do this all the time. Then, everything is an act. Even parents acting nice to me = fake smile. It is scary, it makes me want to hide far in the woods and kill myself. People cannot be trusted. And the things I thought to be genuine / true are actually hard-wired responses to an entirely different and often hidden physical stimulus - hidden because it breaks the illusion that we desire to create for ourselves. This after all is the point of entertainment - to convince some part of the brain that what is happening is reality, because bare reality without the nice colors of a mental illusion of such - is devastating and brutal, too painful to accept. And on some level, both the entertainer (like an actor or pop idol) and the entertained know the illusion - the entertainer only does it to get money, and the entertained see past flaws to "accept" the illusion as truth so they can escape their reality - in the first place wanting wanting to escape their reality so much that they pay money for this chance. If I go to the theater, I pay people to do specific actions / motions while I sit on the other side and watch. Where is the rationale in this? How could this be a logical thing to do? If I go to the strip club, I pay women to act like they are attracted to me while I again watch and maybe interact. Why? Under the facade of the show, I come there due to dissatisfaction and sense of no attraction in real life, while they come there because they see it as an easy way to make money (meaning they are dissatisfied with their quality of life in some way). It could be that this interaction makes a net benefit, but it is not sincere / genuine, it is just a trade where both people end up being used as an object for the sake of money exchange. And in this way it is kind of a sad symbol of a deeply dissatisfied culture. In old times, the peasants worked the fields and sang folk songs, it was the wealthy who went

to theater and listened to gramophone tunes - technology already as sign of dissatisfaction. Not that the peasants were satisfied either - they wanted to be rich. But all of these wants are a fantasy - a fantasy of ultimate control.

People in this dissatisfaction take irrational actions like having social interactions or "falling in love". Love, or sexual infatuation, is like a strong drug that rewires the brain to do crazy things. With enough sexual arousal, the brain is just scrambled, people do more and more depraved things for release. Why would anybody want this? A logical person looking for "love" is like a ship captain looking for fog - objectively it just doesn't make sense. Who would voluntarily want their brain scrambled? This "tickling a baby to make it laugh" remains the driving factor. It is a most basic trigger-response, but ultimately all we do is a trigger-response set. The arbitrariness of present culture is just the result of constant searching + testing of triggers to get the most pleasurable chemical highs as a response. Maybe, this is to say, there is no such thing as genuine - this is in line with the idea of there is no "self" in a deterministic world - because otherwise how to define genuine? Even my own actions, the ones I call genuine, are actually just mechanistic responses to earlier triggers, I just haven't figured out the triggers so in my mind the "magic" remains. ¹ I still feel things, and I guess all I can say to that is my feelings are a physically necessary mechanism to connect the triggers to the responses, that's all. It is kind of simplistic of us to assume that such connections can be made without including feelings. Growing up, we learn at least some of our own triggers consciously (and more subconsciously, and most probably never learn), so then instead of someone tickling us to elicit laughter we can "tickle ourselves" mentally to get the laughter just as well, except now due to conscious inputs.

In this, it is instructive to recall that language + learning are enough to actually control our behavior - one could raise a child without a single spanking, and the child will be able to follow verbal directions and even live on his own following his knowledge programming and nothing else. But such control depends on us "buying in" to the whole idea that language means anything - why should I be ashamed to be called "loser" and happy to be called "winner" - ie these words actually change my emotional state but why, as they are arbitrary? Why should I care? Same with world symbols - why should I care that some celebrity owns a fancy car? Why should I care that the news station shows police in the neighboring state in a chase? Why should I care who is elected president? Why should I care how many gold rings or fancy clothes another person is wearing? Beyond needs I can't ignore like hunger, I care about the things society programs me to care - like finding my true love (what a nonsensical premise all around - that

¹see also an essay on the idea that qualia are those things which cannot be further defined by the brain's network learning process: <https://www.lesswrong.com/posts/3wYjyQ839MdsZ6E3L/seeing-red-dissolving-mary-s-room-and-qualia>

there is such a thing as love, and furthermore, that there is exactly one out there waiting), making lots of money, traveling the world, having lots of facebook friends, buying a car + house, having lots of babies, staying well-kempt and dressing nice and presentable, impressing the boss and fellow workers, applying for jobs instead of making a job - why should I do any of this? I will only do it if I believe, fully and truly, that these are the path to a successful life, that these things have intrinsic value even though logically and objectively they do not - they are an arbitrary imposition of the present society. I can choose to say "I don't care how fancy your clothes are" and I will then feel no need to save money / work hard to try and eventually afford fancy clothes. Breaking from this belief is very simple. I can similarly say, I don't care about kids and want to never have kids, and like that break away from the belief that kids are a status symbol, because all status symbols are arbitrary. I can say, I don't care about fancy cars, so even if I have lots of money I will just buy a cheap old car - I'm not trying to impress anyone as I have lost the belief that a fancy car is a status symbol to strive for. Even if I was given a fancy car I wouldn't take it because I don't care for the attention and don't want to deal with high-end maintenance. So with money: I can say I don't care to reach huge wealth, and then I have no incentive to find high-paying jobs, just ones that will be enough for survival. So with experiences: I can say I don't care about traveling, or going to parties or hanging out, as I'm not trying to impress anyone, so I won't bother to put in the effort to anything that doesn't directly benefit me. Gold, diamonds, cash, the latest iphone, the new hairstyle - all arbitrary, all society-programmed.

How did it get started, though? Why did I have these arbitrary beliefs in the first place? It is the following of such beliefs, after all, which has allowed words to have their real physical effect on my actions. I believe there are evolutionary origins - children are not taught the rules of social hierarchies, the structures of dominance emerge on their own nonetheless. The group picks something as desirable - something that they do not / cannot have by definition as that is what grants its desirability - a symbol which is taken to represent the feeling of drive in itself. There are many such symbols representing multiple drives - for children, maybe toys or bedtimes or certain experiences, for teenagers maybe grades or party hosting or relationships or sport team trophies, for adults maybe cash or cars or a house or children. In any case the symbol is something which, the owner can expect to show to someone else and that someone will say: hey I want that too! Oddly it doesn't have to be particularly useful to be a symbol: gold is a rather crappy metal in terms of its useful properties, steel or aluminum or nickel is more useful, yet gold carries the symbolic value for some reason - likely historic since it was the "first" metal (due to its existence in nature in the metallic state while other metals get oxidized), but still long stripped of

its useful role. If not practical usefulness, what makes a symbol desirable? It must be regular societal reinforcement of the notion that having the symbol makes one successful - but successful by what metric? Successful is ill-defined here, the sentiment conveyed is merely that symbol = happiness / solution to all problems / ultimate power which probably satisfies some primal need for finding such power: philosopher's stone / golden goose / ultimate theory. In the old days the church was the means for preserving the symbols-reinforcement of society. Family units also passed down values ie money or barter items seen as valuable. Without regular reinforcement, arbitrary symbols lose their ability to incite action, and useful symbols remain a desirable item. It is interesting that even in hunter-gatherer societies, arbitrary symbols like jewelry played a role - perhaps there is a need to be submissive to a leading class in the hierarchy and the offering of arbitrary symbols is a mutually accepted / desired action as a sort of "request of future prosperity", like a rudimentary + imaginary investment. How can children learn to follow verbal orders? Their first learning must be of a neural-net coincidence detection form, getting increasingly refined even to the point they say words like "mama" (same in all cultures - these might be easiest to pronounce for a baby, then reinforced in a feedback loop by parents) which they know will lead to some reaction but do not understand it as a title (the parents, though, are giddy of how smart the baby is - it doesn't know nearly as much as the parents suspect). Soon after this, they learn that some actions lead to pleasant things (mental rewards / highs) while other actions lead to unpleasant things (mental punishments / lows) - the original distinction between good and bad is established (children whose parents are indifferent / absent have less respect for the law, while those whose parents are obsessive have a paranoid fear of it, because the power of the law is in creating mental recall in individuals to formative experiences in their childhoods).

How to get from here to symbols? Food is an elementary case, having more is better than having less, toys similarly are better to have than to not have - the symbol's valuability comes from intrinsic pleasure valuation (toys are fun) perhaps by association with new toy = happy parents and fun new learning experience, while desirability comes from scarcity - if there are toys all over the place, they become unimportant. Interestingly then the child selects "favorite toys" which are more scarce - it seems a selection of meaningful symbols is hard-wired for our development and is probably a byproduct of an ability to search for different types of food sources. Similarly, a child will test the desirability of symbols / their importance by "calling the bluff" on parents who make a threat to take away toys ² - if

²For the same reason the brain is more receptive to learning variable reinforcement stimuli - it is seeking to find the working truths of the world

the parents don't follow through, the child will actually be more annoyed / frustrated because then a conflicting mental model is established and such contradictory things in the brain lead to rage because there are no clear answers to the learning mind's questions. If the toys are taken away, the child will cry but will be content with the reality of the world being consistent (all subconscious of course), and will come to value toys by societal metrics - that is seeing them as real incentives or alternatively real threats which then become capable of changing or even defining his real actions. There is next a place for charisma and popularity - due to appearance or social skill or just runaway influence, some people end up being "famous" and "idolized" - not just on a national scale which is a recent trend, but in all local groups. Children in school will play-fight to establish a hierarchy and the highest social influence gain the ability to set the status symbols for the group: because their actions will be imitated by the rest just due to their "leader" standing.³ The values of society at large are brought into small groups by such leaders and their potential reinterpretation; with pervasive media now it is difficult for any significant deviation to happen. The expected nature of the game is the leader will establish dominance by demonstrating a symbol which is not accessible to others, and others will strive for it in this way giving the leader legitimacy and ability to influence / direct (lead?) the group - a "voluntary" following of the leader's initiative (even though it's hard-wired).

On an evolutionary basis this makes sense: a unit that keeps trying to figure out who should do what is not a good match against a unit with a common purpose, because the latter carries out directed action which is much more effective than undirected action, and in all it doesn't matter much what the related symbol (skulls of the enemy / choice cuts of meat / number of mates in harem) is, or even who the leader is (doesn't need to be a genius or athlete - basic survival knowledge is enough) but rather that there *is* a leader and the group actually follows. Early humans didn't plan all this out for optimal efficiency, so this group-forming behavior was designed by evolutionary trends and does not come to appear as rational thought⁴ - some symbols are deemed good / desirable and that's it. The reason or way it works is not a social, but rather a brain-wiring construct. Reinforcement of symbols by the leader remains a necessity - earlier I thought inclusion of brands in rap songs was just to complete the rhyme / show off, then I realized the rappers are getting paid to advertise, and now I realize that rappers advertise not only brands but money itself. Why should I want more money? I've never met millionaires, but I've seen them in the movies

³This is why social media "influencers" are paid by companies to mention their products. It's not just visibility - it's also association with a figure considered a "leader" by some part of the public.

⁴see also the concept of "embodied cognition"

on yachts doing exciting things, I've read of their extraordinary lives in novels, I've heard of the great wonderful excesses the rappers get with their money - namely so many ways to reinforce to me that money is a symbol to strive for,⁵ all by means of ultimately fake but entrancing images that appeal to my brain's hard-wired reward centers (like exploration, social power, hedonism, control over nature). It is the basic trap - get me to do something for a piece of paper which only has value because I believe it does and the rest of society believes it too. It is selling a dream, as earlier, because ultimately my physical actions / life are *real* while money is arbitrary.

As with money representing a belief (in the future value of money) that is arbitrary but has value because when other people have the same belief then money suddenly has value, consider the basic operational rules of society in a similar light. The police physically can only do so much, they don't keep me safe in the same way as the earlier gold standard didn't give money its value - the value comes not from gold but from belief in money, similarly with the police the value comes not from physical enforcement but from belief in the power of the police. Of course reinforcement of this power as reality is necessary (just as with money) but its effect has physical impact that is way beyond the physical power and energy capacity of any police force - because it alters the behavioral patterns of other people, which is an almost zero-energy task compared to achieving anything similar by physical means. Just like we could go off the gold standard without much fanfare, given that counterfeit is difficult / punished, we could get rid of police stations, given that deadly weapons are difficult to procure / punished. In the money case, the value of money is reinforced by it actually buying things, and by famous people showing it off and showing off the things they buy. In the police case, the value of following the law is reinforced by being treated with respect, and by famous people showing the cool + hip ways of treating others is following the law. This is how huge cities like in China or India remain orderly - even though there's so much traffic that police is effectively unable to get anywhere and very few officers carry guns - the people believe in behaving orderly so the crime rate stays in control. This is how stores can put merchandise on the street as an advertisement and people will choose to go in and pay rather than grab + run - not because of the police but because of individual belief in lawful behavior. Another societal belief is the power of government - if this is thrown into question, revolutions will take place until the belief is re-established. Another belief is in the wonder / joy of life ie child birth + care, birthdays, weddings, elderly care. That is to say, this is still an abstract belief - losing it leads

⁵That is, if I choose to accept any of these characters as leaders / role models to look up to

to suicidal or homicidal ideation.

Regarding money itself, consider it (when coupled with widespread belief in money) as a signaling mechanism for optimization of actions, much like neurotransmitters in the brain can lead to qualia the money sets up a large-scale conscious system that in a sense operates of its own accord. Overall price levels are arbitrary, what matters are relative prices and cost of living: wage ratio in numeric terms. This will tend to approach constant values based on physics and human desires, as money serves as a mechanism of mutual-benefit optimizations (human benefit for people exchanging money). We started with money as a positive-integer system, which limited the possible optimizations; by introduction of financial institutions, money has expanded to include negative integers (debt) which gave a huge boost to real-world efficacy of the economy. Ultimately there are just physical actions - money drives them but money itself averages out to zero whereas physical actions do not. So perhaps the ability for money to cause optimization can be further improved by expanding it to a "complete" basis mathematically (credit score / insurance?).

What I've noticed, more or less subtly but throughout my life, is people being unashamedly selfish. I guess the best way to describe it is, following the letter of the law but not the spirit, finding ways to get the most benefit while giving the least effort in return, taking "cheap" shots, and what's more - discussing the best ways to do so. For instance, fraternities keeping copies of past exams so they can pass easier, people finding loopholes in taxes so they pay less, sellers lying / exaggerating about their product to get greater earnings. Witnessing this I felt an instinctive aversion, a feeling that something is off, knowing that I wouldn't even think about taking such "dishonest" actions ⁶ because of a feeling of the systematic impacts of such being reflected onto me - maybe because I was raised to be polite and serve others and disregard myself, maybe because I felt jealous of others' advantages, maybe because I felt angry that my brain won't let me do such things even though I would obviously benefit. Still I remembered what I was taught - exams are supposed to be hard and test your knowledge, which I believed in and studied on my own, yet others copied answers from last year (likely getting a better grade) while still talking about how hard they study. I was taught everyone should help contribute to a great society, so I was happy to pay my share of taxes, yet others found all the loopholes they could while still talking about how much they support society. I was taught that honesty is key so I was happy to pay full price in a barter trade yet the seller blatantly lied about the product even while preaching how honesty is key. Namely, people say things that are socially advantageous,

⁶this being the same reason I can't consider procreation / making a kid - imposing life on an innocent creature, yet others do it without a second thought?

and take actions which are selfish. Anything involving words / appearance / symbols / language is all an act to allow the most efficient extraction (then it is less of a mystery why women dress nicely while men do not). Neurotypical humans are at the root selfish and fake, thus there is no hope of a fair or stable or mutually content society. ⁷ The tragedy of the commons will always resurface - because some individual human will calculate the possible options and choose one that benefits him even fully knowing it will hurt others. Selfish actions tear apart society, and this is why societies are not stable.

I wrote that suicide is a stand for self, a proclamation that I've been treated unfairly and refuse to continue playing. But, taking the above concept of reflection of my actions onto self, is this a messed up view? Doesn't it mean that people like me - who have a freedom from society and live wealthy lives by absolute standards are ones who will be disallowed to gain this freedom by the society that strives to keep them? Doesn't it mean that some future me will have to endure life because he won't even have the ability to suicide? I guess my feelings are evolutionary in origin - I am supposed to feel unease and discomfort when apart from society because historically this would mean I am vulnerable to predators. The same way I prefer to sleep in my bed at home vs a bench on the street because I am less exposed / vulnerable in bed, or at least feel like it, I also prefer to spend my waking hours in society where I feel safe (ie trust + understand others - not possible in today's fragmented + "diverse" society) instead of alone (even in a crowd). So while now being lonely makes sense, it also hurts, the choice is between that pain and the pain of giving up independence to be part of society - both cause me to lose, the game is rigged, so the remaining way to save myself from suffering is suicide. I was not made to thrive in today's society and evolution doesn't want me around - not that it matters anyway because if I don't die by my hand I will die by some other lifeform's doing - evolution's toy, like an animal in a slaughterhouse, there isn't a way to win - only different degrees of losing. ⁸

Is it better to live in filth and eat garbage just for the sake of staying alive (to experience more of the same), or rather to value oneself above such degeneracy and end it? Living to old age, anyways, is not what evolution designed us for. ⁹ Our always-optimistic unjustifiable worldview keeps

⁷The current, lengthy period of relative peace worldwide is not due to any political system but due to the overabundance of energy and materials ensuring that everyone is more or less satisfied with the status quo.

⁸I was watching fish in an aquarium outside a seafood restaurant. There they were, nearly motionless on the bottom of the tank, nothing to do but wait for the inevitable gruesome death by some sort of blunt strike and dissection. Whether from the water current in the tank, or from deliberate choice, two fish were laying next to each other, as if seeking a sense of relief in the notion that they will go through this together.

⁹The various middle-age crises in our society are because society was designed on

us from seeing this reality. I remember when I was young and probably somehow heard of suicide, and had the realization - we are a privileged species not because of opposable thumbs or intelligence or free speech laws - but because we have the ability to commit suicide, to escape injustice instead of having to live through it. I saw that a situation or a being with no ability of suicide is not free - it is enslaved to the world and whatever horrors it may generate, and I was very hopeful that I would be able to keep this freedom as non-illusory.

[PLL: we count down from 3 which gives 4 units: 3-2-1-0. Also 4 units is preferred time signature in music and rhyming. Seems likely there is a place for 4-item hardware level processor in the brain.]

With knowledge of base psychology and the way cultural values are established, it is possible to alter society towards some desired state. To the extent this is possible, media - especially vivid media like TV and video games - stuff often talked about - is a key tool. Of course the skill lies in creating media content the public will actually enjoy consuming / want to access, while carrying out the desired goal - merely forcing a message requires inelegant enforcement and is likely to lead to psychological rejection and counterattack. Same can be said of capitalism vs slavery - the former incentivizes people to want to work as fair exchange for choice of goods so there is no need for whips and shackles and armed rebellion.¹⁰ Yet if I am to believe some elite powers use their abilities to this end, there would be ways to find out how true this is. This would be because whatever techniques / tools they employ, they must be employed consistently - it's not enough to just insert some words into a movie, because assuming normal people are unaware of what tools there are it is safe to assume most of the script will be random / undirected in its impact on the psyche, so altering just one part of it won't do much - the movie must have consistent modifications such that all the randomly-written plot points that are of an undesirable impact are changed into a desirable impact. Same can be said for multiple sets of movies or media content: the "secret psychological modifications", whatever they are, must be present consistently in mainstream media in order to have an effect and this consistency / common factors can be used to figure out what the modifications / tools are. Then again, maybe the elements aren't some conspiratorial tools of programming but rather things that are known to sell / appeal to the psyche - in any case the findings will be useful. As a case, consider the movies *Arrival* and *Mission Impossible 3*. *Arrival* is an alien movie, with fancy spaceships

conscious principles which end up not being in line with our unconscious animal urges, a conflict of logic vs evolution

¹⁰With the armed forces called in for ie union protests, we see that the whip is not actually gone, just left as a last resort rather than everyday tool.

and worldwide efforts at deciphering their messages, lots of big important stuff affecting the whole planet. But this is strangely not good enough - is this not entertaining / interesting enough to warrant the sole focus of the movie? Apparently not - a significant development is the female lead's marriage + divorce with a male scientist and birth of a child with some defect. These scenes frame the movie, being both at the very beginning and the very end. Logically, this is insignificant vs the extent of action the movie portrays, it is like a satellite photo of the earth but half-covered by a photo of your front door - one is much bigger than the other! Yet on an emotional level it is this human scene which sets the tone and main message of the film. So is it even a film about aliens, or is it a film about divorce after a child's death, with the aliens as mere abstract filler to place the emotional message in context? ¹¹ It could be aliens, monsters, zombies, or pirates, and it could be saving the city or country or earth or the universe, all that doesn't really matter as it's just another abstract label (though logically it should be a tremendous difference - but this is emotional level communication). Similarly with the Mission Impossible: the mission is to defuse nuclear bombs, and there are lots of crazy stunts and chases and action scenes, but that's not enough. The nuclear bombs are placed to kill half the world, but that's not enough. The bombs are synchronized and impossible to defuse separately, but that's not enough. It doesn't matter how logically-critical the situation is, it still not enough. How does the movie open? A scene of wedding vows, with explosions in the background, shown as a dream of the character but setting the emotional storyline of marriage / divorce / parting ways bittersweet. Sure enough the closing scene: not the defusing of the bomb and celebration, but a hug from the ex-wife and a happy glance from a new prospect. So was this really a movie about nuclear bombs or was that just the particular choice of establishing the archetype? It could have been a virus or an earthquake machine or satellite lasers, the effect would be the same. It could have saved the city or the country or the planet, the effect would be the same. Both movies address the realities of marriage / divorce and life / death, whether because that's what gets people to enjoy the movie (ie it pays to include this) or because some secret psychologists have decided to put this in (not coincidentally at the very beginning and end, where attention is highest: like those ads that ask a trivia question then praise their product then answer the question, the emotional opening provides incentive to watch for the emotional resolution at the end), if there were methods to manipulate the public psyche this is where they would be used.

¹¹Also, as in pretend play, there is a need to have a clear fantasy / not-real element so as to allow the brain to handle the concept as a concept (symbolically) rather than as "reality" (intrinsically).

Driving on a spur of the moment trip to CT, I pass by lots of stores and malls and the thought of the cycle materializes in my mind: all the people living here go to the stores and buy stuff, then go to work to make money to buy stuff (and the rest coordinate the buying + selling to make sure it happens optimally). The reason we get to the point where people complain about a long work day is because once they have money they always want to buy more and therefore are driven to work more which will only be profitable if others consume more. I am paused now at a college, and basically get to question the environment set up here compared to other colleges. I suppose it is not a particularly everyday activity to stop in different cities and colleges and compare them, yet here I get a chance to do so. And the buildings and the layout of this college are much like many others of the sort I've visited earlier. Indeed there's probably some finite number of academic building and dorm designs that get repeated throughout the country, purposely or not. Then one is to ask, what is the point of having branding, mascots, traditions? Like little checkboxes as to what constitutes a college experience? Why does this college use the colors blue and gold while their neighbors red and white - does it actually matter? What ends up happening is a bunch of undergrads get to live in close proximity for a while and follow their interests. So what I see is a model of a generic college - that tries to pretend to be unique because otherwise the reality would be just too bare - the goal of the institution is to more or less trade a diploma for money while pretending really hard that it's not and letting the students party all they want. I don't know how I feel seeing this or why I'm inclined to write it down, I guess the feeling of "well, this is life, this is your reality now" as I imagine myself a student entering this college, a wavefunction collapse as it were. Why am I in this college? Why should I try to make friends with the other folks that also happened to end up here? Doesn't it all become awesomely boring - yeah there's the kid into heavy metal and that girl has a deep secret she will only tell her closest friends but I can guess what it is - why should I even care when people become generic, a mere collection of attributes each with some practical list of options / definitely finite? What more reason do I have to treat people as individuals and not numbers, when the latter just does a better job in all respects? I am half convinced that this life is a simulation to hammer into my head that being too kind and nice is a bad thing - conservation requires a balance of good and bad, optimization requires indifference to emotional or qualia impacts. Society just puts people through a grinder. Nobody cares if you went to College A or College B, or if you choose job A or job B, or if your worst fear is A or B. Except you, for some reason, care, and furthermore think it is all unique and solely dedicated to you.

Beyond this being the cult of I and blocking the path to enlightenment,

I am just at a loss how to explain the pointlessness of what goes on here. Maybe the brain really goes mad soon after birth and just grabs onto any item of work to do and not experience the pure boredom of existence. All the colleges around the world, all doing effectively the same things in parallel, all for what? After writing this I realized the rental car I was driving could be described in similar language - a generic car but with a white backlight color and particular seat shape. And yet I like this car more than another one, if I had to buy a car I would choose one that matches my tastes even though the underlying foundation is essentially generic. This speaks more clearly to what the purpose of the car is: not to get from A to B, that's coincidental, the purpose is to make the owner happy by presenting pleasing visual / audio stimuli and providing a feeling of power + control. Indeed if the purpose was to get from A to B, no one would be the least bothered if all cars had the same color and layout. Same with houses, there are only some few repeated house types in a neighborhood and the point of the differences is to satisfy the desire to be unique / for social status. The satisfaction of human needs is indeed the essential factor, with any physical reality attached to it only as a matter of fact. World travel is appealing because few people do it and the ones who do share so with others to increase their status - the unfortunate effect that this burns lots of fuel and requires having pilots and airplane fleet, the scale of the physical reality of what is being discussed, is totally irrelevant to the need-satisfaction. I recall visiting a ski resort claiming to be the tallest in the East - on the lift to the top there were periodically signs of the altitude. Now I am thinking, who is going to really process a big number like 10000 ft and make good sense of it? The number is coincidental, the communication here is of a feeling of suspense / build-up as the numbers keep rising, and for the feeling to be genuine the numbers also have to genuinely represent altitude - but the actual numbers don't matter - I didn't even remember one of them but I remember the feeling it invoked, along with the provocative "tallest" title, which is again based on a numerical comparison but neither the number nor the fact that they measure height matter - the communication here is to drive association by proxy with someone really good, and the choice of height as a basis of comparison (with ability to logically back it up) makes this genuine even though this is all again arbitrary at base.

While contemplating the unpleasant feat of finding references and doing a literature review for an academic paper (revealing an emotional aversion to literature search, as it were) I realized the impracticality of it all - there is no way I can read all the relevant papers, no way to become a true expert. Because the old papers never disappear and new ones get added exponentially the system is intrinsically unmanageable - unsurprisingly reminiscent of all human affairs, like population growth, energy use, and trash generation. There is a psychological block here that keeps us from creating

universe-harmonious closed-loop structures which persist and evolve to get better over time, instead we create and accumulate while never having a proper discarding procedure that advantageously maintains the power and lean-ness of the system. In short the academic paper repository is a mess of cast-out creations much like the various plastic dumps in the oceans, a self defeating system. Similarly, due to the denial of death, we give birth to an exploding population till we suffocate on population density but still don't see the source of the problem. Cemeteries and their expected-permanent nature vs land space demand for housing is another fun case study. I would proclaim this as the second fundamental psychological flaw of human thinking - focus on creation and ignorance of destruction.¹² The first one being that very small effect is equivalent to no effect. Between these two, it is more or less inevitable that we end up in the present state, escaping the jaws of victory as it were, rushing towards scarcity and famine even from a starting point of huge material and energy abundance.

I would ask a question of - what is the point of relationships ultimately? What is the point of a friend group? It is counterintuitive but with an increasingly mentalizing conception of people, I am losing the appreciation of people's individuality and seeing the cold but undeniable logic in using people like tools rather than as objects of affection. In my rudimentary view of people, each person was a unique being, and certainly I had all sorts of unconscious biases to appearance and demeanor that made my interactions with them poor, sometimes laughably so. But I did have respect for the fact they are unique beings, even if I did not appreciate their autonomous abilities. Now with a mentalizing stance I see all people as basically the same "under the hood" and this makes me really question the point of having reliance / preference on some special relationships and calling them "friends". So what if I met this guy at college, he is as good as any other guy on the street, why should I care to know him as an individual? I would say the situation is similar with computers: not knowing how they work each one has its own source of unique wonder, but seeing that inside is always a CPU / RAM / PSU is both a more accurate + meaningful and a more impersonal / cold view - yes there is a computer I call "mine" as it has my files, but I can buy a new one and it will work just as well, "my" computer is just the bits of material that so happened to end up being sold to me, there is nothing at all which makes it worth doting on - it could have been another computer, even with another appearance - and would work pretty much just as well. So I don't really care about the physical computer - I only care about my files and that *a* computer

¹²This similarly applies to pleasure and pain, resulting in a retrospective devaluation of the pain's impact and emphasis on a pleasant life, which masks the underlying qualia conservation.

is available - if the physical "my" computer gets destroyed, so be it. But then logically I must apply this to people - I only care about them to the extent they can support my unconscious fantasies / desires and don't really care exactly how they came to be in my life - if there were someone else in their place I wouldn't notice a difference. This, then, points to the symbolic interpretation - the visual differences between people are actually not arbitrary but indicative of their history, and this is what makes different people appear different - as they all have different histories. This also gets to the notion of conservation vs evolution. Conservation requires no change - perfect separability like in additive solutions of a differential equation - no interaction is allowed between conserved quantities, they are forever on nearby but never-intersecting tracks.¹³ Yet describing any salient physical event seems to require the concept of interaction, change, transfer, evolution to stability. Where does the instability go? If a particle's position changes, what happened to the previous one? If two objects interact, how can anything be conserved, when conservation implies perfect separability? And further, the absence of a driving force / absolute time requires that separability be true. I addressed the observed appearance of interactions as them being due to their common origin at the world creation event - the complete deterministic view on quantum entanglement, like all leaves in a tree originating from a common source.

Walking on the outskirts of Singapore, I saw a building, called Rex Building. With the same notion of psychological equivalence I wondered, what does it matter what the building is called? Or even its architecture? All that the companies inside would care about is having enough floor space and shelter, the names and appearances don't matter. But then what does it matter which companies are in this building? There could just as well be other companies there, and nothing of substance would change, only outward appearance. But then what is the grounding point, the origin of asymmetry specifying that each thing should appear just as it does and not otherwise? What is the absolute reference for things to be the way they solidly are? The name "Rex" doesn't matter, and yet me claiming this does not unravel the world - it is still called "Rex" and nothing else - so then the name must matter. In what context does it matter? It matters because it is logically, inextricably linked to my experience of self through some complex mechanism. That is, for the sum of my experiences to be the way they are, the world must also have a "Rex" building. It seems from my view that the name could be easily changed, but if some god figure required the name to be different, the implications of that would propagate forward and back in time to create an entirely new world - with the new-named building but

¹³Also, must our world be infinite? What does it mean to have infinite time? Can it be anything but infinite? As I experience only this moment, and only once

without "me" observing it. I don't know if such worlds exist or if "my" world is the only one that is logically possible - as I see other people but don't experience life as them, it would be at least reasonable to assume that my experience of the world is incomplete - and this may include an inability to comprehend or "live as" someone in another world. The specific mechanism of the linkage here is one I propose to be time-based and dependent on the structure of the universal symmetry-breaking. So we have:

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          ---- Me
        ----<
    [.] ----<    ...
Universe ----<
Origin       ---- Rex Building

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Unwrapping this, I am linked to the Rex Building through the universe origin ¹⁴ - which seems fantastic but is a logical consequence of conservation and no more surprising than recognizing that my procreation can prolong or end a DNA inheritance chain stretching back right to the origin of life. The same world that produced me also produced a bunch of other humans / animals I can interact with - all these are interlinked through the life-origin point, thus it is possible to predict a future interaction with knowledge of the rest of the universe around the interaction volume - this is just a very careful tracking of the linkages.

The same model applies to scientific experiments. I recall a paper [<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.121.080403>] in which light from distant quasars was measured and used to carry out an entanglement experiment to find that the deterministic view of photon entanglement must be traced back nearly to the beginning of the universe, long before the experiment was designed or set in place. ¹⁵ This may seem a point against such a view, but actually the common origin is the only logical interpretation. What I am claiming here is the "fully deterministic" view that this finding should not be surprising, as the universe origin really sets everything in motion and all experiments will be connected through it. Indeed while entangled photons and quantum spookiness sounds magical and mysterious to say goes back to the universe origin, we somehow overlook the presence of such a simple thing as a ruler in an experimenter's

¹⁴assuming that I see it for the first time ever and have never indirectly influenced it before, which is not necessarily true but situations can be found where it is true, such as observing light from distant galaxies - see next paragraph

¹⁵Not entirely related but maybe of interest <https://arxiv.org/abs/0908.3408>

hand - but this relation also goes back to the origin and is just as magical:

```

          ---- Experimenter
        -----<
    [.] ----<      ...
Universe ----<
Origin       ---- Ruler

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The point here is that as the experimenter, I've never seen the ruler before and I did not set in motion any of the processes that made it so the ruler is a part of this world, ie historical measurement unit standardization to use cm or inches and their linear fractions, standard lengths for a ruler, the formation of ruler standards and teaching of ruler use in schools, the presence of ruler-fabricating companies and craftsmen, the cutting down of trees and development of various chemical treatments to make a wooden ruler, the shipping of the ruler to a store near me, the purchasing of that ruler by someone in the office, the placement of that ruler on a table where I see it and readily use it without a second thought to complete my "scientific measurement". When all the reasons why the ruler should be there for me to use, and why *that* ruler should be the one that is there, are traced to their roots what we get is indeed a linkage through the universe origin point, the initial asymmetry. Linkages can also have an origin in the present. Consider the conservation of momentum in me throwing a ball. Total momentum always remains zero, but by dissipating energy I can cause local parts to be nonzero. When I catch the ball, the loop that I opened at the point of throwing gets closed. Throwing a ball up, I have pushed the earth down to compensate. The earth's motion in turn affects all the celestial bodies around it coupled through the gravitational field, eventually the rest of the universe. Yes the extent is inexpressably tiny, but it is not zero, which runs counter to our hard-wired intuitive bias of "very small = nonexistent" but it is the bias that is wrong, not the real linkage chain.

With the ruler example, consider the purpose of the ruler in measurement. The completion of any measurement must result in a unitless quantity, so a measurement must involve a comparison of magnitudes. The use of a ruler to measure motion thus means that the units of a ruler and the units of motion are one and the same, and this makes it fairly obvious that a ruler is actually bound light and moving objects are also mostly bound light but move along the ruler - the underlying foundation must be the same otherwise it would not be comparable and thus incapable of being measured. Are there things which then cannot be measured in any way because they are at root incomparable / of a different character? Perhaps the different dimensions are not directly relatable to each other, and it is possible the various uncertainty relations represent such a lack of commonality. However I think the clearest examples of incompatible characteristics

lies in qualia experiences. It may be a defining point of qualia - they cannot be represented in any physical terms. I cannot measure the length of my emotional state or of the color red, nor does it make sense to compare the feeling I get from reading a poem to the experience of hearing a musical note. These are distinctly resistant to measurement, therefore they must be formed of a different quality than "real" physical objects, such that measurement is not definable. And yet this is not wholly true - I can compare a poem to a song, I can compare different colors and moods, I can even rank different sensations by their pleasantness. Thus some measurements can be carried out on qualia, and therefore it must be the case that whatever enables these measurements forms a common foundation of the diverse qualia that can be thus compared. I would draw attention to the above paragraphs where I mentioned "the magic is gone" - what has happened there is, due to logical recognition and awareness of causal chains, I do not experience a real-world event in the same indescribable way. Whereas it seemed before to have some inexplicable quality to it, now it seems logical and boring, it has succumbed to physical analysis under my existing mental world model and thus its representation in my brain is now simplified / standardized and not unique / mysterious. But this "indescribable" and "inexplicable" is precisely what I use when mentioning qualia. Indeed what has happened is with increased logical understanding, I have actually lost the ability to experience qualia: the feeling of amazement at seeing a magic trick, for instance, disappears after learning how the magic trick works. It is an actual loss of qualia, and therefore this is a path for understanding what qualia is. I am then becoming increasingly convinced, that qualia serve as the brain's way to represent a unique label for something it cannot represent in any more basic terms; if a more basic interpretation or world model presents itself the qualia disappears (perhaps on a neurological level as well, by re-wiring previously "elementary" connections into a more logically cogent / generalizable model). So before knowing the magician's trick, each individual performance seems an amazing and unique thing that I cannot describe or explain any further, thus it constitutes a qualia experience - a higher level one than a color or a sound, more like a mood, but each trick is different and incapable of further analysis. But once knowing the tricks and finding out that all along the previously learned laws of the universe have been followed, I reinterpret each of the tricks as being explained in terms of the laws of the universe that I already know. Thus instead of the trick being a new thing of itself and thus requiring a unique label in my brain, the trick is now representable as a combination of previously learned labels about the world - my mental picture is more logically coherent and physically valid, and I have reduced the number of unique characteristics - qualia - that I am able to feel. Qualia arise whenever there is a need to interconvert physically unrelated characteristics, for instance to catch a ball

based on photon inputs, and in the mechanism of the brain these unrelated things are grouped to form unique relations which are not further divisible or explicable but requiring a label for use in computation, and this is what we feel in conscious experience.

I've mentioned that childhood is a traumatic experience that adults mostly try to recover from (and very few make it to self-actualization before having a kid of their own and continuing the trauma chain - indeed being eager to have a kid is a symbol of unresolved trauma).¹⁶ It is also worthwhile to look at childbirth which is similarly a traumatic experience for the mother. It seems commonplace to ignore this aspect and because it is so taboo, the mother's conscious "self" fractures the understanding of own unconscious drives even further through the process, with society's gleeful support. With this understanding thrown away, blaming behaviors on "hormones" is then acceptable, just as blaming children's behaviors on "attention disorders" is acceptable. One tool that sharply outlines unconscious impacts is temporal coincidence, usually obvious from an objective analysis but remaining outside awareness of the affected person (and possibly purposefully so, in order to uphold the control fantasy of the conscious self). For instance, it is common that a woman's interest in sex drops sharply upon learning about pregnancy, or upon cohabiting with the partner. It is also common that following childbirth, sex between former 24/7 lovers is nonexistent, even with both expressing a desire it is as if the body blocks any attempts at actual intercourse. The tracing is clear: the unconscious is smart enough to understand that sex leads to pregnancy and has made the conclusion that it never wants to experience that psychological and physical trauma again, thus will block conscious sex attempts. Its legitimacy is so easily discarded: depression (and the various birth-related subcategories), hormones, stress, finances, anything but the ugliness of the birth itself. Where this becomes more clear is in the avid desire of mothers to see their daughters (or even daughter in law) giving birth. The transference here is from mother to daughter, the daughter's pregnancy is felt as the mother's pregnancy, and the daughter's baby is the mother's baby. The purpose of this is to relive the earlier trauma of pregnancy from a much more pleasant vantage point: now the baby will be born without any effort from the mother, so she will seek to realize all the desirable aspects of her childbirth fantasy (which ended up false during her own pregnancy) such

¹⁶I had a scary dream where I felt my teeth were falling out and I could feel a loose tooth there on my tongue, I looked in the mirror and saw that my teeth were all crooked and swaying, and I was afraid to accidentally swallow my teeth. I was really scared / repulsed through this as I felt completely out of control. This was a clear emotional memory from childhood - and reminded me just how hopeless a child must feel to see its teeth fall out. Countless moments like this in childhood remain in memory to be resolved and processed in adulthood, if the situation allows it.

as making announcements about the baby and gaining social approval, but without the stress and pains of actual pregnancy. This is a craving for the brain in the same way that acting out childhood punishments during sex is a craving: it recasts the past experiences in a more pleasant light and thus helps heal the psyche of trauma remnants.

Now that I have been born, at some point I will have to face death. Birth was a pretty messy + unpleasant process, and so would be death. The only thing is, I have to (or I better) take matters in my hands for planning my death, that is one obligation I can never back out of and one never discussed by society (instead it preaches to have more kids and leave such pedantic matters for later). It is an unpleasant deed that noone wants to do and as it affects me most directly it falls down to me to do it. I have the prospect of being killed by some disease, being killed by an accident or on purpose by another, killing myself, or becoming complacent and undergoing neural decline until some body failure finally kills me. The latter point is pretty scary as I got a chance to witness it at a social gathering. An elderly dog was upstairs continuously pacing in circles / collapsing / struggling to get up. Looking at her being mostly unresponsive to hearing / sight and doing this walk was very sad - it reminded me of the "bad trip" where I was walking around in circles, terrified at realizing that I am stuck in a time loop, only a faint relief when I noticed that the clock really is changing ever so slowly. It was a feeling of being inescapably trapped in a finite setting for an infinite time, and once having learned it being forced to experience it again and again, helpless to change anything.¹⁷ She is clearly in pain and stir-crazy about it but being unable to do anything other than walk around and hope it's already meal time / bed time / death time. I imagine her life wasn't much different earlier - brain degeneration due to old age and lack of sleep from pain probably got her to enter this loop, and it is sickening to think what painful things can exist in nature. The dog would not have lived to this age "in nature", she would have had pain + death earlier, but now that she lived longer her reward is not pleasure + happiness, but a terrible inescapable torment, counting the seconds until she can find peace, forced by her body / brain to keep pacing and looking for the non-existent optimum. Her owners said "it's funny how she always walks in circles" and were fine having kids run up to her to play - no one seems to be realizing the much colder reality of the situation. I saw M too, he wasn't in pain but he wasn't cognitively present either. The brain deterioration from old age and/or routine lifestyle had left him incapable of doing much more than sitting quietly and falling asleep, and following very brief / clear verbal commands. It was sad in its own way - watching the uncovering (man

¹⁷Thinking back on this, I would actually trace it back to childhood experiences around 1-2 years old where I was left alone in a playpen with no social interaction for long periods of time.

behind the curtain) scene in the wizard of oz and seeing that M had long fallen asleep, sitting up, the colorful TV screen + pretty sounds (which were tailored to be a perfect replica of an earlier filming) entertaining no one. He now can't even think long enough to realize the simplest philosophies, much less questions of life and death. That is his reward for staying alive to old age. Getting bossed around by others and not even remembering enough to satisfy their requests. And at each moment he had chosen life over death, but one has to ask in the bigger picture: is this existence a worthwhile one, one to seek out and experience or one to avoid?

I might imagine that we are all living like a "superposition", all different instances of a universal being trying to figure out what reality / myself is. ¹⁸ In death, the conclusion is that reality is not "this" ie whatever I feel. By making that statement "I" redefine reality for others - now from "nothing" they know that reality is not "that". Evolution / birth makes reality the realm of those who are good at breeding, while suicide / death make reality the realm of those who cannot or don't desire (is there a difference?) to escape it. It seems like some cosmic joke: a totally well-intentioned logical setup of conservation that got corrupted by evolution into a mess of misery-seeking organisms (that extract resources until finding themselves in scarcity / competition vs thinking ahead and having material wealth indefinitely). And no matter what happens, I will have to die. I was born and handed intrinsically the responsibility to deal with my own death. Maybe this life is a simulation to teach me that death must be chosen over life. I can't help but feel anger at this arrangement: I didn't sign up for or agree to death, yet I will have to go through it all the same, and furthermore the logistical burden of how / where / why falls also on me to determine in life (in another view, life is just a way to dissipate energy because "just dying" is not allowed - it has to take place along specific worldlines; like [Faulkner's *As I Lay Dying*] "the reason for living is to get ready to stay dead a long time"). It's not fair that this culture praises birth and ignores death when the two are so inextricably related - and this is easy to do when the responsibility for death lies with the other person not with the parent. The parent gets the praise for the birth and then kindly bows out before the death (saying as much as, parents should never have to see their kids die - yet it's OK for kids to see their parents

¹⁸As such, the notion of "quantum immortality" may be true: many possible logical universes exist and I will only find myself where I'm alive. In this reality I'm aware of my memories and decide to write this text. In others maybe I ended up at a hospital. Perhaps by qualia conservation, what I have to do is "raise the stakes" - the higher risk situations I face, the more I can claim "success". In any case, if I die, I will no longer find myself in potential future reality as myself, but will continue as others. As such, with suicide the world can be seen as selecting a tolerable existence for all as a function of time (in the sane interpretation, or as selecting an inescapable existence with no regard for tolerance in the insane interpretation)

die?). But the parent thus also gets trapped into the purgatory-like cycle of above - mental degradation, moral deterioration, and subsequent inability to deviate from the routine of staying alive until forced to by "natural" causes like organ failure and diseases, such that they remain unaware of death much as they were unaware of birth. The notion of "me" as a being over time is a dangerous conclusion of the cult of I; in reality to observe qualia conservation past me has to pay with suffering if future me is to enjoy pleasure. Sex with pain is a "closed system" and thus more enjoyable. One is to ask: how to make something out of nothing? Starting from a point of pure logical existence, how is one to explore *everything*? Is there a limit to everything - is there some point at which it all ends, I can say I've seen everything? I suppose this limit exists for my present self, that is at death. As a universal being all I can see is myself and that might end up being "everything", but this is a claustrophobic experience: to preserve sanity and make existence acceptable, the world must be split into self and not-self, such that what is kept away from the self creates a specific qualia experience like the one I now have. A general theory may involve the split by prime dividers.

I feel the presence of a fantasy, one even deeper than the D/S purely sexual one and extending into life in general: to go to a new place and build a home there and make it something uniquely mine. This is as close to a "meaning of life" fantasy as I can get. When thinking about it there is an essential presence of a woman to accompany me and "legitimize" the new world I create: I say "I will create a new world" and she says "I want to be there with you", and of course the drive to have children would follow soon after if this fantasy can get to some level of completion, it is only right to have children join this world. This fantasy, on reflection, is probably the driver in 50% of male targeted movies, the other 50% being the rescue of a female from a dangerous situation (which typically gets rewarded by the above willingness to join the man's world). That female targeted movies are nothing like the complement of this is enough to show why relationships are so unstable. And that these are biological fantasies seems to be shown by my deep seated feeling that who joins me in the new world is a woman - a man just doesn't feel right on a level deeper than mere societal programming: this fantasy goes beyond sexual attraction, it is "making a home" and for that I want a woman - and here not a mother figure (then again maybe I just refuse to see it) like I mentioned earlier for the case of "toxic oneitis" where I was acting all nice / subservient to earn the affection of a girl to replace my mother's validation, but a wife figure who I could have sex with and who would support me when I'm in doubt by demonstrating unconditional belief in my decisions. In return I would offer unconditional sacrifice / putting my life on the line to protect her and keep her comfortable materially. It just feels right, a biological imperative, and

I would gladly do hard dirty work if I knew I would come home to a wife who demonstrated her confidence in me by doing what I tell her, not because she is forced to but because she wants to. There is a basic stability criterion here: a team needs to have a leader and a follower, two leaders or two followers will automatically split into roommate-like "people that live together" who work together only when no other alternative is available, because normally it will prove more effective for the two to do work on their own, but then there is no point (or even a negative impact) in living together or coming up with the concept of a "couple". This is of course oversimplifying as there are many ways to still go awry even if a leader / follower dynamic is present, such as emotional insensitivity on one / both sides, but if the dynamic is not present the relationship is bound to be a superficial one as a logical inevitability.

Maybe the notion of a monogamous relationship is artificial - created by society rather than biology - indeed the requirement for monogamy seems to cause a lot of trouble when marriages are a social status symbol. Yet I feel really certainly, and beyond the fact that society programmed me to, to have a single partner for life. Maybe this goes with my fear of loss described earlier - I want the promise of "eternity", even if it's bound to end sometime I want a partner who will really fight hard to keep the relationship alive. However from basic observations and statistical inference I conclude this is impossible and I had best stay away from women. First, there are no feminine women, I don't know if there ever were or if it was a nice fairy tale like santa claus geared for young men, however in today's society they don't exist. This is because somehow the feminine ideal is widely mocked and considered weak / powerless - of course when done properly this is not at all powerless as they support the man and raise the future generation, perhaps not as risky as hunting (of which science is an offshoot) but no less useful or necessary or even rewarding. Effectively the men lead on some issues - the "creating a new world" type ones - while the women lead on others - the "making this new world a good one to live in" type ones; and if my general observations are any guide, evolution seems to have selected for pretty much such abilities in men and women so as to be complementary. I would venture the breakdown of this dynamic today comes from the total inability for the man to try and create a physically separate world and serious discouragement for the woman to try and join it - both arising from huge population density (exponential growth easily outdoes evolutionary adaptation) and ironically, increased technological ability and welfare. If in the past a man had to build a house for his family, now he buys an apartment, but in the latter case there is no physical demonstration of building a new world, just an impersonal monetary transaction, towards which the unconscious is indifferent since it communicates on a symbolic level (ie there was no real physical sacrifice involved, just an ab-

stract transaction). If in the past a woman had to raise children with her close family, now she drives them to daycare and back, but in the latter case there is no physical demonstration of making their world better, just an impersonal chauffeuring and an unconscious message that the mother doesn't want to see the children during the day. When the male cannot create a new space / tribe spatially separate from others to call his own (the spatial separation is crucial for establishing animal-level trust in this idea of a group - what some teams try to accomplish quite crudely by going on a "team retreat" activity), he has to accept failure in the face of his fantasy and live on "old" property like parents' or already-built dead people's places, which are both unalluring because of this fantasy-failure everyday reminder even if they are logically reasonable choices. With the failure of the fantasy thus demonstrated, the male might seek female company for practical reasons like cooking and cleaning, but the drive to become lifelong partners in trust is exchanged for temporary partners in material benefits. This may have been around the agricultural era. The next breakdown occurs when mechanization and ever-higher density (including public schools / kids away most of the time) destroyed this fantasy for women - being a wife was no longer about turning a new world into something beautiful but about doing chores, driving kids back and forth and to/from bed, and dealing with a workaholic husband. The temporary partners in material benefits is exchanged for unlikely partners in annoying tasks, after which female entry to the workforce is unsurprising.

There is a component here that with high density there is no chance for being unique / important / needed, as there are hundreds of people better than you at whatever you pick all in the next block, which is a crucial part of the biological imperative fantasy but can never be fulfilled. I think the best way to describe it is as abundance and disposability. The economic principle of supply / demand actually has dark undertones: it shows that humans value objects not for their intrinsic benefit (as would be rational / sane) but for their relative abundance / ease of access. I mentioned this above: I need air to live but it's everywhere so I won't pay a cent for it - this is the m.o. of capitalism but it's actually insane because the air brings the same life-essential benefit to me regardless of how much I pay for it. The economy rewards spending as much resources as possible as fast as possible, regardless of their actual usable value / benefit to life. What the resulting abundance makes is a culture of disposability: it is no longer useful or valued to try and fix anything but the most expensive possessions (like a house), and this *regardless* of the actual usefulness of the item, which is again insane. Consider plastic cutlery: it will last for hundreds of years, and I could use it likely for months or more, yet I throw it away after just one use - not because it is no longer useful, but because it will be too annoying to wash it and store it when a brand new replacement is

right there and so cheap. When a new phone comes out I throw the old one away: not because it's stopped working or even degraded in any way (ie the absolute benefit it brings to me is the same) but because a better alternative has replaced it and the old one is so abundant it's not even worth selling. It will be striking to see the similarity between the way objects are treated in this culture of disposability and the way people are treated (and the reason for the abundance of people is the same as for the abundance of objects, a repression of the notion of decay / death) - on an animal level the brain doesn't care much whether what it's throwing away / replacing / evaluating is an object or a person, so essentially the same findings apply. Even if we did not have object-disposability the huge population density will cause people-disposability by how the brain evaluates value, but as it is today both are disposable so no "reigning in" of the impulses for something new can occur - as it were this "something new" takes its energy from the new world building fantasy of earlier so even from this surface view it's evident relationships will become unstable while object-ownership becomes possessively guarded with the strength of the drive meant for a human partner. From an animal point of view, the strongest relationship of a modern person is with their cell phone; even if the cell phone displays texts / posts "by a real human", as far as the brain's evaluation is concerned the relationship that is developed is with the direct object - the phone and its appearance - and not with the person behind the content that appears on the screen. Both object-attachment and person-attachment go to zero: the sources of joy are in entertainment and social status symbols that lead to entertainment, any object or person found to not be entertaining enough is readily left for the trash collectors. People are as replaceable as mobile phones, and it is a silly task to try and repair a relationship much like repairing a broken plastic utensil - even if someone makes the attempt they will just be laughed at / mocked and seeing their peers doing better with less effort will eventually give up on such archaic / naive notions. Online friends are a lot more entertaining and abundant than actual annoying human friends so they will be the new standard - again in interacting with a phone like texting, the animal brain knows it's interacting with a phone not a human, so while there may be a human at the other end this is immaterial - the brain just sees the exchange as raising the importance + social standing of the cell phone and lowering the importance of pesky humans. There is nothing worthwhile for humans to do in this situation - anything you try has been done before, thousands of times and better, and because of the abundance valuation when you do it nobody will care even though it took the same effort. There is no way to vie for social validation except through absurdism - making up / exaggerating stories to make yourself sound unique, but even that is useless when there are dozens of such attempts just in your friend group in the last hour. What's

left is perhaps looks and charisma but then there are hundreds of actors and movies and even cartoons that are just better in every way. Everyone, no matter how skilled in an absolute sense, gets to feel completely useless because of the maddening overabundance of people. Whatever they do, job or a hobby, is seen to be useless in satisfying their biological fantasy (of protecting / building up the tribe) and is done more as a way to avoid boredom / for practical matters than as a way to chase inspiration. Is it any wonder rates of suicide / depression / isolation are going up?

Because of no sense of uniqueness / available niche, there is also no sense of ownership or having accomplished something significant (it does not have to be absolutely significant like curing cancer, but in today's society everything else is so overwhelmingly abundant that is what people end up trying to dream about as their fantasy - "maybe my kid will cure cancer") which is entirely obvious in discussions with young adults. Because of no actual possibility of land access or ownership for the young generations, the "new" physically distinct land part of the fantasy falters too¹⁹ - there is a sense of insecurity, of not having something crucial (the stability of one's own place / tribe so the wolves don't eat you at night), and furthermore there is no incentive for them to invest effort knowing well enough they won't ever fulfill the fantasy. If I were to find myself able to live in this fantasy, like I have dominion over land I can call my own and do what I want with it, defend my ground - I realized that as a man that's exactly what I'm meant to be doing, but there is no way I can do it in this crazy society: there are so many people that they are living not just to the immediate adjacency but above and below me, there is zero notion of a place I can call my own. Here I am, basically a drifter, can get kicked off where I live and nothing I can possibly do about it (fight -> go to jail, get a lawyer -> lose money / time / effort), I have no power over my work and no ownership over my stuff. I do not feel in any way safe or confident in my position, and this creates huge stress and anxiety. Even if I don't have money problems, my deepest biological drive is plainly squandered and this feels continually bad despite the material conditions being way better than what I could find in nature. I suppose this is the feeling I had when on a hiking trail I continually encountered groups of hikers and their dogs: I was doing the hike not so much to see the woods but to claim the activity of hiking this trail as uniquely mine, but there was no chance for it, evidently I am no better than hordes of loud obnoxious groups in it to get a bunch of selfies. I feel hit particularly hard by this mad order of society, enough to the point I typically view it as a not-so-veiled "we don't want your kind here" which inevitably makes me suicidal. When I end up committing suicide

¹⁹video games, especially ones with huge worlds, provide a relief for this and become addictive by virtue of it

this will doubtlessly be on my mind. I pride myself on thinking things through in a detailed way, bringing up concepts only when I've eliminated all possibilities, treating objects with care, getting things done slowly but precisely and with investment of effort to detail.²⁰ Yet throughout I am shown how others take the opposite approach - speak their mind, forget important details, break things and buy new ones, do some job without a full understanding of what they just did. And it hurts because I can see they get more reward for less effort - they are doing it right and I am doing it wrong, by objective measures. I can't help but care for objects - I even recover old pieces of technology and set up new functionality (since I was young around 5, I guess I really needed an outlet of care / libidinal investment as my parents provided none). My whole philosophy rests on being thorough but gentle, trusting others as I would myself. But I everyday see others use me without second thought, use objects without even a hint of cognizance, and being as rough and rude as it takes to make life most comfortable for themselves. It really isn't much of a secret that I look and act weird ("autistic") and am actively not wanted or welcome in this society. It will select for people who are selfish and efficient as leaders / CEOs and cast out those who try to empathize as "useful idiots". I get suicidal thinking of it because I am treated in this way and yet expected to perform elaborate tricks for them. I'm a man, supposed owner of my destiny, and what the fuck is this situation I find myself in - powerless, mocked, outcast, ignored, and disposable - how can I keep living knowing this? I feel powerless to even try bothering expressing my ideas to others - I don't have a house or any place to call home, I have no belongings that I have control over, nothing that the animal me can accept as real belongings. So I don't even have incentive to improve society, because any attempts will be met with derision at how naive I am. There is nothing in it for me even if everything goes perfectly well, I want to care but I must not so as to keep myself sane, let society do what it may without my input. Realistically I will have to learn to be selfish because I am too scared to suicide. Society has told me "fuck you and your shitty attempts" so I have to say "fuck you society". How I wish it were otherwise.

Walking along Mass Ave in Cambridge I saw homeless people sitting against a wall and on the other side of the street active construction of a fancy highrise apartment building. The realization hit me: this is **seriously** wrong! Somehow being immersed in this as an everyday reality it is hard to recognize just how messed up it is, but it is indeed a massive failure of capitalism / economy / society to use the available resources in a rational way. People make fun of the long lines and empty stores and bureaucracy

²⁰In turn likely due to anxious early childhood attachments where I learned to be obsessively cognizant of the parents' emotional states so as to not get hurt

in the communist countries and don't realize that situations like the above are just as laughable. At this scale some organism that is bigger than humans is coming alive and wreaking havoc on the individuals that make it up. As mentioned earlier, the exploitation of the mind in an unsustainable manner is an m.o. of society at present, and this is further illustrated with the obliteration of instinctual urges that it requires. I saw a scary-looking homeless guy walking on the street towards me, and just kept walking past without paying much attention - yet my instincts were screaming at me to get away or prepare to fight, as I am smaller and he might have a weapon. I knew that without a group backing me up he could seriously injure or kill me, as all animals know, yet I forced myself to keep walking and act like nothing at all is amiss. This is crazy! It means I am telling my unconscious instincts, "you suck, I don't care about you" and then is it any wonder that anxiety and depression arise (as results of this lack of harmony between conscious and instinctual / unconscious urges and resulting repression / rebellion / "strike")? Is it so surprising that schizophrenia would be linked to living in a city, with strange / unfamiliar people everywhere and at all times of day / night? Maybe my brain is just old (a DNA test showed 98 percentile Neanderthal traits) but I feel the need to be in a close group and stay with them and be safe, this living alone in a city goes against my deepest animal desires (and the "autistic" lack of social understanding is a personal hell, making it impossible to be part of a close group in any case despite a deep urge for it). Then there is relationships, in all mammals it is seen they choose limited promiscuity and partners become defensive of their pack / family / mates. In our society, it is expected that everyone has their own non-overlapping friend groups and can be with whoever they want, being defensive is silly and manipulative so it has to be yet again suppressed despite it being an innate instinct. The work week is also crazy, there is no absolute need for people to work so much - after all societies as a whole have the power to choose whatever working hours they want - the conclusion we come to is that the brain **wants** to work for most of the day - or rather it must do so by its nature - finding work of its own if an official recognized "job" is not available. Society could be viewed as a facade on an underlying madness / insanity in seeing the finiteness of existence and the claustrophobic sense that there is no escape from it: the unconscious mind cannot turn off, it has to keep thinking, and work is a good outlet / distraction for this thinking, so we end up sort of sleepwalking through life. Work, like sleep, is an addiction to pass the time, because there is nothing else to do with it.

There is this sentiment by people who own low-mpg vehicles: what else are we going to do with all this gas? And indeed there is something of a universal principle here: when something is possible, it might as well be done. That is, after all, what gives meaning to the possibility. I wrote

earlier on how knowing that I could kill myself implies I should not kill myself to remain in this existence / in control but then I cannot kill myself - ultimately this means I cannot kill myself. The only way the notion of killing myself has meaning is if I actually go through with it - I have to do it because that's what it is there for. The same with fuel / gas: it is there and can be burned, but if I always "save it for something more important" then it can't be burned then it is not a useful fuel at all! I must commit and say "here's a chance to burn it and I'm going to burn it" in order to make use of the fuel - and evidently physics rewards me for doing this so in a metaphysical sense the fuel also wants to be burned as soon as it is possible to do so. Numerically it is just that as soon as a dissipative system is set up dissipation spontaneously takes place, symbolically there is also a desire there to get dissipated much like the frantic working of the brain taking it through time as fast as it can. The derivative of a Poisson / "random" distribution shows that the most likely time for the event to happen is right now, and the next likely is immediately afterwards - any distribution that does not meet this never actually happens - it is always more likely for the event to happen later - so it doesn't happen at all! For anything to happen / exist, it must happen just as soon as it can, and the closer to the present the more likely (giving rise to terms like half-life). So we get structures which not merely support dissipation but which optimize and increase it to the greatest practical extent (and the brain itself is such a structure). From this I would go back to the interrelated social connections that make up society - what we see here is a continuation of the notion of people as purely selfish beings (not as a criticism, but rather that it can't be otherwise - one can only feel and act based on his own within-body, selfish, feelings). The concepts of love, friendship, family, individuality, all confuse the underlying reality that people only behave nicely to others because they have been in some way manipulated to - because being nice fulfills their fantasy of care / power or because they want to keep an attractive face nearby or because a neonatal instinct is pleasing to satisfy or because they expect punishment / reduced profit if they are not nice. ²¹ There is a myth in the culture that people can be made to change - for instance in a school students are taught, in a relationship partners "fix" each other, in a family parents raise their child. In reality the individual is the only one that can institute a change in himself - the way others can control him to do what they want is by appeal to his instincts or by physical restraint in the case of a complete psychopath who is skilled at ignoring spoken threats. This imposes serious limits on the "degrees of freedom" of interpersonal interactions, or rather what things are achievable and how. For instance if a father has a strong

²¹The way people treat inanimate objects, ie complete lack of concern beyond anything that is useful to self - is representative of the way people treat one another "by default", ie in the absence of fantasies affecting the self involving that person.

neonatal protective urge for his daughter, the daughter can control him by appealing to this urge - but note the whole action takes place within the father's brain so is ultimately his own choice. The daughter finds this ability from everyday parenting interactions through a complex contingency detection mechanism (tentatively outlined in later chapters). If the father for some reason does not have this instinct, then no amount of love or caring or words from the daughter will do anything - the myth that the daughter is "loved" because she is "family" or because of "who she is" readily falls apart.

As I continue the study of psychoanalysis, I am beginning to be able to trace developmental history as well as current personality traits / living environment of people from benign statements that in the past I would have dismissed as just arbitrary / unique / randomly effected. One case is homosexuality - as in [Nicolosi's video https://www.youtube.com/watch?v=2GcD15y_ID0] and based on my earlier finding that relationships retrace / reformulate childhood bonds by using sexuality as a healing device for traumatic situations, I am in agreement that a homosexual desire is the result of childhood absent father, overbearing mother, and social trauma. Now to hear that J is gay tells me about his family dynamic in ways I would not have been able to observe directly; same with A - and I can now think back on subtle behaviors which exhibited this sexual basis yet were overlooked by me without base psychology understanding. There is a caveat here, to make sure I am not making "fortune teller statements", like he does x therefore he was hurt in childhood, as this is so broad anyone could find a hurtful experience, I have to ensure that statements are selective and in line with information conservation (not claiming any more or less than is known). The way I do this with psychological / social influence is by tracing the conserved elements across multiple space / time events, just as in physics. Momentum conservation says that if I observe an object moving to the right, it must have gotten its "moving-to-the-right-ness" quality from somewhere else and those things are now moving less to the right than previously. The only way to define conservation is to look at and track what stays unchanging, as information never changes just spreads. For gayness the specific factor is sexual attraction to men - and a specific type of men - which can be traced directly to an idolization of the father which is an element of both absence (so the ideal fantasy is never challenged) and an undesirable attachment with the mother as primary caretaker. Basically men have shown more emotional interest / care in the individual and yet a more prevalent absence / distancing so his sexual fantasy becomes set on a male figure like the ones that treated him well. The next aspect is jokes - by now it is clear that there is no such thing as a joke, if an individual says some words then he thought of them by associative activation and

felt the need to verbalize them, whether or not he later says "just kidding" doesn't change the true glimpse at his mental processes revealed by the content and timing / situation of the joke.²² So my classmates' sly "does your face hurt?" or "guy with the most beautiful nose" shows just how much they care about me. Indeed it is a shock to see how hated I am even by my own family - appearance really is key, unattractive people are hated by everyone particularly those whose family-fantasy they blemish by their bad appearance. Use of sarcasm and enjoyment of comedy are to be seen in a similar light - indicative of a very mean / emotionally violent and deeply discontent / sadistic / insatiable mindset that would be toxic for my involvement. Cell phone addiction is an indicator of basic discontentment in life as well as situational insecurity / shyness / avoidance, while TV addiction is indicative of escapism as a means to avoid an undesirable real life - such people will not be excited or passionate about anything in the real world as it can't beat the high of a virtual world escape. Further, such people do not have much going on in life to be passionate about so all time can be spent on TV. I would extend this to video games - an innocuous statement like "I'm a gamer" already speaks volumes about the person's aspirations (for ultimate power) and life situation (of powerlessness) and mindset (of depending on virtual alternatives to real solutions). As with the "I'm really content in life", "I never think about the bad things", "my children are such a blessing", "I love you so much" - a person who is truly content / happy with the current situation would not make a point of saying such phrases. A full person will not eat more, a satiated person will not drink more, and so basic desires must be satisfied one way or another but not both or neither (if it really is impossible, depression / mental degradation / suicide will take place, represented as self-harm scars or anorexic body tone as symbols of the mind's pain or emotional bareness). So a person has a need to love and this goes to men if women don't satisfy it. A person has a need to conquer / feel powerful and this goes to video games if real-world actions don't satisfy it. That games in general have been ever-present shows a particular dissatisfaction with nature and reality, and that video games today are so ubiquitous and take up (along with social media) most of a young person's day, shows that the dissatisfaction is increasing despite (or maybe because of) modern conveniences.

²²A more detailed argument on the use of wit / joking as a way to get past the brain's "internal censor" and express a sentiment while staying within socially accepted bounds of discourse is presented in [Freud's Wit and the Unconscious]

5

Shit Tests

People in dating / "game" communities describe "shit tests" where a woman would say something offensive or deliberately make some offhand remark, and "passing" the test would be acting indifferent or even replying back with offensive words, while "failing" would be taking it seriously or literally or showing a sense of being hurt. Even outside of dating, such exchanges can be readily observed in everyday interactions. It is done unconsciously, I've had the experience of sometimes when talking just throwing in a phrase that is off-putting because it felt right, without further conscious deliberation, and now I realize those were shit-tests thrown in on the spot / automatically by my brain. But this doesn't really make logical sense - why do it? I believe just like facial attractiveness is a no-tech way to do a genetic health check (it is no coincidence the genetically unhealthy people look unattractive - this is a very sensitive mental test), these shit tests are a way to check social health / viability (because that is harder to check just passively, though it could still be done by watching others interact). I saw this dynamic with a toddler and his mother: the mother was saying it is time to leave, the toddler said "no", the mother said "yes" and eventually "you are going now or I'm taking away your toy", after which the toddler started crying while the mother remained calm. And this is the same dynamic in the shit test: it tests for who's socially developed and who's socially a baby. The baby will be first to feel hurt and start crying.

It is interesting as I would have thought we have to learn a long time to take others seriously, but actually we take others seriously by default and have to learn to distrust others exhibited by not being affected by what they say,¹ being difficult to fool and thus good for social survival + many

¹With cognitive decline such as due to drugs / exhaustion / age the brain loses the capacity for handling complex structures (and thus the capacity to understand what it has lost - the affected individual cannot see this) and therefore becomes more gullible / suggestible. This is a similar principle to the earlier-noted case of exhaustion leading to the representation of reality in simpler, more human-centric (actually self-centric) and

offspring, and this is what the shit test is designed for.² Like having extra money gives the ability to ignore the boss / quit the job, and having free time gives the ability to do what I want with it, caring little about what others say gives the ability for me to optimize my own life at the expense of others vs the opposite - in this sense it is social power.

I passed a young girl on the street, she was excitedly telling her friends "did you know, *3 billion* years ago, mars had oceans?". I wondered, does she understand the reality / scale of "3 billion years", or just how far away mars is or how it was discovered or how hard it is to reach, or how big an ocean is, or how water molecules are believed to escape the planet or what a water molecule is? I doubt it, but she said it with such conviction (and posed as a question) it made me wonder how this fits into base psychology. Why would she put an obvious verbal emphasis on "3 billion years"? It is a very unnatural thing to work into a conversation, as far as phrases go it is rather unique and rare / low-use thus specific, but what is the need for such specificity? It must have been that she was somehow impressed by hearing this phrase from a science teacher. On an emotional / urge level it satisfied some drive thus she felt a sense of elation on hearing the phrase - repeating it again to her friends perhaps she was hoping to incite a similar sense in them, seeing as she found it interesting that her friends would feel a part of her experience when they heard this from her. "Monkey see, monkey do" works surprisingly well in explaining human behavior; including differential reinforcement from the world just about covers the totality of it. There is another sense here which is a test of social standing: in this case a reaction of genuine surprise / interest in the topic implies a lowering of social status as the girl is put in a superior teacher / mentor position, while a reaction of disinterest or maybe a more detailed / intricate explanation in return implies a furthering of social status as the girl is put in an inferior student / follower position. This all takes place on the emotional / unconscious level of course but this level can still be very crafty in what it does. The girl realizes this social standing aspect, by posing the "trivia statement"³ as a question rather than just a statement, because putting it as a statement would lower her social standing as it would be more certain that others will reply with indifference / boredom: putting it as a statement makes her in a teacher role which the others will not accept because it is so absurd / out

less physically accurate / detailed, symbols.

²The undertone of searching for the recreation of a parental bond (so as to relive/fix associated childhood trauma) by selecting a partner who successfully takes on the parent role in the shit test should not be overlooked. Indeed re-reading this passage after the writing of base psychology I would claim this as the primary motive, as opposed to the evolutionary fitness idea proposed above. The common use of "daddy" (and to a lesser extent "mama") to refer to sexual partners is not coincidental.

³the fact that people enjoy trivia (I never did) and that more right answers = more good / respectable standing, is a parallel to this social standing mechanism / urge

of place - they may react with a joke at her expense / sarcasm in return to "put her in her place".⁴

Earlier I posed the question of why people would engage in self-harm. Could it be an expression of self-hate? But an expression to whom - the self?⁵ A post on a depression forum said "do you secretly hope someone will see the scars and comfort you?" with many affirmative answers. I am drawn increasingly to the view that self-harm in the form of cutting is meant as a display to others of the reality of psychological pain - the words "I feel depressed" / "I need attention" can be manipulative in nature and cheap to produce; the self-harming person seeks to communicate to others: I'm not just doing this for attention / to manipulate, I really need your validation, and am willing to pay in real pain to confirm my honesty. Chemical releases in response to pain and even social responses may create feedbacks that lead to self-harm becoming an overused coping strategy, but the very first cut has to have a logic of the above sort.⁶ I fantasized about someone telling me "I want to kill myself" and me pulling out a knife and walking up to them threateningly. What I imagine is they would rapidly move back / defend themselves which would mentally create the therapeutic paradox

⁴The extent of what takes place here should not be underestimated. Even such a simple exchange requires each of the people in the group to have an idea of what they know and how they feel, what they expect the others to know, including what the others think of them and what they think of the others, levels of certainty on all these bits of knowledge as well as other possibilities of explanations for observed actions and their certainties, and a constant updating of all these incomplete / extrapolated models based on real-world inputs from the conversation. All this complexity is handled on an unconscious level and is highly intricate with conscious awareness only getting a highly distilled overview, in the same way that our visual processing is highly intricate even if we feel it trivial to point at objects and classify them by name.

⁵This is problematic because I don't go cutting up people I hate, or even fantasizing it. Why would cutting myself and experiencing pain be indicative of expressing hate? Something else is at play here.

⁶I would add that self harm in animals is seen as definitive proof of psychological welfare concerns (especially a feeling of an aversive stimulus that cannot be escaped, such as being kept in a small cage, or having parasites stuck on the body). This indication straightforwardly carries over to people, yet I know from observation that human self harm is common and not addressed with the seriousness that an objective evaluation of its message should bring about. The most common aversive stimulus I notice in humans is an abusive relationship which they feel they cannot escape - often they are not even aware that this is the source, there is just a general feeling of dismay / being trapped (on an unconscious level, this lack of awareness may serve a purpose - the abusive person may be playing some necessary fantasy role and it is a worthwhile tradeoff to experience some physical pain vs the psychological pain of consciously choosing to leave this fantasy); self harm inevitably stops upon removal of the aversive stimulus. The self harm serves a psychological purpose: to create memories where the self is in control of inflicting pain on self, and such memories are more comforting than memories of the real world where the self was/is not in control of externally inflicted pain. This is addressed further under control fantasy.

of [Pragmatics of Human Communication]: they obviously don't actually want to die so either they were lying about wanting to die or they intended for me to not take it seriously. Indeed a suicidal person (see also suicide levels note) would not spend time on monologues and reach to others - he would seek to finish the act quickly. So the person saying "I want to kill myself" is not actually making a declarative statement: similar to self-harm this phrase is intended to signify "I'm not just idly asking for attention, I seriously need some support - my life is at stake". ⁷ It is a call for attention but saying plainly "hey I need some attention" is a "normal priority level" request, whereas saying "I need lots of attention" passes off as self-serving - why should the listener bother to give lots of attention? Furthermore this explicitly underlines a sense of helplessness / desperation which the suicidal person wants to avoid as this state is what he is trying to escape. Thus he says indirectly, "I want to kill myself" so as to request comfort / support "as if" it were spontaneous and not a request to a conscious call for help because the latter makes the help itself ineffective to the base mind (the message here is "he will only help because I forced him to do it, not because he values me" which furthers the suicidal concept of "the world would be better without me"), while at the same time conveying to the listener that the situation is serious / sincere - for unfortunately our language is very rudimentary at transmitting emotional states so whole concepts and circumstances of communication (including the fact that communication is even taking place) are used to more effectively do so. It is in essence a communication issue, and it can even occur within the self, as the "language" of conscious understanding is logical / direct interpretation of words while the unconscious base communicates in feelings and experiences - creating and conveying specific feelings through choice of words which have to be taken seriously to understand the feeling but then understood as "not actually serious" because their point is to convey the feeling and not the conscious instructions they may carry.

In saying "I want to kill myself" I want the other person to hear the words and think about how they would feel if they were to say those words then project that feeling-state onto me then treat me the way they would respond to such a state, namely help / care. Of course this convoluted path is prone to breakdown and errors, as many depressed people talking to "normal" people find out - the latter don't have a mental basis for how the other might feel so they respond by a conscious interpretation - "you're

⁷"my life" is a stand-in for the life of the psychological self. That is, a person talking about suicide is saying that his concept of self (inner child) is dying / destroyed from psychological trauma or ongoing lack of emotional fulfillment, taking this to mean that his physical body is about to stop functioning is too literal. Such a person may go on to live with a healthy body but his core self will be largely devoid of direction or self-actualization, reliant on external structure to attain them.

lazy / selfish / immature" or "you should just do A, B, C..." or "your life isn't so bad" which sadly ends up being the opposite of what is requested because the emotional message transmitted is "my state of mind is clear and logical, and from this I see that you don't need or deserve help / care".

If this conflict happens within the self, ie the conscious brain takes thoughts from the unconscious too literally / logically, the result is erratic and unsatisfying, inexplicable (because of unconscious origin) actions. I wrote earlier about D's expression of "really enjoying" the lab but barely spending an hour per week there. There's a post on r/depression about getting depressed and unable to do homework even with clear conscious knowledge of what to do. Talking with R about writing an essay I get a similar sentiment "I know what to do and that I need to do it but I don't do it!". I explained as much in my one-off attempt at therapy, that I would stall when writing a paper, knowing what and how to do it and how it will benefit me but just plain unable to actually undertake the action, my brain not even handling the thought of opening the document without finding something else to focus on. This is a clear message from the unconscious: this action is deeply repulsive to me, I downright refuse to do it. It is difficult to imagine a more obvious way to communicate this emotional fact. But the conscious mind can remain unaware if not recognizing larger scale patterns in the limit of pure faith where any thought is taken as itself (at face value) rather than as a product of the unconscious and past influences. I cannot speak for others but my own hesitation with the paper writing seems to be due to the feeling that I am doing something I have not been taught to do and that will majorly impact my future - I would be much more comfortable doing the writing with a mentor at my side telling me what to do. ⁸ I wasn't stalled like this in (say) doing homework - I still procrastinated but it was more or less conscious "I know this will be mentally taxing and would rather do it later". And I guess another way to say it is with the paper writing I didn't actually have any confidence in what I was doing so I stopped - perhaps realizing the high stakes and my lack of experience I unconsciously found it safer to flee the scene instead of attacking the beast. There may be other factors as well such as fear of judgement (which is not fully rational because being late or not turning in anything also leads to judgement) or just plain aversion to the work -

⁸This in turn is a clear remnant of childhood behavioral memories - I would often get punished for doing things the wrong way, especially things involving writing (vs playing with toys), but if I was doing it together with a parent then it was much less likely that I would be punished. Thus my emotional memories led to a strong negative charge for the act of writing where now the punishments won't follow, but logical refutation of this is pointless, the only way to remove the emotional charge is to go through with the act and observe that the punishment doesn't follow - the trick is to do this without causing extra trauma by forcing oneself to do something unpleasant.

the unconscious finding it as a waste of time or even detrimental to the unconscious life goals such as exploration, safety, protection / parenting, ownership, social status / value. I gladly spend hours in lab testing out new ideas but I can spend hours sitting in front of a blank screen trying unsuccessfully to get my brain to write down the same ideas - writing is interpreted by my brain as useless to its goals and it would rather spend time testing more new ideas (which it has grown comfortable doing + gets rewards from) vs writing them for others to see / criticize (which it is not very familiar with doing + sees as exposure to risks without any chance of reward - ie it is at best neutral / waste of time and at worst career-ending so it is unacceptable to do it).⁹

Maybe here again is a tie back to my imaginary parent: it was a regular occurrence that I was given an unfamiliar task and told to do it and then judged harshly for inevitably failing. For example I was expected to clean the bathroom and harshly punished if it was not to parents' specifications. Yet I don't recall a single instance of them methodically teaching me how to do it, nor what their specifications actually were, all I knew is that the cleaning chemicals were in a drawer downstairs and that the bathroom better look really clean for when they inspect it. I remember asking "how am I supposed to clean the floor?" and they answered "figure it out!". I put in an honest effort, but without knowing what to do or to what end, I would obviously fall short of whatever they were expecting, and would be punished. I knew that I did all I could, and worked really hard too, and still got punished for it. It was either punishing me for doing a shit job or using the wrong supplies, or shoving me out and then doing it for me but instead of explaining + teaching they would yell and criticize so the next time around I was in the same situation. So when I'm faced with doing something major (ie failure is not acceptable) and that I don't fully understand how to do, my brain recalls the double-bind "damned if you do, damned if you don't" propositions from childhood and the resulting punishment and mental pain, and refuses to even participate in the first place - you can't be damned if you neither do nor don't ie avoid even thinking about it. This is combined with a certain arbitrariness of the task - I know unconsciously from piecing together things I've learned on an emotional level that poking an animal will make it angry or that punching a rock is going to hurt, but I don't know how I will be judged on my writing - there is no right answer but surely wrong ones - like walking through a minefield for no clear reason (the "reward" of a successful writing is all conscious like higher pay to which the unconscious is indifferent - the punishment of disapproval / mocking laughter totally outweighs the reward

⁹A parallel to playing with toys vs doing homework is easily traced, so this aspect of the charge may have been formed in my early childcare years 3-4

of a bigger number on a bank account from the emotional / sensual view). Relationships, as based essentially on communication between two people, are particularly prone to problems of the above sort and even more when including the possibility of lack of understanding of self within the partners on top of lack of understanding each other. This lack of conscious control leads to the creation of unconscious-driven patterns which are stable to the dismay of the conscious mind - this should be remembered in therapy settings as merely removing a pattern without changing the system is bound to be fruitless - the pattern emerged once and will surely emerge again. It explains partners staying in an abusive relationship, sexless marriages (conscious attraction but base repulsion), cheating / affairs (unconscious attraction but conscious repulsion) and regrets after sex, the concept of "I want you to know what I need without telling you" (as telling implies that it was only done out of obligation not out of attraction / desire), "love but not in love".

Walking on the street I look around and see lots of human-made items, time-transported from the past and now influencing me through my senses. I see these items as the traces of human will / creativity / life-force, and it is a bit melancholic to imagine all the effort invested therein and the driving hopes / dreams that led the people of past to make these things only for the things to eventually fade away, remaining lifeless and indifferent. And it makes sense that nothing should last forever, it is even good that it doesn't (for what if it were bad forever?), but the melancholy is from directly facing the limits of life and the bare reality of the progression of life and death. I think the brain on some level realizes the truth but it is too painful to accept as this destroys the ego by putting it against irrefutable logic, so instead the brain builds up a series of psychological defenses against reality, creating some irrationality but in turn being able to keep sane in this cold world. And these defenses are in turn what result in the world I see around me - people driven by a sense of dissatisfaction (for if they were satisfied they would have no need to create) with the reality of the world, seeking to create a mental environment that is more amicable for their own existence. There are a few ways of achieving this escapism into a nicer fantasy: distraction into a pre-made artificial world (watching TV, reading novels, listening to others' stories, playing games), creation of a new artificial world (making music / movies / books, handiwork / crafts, art and theater, engineering and design), avoidance (sleep, depression, isolation, exhaustion, indifference), rage (insanity, murder, fighting, aggression, revenge). All this drives the higher-level actions like planning and leadership and construction, while lower-level actions are driven by animal instincts and internal chemical rewards / behavioral reinforcement. It is the fear of facing the hard limits of our life that drives all the creative and ritual processes of society, and the failure of these processes to convince

the mind against an onslaught of reality messages (ie you're unwanted / unneeded / disliked) results in a depressive state. Many times, and it seems more and more frequent as the days go by, I would feel a complete lack of motivation, not even wanting to do the things I called fun - like hobbies or programming - much less "actual work". Recently I feel this as a more profound, existential lack of drive, running out of desire, an unraveling of the mechanisms which in their operation brought me to where I am now. And this is darkly entrancing to observe from the first person because it shows (or can be reverse-engineered to show) the specifics of this mechanism, as successive layers of unfounded assumptions are stripped away by logical inconsistencies as my brain reconstructs itself to be in line with the deterministic / cold logic axioms of past writings.¹⁰

The basis of this whole human endeavor, society at large, is setting up an individual's psyche to use the brain's internal chemical-production / reward + punishment pathways such as to be in line with societal (and, to the degree it benefits society, individual) goals and survival. Purely individual benefits lead to things like walking and tracking motion, things that animals can also do instinctively. Communicating, thinking, and in turn forming plans and goals for the future and then taking actions accordingly - all are only possible for us due to *societal* programming (a person alone in the woods will not learn abstract thinking) and thus all actions following from this (and this would be the vast majority of our conscious actions) are evolutionarily selected to benefit society, not individuals. Yet at the end of the day all I feel is internal - my feelings of pain and pleasure originate from my brain / nerves¹¹ evaluating its surroundings and sending impulses to itself, my understanding of other people's emotions comes from me projecting my own emotional response profile onto what I believe their situation is and is thus indefinitely removed from what they might actually feel (or not feel), me feeling embarrassment or loneliness or acceptance / popularity comes from my interpretation of my life situation rather than any absolute feature of the world and even though this processing is done in my brain it's out of my control - I can't help but feel embarrassed in some situations even while another person would feel completely confident / content. The trick of society is in setting up an intricate structure of unquestioned principles /

¹⁰From another view, this is a straightforward manifestation of what happens when my drives to create "fun" things are not reinforced by societal approval and the loneliness proves to be inescapable. I only got interested in the "fun" things because as a very young child I was somehow rewarded, and now my brain is starting to catch on that I am no longer being rewarded, so naturally it will lose interest. The logical dismantling of society is in turn an act of rage at the injustice I feel I have been put through, in the only way available to me - mental rather than physical.

¹¹where nerves should really be taken as part of the brain, and the brain can be seen as having 'roots' going throughout the body as a combined sensory organ, much like a tree is not just the top leafy part but also its extensive roots underground

memes that program the psyche to release chemical rewards / punishments based on evolutionary beneficial actions. In a way it is a "web of lies", not because it is untrue but because it is an arbitrary structure that professes itself as the only truth, and because it is practically impossible to escape from within - doing so would imply losing one's mental state so thoroughly they would be branded crazy, because what we call normal is indeed normal only with regard to this "accepted" structure of brain-operation, accepted because societies that lived by this have outnumbered those that did not (and because questioning such things is practically impossible without serious alienation from society - for in every social interaction the accepted programming / brain operation gets reinforced - the structure cannot act in a vacuum and *relies* on other people's inputs because there are many types of chemical rewards that the brain will only release when engaged in particular interactions with others (ie cannot do it by itself) and such pathways would not be just left untouched by society).

What about internal drives themselves? The purpose of a drive is to lead us to take one particular choice of action out of indefinitely many possibilities. From an outside view this looks like a deterministic progression but maybe this choice is the essence of qualia rather than a "dumb" process. The brain has different ways of choosing its actions and responses to the external world based on its state / emotions. I believe these pathways of choice are finite and hard-wired in the brain, constituting the various directions along which the human race as a whole makes progress / finds interesting and rewarding. One example is the preference for variable reinforcement: since constant reinforcement means one has fully solved the problem while no reinforcement means there is no problem to be solved, variable reinforcement shows that an optimal solution has not yet been found so the brain is drawn to keep working on the problem - seen in riddles / games / gambling and a lot of the scientific disciplines.¹² This has an interesting tie-in to complexity as defined earlier, as a sole way of increasing complexity for a system is to face unfamiliar / unexpected / *unpredictable* data, so by seeking to focus on the things that yield unpredictable rewards the brain has potential to learn more about the world (though this is perverted in things like gambling because ideally the person's actions would actually have no effect on the outcome - it will be seen that gamblers on a deeper level really believe they can affect the machine / game as the brain is stuck trying to learn an optimal approach - thus "lucky" motions and special dice throws and praying).

Consider next sex and fetishes. The pleasure of sex, surprisingly, is not adequate to drive reproduction (as demonstrated in mouse utopia experi-

¹²This is also related to contingency detection, a mechanism used to focus attention on other "living things" to make us interested in social interactions. This can easily get hijacked by non-living things like games and conceptual queries.

ment and also recent high profile extinctions despite attempts at remediation). The pleasure is a reward which reinforces sexual behavior, but to get to the situation of engaging in sex in the first place there is at work a mental drive to seek sex. I can feel this within myself and can tell it is a hard-wired drive because I was never taught such feelings nor could feelings really be taught (like 'hunger' is not taught - while hunger is a feeling based on physical sensory inputs, sex drive and other drives are feelings based on internal mental processing and thus can have abstract triggers like seeing a pretty face vs nerve cell activation by direct contact for the senses).¹³ There is one pathway which is submissive in nature - what some people call the "sub zone" and very sexually stimulating, making me want to seek situations where I am used / hurt / helpless. There is another pathway which is dominant in nature, which makes me want to treat others like objects and boss them around and make them fulfill my demands and punish them at will - this is also sexually stimulating but in a wholly different manner. Perhaps these are hormone-regulated, making one more likely in women and the other in men, leading to the stereotypical BDSM relationships. By this notion vanilla sex would be very boring indeed for both partners - unsatisfactory as it would be undertaken only for the abstract idea of consummation rather than as pure lust, not triggering the evolutionary brain pathways that signal success in mating, so despite the potential pleasure the partners will remain limited in sex. This explains otherwise unjustifiable / baffling stories and stereotypes: the dead bedroom in a traditional marriage (where either physical attraction or societal notions of proper conduct interfere with the triggering of the sexual drive pathway), the women chasing "bad guys" (because "nice guys" don't just not trigger a submissive pathway but actually suppress it, placing the woman in an awkward middle-ground position ie not seeing the guy in any sort of sexual way and maybe even despising him for breaking her out of the chemical high of the submissive mindset), women leaving a relationship for an "abusive ex" (because the "abuse" triggers the sex pathway, and this makes sex + closeness feel very pleasant, this forms an allure much like the longing for spicy / flavorful food when one's been eating only bland watery things for too long), men watching "disturbing" porn like BDSM / vore / guro and even creating (real or drawing) new scenarios of such (because seeing another person helpless / abused makes sex and even just life as a whole feel really good - a chemical high), and the rapid decline into abuse in guard / prison scenarios like Stanford experiment and real ones like Guantanamo (because the allure to abuse a helpless person is about as high as the allure

¹³Indeed, pleasure and pain should be seen as *mental* states and not merely consequences of sensory input. Cutting for instance could be painful or pleasant or highly sexual all depending on the mental drive / state active at the time - sensory inputs are the same but feeling experience is different.

of breaking a stable relationship above - though driven by different feelings both are evolutionarily hard-wired).¹⁴ This has some dark implications for what life in the past may have been like, but maybe on the other hand the technological abilities of civilization took these drives to unnatural extremes (torture, concentration camps, sexual slavery) - still early humans must have been violent including violent sex so evolution selected for a drive that on some level accepts and even enjoys this reality. There is then a fine line as far as relationships + sex goes: some level of abuse is necessary for mutual sexual fulfillment but it cannot be "real" abuse because that is damaging to one / both people's livelihoods. Triggering the submissive + dominant pathways requires taking action without abstract concerns like permission, indeed asking permission or outlining expectations is a great way to shut down the pathways - there has to be a mutual trust between the partners that the abuse is "for play" which cannot be verbalized as doing so breaks the necessary setup / situation which the brain uses as a trigger for reward-chemical release along the aforementioned pathways - much like a compliment is said (consciously or not) for social validation but if it is explained / justified then the brain (unconscious situation-evaluating module, which is not too discerning of lies) will no longer be able to experience the compliment as authentic and thus will not release the reward as was desired.

I was reading a chapter in [Pragmatics of Human Communication] and found myself feeling angry at the situations described, then frustrated as I fruitlessly tried to answer why some letters on a piece of paper should make me angry.¹⁵ The book described fragments of the play "Who's afraid of Virginia Woolf" in terms of communication systems, and reading the escalating emotional attacks between husband and wife (and their seeming enjoyment of it) was a factor in my reaction but what cemented it was the application of the same attacks onto a couple visiting them who tried to act decently and got made fun of / humiliated for it. Why did the character getting made fun of feel belittled by hearing some words? The notion of

¹⁴In re-reading this after base psychology, I would reformulate the concept. There are not 2 elementary drives, but rather these two are easy classifications. The main role of sex and what creates these drives is the fixing of past trauma, as outlined in later chapters. The pleasure of sexual healing is possible only after the pain of social rejection - see also qualia conservation. A completely trauma-free person would have only the sensory pleasures as a driving force for sex, which is not very much (children also get this pleasure but feel no particular need to engage in sexual activities until a certain psychological threshold has been reached which allows the projection of mental states onto another and the use of this other to fix aspects of the self (also why sex with a clone is a topic of much fascination)).

¹⁵In general, anger is a response to a perceived lack of fairness or logic, such as witnessing preferential treatment of others or having one's deeply held beliefs challenged by others' words or actions.

"lame" comes to mind - compared with the sharp wit of the husband the guest's reasonable and content-based / rational statements could be seen as not in the same league, or lame. What is lame? I would guess it is a notion not just of failure but of not following the rules at all - a boxer fighting a losing fight can still be rooted for, a boxer sitting down and crying is lame. The former follows the rules even if he loses, the latter does not even follow the rules and thus calls the game itself into question. It makes sense from an evolutionary basis that such behavior, which threatens the cogency of the group and its organized actions, will lead to exclusion of the individual so as to keep the playing team intact - the same reason elementary school kids will pick someone last to be on their team - usually this last person is not just bad at the game but bad at the rules / spirit of the game and emotionally hinders the team beyond full statistical impacts on score / performance which aren't intuitively kept anyway. So that's why the guest would seek to not be called lame, but why should he just take another's word that he is lame to heart? This is intriguing as it shows a potent logic-based weapon to engage in intellectual / emotional dominance, a **logic bomb** as it were.

Consider what happens if I renege on a promise - I say I will be bringing a gift to the party but then forget it, and get called out on it by someone else. Why should I care? Why do promises have any value? The evolutionary point that cultures where promises are ineffective perform poorly is tempting but not nearly direct enough for the desired effect. Another person, or the group at large, may get hurt if I break a promise - but I don't directly care about that either. The force of the promise lies in its effect on me: if I break the promise, I will have to accept the reality that I am an untrustworthy individual, or if I choose to not do so, I will have to give up some logical worldview about the definition of promises or cause-effect itself. The brain is designed to create coherent logical frameworks to describe the world so my breaking a promise ends up being a punishment to myself, one way or another, unless I am willing to give up logic entirely. In the same way the statement of lameness has its power - it is not sufficient to just call someone lame, their gross lack of ability has to be demonstrated to the extent they cannot logically deny it, and then calling them lame forces them to also logically accept it or deny logic itself - their brain cannot help but take the word "lame" label as true, the attack has its desired effect. This much made the character in the play angry - why did it make me angry? Probably because I saw myself in the character: the countless times I was trying to be serious and considerate and hardworking and in return got a snide remark and laughter at my expense still make me mad. Why? All this comes down to is people playing different games - so while my seriousness / calmness is lame in their view, their volatility / shallowness is lame in my view - but why am I the one left angry? I think

because them coming in and replying in this way also disturbs my logical world - when I am happily working my worldview is perfectly as I expect, with other people having similar goals and being genuine - this makes it easier for me to work so I operate on this belief and when they try to play their game with me there is a risk for me that my worldview and thus my ability to do work (survive) is threatened. It is as if I were happy building a castle in a sandbox then someone comes and takes a shit in the box - it makes me angry, and rightfully so, because it is a forced imposition on my (mental) prosperity and stability against which I cannot retaliate without disturbing this stability even further. It makes a difference who initiates - if I see others bickering I will just think their behavior is lame, if I am invited into the bickering and find myself affected - well I'm more or less at fault, but if I am honestly trying my best and unprovoked get this sort of treatment - I'm angry just thinking about it! (This carries over to the shitty sandbox analogy - I will only be angry if it's my sandbox and the other person was not invited in the first place). It's possible that anger comes from a sense of unfair treatment, which in turn comes from inconsistencies in the logical mental model that are forced to be resolved (for instance "I'm not lame" vs "evidence shows I'm lame" = anger) - this would explain why people with (say) religious beliefs will get very irritated if their beliefs are systematically challenged.¹⁶

Beyond the logical truth aspect of words, associative learning contributes to their power in interpersonal communication and rule-directed behavioral control. Consider the case of calling a child a failure: the image would be of the child feeling guilty / sad, but why? The word failure is arbitrary, where does its power come from? The baby, in its early years, is driven by instinctive feel-good impulses: it can break glass containers on the floor and be in complete glee at the sounds and shapes generated. The guilt doesn't come until the angry parent pounds down the hall and screams at the child / spansks it / grows distant, maybe guilt is just fear in the face of known powerlessness / inevitability (do people feel guilty at funerals?). At some point in this highly emotional situation the parent utters the word "failure", which then gets associated with the emotion of fear / guilt / self-hate because the word is rarely said in unrelated situations. The connection formed is so strong that later on merely the uttering of the word itself is enough to alter behavior so as to avoid the possibility of re-experiencing the emotional state - this is done as a logic bomb to involve a conscious choice of actions: do this and this, otherwise you are a failure (ie

¹⁶It is instructive to compare this with Freud's [wit and the unconscious]: he claims that the pleasure of laughter is from an unexpected economy of mental expenditure. Then it may be that anger, as an opposite of laughter, comes from an unexpected high-effort mental expenditure, such as when two contradictory notions have to be made sense of by the brain.

you will have to relive and accept your past punishment, at least mentally).

This is messed up! It means that all emotional charge / impact of words is defined by childhood punishments.¹⁷ Later threats of "don't be a failure" in the use of "failure" merely reflect onto the listener earlier real-world punishments associated with the word and thus drive action. It is no wonder then that poorly raised children are less likely to be law-abiding - to follow the *word* of the law. Different children respond to words differently, because their parents are different (behind closed doors). Why is banter / emotional attacks as in the play above even a thing in the first place? This ends up being an indicator of maturity as it implies an awareness of self. This is to say, how parents punished their children is rather arbitrary and more in the parents' interest than in the child's - so the growing child has a set of emotionally charged words which can be used to drive the child to action by merely giving some commands. The relation between words and actions is simple - there is a more or less direct mental mapping between words and emotions and real actions. With a growing awareness of the world, the child is able to form a more complete and accurate mapping between words and actions including things like manipulation and lying, forming a more advanced mental calculus associating words (of self and others) to desired real world actions. Banter helps in this process as it allows an individual to find out his own undesirable / parental emotional triggers and find ways to remove their emotional impact and reassign some more useful meaning. A more complex mental model of words and actions means that this person is both more difficult to manipulate and more likely to manipulate others toward his goals (in the same manner that play fighting is used to build up an individual's fighting skills and set up a hierarchy within the group) - an evolutionary advantage certainly so this could be why the trope of "girls like abusive assholes" gets perpetuated - dark triad traits (more successfully in families with appropriate and minimal punishment) show the same effects as the building of a more advanced mental model of communication thus look attractive to the opposite sex (though this was never attractive to me - but I don't think I was attractive to anyone either as my communication model was quite rudimentary / flawed due to my weird upbringing). It is another level of fucked up that we get to spend our adult lives basically cleaning up / remediating the shit that parents put us through as kids which kindly left a personal-communication minefield we had to painfully navigate to get to that point. It amounts to something between hazing and slavery - there has to be a better, less violent way to

¹⁷This is so against societal beliefs and yet so true, that it warrants repeating. Any emotional charge of words / phrases come from past experience of physical sense of fear / hurt / alienation during social exchanges where such words were used. This is at root of developing base psychology.

transmit knowledge between the generations. ¹⁸

What about love then? When I think about love I get the feeling of looking for warmth and affection, physical closeness and emotional trust, it is not a joyous happy feeling but a longing for something I've never experienced combined with an urge to do anything in my power to get that feeling ie to sacrifice myself to another. It reminds me of emotionally charged episodes of punishment: I would accidentally do something that made my parents very angry and distant while insisting that I don't love them and in turn I tried my best to follow them around and show what hardships I am willing to undertake to convince them I loved them. This, then, shaped what I consider love - a full submission and sacrifice so as to avoid guilt and alienation and inadvertent hurting of someone I care for.

Why should I do anything at all? It is tied in with the control fantasy: past me believes doing something will lead my future self to be in a desirable position and thus does the thing. This doesn't require words, as with animals, but words allow much more complex action patterns and specific responses through logical reasoning and ordering / understanding of experiences and their meanings. What words do is set up associative linkages between memories of past qualia inputs for the unconscious to handle these memories and make predictions accurately on a symbolic rather than intrinsic / literal level. Thus for a child to be "controllable" by words alone there must be enough linkages created to real qualia memories of pain / punishment and pleasure / reward. The brain must also allow for the concept of "worse than what I experienced" and perhaps "better than what I experienced" so that it can preemptively avoid highly damaging actions which it has never even tried, ie I've tripped and fallen before so I learn to be cautious, but the reason I get nervous while rock climbing is I realize a fall will be much more terrible than my past painful experiences so I am even more conservative in my actions. Words are a tool used by my brain to control its own linkages and actions, thus my learning of words is a crucial part in defining my self - the control fantasy and my willingness to make sacrifices to improve my future well-being. I experienced a period in college of doing risky things like rock climbing and going on hikes alone. I realize now I felt the need to do this in order to prove to myself that I need to take the actions that I do because they are in line with how the physical world works and if I don't do this I will be punished by the physical world itself. Thus my actions are based on physical, justifiable, necessity and *not* on the demands of other people, especially parents. I did not trust my parents' words because taking them literally made for shitty self-contradictory

¹⁸I argue childhood is a traumatic experience - even in loving families since the child is basically helpless and cannot communicate his needs to relatively omnipotent beings - but especially in abusive / emotionally unaware families (which are definitely on the rise as the closest relationship nowadays is with a cell phone).

tangled mess of conceptual links, this in turn because they used words in order to control me and make me an extension of their will ie make me do whatever they want, instead of to teach me truths about the world and myself. They made blatant lies about the state of the world so as to get my reaction to be what they desired, for instance during spoon-feeding telling me there was only a little bit of food left in the bowl (with an obviously full bowl) so I would eat more willingly, or telling me I lost or never had a toy that they took away so I would not be angry at them for having taken it, or telling me I will get really cold outside so I would put up with their comic over-dressing and then disregard the profuse sweating later. In all this it was unnecessary to lie, they could have said something truthful or distracting or used physical punishment, but instead what they said was actively damaging to me building a logical word model of the world because their words were just as word-like as my own, ie it made no difference to my language processing machinery where the words came from - indeed their words were more intrusive because they would yell and loudly force me to listen to them so their speech overrode my quiet / fragile inner voice by simple brute force / drowning out. As I escaped that household I became more attuned to my own voice and through logical tracing I realized I have no fucking clue what is "real" and what is made up by my parents to fill their nonsensical desires of the moment. There must be parts of my psyche not in tune with the physical reality of the world and I don't even know what they are. I believe most people don't get to this healing of childhood trauma until adulthood if at all, I just got "lucky" to be alone (excluded) a lot and have lots of time to think about myself. So I set a program for myself to find out what is real. Parents, in forcing a child to do something so that a bad outcome is avoided, must also explain how and why it is avoided and what the bad outcome feels like, otherwise they deprive the child of a chance to learn about the world by building a mental model, so even if their advice is perfectly correct the child remains dependent on them to survive. And unconsciously this is a goal for controlling parents in the technique of infantilization and protection / bubble-wrapping of the precious child (doll). My parents were obsessive about treating me with all sorts of medicines so I tested myself on whether and how I can recover with no medicine at all. They had a weird need (a symbolic expression of their own feeling of emotional coldness / bareness) to dress me in heavy thick layers so I tested how long I can be outside in freezing snow wearing only a t-shirt. They made me eat the whole plate strictly 3 times a day so I tested how long I can fast or how few meals a day I need. On one hand this may be interpreted as breaking away from the family and establishing individuality, but on the other hand this is too abstract of a notion when the process was a neurological level urge to heal / fix my screwed-up associative linkages. Indeed I was OK with having other people join in the

"risky" activities, I didn't strive to establish myself as the only person who does such things but rather as a person who lives not by the lies of my caretakers but by the realities of the world. This means I would even seek unpleasant experiences like freezing outside, such that I know why it is I wear warm clothes, and I was perfectly content, even excited, to undergo these experiences because from them I got satisfaction of learning about the world and my own limits. I could now have justification for the actions I take as physically necessary and not traces of my shitty upbringing. It is only with doing this continuously over many years that I started to be able to understand my inner voice as "myself" and that this self has interests, preferences, and goals.

Is language purely social? Is it possible for me to not use language for my thoughts and thus have greater control over how I interact with others vs with self? I find it impractical to operate without an "inner voice", a representation of thoughts in language form - the purpose of language is to serve as a compact reference to activate desired brain areas, like a pointer in programming, different words are different to the extent that they activate different (at root arbitrary) brain areas, but their value lies in that they themselves are very compact and can serve as a means to logically treat brain activations without actually having to activate them. For instance I want to plan my day for tomorrow and if I try not to use language I end up thinking about one thing to be done, then the next, then the next, and by the time I've thought through all this I've forgotten where I started or what I was trying to achieve - in place of that I only remember the specifics of what to do for the last action I thought of. I am only able to recall that I had intended to make a day plan because I remember this notion in language terms. Without a pointer that says "activate this on cue" the brain can only approach this by actually activating the regions but then the activated region takes over and all is forgotten. What is desired is that I think of the idea of actuating that region without actually activating it, then I treat that as an object in an abstract sense and decide things like when to activate it and what to do before / after. So in making a schedule, my brain activation is of the facility of task-scheduling and it deals with words as task representations; it cannot deal with tasks themselves because this will displace the task-scheduling activation. At root the optimization of consciousness fixates on one goal, so complex tasks require the use of language as abstract references, then the use of some other symbols as references to language can be even more powerful.

I had an impulsion to watch a wedding video, typing in "wedding" on youtube and hunting through the links to find one with minimal editing. I can't wholly trace what made me do this, perhaps some unconscious state made me feel amenable to try and relive the experience of a wedding I had been at in young age and put it in context by seeing what a "typical"

wedding looks like. It is plausible that the trigger was a post-it note from a coworker that made me (unconsciously) think of his relationship with his girlfriend and how they are likely to get married soon, and perhaps I unconsciously wanted to watch their "wedding". This then activated my memory of the wedding I attended and I found it a more productive goal to try and deal with that experience. I think my earlier writings on the emotional and brain-brain impact of weddings stand well supported by these real videos. The more highly edited ones focus on the dress, flower bouquets, fancy rings, nice cars - symbols of material wealth (just about all of them) but no hint of emotional desire (indeed a video recording would be antithetical to maintaining such a desire - the best it can do is refer to material objects (which it inevitably does) and leaves the emotional work to the viewer). The longer one (5 hours) I watched at multiple points throughout, showed the sad state of affairs. There were some parts where dancing occurred - the women (it was only women dancing at this point) moved about unenthusiastically and had such grim expressions on their faces that I thought "I've seen happier faces in concentration camp photos".¹⁹ This was in contrast to the loudly blasting upbeat music and flashing colorful LED lights and fancy marble floors on which they stood - a failed alchemy experiment as it were, mixing in all the phenomena deemed connected to happiness and hoping that happiness will arise, but finding out that the mixture remains lifeless and nothing emerges out of it.

Events like this must be frightening or at least hugely uncomfortable for the instinctive / animal brain: the unfamiliar setting and expectations (fancy room, fancy food, special unwritten traditions / manners / rules) lead the animal to feel less secure and thus reduce risky behavior like exploring much less dancing (which, in spontaneous form, requires a feeling of safety and trust and togetherness - no sane animals would go into a new unfamiliar space surrounded by eyeing others and start dancing, every instinct screams against such acts). Only children ran around freely: perhaps because they had typical experience with large dining halls at school / childcare thus the setting was not too unfamiliar, and the lack of awareness of social punishments for breaking some secret rules probably also helps. It seems at least some guests did not miss the evident lack of joy in the ceremony, so at one point one guy went to grab the microphone after his speech and said "OK everyone we're putting on some dance music [signals to DJ] and everyone is going to dance! Youth, come down and dance! Every last one of you! Everybody come here!".²⁰ The "be spontaneous" logic bomb

¹⁹concentration camps being recalled because the wedding was in Kazakhstan and I remembered my trip to a Gulag museum outside Astana - not consciously of course. The derogatory tone also perhaps reveals the unconscious desire of above to get back at my coworker for leaving a snarky post-it note.

²⁰Of course, it is the youth that needs to step up and dance and make the party a

is already rearing its head, but just to drive the point home, a lady came up next on the microphone "ladies and gentlemen, like our dear guest said, we're going to have music and everyone is invited to dance. He wants it to be like a discoteque, let's do that, indeed this doesn't even feel like a wedding. Weddings are supposed to be fun, joyful happy [Audience member: And this is?] and this one is" then the music rapidly cuts in. People do not come to dance, until some prompting by the MC, and even then it is the women of earlier, no men, and their expressions are similarly indifferent. The look reminds me of what I would expect to see on some POW made to do tasks on camera but at threat of torture: just blank emotionless expression and a thousand-yard stare. Perhaps this is true on a mental level: the unconscious (originator of "spontaneous" dance moves, as in sex also) does the dance only under threat of torture by the conscious enforcement (recall / activation) of social punishment memories onto self (in this light also that it was all women is illuminating).

At the end of a prior dance, I see these women break the "dance circle" with almost explosive simultaneity: one turns just slightly away and moves toward her seat and the others, looking for any cue to leave, take up the offer leading to a cascade that leaves an empty dance floor within 2 seconds - an impressive indicator of just how uncomfortable the unconscious / animal was to take part in this. As they walk away, I see two women (out of sight of each other) reach for their nose / eyes as if avoiding tears (for really, such vicious destruction of a fantasy is worth grieving over) and one taking comfort in stroking her hair as she walks to her seat. During the man's call to dance, another man nearby got frozen in a weird pose reaching for his phone (another indicator of nervousness ²¹) with his hand half-way in the pocket for 10 seconds until the other man was done speaking. I mentioned how euphemisms and vague words in writing are indicative of unconscious avoidance earlier; the above in turn are physical / body language analogues of this unconscious state: none of the people there were comfortable or enjoying themselves. It is illustrative how the man + woman handled this: the man calling people to dance sought to remedy the situation by giving orders and having someone do them (it is the *youth* that has to dance, I won't do such silly things), then the woman readily submits to his "alpha frame" / strong tone and calls others to dance by using emotional threats (this wedding sucks because you fuckers won't dance (ie it's your fault and

happy one, and furthermore it is their fault that things are not going well. The man himself quickly retreated back to his seat and wouldn't dare join in. This is the same use that parents have for their children and why they choose to have children, in the rare cases where it is not an accident. Here it can also be seen that the wives are used by the husbands in this way.

²¹and a call for proximity with the most reliable relationship partner, phone, as a way to get emotional reassurance in a stressful situation

you need to make up for it), get up and save this mess) - a lot about family and cultural dynamics can be learned here and accurately.

The issue here is foundational - telling people to "enjoy yourself and start dancing now!" is fruitless as if they were truly enjoying themselves the dancing would follow with no prompting. The message is "fake your joy, damn it, so I can keep my fantasy alive. you bastards.". The context should be borne in mind - why would there be dancing or other traditions at the wedding? I can imagine back in clan days, when in times of hardship a warlord brought home a bride and other stolen goods for a feast, the people were genuinely happy as they could celebrate ie the end of hunger, or new women for everyone, or getting a rare foreign treat / status symbol. Seeing that in these events people were happy, social status competition led to various lords competing amongst themselves in who can make their people happiest ²² and naturally something like dancing is a way to evaluate happiness, so dancing becomes a de facto requirement for a wedding. Some time a lord made a fanciful entry carrying two swords, and this was deemed cool and copied enough that it became an expectation / a tradition, so in this modern video the groom is seen wielding two kitchen knives as he walks in front of the bride. All traditions are just fanciful "monkey see, monkey do" copying of things that looked cool at the time. No dancing would be better than forced dancing, but with no dancing it's not even a wedding in the eyes of other people (the wedding is made impressive for others, after all, to increase the couple's social standing) so forced dancing ends up happening.

From this unwinnable situation it is odd to see the man + woman try to force happiness: that doesn't work, as emotions cannot be consciously controlled. It's the image of an ape insistent on building a computer out of rocks, seeing that rocks are basically a similar shape - happiness can indeed be created, but not like this. ²³ Creating it requires a high level of power and ability to impact others, like the warlords of earlier might have had, and an emotional sensitivity recognizing what people want. ²⁴ Telling people to get up and dance is such a crude attempt that it instead paints the initiator as incompetent and low-power in the social hierarchy, sort of like if I printed out a nobel prize certificate and started telling others to "get off their ass and listen to my lectures" - this state is indeed

²²A similar phenomenon is documented as rituals of excess - competitions between tribes to see who can throw away the most food.

²³on a lighter note, see <http://www.sandraandwoo.com/2019/02/14/1059-cargo-cult-chinaware/>

²⁴More deviously, it requires an absence of happiness, or a dissatisfaction with the world, that is then fixed, resulting in genuine happiness. This is why abusive relationships remain stable - the abuser imposes pain but also provides relief, and this creates genuine pleasure some of the time. Objectively perfect relationships grow boring because nothing is then pleasurable, not even lavish expenditures.

achievable but not through such a lame route. Interestingly it would be emotional sensitivity that would defuse this situation (ie seeing nobody wants to dance, skip the dance) and this can be seen in upper class society across cultures - the unusually strict manners and expectations designed so as to not place others in uncomfortable binds / giving chance to "save face" / designing activities to match instinctive drives / not infringing on (respecting) others' autonomy.

The wedding cake made its entry next, with praise by the MC but sparsely any applause, catching on fire due to firecrackers on it and having to be put out by the attendants - writing this seems almost like some bad comedy film but this was actually someone's wedding. Next followed the groom + bride dance, not sure if others were invited to join but nobody did, and the couple faced each other and "danced" for some minutes. This dance had so little movement that I thought "might as well be dancing with a corpse" - the husband was wobbling left and right, while the wife was somewhat following the wobbles but with a lower amplitude. Husband had his hands on wife's waist while she had hers on his shoulders but over time they moved down so she was more or less pushing him away with both hands, unconsciously exhibiting her view of the wedding. Both their expressions were somber. The happiest state of the room as a whole was at the end of the event, when everyone got up to leave the dance floor for once got crowded, and one guy danced out of the hall in front of the groom.

A number of times I've heard excuses of the variation "I could do X if only I had Y". How should such statements be interpreted? One possibility is that the ideal version of the self that the person wants to see themselves as is a person who does X and has Y. This does not mean that having gotten Y they would be willing to actually do X, because there are always tradeoffs. I think the presence of such a view indicates a non-acceptance of death / finality so there is still the hope for eternal bliss, for which getting Y is the key. Thus actually getting Y can be a disappointment because it will be seen that no bliss occurs. Such a sentiment is probable necessary for maintenance of the omnipotence fantasy and viability of the self (see later chapters): neurologically activation energy needs to be let out so there is a focus / fixation on an object that is "the key" to fulfillment, to which all actions and events are anchored and thus gain meaning and relevance for the self - the disparate sensory inputs and outputs are thus unified. So we get thoughts like "if only I had another roommate" "if only I lived in a different city" "if only my job paid more" "if only my friends were nicer". Indeed all of modern society can be seen as this taken to an extreme - external compensation through increasingly disruptive technological means of an inner void that can't really be filled externally, only distracted from. We are so overabundantly productive now - why? To what end? Because whatever we have now is not good enough - it is an

internal need, not for a new physical object but for the concept that novelty still remains and is accessible, which manifests itself as the creation we see around us. Yet the key to being happy is being able to be happy in any physical circumstances. Indeed the inability for fulfillment may be genetic and characterizes the advanced societies. Even though the old civilizations have had more time on earth than relatively new white European civilizations, it is the latter which have modernized the world, an extension of the drive which led them to migrate far north, and the reason they were able to do it is they were deeply discontent on a neurological level with the state of things which forced them to learn more and try harder in the logical realm. It is even arguable that the white race has increased aggression, and thus is more willing to dominate / less willing to give up on a mental quest. The basic frustration and aggression are expressed also as sexual perversions, predominantly perpetuated by white races. What we see now, in terms of the cultural suicide of Europe, is an expression of this aggression and violence / hatred turned against one's own race. The laughable difference between how white people react to "black lives matter" vs "white lives matter" shows the extent of self-hatred, which is at root others-hatred but which has been suppressed by societal norms and thus turned onto the self.²⁵ The role played here by the focus on the holocaust and more subtle cuts like all villains being white males is significant and arguably well understood as such by the powers of the world (and if not, they better catch up). Finally, concerning hatred against self, laughter should be seen as a manifestation of violence - obviously against another when bullying or mocking, but also less evidently against self as in self-deprecating humor or awkward moments - the person making a joke there is expressing "attack me, please" and the laughing listener obliges. This can also be an attack

²⁵A point seemingly making headlines today is the notion of "privilege", such as a white man getting a position only because of some "privilege" and not because he truly deserved it. This is completely nonsensical and counter to the nature of the world, and an acceptance of this view amounts to a submitting of oneself to any weaker opponent, a laying down before a stranger's feet, a self-sacrifice with no reward, a losing move. The way the "privilege" seems like a vaguely palatable idea is by a backwards argument: given that everyone is equal, those in power have gotten unfair privilege. It is not true that everyone is equal. No person or animal is born with a cheat code to physics. Consider a lion that has caught a gazelle. Was it only because of the lion's privilege? Sure, all it did was grow up as a lion, a privileged class, there is no real reason it deserves to live more than the gazelle it is about to eat. Therefore the lion should do the honorable thing and release its catch and starve to death. This is nonsensical because the reason the lion is in its role is that its ancestral chain made decisions which led, over evolutionary timescales, to create this particular lion with its hunting abilities. Meanwhile the gazelle's ancestors made decisions which led to it being created as it finds itself at present. There is no right or wrong, just that the lion has the ability to kill the gazelle, and it does. If the gazelles found out they could guilt the lion into letting them free, it will be the gazelles that are known as king of the jungle.

against a problem or frustration, once having solved a significant challenge the person can laugh in joy at the extent of his subjugation and power over the previously formidable problem - it has now been made "his bitch" and he can laugh, mentally degrading it in all sorts of unconscious ways.

6

Base Psychology

In my typos I can look at the operation of the unconscious / intuitive pattern finding process as it tends towards economization and combination (such as with puns, or typing a complicated word combining parts, for instance thinking of "these causes" like "theses" or the infamous "thanks ants - thants"). I observe that immediately upon seeing a word it has the capacity to modify what I am typing to make it related or somehow combined with what I see. Previously typed words still in recent memory also have the capacity to affect my typing (typos) as well as words I am thinking of typing. I believe a basically similar process is at work in "scientific insight" where a person is thinking of a problem in his field, sees / understands a solution in another field, and the brain automatically combines the two with no regard for validity or physical practicality, and sometimes this combination is found by the internal "censor" to actually produce something sensible which is then allowed to get to conscious awareness and is experienced as an insight. Just as with the sharing of wit, there is a desire to share a new scientific discovery, and both bring joy and laughter to the originator and the listener.

From my overall interactions with others and reading online posts, I seek to outline somewhat of a basis for brain operation as a first step in a model representation of a brain "unit". I've come to the conclusion that most choices are driven by unconscious processes which we then verbalized for our conscious understanding. The brain itself is a network of nerve cells, and our life experience is that of this network, with its infinite-coupling boundaries being the reason we feel as ourselves and not as the universe at large. Chemicals / hormones regulate the connectivity of this network and thus change the nature of experience and decision making. Brain links that have fired become more likely to fire, leading to a system poised for "molding" by runaway cycles and this is the basis of original cultural / behavioral learning. Consider learning in dogs: as in Pavlov's

experiments, reinforcement works. But what exactly should be reinforced and what led to its appearance? This is the task that the brain solves. Its network keeps track of recent circumstances / events and also analyzes the present sensory inputs to determine whether something worthwhile (good or bad) has happened. Over multiple instances of an event the network gets activated and any common elements that were present in past activation get triggered / neurons firing more often than the "irrelevant" links, and thus "useful" cause-effect links get reinforced while "circumstance" not-related-to-effect links get pared down. Thus the brain learns that out of all possible world causes only some lead to desired effects, and these causes get hard-wired in the brain operation during the formative years. What the brain finds worthwhile to learn is based on qualia experience - pleasurable / desirable / painful feelings and the associated chemical releases in the brain (as mentioned earlier, neurological drugs work by using these already-existing mechanisms but modifying them beyond a typical scope).¹ These chemicals drive both the brain state and what it learns and what it finds pleasurable, and these (like hormones) play a huge role in genetic / gender / age differences in brain function. These control things like impulsivity, wakefulness, food preference, empathy, aggression, subservience, interests (math vs music vs art vs social). A dog's operation ends there: it has no self reflection or awareness, it learns aspects of culture from its mother (father? pack?) guided by chemical incentives like curiosity / play-fighting to play and establish itself in society. Working societies exhibit complex behaviors like hunting and courting and dominance displays, and while this is caused by programming in each dog's brain due to its propensity for runaway cycle learning, none of the dogs is aware of what they are caught up in or why - they just know that in some situations some actions are called for, not realizing why they work or why they are called for, only that it "feels right" - the origin of this knowledge being ultimately evolutionary on a memetic level but practically from observing other members of society and driven to copy and perhaps modify / improve / make "unique" based on unconscious pattern-forming by link activation (differential) and chemical signals.

Dogs cannot learn by a conscious process, only by behavioral reinforcement which provides stimuli rewards for recently-experienced brain states ie the tree-paring system of above. There seems to be no mechanism in place to evaluate or optimize such links - surely what would be the justification for this given that the brain itself *is* such links? So I might teach a dog not to poop inside - such as when it looks about to poop I move it outside. It would seem the message is pretty obvious: pooping is to be done outside, so the next time the dog will already be potty-trained, so

¹This can be unconscious: as in abusive relationships ultimately both parties get something out of it - the brain finds it worthwhile to continue even if the person consciously knows something is wrong

as to avoid the unpleasant stimulus of being moved outside. Right? But from the view of the dog it is not clear at all, it was just following natural urges to poop then got moved outside by the person, forming an association between pooping, getting picked up by the person, and the sensations of being put outside. Any of these might be a signal to activate learning, they are activated one after the other and the closer in time two of them are the stronger of a link will form between them, with a fading time so long-time-ago concepts / nets don't impact "present" learning. That's why it takes months to train a puppy, and shows that training might not be what we think - to the owner the training is so the dog keeps the carpet clean but the dog doesn't know any better than (maybe) outdoor smell = time to poop, which is good enough from the owner's perspective but is not a sign of any understanding (an further solidifies the misguided humanization of pets in contemporary pet-owner relations and "conversations" (who's a good boy?)) - as in the [Clever Hans effect]. Puppies are taught memes like methods of hunting by observing their fellow pack members - for evolutionarily useful behaviors to be passed down then the elders' memories need to be more stable so they aren't "taught" by the puppies, meanwhile the puppies' impressionable memory is formed by the elders' actions following their memory but with environmental influences / "mutations" thrown in leading to a cultural-level evolution. Humans certainly do this type of learning - and it is subconscious and may well underlie the majority of our actions and thus most of our awake time.

It is likely that in humans the "hash" of the world is more complex, allowing this neural net to be more sensitive to more sophisticated patterns and intricacies and have more driving incentives, but at the same time this requires longer to learn as there are more links to form - human infants develop for an absurdly long time vs other species (greater plasticity at birth means greater capacity to deviate from slow evolutionary trends and towards quickly improving cultural behaviors). But what we consider "human" pursuits are due to additional mechanisms. Looking along the species evolution path, we see an ability in monkeys to learn actions from seeing them only once, and without material reinforcement. There are two factors here: one is hard-wired representation of actions, where we readily interpret actions as mental constructs which leads to conscious copying ability (same sort of hard-wired pattern-finding ability like seeing shape edges or understanding stick figures (even the cavemen did this!), we can understand the concept of another's action); the second is an appreciation of patterns for the sake of patterns, a different type of reward pathway looking for novelty and elegance vs food / mating (why we like music, why we call art beautiful, why we find math fascinating). So the monkey seeing an action will be led to try and copy it, modify it by environmental circumstance, and perhaps eventually some material benefits will follow that

will further reinforce the action. The time delay between action and reward allowed by the symbolic interpretation of actions allows for more complex societies to emerge. Still the intuitive understanding of actions is limited to what can be demonstrated in a few seconds and is context-dependent and is not amenable to action chaining. The ability to represent actions with symbols, and the ability to optimize virtual symbol chains of past actions mentally, led to the establishment of human societies. Later evolutionary emergence of written symbols + text allowed even greater temporal disconnect between action and reward, and even greater ability to optimize virtual actions before taking actual actions.² This probably has a not-too-complicated mechanism in the brain, such as allowing net activation equivalently by sensory or abstract (thought) inputs, with the thoughts being symbolic representations given by special patterns of sensory inputs - typically verbal / audio but also visual (text / sign language) and tactile (Braille) and probably other if we cared to - the different sensory inputs seem equally capable of being mapped to symbols or back and these symbols are sensory-independent (language I read has same meaning / effect as language I hear). I would imagine our development of language in the first place had to do with our drive to music / singing, while visual art is of the sexual realm / finding a good-looking mate. The culture formed from these drives and given the communication and optimization abilities is accordingly more complex, leading to tribes and religion³ and politics and arts and tools. With "permanent" storage like paper we were able to expand out computational abilities beyond the temporal limits of mental processing and also to send messages to future humans saving them the effort,⁴ so we effectively reached the computation limit as far as evolution is concerned.

We had enough excess computation power to question life, develop technologies, and build up more computational power (as in computers). One might think then that our actions would be logical and well-optimized yet it remains the case that often they are driven by basic urges / instincts: thus "base psychology". This is because the majority of situations require fast

²Note that human brains haven't changed that much since the time writing was invented, yet human abilities have greatly increased, and this is attributable specifically to writing being a complement to the way the brain functions, and therefore from the structure of writing something about the way the brain functions can be learned.

³On a hike I thought: look at the complex world around me, this is the nature of existence, reality itself, the universal being presenting itself, why do people stay in some dark church room and read an old book and find comfort in believing some ancient secrets? Maybe religion really does fill a (evolutionary / to form groups) void, because the idea of there being an answer is undoubtedly comfortable.

⁴it is this ability to send memories into the future that seems to define a conscious system as well, so we could be seeing the emergence of the first societal-scale consciousness around the time when ways for humans to transmit memories became available

actions where deliberation is not useful, and because most situations are too complicated to analyze consciously (such as social interactions: there are too many possible alternatives, so I can feel my brain taking over my dialog when I am conversing; or identification of objects visually: I just "know" what the object is that I am looking at, it is hopeless trying to consciously decipher how I know this). This is the argument also in [Thinking Fast and Slow]. In this way most of our actions, even ones we call conscious, stem from unconscious desires / drives / mappings. Fully conscious actions are ones where I can explain fully the cause / effect chain and why I am interested in the action, and I can expand the scope of conscious actions by consistently questioning and analyzing my unconscious tendencies, but unconscious actions and desires always remain as a catch-all for things I cannot consciously handle. My thoughts themselves are unconscious in origin - I can tell what I'm thinking but not how I got there or why or where I'll go, thoughts are the mechanism of conscious deliberation but are themselves unconsciously driven - I control thoughts by changing external circumstances (unconscious reinforcement processes lead me to do this automatically - it takes many years to teach kids to do this control of own brain, we're not born with the ability but it has evolved culturally) in a way that the unconscious responds in the way I want. The brain also has an evolutionary drive for social validation (and a strong one as in the early days being alone = dead), and indeed most interactions are based on that. The majority of words in a conversation will serve to communicate emotional states (useful to know what another person is thinking / feeling like - for both of your safety), validation and acceptance or search for it. Validation is an interesting case as for it to be effective it needs to be believed - a lie is not processed by the brain as effective validation when it is known to be a lie so the effect is lost, and on the emotional level the brain will accept what is heard as truth without further analysing (why mean words / bullying really hurts even if the victim is made to rationalize "it wasn't true..."). This leads to a number of unwritten rules / expectations, namely that one should put on a good performance for others (even if both know something is a lie, both can be better off without breaching it).

Lies to others and to self play a large role in communication as well as societal mindset and sanity / stability in the face of death and competition.⁵ One example is the special needs / retarded / genetic-disabled kid videos that get comments like "He's so strong / beautiful / angel / blessing", one family even had the kid in a shirt with the label "Handsome" as if some sort of dark joke with the baby itself being so deformed. The lie here is by both the viewer and the parents to create a mental reality less deranged

⁵The problem, and the driving reason, is that on some level the brain believes all it hears - whether it consciously appears as a lie or not

/ more palatable than the real physical facts before them. This is also a case of words (as thought representations) being used to try and define a preferred / ideal version of reality, with physical actions being representative of an underlying "actual" mental state. Another lie is in our choice of words for friendship / love and the mutually held belief that such things exist. In reality our interactions with other beings are all transactional, consciously or not, chemical rewards given by our brains based on *our* personal interpretation of events and causes. Two people in love may view their togetherness from very different viewpoints but mental states are not directly comparable so both can call it "love" and try living out the fantasy they have associated with the concept of love - a feeling of success in life and having everything figured out, which unfortunately proximity with another flawed being does not provide. The extent of our love for another is based on what happens in our brain's interpretation of their actions, so the constructs of love / friendship are projective in nature - we can't help projecting our emotional / mental states onto others as we have no other basis to go on during interactions - we may build mental models of another being's operation and reactions but as to their current mental state at a given moment (which we use to determine what action to take in our interactions with them) all we have is a projective guess: how would I feel if I were in their position? This is how human-pet relationships can get comically intricate, with the human projecting all sorts of emotions (like love) onto an animal which is basically a food-seeking machine. This is how parents assume their baby understands the phrases it is parroting, or how they insist that their child purposely took some troublesome action to spite them. This is how people in love look at each other and imagine the other feels the same love for them as they feel for the other, because the alternative is too painful to consider. But all our experiences are inherently based on our own feelings and another's actions (not feelings) so there is no love, just mutual finding of benefits to be together vs not.

In fact I think it is rare to have two people mutually infatuated with each other, especially in the absence of peer pressure or physical proximity / contact, so even in sex at least one partner will not be enthusiastic. As with pet owners, the projection effect is strong so the enthusiastic one will be sure the sex was great, while the unenthusiastic one will be sure it was horrible, but both will call it the same name because language only provides a label and not an absolute feelings comparison. Seeing sex in this way is kind of dark: people as driven by instinct-level urges for fucking (started by proximity / foreplay initiating a change into a sexual mindset which can readily undertake actions later regretted: like a drug high, this is a chemical high and will reinforce behaviors) and then justifying the act in realtime according to projected beliefs (ie mental masturbation but requiring the presence of a person to project onto). The disconnect between words and

actions is used to manipulate, both consciously and not (the latter due to behavioral reinforcement in the absence of awareness). For instance, "I don't care about X" is actually a representation of thinking about X and thus on some level caring for it - again the words suggest an ideal / desire (I want to not care about X) while actions suggest mindstate (I still care about X!); the statement itself depending on context can be taken as a request for validation (please tell me it's good to not care about X) and a sign of insecurity (I'm not sure I'm making the right choice about X) or a sign of concern (I'm worried that not caring about X is a sign of something bad). The reality being that a person not caring about X will not even think of X or bring it up. Validation in this sense is a way for a person to consciously direct changes in their unconscious behavior: saying "I don't care" is a conscious output that doesn't change behavior just announces an ideal that is desired, then a communal supportive reaction gets interpreted as positive or negative by the unconscious processing and thus a change can eventually be made. Of course also the reaction is a sign of attention, so the behavior can unconsciously change to attention-seeking patterns ie making up problems or not caring about solutions, all outside the reach of awareness. The processing abilities outlined above that make human brains capable of language and learning point to an ability of the brain to stimulate mental states / trigger them by virtue of internal processing as opposed to purely external inputs, this triggering being thought itself, and the notion of introvert = more self-stimulation / introspection and extrovert = more external stimulation / socialization seems to be roughly in line with the above validation picture. Consciously looking at behavioral links allows much stronger optimization of actions and eventually the achievement of more complex actions by breaking them into small steps. The unlooked-at actions remain undertaken as unconsciously programmed and in those actions our learning of optimizations is as stunted and chance-prone as that of the dog being potty trained. Expanding conscious evaluation to these actions so we can act more optimally requires some external prompt to direct our attention to those actions along with a mental incentive to change the action, and either an intrinsic (sensory) or mental (willpower = learned drive to achieve pleasant feelings by practicing conscious control over urges, liking the control for its own sake just as liking music for its own sake) reward for change otherwise reversion to the differentially-reinforced behavior is inevitable. The mind being able to provide its own rewards like a sense of comfort / familiarity vs insecurity / uncertainty also causes a runaway solidification of a repertoire of actions / thought-patterns that remains resistant to change.

Continuing the notion of disconnect of words vs actions / mental states, "I don't like you" sent as a text constitutes more underlying evidence: I am thinking about you, I want your attention / reaction, I am not sure how

to interpret what you did, or even I like you but want you to act as if you're trying to woo me. Conscious or not, such words and reactions to them are indicators of social awareness, and indeed "shit tests" have come about to detect such an awareness. In the engineering / math realm words themselves carry an abstract meaning (dictionary definition) and that is all there is to know. In the social realm, the words are just an arbitrary surface appearance / carrier wave for the underlying meaning of emotional communication / connection, which for completeness and resistance to manipulation is also dependent on physical factors like who is first to initiate conversation and when and where, who makes / expects what requests or promises, who puts more effort into the relations. "Don't sell cheaply as that makes the product appear unimportant / low-effort / low-quality" is applicable as well to the unwritten social contracts we undertake. Surely selling for too much will drive away potential buyers, so a skill of social interaction is selling for just as much as one is likely to get - negotiation.

The issue is this does not need to care about physically conserved quantities - and this is codified in our economy; money as a driver of mutually-beneficial exchanges is a downright insane way of dealing with finite resources as plainly it is mutually beneficial for everyone to use as much as possible. Could it be that amidst all the lies we tell others and ourselves about our actions, that society at large is insane? This claim would require a definition for sane: say, living sustainably and dedicating time to making future lives more pleasant. We certainly don't do that. What we do is: satisfy our present urges with all presently available resources, fuck everyone else, which is not too bad a strategy for a hunter-gatherer society dealing with fluctuations in food supply and threats from other animals / humans, but it is asinine for modern society - unfortunately, like our wiring for sex, such urges are hard-wired by evolution and cannot be undone on a whim, even with education. Urges and more unspoken rules also show up in social-status material possessions. Even early humans had jewelry and rituals for high-status people, something which is energetically a waste but must have been stable in keeping a group together, similar to religion. How senseless is wearing a ring / bracelet / necklace or getting a tattoo / piercing! These things do not help with the material needs of survival and indeed detract from them, why do people do it? This can be seen as a social-level competition, giving a materialistic drive to try and gain the jewelry and thus some meaning to life / rituals, also as a way for a leader to be seen as super-human which probably helps followers not notice his human flaws / lack of knowledge. What is the drive to get status symbols? It is one of an expectation of respect / power / fame, ie ongoing social validation and care, as in the eye of a person desiring jewelry the people with jewelry are widely respected / given authority so he projects his respect for / jealousy of jewelry-wearers onto the idea of himself later wearing jewelry

and causing such feelings in other people (not necessarily true - depends on what *they* respect) and finding such a situation more favorable to the present where people don't pay as much attention to him, the classic "I will show them!". Only by playing into the game one is not showing but rather becoming subservient, to overall societal programming. Status symbols are not just material things, they are things people talk about / gossip, and such that a person with lots of symbols can be seen as one needing / asking for lots of validation / care. It is the things of "keeping up with the Jones'" ie everyone around me has this so I need to have it too, because that is normal and I don't want to be abnormal as that implies ostracism / death (this is all on an unconscious level, consciously felt as a sort of jealousy but this in the first place requiring the person to believe that the things most others have are good / desirable, which is done by repeated social programming in media / gossip / conversations - ie novels and films that portray romance as essentially good, friends bragging about their luxury car which is associated with wealth which is associated with "success in life"). So boyfriend / girlfriend, husband / wife, friends, and children are all status symbols. As with ancient societies creating ceremonies associated with receiving a material symbol (thus elevating the boring material itself into a psychological experience / fantasy that becomes worthy of pursuing), the above people-symbols are also associated with continued rituals: dating / marriage, common group outings, baby showers / birthdays. It is sad that children end up a status symbol as that implies creating life without concern for its welfare, but evolutionarily this is not too surprising.

So to review:

- Hard wiring - life essentials (heartbeat, breathing, sleep regulation). Not under control of us or external inputs, not programmable after cellular development and designed wholly by DNA, independent of later surroundings
- Inherent learning - secondary essentials (walking, sucking, feeding, excretion). Actions are taken according to hard-wired pathways. Infants can do these without any prior experience of the world (fully DNA driven *at the outset*). World feedbacks on these actions lead to complexification and refinement of behavior beyond the level DNA is capable of providing. Withdrawing or excluding the chance for real world feedback results in permanent developmental disabilities and failure to complexify beyond infant level actions but does not affect the presence of these simple actions
- Animal learning (dogs) - pure reinforcement. Neural net effectively selects what of very many influences causes the one desired effect -

must have multiple + continuing reinforcements to learn. Desirability of an effect determined by hard-wired reward pathways (pleasure / pain). Concentration on variable reinforcement. Decay of old behaviors (unreinforced) and ability to learn new behaviors (reinforced) - liquidity and complexity surpassing that of inherent learning. Ability for high accuracy behavior through differential learning / practice. Behavior is not observable in infants until they are exposed to parenting / society / the physical world and learn from them through interaction; behaviors can differ between different groups / packs.

- Animal drives - nerve-state reinforcement. Brain gets inputs from sensory organs and reacts accordingly: sight, hunger, motion, touch, smell. All end up chemical release pathways that control learning.
- Human learning - abstract reinforcement. Self-regulation by conscious or unconscious means (change of surroundings - on purpose or "just because") and potentially employing other people (compliments) to create an illusion for the brain to release desired chemicals. Only happens in society with language, depends explicitly on society and language (ie can be very different). Desirability of learning defined by abstract concepts like future well-being (with such concepts having their power by virtue of reinforcement-learned ties to desired chemical rewards: this being the process of learning language in a society (why is "good" good?)). Behaviors can be spontaneously modified through conscious or unconscious optimization, without need for direct feedback / guidance from the world to do so. As the language-learning process already pared down the neural net of concepts, an influence-effect chain can be learned from a single exposure (fast mapping / dictionary definition learning) which is impossible in pure reinforcement. Ability for high temporal complexity, adaptability, and long-term-delayed actions far beyond simple reinforcement ie development of logic / plans / goals and contingencies, abstract memory of long-ago inputs. Can remain stable in the absence of reinforcement or even contradict direct reinforcement as long as there is ultimate higher-level reward (ie doing hard work now to be free later, in turn by association of "free" to chemical release pathways) which may remain unconscious.
- Human drives - brain-state reinforcement. Brain evaluates its surroundings at a nonverbal level and responds accordingly: attraction, cute, melodic, social approval, groupthink, peer pressure, embarrassment. Sexual drives (dom / sub), Creative drives (art / music / math), Love / hate / jealousy / guilt, Fear of death, Chemical release pathways that control learning and also abstract processing ("what

should I do?").

- Logical learning? Instead of definitions one learns whole concepts / frameworks which can then be applied to the world at will: only possible in logically / scientifically developed societies. Not reinforced except by indirect abstract means.

Note how human learning and drives interact: so I can "fall in love" with an attractive person due to brain chemical rewards while simultaneously insisting that I am pursuing this because it will improve my future well-being: the latter does not have to be logically true or thoroughly proven as the former justifies it / instills it. Note also how humans must have an animal-level drive to eg learn language so that earliest groups developed language in the first place, and such drives continue to define behavior. Human-level drives then set up institutions leading to ego protection and programming for reproduction / care like optimism / hope, religion / all answers / certainty rituals, love / family / friends. As drives are hard-wired, they should be enumerable. Here I will define drives as feelings that cause me to seek or avoid some action: a way to evaluate potential actions as good / bad, a way to determine what I should do next (and explicitly not do next). From outside they are chemical releases based on the brain's evaluation of its inputs at a simple or abstract level (sensory pain vs group acceptance / approval), but from my point of view they are urges which tell me "this is the thing I need to do now, this is the best choice / right choice". So a way for me to find them would be to look at every single action I take and try to find its associated drive. It is important to separate drive from physical sensation, ie hunger is a physical pain which triggers a search-for-food drive: the drive makes specific recommendations on the future course of action while the physical sensation is just there and has no comment on what I should do next. Note also that drives are non-negotiable: they *must* achieve their goal one way or another, if they are not allowed a direct path (by past behavioral reinforcement, ie politeness rules) they will use all available indirect ones. In this I have found useful to introduce a trigger-response model, where an external sensory input about the state of the world (potentially combined with the internal mental state at that moment) always acts as a trigger for a specific drive which then makes its contribution to action planning and affects what the person does.

So for example:

- Physical sensation of hunger / realization of limited food left → drive to find food → actions to obtain food
- Mental tiredness, low lighting, emotional state → drive to find comfort → actions to reach a comfortable safe place

- Seeing an attractive person or a situation of vulnerability → drive for sexual interaction → actions toward sexual release
- Frustration, dissatisfaction, insecurity → drive for human interaction → actions to connect with others
- Idleness, boredom, stagnation → drive to explore → actions to learn new things

So I can experience an irrational loop like the following: I am at home and get bored which leads me to think about new things I could do, this combines with hunger and leads me to think about actions I could take, the combination of these two leads me to think about taking actions to accomplish the new things I just thought of, which gives me enough interest to go to the machine shop where I can try out all these new things. On the way, I get lunch and by the time I reach the machine shop I am tired from the walk and full from eating a meal, which makes me feel tired and in turn crave going back home to comfort and quiet. From a logical point of view this makes no sense: I already planned out a bunch of exciting things to do and even wanted to do them, but I didn't even start and already want to turn back. From the trigger-drive model this can be expected: in the process of actually reaching the machine shop and getting food on the way I have significantly altered the sensory inputs that led me to feel the excitement and curiosity about trying out a new concept earlier so even though I am now capable of actually doing the physical action I no longer feel the drive to do so. Adjusting scheduling like duration of events, mealtimes, and sleep / wake times, as well as adjusting environments like having a break room at the workplace, can greatly help in making effective use of basic drives to achieve some desired goal.

I was led to think more about what I am - in the midst of all this unconscious communication, why should consciousness be placed as its own category? Why the inelegant duality? Is conscious thought not just a limited indicator of the action of a particular Turing-machine-like (ie logical) brain circuit whereas my interactions with the world and indeed definition of self are based on the rest of the brain - which I have barely any access to consciously? I think such a view is justified and what it implies is human relations, in the extent they are communication-based, are brain-to-brain communications rather than merely conscious mind to conscious mind communications as we most readily assume. ⁶ That is, conscious thoughts and

⁶An online post: "He said he didn't want to have sex because he was tired from work / he had a big meeting coming up / he didn't get enough sleep". It's clear the actual reason doesn't matter - the message here is "I am not sexually attracted to you" yet the conscious brain fixates on a concrete explanation to be able to communicate this message without getting the fall-out of straight up admitting the relationship sucks (which is likely

utterings, if any, are yet another tool used by the unconscious brain architecture / mechanism to communicate with another largely unconscious brain to synchronize operating states and achieve some sort of solution / optimum. This is what happens in manipulation - getting people to do things they will consciously say "no" to is possible by using appropriate unconscious communication - including emotional appeal and body language / visuals. This readily explains the current state of politics, advertising, media / entertainment, and art. The point of archetypes, as suggested earlier, is precisely to enable this brain-brain communication - the logical aspect of the words or images used in the archetype both matters (because otherwise how to convey it?) and doesn't matter (because the archetype is independent of a specific realization of it) - like a carrier wave for a signal or the mystical wavefunction before its collapse.

I am drawn to refer back to sex, because on an evolutionary basis the whole point of brain-brain communication is hunting and sex. The systems of society hijack these urges to things like work (as hunting - me exploring things in a lab is engaging that system, of stalking / observing / chasing but mentally) and child-rearing and family. But the nature of brain-brain communication is not changed by this - the brain always classifies communication on whether it pertains to one of its urges (as an example, movies / series are specifically tailored to show scenes of "interest" - this interest is to be taken as relating to one of the basic communication urges in some way and thus keeps the viewer engaged - otherwise the viewer gets bored / leaves in search of more effective communication). I imagine that lots of contemporary problems in sexual relations are due to the overestimation of conscious communication as a driver of sex. I can imagine an awkward exchange: "Well... let's take our clothes off.. I guess" "OK" "And then we can go on the bed and have sex" "Yes that sounds good". This is a factual, conscious exchange of information, and wholly a sexual turn-off, precisely because it communicates on a conscious-conscious level a message

a self-logic-bomb thus unconsciously avoided even by the sender). A friend asked his dad a slightly uncomfortable question and the dad remembered just at that moment that there was something that had to be done in the kitchen (maybe turning off the stove). Again the stove doesn't actually matter, it was used as a message of "I refuse to talk about this". The brain actively sought a logical excuse and the logical side may well believe that the wish to adjust the stove was sincere, not a consequence of the conversation taking place. In a similar manner, the brain itself is an arbitrary structure meant to convey a message of consciousness - it doesn't have to be a brain, could be a CPU or the economy. The specific structure of the above responses can be further analyzed with the help of symbolism (see later chapters). In the first case this would be "when thinking about sex with you I get emotions which remind me of stress / anxiety / exhaustion and an excuse like being stressed about an upcoming meeting is representative of these emotions", and in the second case "contemplating this topic makes me feel uncomfortable and worried in the same way that I am worried about overcooking the food on the stove right now, I will attend to the stove to alleviate this worry".

(let's have sex) that's opposite of what it communicates on the brain-brain level (let's discuss plans / strategies). ⁷ The latter wins out and the sex feels awkward / forced but the conscious side puts up with it to avoid encountering a self-made logic bomb. The physical stimulation of foreplay may eventually get the brain to switch to the sexual communication / receptive mode but it is a rather brute-force approach. Instead one should observe how animals initiate sexual relations through brain-brain communication: displays of fitness / prowess / visual appeal (typically by male to female) followed by female indication of interest or lack thereof, followed by a back-and-forth chase game where typically the female leads the male on a reasonable difficulty track - not fighting or escaping with aggression as in a "real" chase scenario. Human mating fantasies and media reflecting such, are entirely consistent in following this trend, but real-world marriages are often not (thus readily ending in divorce or dead bedroom). ⁸ What is communicated between brains in the above natural exchange is actually wholly rational in terms of evolutionary fitness and mutual alignment of sexual desire, once the language is understood. ⁹ There is a real power in this natural language which the abstract conscious language does not possess - the natural language is very difficult to use in a manipulative manner, and it can be used to convey qualia experiences in a very direct way. I see two squirrels chasing each other around a tree - in this communication the one being chased knows that the chaser must have maneuvered the terrain in a similar manner to keep up - a qualia experience has been transmitted. ¹⁰ There's no way to fake a display of skill. Note how this cleanly avoids the potential for abusive relationships (a uniquely human construct?) because there is no concept of lying without consequence - animal relationships may be relatively more aggressive but at least everyone remains clear in their standing, there is no potential for a "gaslighting" fog. ¹¹ In [Calhoun's

⁷This also explains the common sentiment - "don't look for a relationship, just live normally and it will happen" - namely conscious desperation for a relationship transmits an unconscious unappealing image

⁸Consider also the case of women singing along to explicitly sexist and denigrating lyrics particularly prevalent in rap - here it is not the case that the women consciously support the message, rather it is recognized that the rapper has some desirable traits and the mimicking of his words is an action to demonstrate their desire to be "in-group" with this male.

⁹Maybe I was too idealistic here. Females end up submitting to a male because those who don't end up not procreating. Still when looking at mammalian intercourse it is evident the female could run away but chooses not to.

¹⁰assuming an awareness of another being as capable of feeling and an ability to imagine that feeling state from marginally related external inputs

¹¹Again I must reel in the forcefulness of this claim, for the expectation here is that the animal is aware of what is going on with it as a result of this brain-brain communication. It may well be that the animal is unaware / does not have a sufficiently complex mental model of others to be aware, in which case it could be manipulated even using "natural

mouse utopia], I imagine the high population density led to the breakdown of such communication and a subsequent population decline (perhaps a built-in population density limiter to keep the species from exhausting locally available food supply density), and it wouldn't be much of a surprise to see the same in modern human populations. Yet I imagine engaging sex could be had by applying the above communication mechanisms - a chase of sorts is a brain-brain demonstration for how much the woman is valued and makes sex enjoyable / natural / freeing. This occurs on a mental level also: a battle of wits, which from my observations tends to complement the physical experience of sex (ie this man is fit and keep up with me both physically and mentally).

Furthermore, the need is for both parties to be independent / robust as they would have been in the wild: the legal and practical dependence relations codified in a modern marriage mess up this dynamic because the brain is no longer able to communicate honest desire when social pressures can make a "unconscious logic bomb". This latter communication is an interesting device: unlike a logic bomb which operates within the conscious / abstract realm, the communication bomb pits logic against the language of unconscious brain-brain communication and in this way can seriously poison / destroy classes of brain-brain communication and lead to the violent destruction of a relationship. Consider two people playing a game, where one player sometimes wins, then the other player says "you know, when you're really superior at a game it's good practice to let the other player win once in a while". Now the other player is never sure - did I win because I'm getting better or because he's taking pity on me? The unspoken rule of the game - that it's serious and not a game - has been destroyed by this communication bomb and there is no way to recover - if the other guy says "no I wasn't letting you win, that was authentic!" it doesn't help because the winner realizes that if the guy actually let him win he would not want him to know thus he cannot believe his words but now he also cannot believe his actions (ie performance in the game). The two may well cease playing because the game is now seen to be an act and not real / genuine which was the source of enjoyment in terms of brain-brain communication (the awareness of the possibility of loss vs possibility of win as dependent on the skills of the competitors). There is a deep connection here with qualia / money / other zero-sum (conserved) phenomena: the meaning of an item is defined by the separation between some positive and some equally-negative aspect; remove one or have too much of the other and the meaning vanishes. If banks make loans they must take money back otherwise inflation

language". One might argue I wrote this as a frustration with human interaction complexity because to me the animal world seems simple, but to the animal that same world could well be difficult and unpredictable. One might even argue that all relationships, human and animal, are abusive relationships.

decreases the value of money itself. The potential to feel good things necessitates the potential to feel bad things and attempts to shift this ie with drugs / hedonism eventually dilute the notion of feeling itself. A balance of birth and death makes the presence of life meaningful, eradicating death or having no births would make presence of life a no-value proposition. Curse words have meaning when reserved for the most outrageous times and the meaning fades as they become more widespread. The application to the game example above is that the base communication for which the game serves as a mechanism has meaning only because there is both win and lose possibilities of communicating "your skills are superior" or "your skills are inferior" respectively. The communication bomb uses the logical brain to create thoughts that contradict the base communication and thus make it meaningless / ineffective. There is no longer a way to communicate "your skills are superior" in a way that the winner will be able to accept on both a base and logical level, during a win the two levels will contradict each other and there is no incentive to play. This I imagine is another aspect of what happens in cases of wedding / marriage leading to immediate drop in sexual interest, or nice fancy getaways leading to *increased* strain in the bedroom despite being nominally / logically "romantic". The unconscious basis of the sexual pursuit is "I really want you" to which the partner replies "How much?". The exchange is kept stable and meaningful (ie capable of information exchange = communication) by the unspoken agreement that either partner can quit the chase unless the other "puts skin in the game" and "shows what he's got" / keeps up. A verbal spoken agreement of forever-lasting faith, and a similar unspoken but logically expected agreement that a "romantic" outing will lead to sex, creates a communication bomb that then makes it impossible to express genuine desire - the logical side will fight the base side in interpreting actions as indicators of desire vs indicators of duty / obligation, so an authentic sexual exchange can no longer occur.

To make the distinction between the conscious "I" and the unconscious animal brain clearer and less arbitrary (why only two polarities? what about in-between?) I would recall the article of how "I'm not safe even in my brain". That is to say, even at a singular moment in time my brain could be housing a multitude of simultaneous co-existing qualia experiences - it is arbitrarily constricting to say only one qualia per brain is allowed. Indeed [IIT] shows how a brain can split into multiple conscious state such as while driving and singing along to a song - one part of the brain takes over on autopilot while another does the singing and there may be more yet in the background. In human communication and actions I mentioned earlier that what I see of another person is their whole body expression, brain-brain messaging involving emotion, visual cues, timing, and circumstance. But what I experience of myself and what I most readily control is just the

abstract train of word-thought that I call conscious awareness - only a limited representation of how much information actually gets communicated. Someone else is processing all the rest of the information and responding in kind - and this latter conscious system is also within my brain, just not connected to my conscious experience. This is how an abuser can manipulate a person even with conscious awareness they are being abused. This is how couples that swear they do not want to be parents become pregnant. This is how friendships are made and lost. I would draw attention to [Freud's "A note on the unconscious in psychoanalysis"] description of the unconscious and the "active and unconscious" idea - one that definitely impacts the person's actions but one he swears he is consciously unaware of.¹² Where does this idea come from? There has been a split in the brain's circuits and the unconscious idea did not make it to the side which got access to the memories and sensory abilities defining conscious awareness;¹³ whatever system is aware of them however still has access to the sensory / output organs and thus acts on the idea but without conscious awareness. Blindsight and multiple personality disorders seem amenable to this view, as do the routine experiences of learning a skill to the point it's done "automatically" - it's just done by another system but not one that has access to all the memories and abilities of "I" so it cannot come out and say "I am me! I am conscious!", it has a more limited and constrained existence but an existence nonetheless within my brain. To relate this back to the notion of animal brain: this is not a definite basis for saying there is a single "animal brain" entity. What I can say is, from most of my experience, there *is* a single "conscious I" entity at any given moment. Other systems which I might then call unconscious ie not-the-conscious-one or those without access to my memories and abilities (which access perhaps gets assigned by the ability of the system / idea to fulfill urges - the best choice gets conscious access / is deemed "king", while the rest still exist but do not experience themselves as someone to call "me") form what I've been referring to as the animal brain. So this animal brain can be one or many systems all at once and all interacting, and all these systems between them split the body's senses and outputs. As evident in blindsight, the split can be such that both conscious and unconscious can simultaneously control

¹²From the communication standpoint, the act of psychoanalysis could be said to engage in brain-brain communication so that the psychologist can intermediate between the multiple conflicting unconscious systems within a brain and bring them in harmony with each other. Like comforting a bunch of mute / blind but thinking beings who've been abused and continue to feel hurt + ignored, haunting the brain (ghosts after all are a symbol for unresolved psychological remnants) while their supposed conscious owner doesn't even acknowledge their presence. The psychologist enables them to communicate with the owner and vice versa, so all is clear, and everyone is at peace.

¹³Drugs likely shift these lines so we get to "consciously experience" parts of the brain we normally don't see (same with dreams).

outputs based on inputs. Whether it is possible to "multiplex" information to multiple systems or one assumes exclusive control but then communicates its outputs with others can be tested experimentally (see also various time-threshold experiments on what stimuli enter conscious awareness).

From the [Affect Regulation] book there is an idea of the emotional state as being learned through interaction with others. There is naturally an extension here that even the feelings / qualia of an emotion are not innately available / felt to the individual but instead learned as a response to another's actions towards self. Once again we are led to the origin question then - if all is links, then how is any quality defined? There must be something to call a "base" or "elementary" feeling (say, of anger) which gets linked to real world inputs, otherwise it is all linkages to nothing substantial. I would imagine this base feeling (set of such) is animalistic and internally defined, like sensory qualia are also internally defined rather than learned. Given these hard-wired experiences the brain then links these to external world inputs by neural-net repeated activation (statistical) learning. This mechanism accounts for forward-time and backward-time cause-effect learning, and as outlined in the book, by seeing that different external events can cause similar internal responses there is a means to distinguish the borders of self vs external world - for instance I feel my arm as part of self because no matter what I do that sensation will always be there, whereas I can readily experience different surroundings / sounds / sensory inputs, so I conclude that the fact and nature of inputs is a part of "me" while the messages communicated by the inputs are a part of "the world out there". There is then a process to get minimal linkages so that they have the most direct explanatory / affective power - this is indirect and uncertain, as evidenced by the long-lived cultural traditions / superstitions and fortune-teller statements of today. Basically the brain tries to activate a smaller set of linkages than originally learned and if the reward is again obtained then the excessive linkages are reprocessed / cast out. The brain then has the capability to "forget" but this can only be done during an active learning process / before the long linkage has been repeated enough to become a certainty / habit. At that point the long linkage becomes part of the logical self and is used in other explanative / action chain activations, so a whole network of superstitious / superfluous behaviors can arise. I don't have enough experience with learning data to describe this more fully but it is an interesting phenomenon to keep in mind.

Next is an analogy of physical and mental damages and a possible description of the causation of grief and headaches / mental pain / depression. As argued before, the body does all the hard work of getting itself healthy - so the body itself must be a stable system to outside perturbations otherwise death is inevitable (evolution selects for this increasing stability over time). Consider a broken bone - the doctor can put on a cast and give sup-

plements / anesthetic, but the body must fix all the microscale fractures - if it cannot there is not much else medicine can do. I would argue the role of psychotherapy is similar - to provide a protection for the "broken" part so it keeps from moving and can heal without interruption like the cast for a bone - this would include alteration of the environment or its interpretation such that the structures of the self are in a low-outside-influence state: people even naturally undertake such things (as they would with bones) for instance by spending a vacation in a distant cottage in nature. The rest of the work is done by the brain automatically and mostly out of sight / awareness. But what is it that would need to be fixed / be the goal of the brain's background processes? As one possibility, everyday use of language is instructive, for instance as insults being "destructive" to self, like physical actions, or various "emotional buttons" as leading to depressed state / suicidal ideation. On the other hand, there is no particular reason to assume this language has any relation to underlying brain structures or what the brain does to fix itself - maybe insults don't change / damage brain structure but just generate negative emotions temporarily. A definite sign that something has been fixed or broken is a rapid and large-influence / extensive change in behavior. All therapeutic and traumatizing processes I can see are of a more slow / gradual nature, which is indicative of a lack of mastery over the real underlying variables. But at least breaking should be easier than recovery by thermal / statistical configurations as in the physical case. Examples that stand out are then random trauma like rape / robbery / kidnapping or the more common passing away of a loved one - all these are capable of causing an "overnight" change in behavior indicative of a changed - an likely "broken" - psyche (ie one farther from its stable state than earlier). After this the body immediately begins reconstruction of the psyche to a stable / fully integrated state and takes defensive actions which may or may not work in our complex social world, again like with physical injuries in the absence of medical care. The overarching point here is that any stable - living - system **must** be able to self-correct as it is constantly exposed to perturbations, so whatever recovery mechanisms are at work after trauma are also crucial to everyday mental function, just not readily distinguished as such. Then what is a "fixed" psyche? There is a certain linkage structure defined by genetics and stored as spatial arrangements within the brain and interacting with the sensory inputs of the external world, that the hardware mechanisms of the brain serve to uphold / restore. Pain avoidance is not a good guide: the cells released to fix a bone are not released to stop the pain or even to fix the bone (although that's what they end up doing) but as an evolutionary consequence of bone breakage which happens to prolong survival by fixing the bone. So when the brain fixes itself it does not do so to avoid hurt or because of it, rather it does something which is caused by some inappropriate linkages

and which ends up making them appropriate again (hopefully) so should be definable in neurological / graph theory and emotion-free terms. There must be a conservation at play - if a neuron fires and activates another one, that other one has to also fire to conserve energy / matter so the firing must keep going, it cannot just stop. Taking a very rudimentary stance that one firing must always lead to one another, we could define sources (sensory inputs) which fire based on the external world and sinks (muscle activation) which accept firing but convert it into something else (motion) instead of firing themselves. Then we have two problematic structures: open ends and loops. Open ends are incapable of dissipating accepted firing energy so they must either fire indiscriminately or by chemical means make themselves incapable of receiving signals. This would correspond to random / incoherent thought chain or forgetfulness / amnesia which might be observable as cognitive deficits in depression and schizophrenia. Here I am alluding to the hypothesis that depression and schizophrenia might be the results of a brain stuck in the self-fixing process and with the proper change of environment can be resolved - counterintuitive but able to explain the not-uncommon spontaneous recovery that has been achieved by some. Loops on the other and are incapable of ceasing their own activation and thus keep going indefinitely, sapping energy flow from any nearby structures as well. This could manifest itself as repetitive behavior / fixation, intrusive thoughts, reduced conscious cognitive abilities, and lethargy / lack of interest in/responsiveness to outside stimuli. Surely there is at least one loop active - the conscious self - and likely other specialized loops that do unconscious processing: or perhaps, more clearly, only one loop exists and what we consider unconscious actually takes place as a mechanistic side effect of the single loop. I would argue that a serious case of extra loops is seen in split personality disorders, where multiple "consciousnesses" fight for control of the body - since we see these cases and consider them clearly pathological, it is difficult to argue for the presence of unconscious loops, or Freud's similar rejection of "unconscious consciousness". Then perhaps the goals of the brain-maintenance mechanisms are to ensure there are no open ends and there are no loops (except the big one) and further that the big loop has all necessary + balanced connectivity to other input / output structures. The pain of a headache, the heartache of grief, the weakness of depression, are all effects of these mechanisms breaking up and re-stitching the connectivity of the brain network; this is also done in dreams (where the big loop now no longer has access to qualia / memory and thus is, typically, not felt as real) and through repeated self-activation of pathways / associations desired to learn so as to solidify them much faster than the real world inputs allow.

I think the paradigm here is that on a neural level, there is no way to signal the breaking of a link, only an increased solidification of some alter-

native link making the other irrelevant (but then the new one is yet harder to break). There are some "watchdog" mechanisms which keep track of the various activations and, once having observed some connection that is seen as desirable, they repeatedly activate it to solidify the links much faster than waiting for sensory testing would allow - fast learning, even from a single case of success. There is a high likelihood these learned actions would have to be defined as conscious. Then, the reason traumatic incidents cannot just be ignored by the brain is that whenever consciousness is active it always commits its experiences to memory, so if it goes through a traumatic experience it will have no choice (mechanistically) but to emerge with stored remnants of the trauma as part of the neural network. The brain's repair mechanisms will then try to integrate or resolve the trauma - the language used in psychology - to restore the "normal" state of the neural net. One is led to wonder, just what is it that makes trauma so damaging on a neural level? What specifically defines an event as traumatic, and what does that feature do to the brain's connectivity (through the always-active GLM)? It seems that damage is done by a loss or significant change (to the degree that it is effectively a loss even if nominally not) to something the brain has gotten used to / makes a significant part of its operating structure (which is typically geared towards pleasure-searching) thus on a chemical level it is basically a "cold turkey" dopamine withdrawal. Still, if change of behavior is the only criterion, then "positive" effects like the irrationality of being in love might also be seen as damaging - except they feel good chemically so are not seen as such. Or perhaps "love" is positive and is felt more strongly by those who need some sort of mental repair of their neural network - perhaps same as sex / perversions. In human and animal interactions I see that children seem to have a hard-wired need to periodically check the situation / request validation, done by seeking proximity to the caretaker or getting their attention by speaking + expecting a response. It is as if there is some timer, and once the time has passed the infant has to check that his mother is still present / attentive. Even the most caring / thoughtful mother will be subject to these checks - the quality of their response doesn't particularly affect the frequency of checks (except for outliers of overprotective / absent mothers which teach the infant to modify their behavior). For learning and exploration, the brain needs this particular validation regularly. I think a similar process continues into adulthood, where instead of checking for the presence of a caretaker the brain checks for its own control over the external world, a reality-check as it were. If such checks cannot be readily and regularly completed, the logical self suffers visible degeneration - this is why extended sensory deprivation is observed to be surprisingly damaging and the damage only reversed with sufficient time spent interacting with the world again. This should not be taken lightly: despite evident stability of neural links, able to store memories quite accurately for tens of years

even from a single exposure, the brain is not able to shut down like a computer and then just resume operation as before with the self still intact. This is a special feature defining the psychological self - it is a dynamic entity and depends on an ongoing "information diet" to survive; deprivation will cause damage that shares many similarities with more typical "violent" trauma. Yet sleep and anesthetized states permit such a "shut down" as above, and patients who lived through near-death experiences are able to return to wakefulness with the self more or less intact, so the degeneration of a deprived brain is not inevitable but determined by chemical processes that imbue it with awareness - it must be both aware and deprived for damage to occur (this in turn provides a hint on the nature of awareness as intertwined with short-term memory learning). To the aware self such a situation does not feel good at all, and it seeks to avoid / escape it however it can, which parallels the response to physical pain and perhaps incurs the same mental effects. Awareness might be identified with learning, ie when the brain is chemically awake it is capable of forming / re-orienting links through repeated activation.

Then the role of the psychological self is to act as a predictor of the future, activating regions of the brain internally before they are activated externally so that the incoming sensory information is appropriately filed away / written in memory according to some logical / abstract structure, and so it is useful for later behavior planning. The logical self, being a looped link structure, repeatedly activates itself and reorganizes other links to provide context / meaning to sensory inputs thus enable learning / optimization. It also activates muscle outputs and checks for coincident changes in inputs, to refine this learning process - this is the "reality check" or "control check" mentioned above. If the self is unable to readily predict what is about to happen or why, and the brain is in a learning state, external sensory inputs serve to activate arbitrary connections which then get strengthened with no real logical meaning attached - there is a thermalization of the brain's logical structure which ends up a neurological attack on the learning-effectiveness of the self, in the extreme appearing as the self giving up and accepting the world as random and where self-action / muscle outputs are useless - the depressive state. As the self's prediction ability is not perfect, small scale thermalization occurs from time to time and is routinely cleaned up by placing the past event in a logical context (hindsight) and then causing re-activation of the resulting links such that the coincidences are as if the event had been predicted (the individual may even come to believe this). This is observed in many cases of stunted social development individuals, after being in a social event, feeling an unstoppable replaying in their head of every word they said and what other people did - it is a side effect of a low-predictive-quality social model so lots of social interactions were random to their mind, and the mind tries to learn

what happened and also convince itself that it had known social rules all along thus the logical self is maintained. This is typical in young children who repeat aloud and almost verbatim lots of utterances heard during the day, as self-stimulation then in a pretend context then silently then as original thoughts / inner voice. In adulthood this becomes more complex and can be called a fantasy - a control fantasy: I am fully in control of my fate. The notion of free will, and the ease with which it is culturally accepted, is a side effect of this fantasy. Earlier I mentioned the example of the "bridezilla" and how it is actually tragic from her view as society had been there to benefit from the joy of building up her fantasy that this will be the best day ever, but then leaves her alone to deal with the hurt of seeing that fantasy crashing down. It is interesting to note her reaction though: she does not just cry in a corner or runs away, she demands changes and requires people to cater to her, an evident control check, as if to express: my fantasy is being destroyed (my predictions were wrong and now not just thermalization but modification of self is taking place ¹⁴) which implies I am not in control, so I will take these actions to demonstrate I am in control. The breaking of objects in anger is an easy way to check control (less effort than making something) but not essential as the ability to manage violent outbursts demonstrates. The bullied child who takes to creating fantasy worlds or to sadistic tendencies with animals / bugs similarly feels the need to establish control as a root for learning: the brain experiences so many random events in daily life that it sees the self at a risk of total thermalization so forces it to cling to any known means of performing a control check, as in this the brain has a starting point for the re-establishment of the intentionality and the logical self. But in the absence of environmental changes and the removal of the random-input source (typically another person) this is seldom effective.

Finally then we can say what defines trauma: sensory inputs that contradict or invalidate the brain's control fantasy, including to a lesser degree the negation of concepts seen as facts ie death of a close individual / wedding not being to expectations / santa not real. This is how similar sensory-input physical events can be traumatic or not depending on the individual's state of mind: torture is made palatable with a notion that it is for a greater cause (as is life - with religion or just rudimentary goals, "I'm staying alive because a new movie comes out next month and I have to see it" - the notion here is that living through hardships is a choice made by the self because of the worthwhile reward of the movie so the fantasy is

¹⁴The self pre-emptively configures learning pathways without knowing what it will learn but having some expectation for it - if there is no expectation then thermalization may occur but if expectations are wrong then active logical destruction occurs, ie this is the best day ever / this is not very good -> best = not good. Perhaps here is a root of sarcastic language.

maintained). The most harmful influence on the self then is an exposure to chaotic / unpredictable sensory inputs - ones that are of a specific nature so as to get past the brain's strict filters against such influences. Enough such experiences will cause the person to realize their lack of control, break the control fantasy, and enter the depressive state.

With the above descriptions of urges and drives, what causes me to do anything? I would venture that all actions originate ultimately from the omnipotence / control fantasy but would also go further to define its polar opposite - the powerlessness fantasy, the source of inactions and anxiety. The reason for such an entity is as a necessary condition to give the control fantasy its character, one cannot exist without the other, the absence of one makes the other meaningless. It can be seen as a degree of freedom for a self-assembling system: without the freedom for this to take on a range of values, the resulting structure cannot be complex, but with the freedom comes the possibility of both better and worse outcomes. The control vs powerlessness fantasies would be comparable to life / death instincts of Freud. I realized this when thinking about how my future plans make me worried - when thinking about searching for a future place to live I think of how terrible everything will turn out and how bad it will feel, even getting suicidal. What happens here is that probably my past experiences of helplessness / humiliation when searching for housing have fed the powerlessness fantasy and thus thinking about having to do that again activates it in my brain. What I realized is it's not the actual event that's so horrible - it is the anticipation of it that is much more unpleasant and paralyzing. Like in [Nymphomania movie] the protagonist screams in fear at the thought of being hit but actually stays silent when experiencing the physical impact. Indeed the process of calling realtors and looking at houses is entirely doable and not very difficult, I will get through it without issue when the time comes. But the anticipation of it, now, is exceedingly painful, even making me consider suicide instead of having to go through it. What happens is the powerless fantasy, having taken hold in the brain, takes over the action-planning mechanism and leads all thought neuron discharges to be absorbed by negative / punishing outcomes, creating a fixation on the problem yet no hope of resolving it. Suicide then becomes a last resort tool of the control fantasy "self" to take back the reins, by re-affirming the agency of the self once and for all. As such, passive suicides (starvation, dehydration, exposure) are exceedingly rare although logically they are most accessible and require the least mental / physical effort to pull off. It might be plausible to identify the control fantasy with the "true" self and the powerless fantasy as an "alien" self, though both exert a formative influence on the self and continually determine action choice. Real world interactions which establish / support the control fantasy are said to build up the self / raise self-esteem / be validating, while those that support the powerless

fantasy are called destructive to self / drop self esteem / invalidating. It can also be argued the control fantasy is neurological ordering of the self while the powerless fantasy is thermalization of the self (through unexpected / unpredictable inputs). It has become clearer to me how mirroring works in affect-regulation: when marked (or, in essence, mocking) mirroring happens by the caretaker, the baby is able to tell that something is off - the caretaker is not acting normally. At some point in maturation there is also the realization that her actions are similar to those of the child, which gets combined with the understanding that she is acting strange, to lead the child to realize his actions also look just as strange to her, and furthermore the specific ways in which they are strange. The child can then learn how to counter the strange expressions of his own whenever he feels they are about to happen. The animal level brain always operates, successful affect regulation means the conscious self is able to predict the animal's behavior and counter it ahead of time, thus remaining in the intentional state and "in control". If emotions or stimuli get too strong or the person is too tired the animal brain may take over, requiring an external push to get back to the intentional state.

What I see now is that it's monumentally more damaging for a caretaker to say something to appease a child (or provide a distraction) but then act differently, vs being truthful up front even if it results in a tantrum. This is because while consciously the kid will not be throwing a fit, there will be an unconscious void - an absence of the needed consequences of the caretaker's action had it been taken truthfully, which the brain would have used to make a logical model of the world, now are not just wrong but missing without recognition. For instance a child cries wanting candy. One possibility is to buy candy, but this is literal and not conducive to affect regulation / establishment of self. Another possibility is to say no and be unresponsive until the child calms itself - this teaches the child that he will be abandoned if he expresses emotions and thus he discards the possibility of the self being an emotional creature - understanding of self and others gets eroded. Another possibility is to mirror the emotion while staying logically firm with a no - this is conducive to secure attachment and good social awareness. Another possibility is to appease the kid by saying "OK we will buy it in 20 minutes, OK?" but never intending to buy anything, and this is the one I would criticize as unconsciously damaging. The unconscious searches for patterns constantly, and the later unfilling of this promise even if consciously forgotten, mentally devalues the whole use or meaning of communication itself, making language useless to convey anything and leading to significant challenges in understanding self and others.

¹⁵ This is at root a betrayal - the caretaker does not work with the kid but

¹⁵In therapy this may manifest as requiring a physical action to convey the patient's

lies to it / pretends - but one that remains invisible and unrecognized.

Behavioral (animal) learning relates inputs (sensory feelings of organism) to outputs (muscle motions of organism) along one direction in time through associative neural link reinforcement to precisely match the effective actions to resulting outcomes and exclude chance associations. This sort of behavioral training exists in humans on an unconscious level and can, for instance, train an abused child to not mentalize if that is only found to lead to harm (for instance by questioning an adult's intentions or understanding extent of own weakness). I would represent it as a function of time:

t->

Inputs	B	A	C	D	A	E	A	D	F	C	D	B	A	F
Outputs	1	2	3	4	1	3	4	5	2	6	3	1	2	4

At the end of this trial, A is linked to 1 by 2 previous-instance and 1 prior-instance links, that is there were two cases where input A happened just after output 1, and one case where it happened after two time intervals. Keeping only associations with two or more previous-instance links¹⁶ results in the following condensed network:

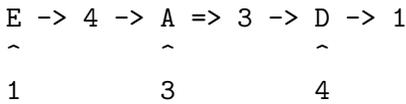
1 = A = 3 = D - 2 = C

Then, given that A is a desirable feeling, actions 1 and 3 will be repeated through a reverse search. If also D is an undesirable feeling, then actions 2 and 3 will be avoided so what remains is $1 \Rightarrow A$ which becomes increasingly reinforced as the physical causality reasserts itself as the person repeats action 1 and gets the feeling A. This learning requires the presence of the physical world to complete the reinforcement process; in human (rapid) learning this subsequent reinforcement takes place entirely mentally, a mechanism in the brain (Internal Reinforcement Mechanism, IRM) repeatedly re-activates pathways formed by precursory associative learning and evaluated as correct, so that further trials in the physical world are unnecessary. The mechanism of copying (monkey see, monkey do) enabled by the GLM is a crucial part of learning when combined with an ability to have a mental model of another's mind. For instance the baby learns to speak by pretending to be an adult and copying the adults but meanwhile storing the necessary mental states so this is not merely repetition. Specifically, the mind sets out to become / absorb the person of interest, then copies

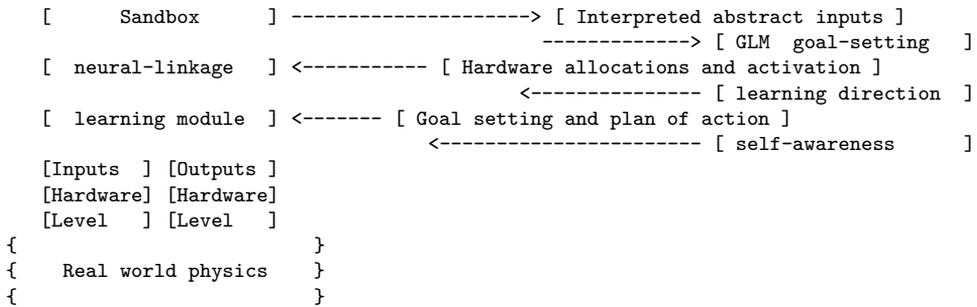
emotions - for instance becoming aggressive towards the therapist in order to convey one's aggression because language has been taught to be useless to do this.

¹⁶in a real neural network these links will also become more likely to be re-activated in the future compared to others, so if they represent something real about the world their reinforcement can be rapid

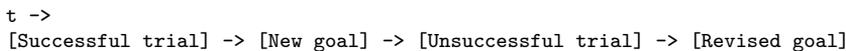
that person's actions in context. The directionality of the above association is only output → input time-forward. There are many situations in which an animal needs to act as a feedback controller, for instance to learn to stay upright or to reach some desired goal despite external perturbations. For this I propose there is a General Learning Mechanism (GLM) in the brain, which beyond passive reinforcement of the above also acts to perturb the system and study its response, so as to learn how to "stay in control". The GLM is present in animals and humans, where in human learning it also gains advantages of the IRM to allow faster learning and application to complex tasks like using tools. Consider again the above time trial, now with a directed linkage network:



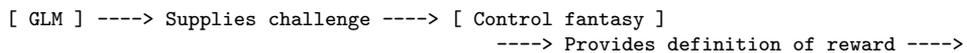
Then if A is a desired feeling, I can find a way from a currently experienced D through action 1. This is not directly felt by the brain but is implicit in how it takes actions. Goal-setting by the GLM is a higher level mechanism that observes big scale competencies and makes best-guess estimates on what is achievable.



The GLM inputs and outputs in this case are high-level and slower, but the principle is similar to that used to learn low-level actions like motion. Unlike the above trials of feelings and actions, consider trials and goals as a function of time:



The GLM in turn must be based on the control fantasy and that is what it will strive to satisfy through learning:



Time-directed learning like the above must involve a preemptive look-ahead association ie $1 \rightarrow A$ is not merely observed but expected on a neurological level. Then when A actually happens it is reinforced highly non-linearly. If A does not happen, the control fantasy is harmed (the learned material does not disappear - it goes towards strengthening the powerless fantasy), and with enough such cases the brain behaviorally gives up on learning in this context, and if it cannot escape the context it enters a depressive state. Depression arises from a condition where neurological linkages are incapable of sustaining a directed processing operation, discharges then become aimless and thermalizing, undirected towards any goal, capable of activating many possible actions by association but never connecting them to any sort of goal, leading to the experience of random thoughts ie daydreaming that don't add up to anything constructive. An easy way for this state to arise is when the brain acts with an expectation of reward for completing a task but upon task completion no reward (or even a punishment) appears. This causes the GLM to rewire the pleasure-connections that had been associated with the task goal-planning and keeping it active throughout the task process, and to disconnect these pleasure paths of discharge, leading to the inability of the reward system to act as a guide / direction for coherent discharges / goal-oriented actions. The depressed person is lacking something like a "moral compass", any action is as meaningless as any other, so none is taken even if thought about obsessively. Situations like exposure to uncontrollable physical pain or inability to satisfy natural urges (such as caged animals resorting to stereotyped motions) can lead to a depressed state. In humans a particularly strong reward is social validation, and a particularly painful punishment is rejection; my belief is that all major depressive episodes can be traced back to events where social approval for some significant accomplishment was expected but not gained, because the influence of such an event becomes amplified by the amount of mental resources put in to the actions that were intended to result in validation and acceptance (as that whole block of actions is now linked to the powerless fantasy by the GLM).¹⁷ On the other hand, strong validation (or other pleasure reward) at key points in life leads to an overabundance of mental resources dedicated to performing tasks believed to have caused the validation, appearing as hobbies or interests, things which are irrationally done way past the point of initial reinforcement, carried on by the inertia of the initial reward.¹⁸ Social validation is evaluated in

¹⁷A related notion is the fear of invalidation / mockery of something one holds dear and this leads to a notion of privacy (also see later chapter on privacy). The joke of clearing one's browser history before death is a reflection of the anxiety when the brain knows invalidation is likely to happen to a key part of self that, if invalidated, will cause a great loss in functioning (loss of pleasure source) due to the GLM's rewiring.

¹⁸In this light, the prevalence of food used as a hobby, for instance watching cooking

terms of contingency chains - if I ask for a compliment and the other person obliges then the compliment is no longer a boost to self-esteem, whereas an unsolicited compliment is seen by the brain to be not due to my conscious prompting so it searches for other causes, potentially finding some action that I took earlier in hopes of validation (for instance dressing up nicely) and then that action becomes the entity rewarded by validation and one that the GLM wires to preferentially take place. If I ask for validation and receive it, it is the asking which is rewarded and not whatever impressive actions I may have taken earlier. The brain's evaluation of validation is thus difficult to fool - insincere or lackluster social response to an action cannot reward that action, and trying to garner response by asking others explicitly is also ineffective. Hence a depressed person's state cannot be made better by telling them to visit a therapist or take other self-improvement steps, but only by genuine / spontaneous validation of their life experience. It is an unfortunate state that in modern societies natural rewards like social validation are often entirely displaced by indirect and abstract rewards like money, thus causing a strange interference where friend and family groups are used to get natural rewards for working full time even though they are not directly benefited by the work, while the money earned at work is later used to provide natural rewards to friends and family for their services of providing a support network.

All behavior is the repetition of thoughts and memories of the past. I had the realization that discovery / creativity, original works, comes about as the result of a continuously functioning massively parallel pattern-finding algorithm which finds a particularly high-quality pattern when fed with an original / unique input combination of thoughts and sensory experience and memory hash (from the memory hash table model - based on recent experiences). In other words, insight or novelty is just looking at the same thing but from a different point of view / paradigm, interpreting it in another way / from another angle.¹⁹ There are too many memories and way too many possible combinations within the brain to have a hope of this optimization algorithm just spontaneously finding a high quality new (not before seen) pattern, so what it relies on is access to most recent thoughts / memories / experiences²⁰ which results eventually in seeing some phenomenon from a

shows and sharing photos of food and attending "foodie" restaurants, is indicative of an absence of other more fulfilling interests so that satiation is a last remaining pleasure source - then it is easier to see why obesity is on the rise. The absence of other interests is in turn due to society being structured to not provide the necessary social validation.

¹⁹This is why things like rubber duck debugging work - they force the brain to express / see the issue in another light. It is why teaching can lead to deeper understanding.

²⁰In terms of neuron mechanics this is actually straightforward: recently activated pathways become more susceptible to re-activation so it is precisely they that get re-activated in the search for patterns inspired / instigated by the new worldview.

framework that is independent / different and thus an unexpected pattern is seen (since within the framework, one has already found all the known patterns, but the known pattern of one framework modified to fit the data of another unrelated one gives rise to noticeable previously unknown patterns). Society at large can be seen as a huge optimization computer - with billions of brains each doing their own internal optimizations based on what they experience / know and sharing their highest-quality patterns with other individuals who in turn take to the simultaneous each for the next higher level of quality. This can be witnessed in literature, music, visual arts, movies, technology, science, architecture - any field of human productivity and creation. Most of the ideas tried don't work, just as in biological evolutionary selection, and the ones that do get adopted more widely (that is the implicit definition of their success). This has a number of implications: for insights I should continue exploring different worldviews / ways to approach a problem / different fields though not at the detriment of losing the detailed information content within each known field; insights and creativity will be determined by variety of childhood experience - to include unpleasant experience; people who can force themselves / have willpower got these through being forced to do something at threat of punishment and this is the behavior they chose to repeat; ²¹ we cannot expect insights without ready access to information; insights are really hard / rare given the tremendous brainpower dedicated to such throughout history and the impressive but relatively small result. On a statistical view, since I know most people live in one way, if I want to have original insights I have to live a different way - going with the crowd or society's idea of success means the most original insights I might get will already be seen thousands of times over by the people around me and it won't be very impressive or original even though it might be to me. This also says that I should gear my behavior towards what I want to achieve at all times - if I am not training my neural net with relevant and interesting info / worldviews to approach my goals, I am stagnating and losing the ability to generate new insight.

I had a dream where I kept trying different configurations of an experiment I had been doing earlier yesterday, and feeling quite anxious being unable to find an optimal solution. This would seem a straightforward re-processing of recent memories until I realized this should be interpreted in the same manner as other dreams I mention: as concerning emotional memories from possibly very long ago. The anxious feeling and the different configurations could well be a memory from early childhood, while the surface appearance of yesterday's events is due to the use of symbols stored in recent memory. From here a key mechanism of unconscious learning is seen:

²¹Why I would imagine "elite" students are on the whole more kinky than average.

the use of past learned event chains is represented in recently experienced symbols thus generating "new" ideas by a specific combination of properties from past memories. This process is one of "complexification" in that it can generate what appears to us to be novelty or creativity - new melodies, new formulas, new interpretations (note the recursive nature of how it led me to writing this note). This is no less than insight generation that is the driver for science, art, and all human endeavors. For a while I held that there is a special filter in place which selects only the most logical or useful ideas out of these mixed combinations, however this is again unnecessarily strict and imposes a dualistic view of brain function (the good memories kept vs the bad memories discarded, which if nothing else loses the potentially valuable information from the bad memories because they are also real experiences of the world). Instead what happens is the unconscious has been designed by evolution to perform the mixing in a very specific manner, such that the result of the mixing is highly likely to be logical. The result of the mixing inevitably guides conscious action in approaching the problem considered, there is no further deliberation done as this implies a "homunculus" view of some higher process overseeing everything - this mixing *is* the mechanism which gives the future actions to take. This process is somewhat similar to a genetic algorithm, except such an algorithm mixes or perturbs data in a largely random way, whereas the unconscious does this in a specific way - the specificity is that which is seen in dreams, namely past memories take on present symbols. This serves a dual function of both integrating or "upgrading the format" of old memories and gaining insight into new potentialities. The way a logical sense is preserved here is because the past memories that are recalled are based on some sort of association to present experiences though not necessarily related to the symbols. So if I felt some anxiety yesterday (which is an automated response to the external world ie not learned by some sort of mechanism but rather a starting point) which along with specifics of the situation recalled a childhood memory in which I felt a somewhat similar way (which was again based directly on external inputs and thus a starting point; it is possible that this memory had been "complexified" earlier in which case the n-th previous memory used was based directly on external inputs - in the end external inputs are the only starting point for this entire edifice) and then in the dream I experienced multiple interpretations (seen as a feeling of *deja vu* / I dreamt this just a few moments ago) of the childhood memory but taking on the appearance of yesterday's events. Chances are, if I've been through a similar situation in the past then what worked back then will also work now, and yet to make use of this knowledge my brain has to be able to generalize and draw links between these experiences even though they may be only barely related. The way the brain picks a specific old memory to reactivate is based on emotional experiences and peculiarities of the situation

(which can be gathered through psychoanalysis as they are unconsciously interspersed throughout a retelling of the experience: here for instance a peculiarity was that exactly three different possibilities were involved, which was true of both yesterday and past memories; I did not write this above only through conscious exclusion of it until now). The way it picks recent symbols is embodied - these symbols are already in recent memory and so they are the only ones available to represent the past memory, as the past memory is recalled it is re-experienced in nearest-cast recent symbols. Looking back to the hash table model of memory function, and expecting conservation to also take place (that is, reading or recalling a memory will perturb it) I can pose that the hash is based on the emotional experiences and peculiarities of above, while the newly re-experienced memory overwrites the original source memory once having been mentally visualized in terms of recent symbols. In this way the process is cumulative, allowing very complex cognitive frameworks to emerge. One would ask, if reinterpreted memories overwrite old ones then how can mental function expand as then the number of memories must stay constant - expansion happens when external inputs generate a situation that is observed to be unique or otherwise worthwhile - one having a new hash in the hash table model. So if I am in a situation where I expect something to work but then it doesn't, or I have no idea what will work but I happen to see something that does, or otherwise I find myself feeling surprised or learning something, a new memory is formed which is then available for complexification later on if a similar situation is re-experienced. In this way the entire mental framework is based on external inputs at root, with varying degrees of complexification (which is a very specific, perhaps largely information-conserving, hashing algorithm) applied to its constituents based on degree of differential reinforcement from the external world allowing increasingly directed and confident conclusions to be made within specific situations.

Looking more generally, with applicability not only to insights and "work functions" but also to everyday actions and conversations and thoughts, I would claim that the brain operates by taking heuristics from one process (mental encoding of perceived action model) and applying it to another without any particular justification other than associative and then learning from what happens to increasingly refine its actions in a new situation. At some point an individual experiences some external environment and action for a first time, and tries something at random or inadvertently while not being aware of what he is doing. He generates a heuristic by copying the action and learning from random perturbations (increasing control as perturbations are experienced and understood - at first any influences unknown thus not controlled and perturb desired result, causing outside-driven learning (complexity increase)). Novel problem → apply closest heuristic → testing and refinement toward new heuristic. In a time pro-

gression:

- An individual is exposed to a new situation, and has some goals (which eventually distill into avoiding pain and seeking pleasure). He may or may not intend to learn something. As he takes actions, the physical world provides accurate feedback to the individual, including about factors the individual was never aware of. The brain tries its best to categorize this feedback and learn what actions it can take to either remove an undesirable effect or enhance a desirable effect.
- Eventually the brain has experienced and reacted to enough perturbations to have "learned" an action. From the learned neural mapping the brain forms a heuristic of how the action works. This is on a deep cognitive level that would be Chomsky's "deep structure". Humans can describe the heuristic in different words and languages, and animals that cannot use language can nonetheless learn in this manner to some degree. A heuristic for catching a ball would be the set of actions to run towards the ball. A heuristic for solving a math problem would be searching for known patterns and applying them in a practiced manner (with specific definitions for each problem). A heuristic for creating an artwork would be capturing some inspiration and then using known motions and mental transforms to transcribe it in a memorable way.
- The purpose of heuristics is to allow the individual to apply his knowledge to problems outside the narrow learning situation. Having learned to catch a ball, I can apply the same heuristic to chase an animal. Having learned how to solve specific equations, I can apply the heuristic to equations (of a similar type) I haven't seen before. Having learned how to make some art form, I can explore different themes and meanings. The brain forms some criterion of similarity based on which it decides which heuristic to apply to a new problem, which in itself is a heuristic learned as from step 1. When the heuristic is applied to a new problem, if it works properly there are no perturbative feedbacks from the external world and all proceeds as intended, however if it works improperly there is an unexpected feedback from the external world communicating that the individual does not have an adequate understanding of the physics of the real problem, in which case learning begins from step 1 for this new problem type.
- With enough such heuristics or "deep structures", the brain becomes adept at solving "new" problems. Discoveries and insights happen when a heuristic is in mind and an unjustifiable (ie it would not have

been created by the brain in isolation) link is brought up by "random" external influence, which the brain considers and then imagines to be effective.²² Conversation is geared towards such randomizations - one might argue the biological-advantage role of conversation (including "idle chat") is to allow groups of humans to make survival-relevant discoveries in this way. Each individual learns different heuristics based on specifics of practice trials, and so each one approaches a problem differently and expresses it to others in words which may fit "just right" with the other's heuristic. If this is the case, one is to expect the majority of conversation will be largely aimless and not leading to any great insights, which seems reasonable.

Thinking back to my childhood I remember an "adolescent phase", one which I never understood but which I saw readily on the internet - that of writing fanfiction stories, events that happen outside the main storyline and with the same characters, notoriously prone to sexual theme emergence. With the self representation and affect regulation view, this makes sense to see as a mechanism of more advanced pretend play, where the self is able to deal with some overwhelming internal states by projecting them onto not merely physical objects like in childhood but onto entirely fictional characters. The choice of characters / story is not accidental either, the fanfic author expresses a desire to enter the fictional world and *be* one of the characters,²³ so the world chosen is one that is found desirable by the ideal self - one which has certain relations to the author's own life experiences and yet maintains the omnipotence fantasy in the face of challenges, a world which is not completely made up but rather visibly an alternative "author's world" which is kinder to the author, an ideal that is still grounded in reality. The fanfic places the human author as in control over what happens to his character thus engaging the omnipotence fantasy, but it also transports the author's view of himself into an observable fantasy setting which is known to be "good" where the punished parts of the self can be examined freely and quieted by logical rather than violent / emotional-primitive (unmentalized) means. It should not be overlooked that a vast

²²It is of course possible, and much more likely, that the brain itself activates these disparate areas, in which case there is insight but no "eureka" moment because it is understood that it took one's own effort to find this, so it is felt as a logical deduction and not particularly surprising to the self. The "eureka" moment can be compared to the joy of wit and humor in making a mental "simplification" or degradation of a complex / serious topic (see [Freud on Wit]), and on the other hand the frustration of an impenetrable problem compared to anger and "the opposite of humor" in overly serious and stressful contexts.

²³The desire and ensuing attempt to become the same as one's idol (by seeking to be in similar situations as them and then copying their actions) is the higher-level guide for the GLM

proliferation of violent media and immersive games is taking place in the most peaceful and population-dense time in history: the pretend violence is an effective mechanism to process and discharge violent feelings without doing actual physical violence because the feelings are handled through reflection and mentalization. This leads into the role of sports - as sport events demonstrate a generalized notion of a self-vs-other conflict and thus can be applied to practically any conflict in a fan's personal life as a source of inspiration and affect regulation (thus sports players are heroes / role models to many - they demonstrate that challenges happen but can be faced and overcome, which is a lesson the individual viewer can adjust to his life situation. It is made effective because the players don't merely lecture on about this concept but go out there and experience pain/exertion to demonstrate the concept is true - the only language the unconscious takes seriously). Similar interpretations apply to sport-like video games and even board games.

Then with a hero figure there is a desire to become them, which manifests itself as the sale of a player-name jersey at a fan store, or various cosplay events. This desire is not limited to such blatant expressions of course - the individual will readily emulate characteristics of the self-ideal character, such as copying phrases / idiosyncracies / tastes / preferences / everyday habits. ²⁴ Still of course the human participant knows that putting on a costume is "just for show" and they don't literally become the ideal character (their ideal self in the manner it handles challenges) - when taking on the habits and appearance of the other, they are able to see themselves through the third-person observer *as* the ideal character (and why full-body costumes are important in cosplay, showing remnants of earlier experiences of body / self-image insecurity and vulnerability when exposed as the true self vs the ideal self which handles all such issues flawlessly and justly). The message to this internal observer is then that I am both me (with my thoughts and feelings and experiences) *and* the character ideal (with their appearance and fortitude) which then puts a logical bind on the internal observer - I have to act strong and powerful, like my character, to maintain my appearance to others, or I can act weak/shy like regular me but then betray my affection / belief in the ideal. Thus it forces the observer, which has likely internalized negative social experiences into a harsh / judgmental treatment of the self thus making it weak from within (ie "you're worthless, get out of the photo, nobody wants to see your face") and appear shy/fragile, to cast out the negative parts as incompatible with the self (ie "you're superman, everyone wants your photo, take a pose that looks awesome; would superman care what other people think of how he looks?") and thus can be a powerful form of reprogramming the observer

²⁴Was the spinach guy cartoon just one big experiment to see how strong this drive is?

to be in line with what the conscious self needs it to be rather than what it has gotten developmentally from caretakers / peers. It is a transference, not of an internal concept of other onto an external object so as to deal with it, but of the self onto an external object so as to force a change in a judgmental opinion of self, with the awareness and support of the self but also implicit validation by past experiences with and continued physical / visual presence of the ideal character. This search for validation is strong in adolescence which I can remember as wanting to buy specific shoes, or a shirt with some unique message, so as to associate my physical self with my mental notion of "someone cool". This desire is interesting as validation for its own sake might not really be the goal, but rather there is a need for me to find myself through reflections of the self in the physical world and I wanted to control the content of such reflections. This is because with the custom shirt I didn't really care what other people's shirts may have said, I only cared that mine was what I chose as "cool" and that it would be unique - I wasn't trying to please others, I was trying to convince my internal (parental) observer of who I am and that I am worthy of being called cool - something my real parents would not support / acknowledge.

Another example of base psychology in relationships, is a person having experienced rejection tending to be unjustifiably mean / hurtful to another, or perhaps having experienced stressful situations at work coming home angry and violent with family members, in any case situations where the target of the attack did not do anything to provoke it. The animal level does not care too much about what the target is and whether it is different from the real source of earlier pains (as long as a reasonable (acceptable to self) logical link can be drawn between the two), but rather that a sense of fairness and control is achieved by the self. Thus, having received a punishment that was felt as undeserved, the individual proceeds to punish someone else when a similar opportunity presents itself, therefore rewriting the logical construct of self to be based on the notion "I can punish others, I am in control" as opposed to "I am punished by others, I am powerless". An instance involved a sadness that on the surface level regards mortality and fear of loss: "I hate loving him because I know someday it will end, I cried when he held me and I was sad". Again the crying and word choice are illustrative, "hate" being a strong indicator of dislike, and crying showing some internal displeasure / helplessness with the state of the world. I think this can be analyzed as, in that moment the partner did something which recalled a childhood memory of a parental "wrong" (eg abandonment) leading to an emotional memory and replacement of the parent figure in the memory (whom the self wants to punish for the wrong they did) with the real partner and causing hatred toward the other and want for separation, as in "you didn't care for me then and I don't care for you now". Even though the people are different, the impact and outcome of the emotional

memory is not sensitive, nor is the repair mechanism concerned with the difference. I had a dream involving running away from a man shooting me with some sort of weapon. I traced this back to an incident 8 years ago where a BB gun fight with a friend (L) got too intense and he shot me in the head as I was running away. It is interesting to look back at the psychological environment surrounding L's shooting of me. The question is, did he shoot me because he hated me and wanted me dead or because he liked me and trusted me? I think it is the latter, which is counterintuitive without considering the process of affect regulation. At the point we were playing, it is likely both of us entered animalistic, non-mentalizing states. These states are not fully aware of pretense, so to me this was not a pretend play but L using a real gun about to actually kill me, which made me deeply afraid and running away. In turn, him seeing me run away increased his excitement at power over another and he became the animalistic killer with no concern for pretend-world boundaries of safety (ie don't shoot people in the face). But it is likely that what he wanted to kill was not me as an individual person (which is a construct he would not be aware of anyways in the nonmental state) but me as an externalized projection of some of his negative experiences. He shoots me but not a random person because he knows that I can accept his emotional (and deeply personal) discharge and still be there for him, whereas the random person will likely react with more violence. Thus I fulfill the dubious role of a real-world representation of some of his negative emotions, which in the animalistic state he saw me as being solely these emotions and not a real person, so he went ahead and took the shot. It is not a nice role but nonetheless one only possible if there is a relationship of trust and acceptance between two people. The counterpoint is that in this role I actually become useful and necessary to him as a real-world extension of his self and thus he will seek proximity to me, and would genuinely try to make me as a person happy (and he did - giving me rides, buying me birthday gifts, showing me new places). I would extend this to all human relationships - the only reason to seek proximity is a selfish need to feel better, and the people that can help the self achieve this through fulfilling a role that the self cannot and by allowing the self to be what it wants to be, will be considered friends or even romantic partners. This explains the different types of relationships that can be observed - as one distinction, ones which can turn sexual vs ones which must remain platonic. This is not a continuum because some roles (such as externalization of an alien self) are not meant to be sexual as this is destructive to the self, while other roles (such as the idealized self-observer) can be sexual but this may destroy the idealism. A lasting friendship is established by being very good at the role that the other person requires. The fall in friendship intensity after maturity is due to most of the needed role-playing for self-establishment already having been done thus reduced

need to seek proximity other than for pragmatic reasons. "Just like old times" cannot be recreated as the psychological associations are all gone, the other person is now seen as a real person and not a role externalization of the self, so the need for proximity is thoroughly questioned. I guess this could be called self-actualization, where others are no longer necessary, the self feels content with the physical world. The self has become what it wanted and no actors or roles are needed to continue on this path, except for practically necessary interactions. If it ends up that the role fulfillment requires the presence of a baby, the cycle continues on in samsara as the baby's desires for affect-releasing role play get established through being forced into a role they did not choose.

7

Unconscious Communication

To further elaborate on the concept of brain-brain communication it is worthwhile to focus on a few aspects of written / spoken text which are intrinsic signs of unconscious processes / intentions. As a reminder, the brain-brain communication is taken as some "fundamental" goal of the optimizing systems that undertake communication actions, and spoken words / ideas represented using logical/abstract language are the medium of this communication. This is as opposed to the simpler view that text is to be taken at its logical face value: the approach here is to make a separate "supervisor" in the brain and this is free to use words/text as a tool to its ends, imposing a strict separation between others-language and own-language such that the latter can be used to define the former instead of just relying on the former for everything (as might be the case for childhood thought and the reason why children are impressionable). This ability gradually gets established as theory of mind develops, an obvious case is that of lies and sarcasm: the text is known in a meta-cognitive way to not be taken at face value / its abstract meaning. As I am still refining my TOM and may have autistic tendencies I'm not sure how much of this is consciously known by "normal" people - based on observation there is only rare conscious understanding but of course this does not stop unconscious learning from becoming very proficient at this task - formative years in school where relations rapidly fluctuate are indicative of the unconscious learning process to establish this understanding. As I missed out on it I have no choice but to learn this consciously, and in this I can find logical inconsistencies in behaviors - indicating that the people readily participating in intricate brain-brain communications and even guiding them to achieve desired goals, don't actually have a conscious understanding of just what is going on, akin to the specific muscle motions I use when writing or typing - it just happens as I will it to. Yet communication is interesting to analyze in this context as it is so ubiquitous and readily accessible, and analysis can

be impactful. Here are some aspects I found to be intrinsic: the amount of text / time allocated to one topic as a fraction of total time is indicative of unconscious desire / preference; when nearing an uncomfortable topic / repression the speaker will increasingly use euphemisms, vague phrases like "etc" "one thing led to another" "and stuff", even extending to abbreviations like "u" or "gotta" - spending as little time/text as practical on the topic; when expecting some sort of validation or reaction that is not forthcoming the speaker will repeat himself, almost word for word or perhaps at the idea-level; the unprompted linking and progression of concepts in a monologue is indicative of unconscious associations even despite negation (as per Freud, "it was not my mother" = it was my mother); specific word choice and slips of the tongue indicate underlying unconscious state, especially words which seem out of context / unusual; like negation should not be taken too seriously, positive attributes which are spoken but not demonstrated / exemplified should also be held suspect ("we got a blessing - a baby boy - I love him very much but sometimes he is just too wild" = I hate this change but so much of my mental construct rides on this being great that I convince myself it is); mental state / emotion words should also be held suspect and only demonstration taken as real ("I was so sad and depressed" but said in an upbeat and even show-off tone = I want your praise).

Look at the above paragraph as an example. I title it as unconscious in communication but biggest chunk is spent on how "normal" people are ignorant of this secret thing - the unconscious state here is to express my pride in having "discovered" this, seeking validation, and attempting to provide it to myself by showing (and spending time thinking about it meanwhile) in written form how basically I am superior to everyone else. Note I just used the word "basically" indicating a lack of desire to fully accept what has happened - even here "what has happened" is passive + vague language as if renouncing the fact that I initiated this train of thought. This analysis applies just as well to body language and all other aspects of interactions - such as who initiates contact and how and why. To make sense of all this beyond just a case-by-case listing with no structure or end in sight, it would be useful to try and enumerate the possible unconscious desires - assuming that this list is finite - as it would be a small list compared to all the ways these desires could be expressed in action form which can then be back-traced with more experience. I could venture that at least a desire for sex (which is actually dual: dominant or submissive) and control (sadism/masochism; creativity/voyeurism) and power (friendship / group inclusion / validation) might be put forward. To satisfy these desires / urges the unconscious concocts fantasies using real-world memories and then seeks to interact with the real world including through conscious / logical words so as to make the fantasy come true. Then we come to a

derived hypothesis which may be verified in observation: the unconscious communication, while appearing disjoint from the symbolic remnants of it, actually conveys a coherent and at its root rational fantasy that will somehow make the speaker happy (sometimes merely engaging in communication and bringing this fantasy to light for oneself is enough to raise the speaker's mood). Assuming the receiver's unconscious processing is "properly tuned" they will get an awareness of this fantasy to some degree and then might try to satisfy it - if they prove useful in satisfying the it the speaker will inevitably draw them closer in / "absorb" them into their life - even if consciously this is denied or opposed as in "negging" or abusive relationships. Similarly if the receiver is incapable of satisfying the fantasy or even worse invalidates it, the speaker recoils and makes any conscious excuse to cut the receiver out of their life - a self-preservation which yet again proves the unconscious much more rational than might be assumed (which I guess is not too surprising - as all out "conscious" logical thoughts must have originated there - all the neural associative links must be valid to some degree as can be verified when trying to decipher a young child's speech - it can all be explained and usually is surprisingly coherent).

When doing this analysis it will be important to ensure I'm not merely projecting my own fantasies onto the other's communication. There are at least three guards against this, the goal of which is to assign a unique meaning to the communication regardless of my mental state: first, consider alternative word choices / phrasings in all cases and ensure that the meaning assigned is not more specific than the number of practical alternatives permits (as a corollary, the larger a group of symbols that is analyzed together / at once, the more specific of a fantasy can be learned); second when assigning meaning to the analysis use the speaker's own words/text whenever possible - the unconscious may paint in broad strokes but is typically direct in what it intends to convey: if writing the fantasy in the speaker's words becomes convoluted / contrived it is likely untrue / a projection. Third, verify the accuracy of analysis by predicting future utterances / topics or explaining otherwise "random" trains of thought in the text. For the first case, if the text is "I don't want to tell my family" I might think that in reality he wants to tell his family, yet that requires that I treat "I really want to tell my family" as him not wanting to tell his family, to conserve information range - if I doubt the former but accept the latter it becomes impossible for the text to demonstrate anything other than "I want to tell my family" but then communication entropy is artificially reduced by my insistence that he wants to tell family (whether he says so or says the opposite) which is a projection / unjustified - the possibility of him not wanting to tell his family has to be present and checked for. As in negation, the likely demonstration of not wanting to tell his family would be not bringing up family in the first place - the word choice is not necessarily symmetric

but the analysis must start at the outfront genuinely not knowing the conclusion and probing both alternatives without bias. This also applies to standard phrases that have for better or worse become common: if I attribute possessiveness + selfishness to a phrase like "I want to have kids" then how would it be possible to use different language to convey the same notion without being selfish-sounding? There isn't a ready alternative to this common phrase ¹ so its possible implications should not be made too specific.

For the second case, if I am to claim that the speaker feels hurt and lonely, I would best not put my own feelings onto his words but ensure that he has said those same words, "hurt" and "lonely". Of course the unconscious is loose in its associations so the message will not be conveyed in a logically coherent / temporally ordered way: he will not say "I am lonely" but he will say "those orphaned children must be so lonely, it must have hurt to realize their parents left them" - the unconscious message is that in seeing / imagining the orphaned children he sees himself as them and feels that his hurt and loneliness are like those they would experience, ie "I feel hurt and lonely, like an orphaned child, because I haven't been able to accept that my parents left me". I end up mostly using the speaker's words but re-arranging them and switching subjects to "I", as any emotional / TOM evaluation of another object or being involves an unconscious imagining of "what would I feel if I were them?" which in itself is a very difficult question to answer - without lengthy psychological evaluation I actually have no idea so what comes to mind is what I actually feel now or have felt in similar circumstances in the past, which then gets attributed to someone / something else - enough of a logical difference for the conscious mind to accept that my fantasy is not violating social norms but still being able to express it, somewhat like fables use animals to represent "people like me but not actually me".

For the third case, if I find that a speaker is feeling unsure about his acceptance in a group, I would be justified in my conclusion if this speaker's finishing remarks are "sorry if I've offended anybody". Or if I claim from the first part of a text that the speaker misses his mother, the analysis would be vindicated when in the second part the speaker brings up his mother explicitly with no obvious logical reason to do so, and uses a caring / longing tone. Similarly, when the speaker picks only some aspects of others' responses to in turn respond to, his choices will be those that validate the underlying fantasy.

The notion of archetypes is also put in a rational context by the base

¹Of course the very fact that there are no alternatives should not be left by the wayside - this is just to say that it provides minimal specificity as the phrase may just be used as a matter of fact because it is commonly heard. The selfish wording can be analyzed to learn about society at large but not so strongly about an individual's fantasy.

(brain-brain) communication approach. I outlined earlier how in the mission impossible movie it didn't actually matter whether there was one or two bombs, and whether they were nuclear or biological. Similarly in the ever-present hero conquering some objective, it doesn't matter much who the hero is or what the objective is. So why do we bother at all? Why write Odysseus instead of just saying "The hero did a very important thing and saved the place he cared about"? There's a joke that outlines a prison where all the most common jokes were assigned numbers so the inmates could be heard saying "#5" "Ha ha!". It's the same story here - a generic and logically equivalent variant just doesn't convey the desired base level communication. What happens is that the dry phrase "the hero rises above" communicates primarily on a logical / abstract level the message, which does nothing for the base level and may even be negative - this is why spoilers are avoided for greater enjoyment: the unconscious reception of the archetype depends on the expectation of possibility of loss / failure, if this gets overwritten by the logical spoiler already saying the hero survives, there is a communication bomb dropped on the whole story and it is no longer enjoyable. To get the message of the hero rising above onto the base level it is not possible to say "the hero rises" but necessary to show it explicitly, with supporting details. But again the details "don't matter" so why are they still present? Because the mode of communication used here is the logical / abstract language, and it has to use some such words to convey the desired state. Look at the action of conscious interpretation of a story as sequentially activating different brain circuits - this activation pattern is the desired brain-brain communication, one brain activating another in a desired way, which is the goal of the archetype and any language that does the job will be effective. The details make the process palatable to the logical circuits, but they can be really arbitrary - as the world of fantasy shows even physical reality / relations are barely necessary. "Imagine the biggest thing you can, this was even bigger" - it conveys a feeling, that of "unimaginably big" and awe-inspiring perhaps. Well things need names, like variables in equations and programs, even though the names don't matter they are what's used by the logical mind to make sense of what's what in the logical communication medium (such as a written story) so as to eventually recreate the correct neural activation pattern for the sake of the base level's enjoyment (by fulfillment of its urges through proxy). Every story and movie and cartoon is made for this reason: the situations and characters depicted are capable of accepting the listener's projections and virtually fulfilling his urges. Songs can be seen in a similar light. If the words of some pop songs are read out loud in monotone, it sounds really stupid, while the melody without words is forgettable + repetitive, but put the two together and suddenly the song becomes catchy - of great interest to the base level. What happens is, much like with ornaments on a person making them more attractive because the

brain is attracted to shiny things intrinsically but in this case it becomes attracted to the person instead when the two stimuli are combined, musical backing acts as "ornaments" ² for words, so the music itself carrying sensory / emotional (major/minor chord + progression + beat) tones gets projected onto the words and their logical + base meanings, leading to even greater attractiveness of the "package".

With this brain-brain communication I am led back to the base psychology model. If the model is to be of use, it must necessarily predict actions of an organism and it must be always applicable - ie there is no "idle time" for the brain, or doing something "just for fun", even trivial and overlooked actions have to be predicted by the model, and even knowing the model won't alter its efficacy. In [supernormal stimuli] there is an observation that film techniques such as change of scene evoke the orienting response - and even researchers that knew of this couldn't help but be drawn to the TV. Here is a biological truth that should play a role in the base model. The supernormal stimuli view implies that I can look at my surroundings in society and see how / to what extent they are different from nature, and in this way back-trace the base urges, because each supernormal stimulus relates back to a base urge. A few observations: sugar / fat - urge for good food, cute cartoons - urge for care of children, cars / racing / stunts - urge for adventure / excitement (hunt?), porn / sex toys - urge for sexual fulfillment (differs male vs female / dom vs sub as outlined earlier), friends / family - urge for mental / physical validation. Is this all? How do I know when I've found all the urges? Are they enumerable? Another way is to think of stupid monkeys, who don't even know what or how much to eat, much less why. Their brain must be programmed with urges that lead from this state to a fuller understanding of the world - for instance attraction to banana-like shapes and smells, or desire to stay close to the monkey group - not because the banana is nutritious or the group provides protection (they do but the monkey doesn't realize it / think that deeply) but because it feels good to the individual monkey. The monkey needs to search for food so there's an attraction to certain colors / textures / shapes, ³ it also needs to hunt so there is an urge to chase / kill / eat, it needs to have sex so there is an urge to chase / inseminate, it needs to defecate far away from living space so there is an urge to find privacy when doing that, it needs to not kill its offsprings (they will learn life on their own by following their urges, all they need is to be protected) so there is an urge for collecting / possessing cute things. What I experience is that the brain takes on one

²The notion of super-stimulus could be applied here. Perhaps music works as it is a super-stimulus of natural responses to ie growls / shrieks / crying. Similarly jewelry for people is a status super-stimulus for whatever reason.

³White color looks bland because it imbues no differentiating power - the brain can't figure out whether the white object is fruit / water / plant

primary urge at a time based on its feeling state - I discussed this earlier with the case of thinking about new scientific concepts when hungry and wanting to go home and rest when full. What happened here is the hunger engaged my hunting / exploring urge, which enabled my brain to do the calculations necessary to find some optimal solutions to work problems, and in this mind state getting the work done was desirable (as a sublimation of hunting some animal). But once I had eaten, the hunger disappeared and along with it desire to hunt - why keep hunting once you've eaten? I force myself to do the work but it is passionless and kind of disappointing. After eating is a good time to bond / spread genes and sleep in a comfy secure hideout which is exactly what my urges were telling me to do. I was able to override their draw using the combined memories of past punishments for deviations from a logical thought pattern which in this case was that I would get a bunch of work done today. This is why spoiled children display an inability for delayed gratification much like animals, and also why I have to keep promises and not be a hypocrite and take logic words seriously - not for the sake of pleasing others but for the sake of training my mind to be more rational and less subservient to evolutionary urges. After all the urges are like guideposts - their fulfillment is actually independent of my physical survival and welfare. For example I could use some blood injection to get nutrients and physically survive without ever having to eat or defecate. Or there could be a life saving operation of removing infected tissue which would be really painful and my urges would prefer to not undertake it, but this ends up worsening survival because logically it is not necessary to follow urges for physical success. Humanity as a whole is just beginning to be able to look at its urges critically, yet we are still subservient to them and have not realized the law of conservation of qualia: that there is no absolute good, that every action that pleases one must hurt another (which indeed may be oneself but in the future / past). So we rushed headfirst into the use of fossil fuels and mined materials and readily killed animals / plants, and the payback will be suffering as the earth returns to an equilibrium. ⁴ This is because we followed our urges beyond the point of logic, taking on the good qualia with the belief that it is "free for the taking". But someone will have to pay - and it's easy to say this is "others" that have to pay due to the cult of I, but as suggested earlier there is just a single consciousness - *you* will have to pay, just without remembering what you're paying for or why. It is kind of cruel that it works this way - the nihilists asking "why do *I* have to suffer? I didn't ask to be in this world" sidestep the point that their suffering - mystery of it included - is the payment for something done in *their* past (or future) existence. In this light present

⁴But again, the point here is not the physical earth in the 3D world, but qualia conservation in C space - they will be conserved, the manifestations of this in 3D space are up for debate but the conservation is not

society seems grotesque, much like the "cute" huge-head-thing-appendages plush toys that depend on the neotenous care instinct to keep us from seeing the absurdity and unphysicality and indeed unattractiveness of such a body. People work or find work to keep their mind occupied, to avoid the feeling of urge-less pure existence to the point they "choose" to work - but really it is just following their urges and spending time on something, anything, so as to not go crazy. Imagine a mental institution with patients stumbling aimlessly in a white room, or the sense of desperation / claustrophobia that animals feel in a zoo, this is what society at large feels like and it relies on very strong supernormal stimuli to draw our focus away from the logical reality of working during our most youthful years and till end of life. TV feels so good because its distractive potential is immense - it not only makes you a participant of a very exciting story (the life you wish you were living - but only because you're not actually living it) but forces you to watch with the orienting response. Bread + circus is not a mere quip - eating eliminates the hunting urge, and seeing violence carried out on TV eliminates the violent / anger response much like 1-on-1 porn eliminates the sexual pursuit urge.

On dreams

I just woke up from hearing people walking overhead (with a very unnatural housing situation having people overhead and up all night). In the moment I had a brief dream in which I reacted to what I realized were the footsteps - from my view within the dream they were temporally widely spaced and I "knew" they would happen before they actually happened. I think this is a reflection on the nature of dreams - or at least dreams as I've experienced them. In the sleep state the brain can get interrupted by concerning sensory inputs - such as footsteps or body discomfort or even mental recall of distressing experiences, and when this interruption happens the logical brain / what I call "I" gets booted up briefly to evaluate the threat. In this boot-up period it has access to the brain as it is undertaking its sleeptime processing - this processing uses the sensory buffers (what "I" experience as sight / sound when awake) to connect events across time to find cause / effect chains - a brief glimpse at this lets me have "foresight" due to the temporal shift and the dream being basically a retelling of the day's events (for today, me giving a presentation to colleagues) in a strange temporal progression but which is not seen as strange while within the dream. And while the footsteps must have lasted only a few seconds, my dream experience felt more like thirty minutes had passed before I was woken up by widely temporally spaced (minutes) loud noises. What I realize now is that the dream *felt* long but was actually information-poor ie the scenes seem trivial to describe, like it should not have taken minutes to experience them. What I will argue is that this whole "dream" was actually experienced in the few real-time seconds of my conscious experi-

ence booting up and is a humbling glimpse at the extent of unconscious calculations the brain undertakes routinely. For people who report vivid long-lasting dreams I would hazard a poor sleeping pattern / consistent interruptions from physically or mentally unpleasant stimuli. Because the conscious brain's memory is stable, it can get activated in periods of some seconds real-time duration throughout the night separated by hour intervals, but to the self within the dream this will feel like smoothly changing scenes each lasting for a few minutes of experience. Because most stimuli that would wake up an organism are not pleasant in their implication, there is a widespread report of dreams ending badly or constantly turning negative. The only "positive" dreams I can remember, I think I can trace back to being woken up by good music I had fallen asleep listening to, or some reminiscent sounds like it (in turn going back to falling asleep as a small baby in the comfort of my mother's arms and calmed by her lullaby).

5

I recall now that not too long ago being in this apartment I would freeze when hearing the footsteps, a triggered reaction back to hearing angry caretakers coming to yell at me in childhood. And yet it was just such dreams, being woken up by loud noises, that would often end up as wet dreams - leading to orgasm in the boot-up period of conscious awareness. Maybe the fear somehow played into my animal level submissive sexual fantasy, although consciously I very much despise the notion of being submissive to another (I've had more than my fair share of that in childhood). I address this in a later chapter on the "fixing" role of sexual arousal. Still this strong emotional impact I can't help but experience is indicative of

⁵I will demonstrate later how dreams are indicative of unconscious work as integrating previously experienced memories into the current mindset (especially in childhood, as the brain itself develops in complexity the memory representation of the past must be "upgraded" to the "new storage format"). Normally I experience dreamless nights, in which I venture the integration is of emotionally neutral memories typically from earlier in the day. There are a few cases in which I felt very vivid dreams, where the integration is of emotionally charged memories and these can be from very long (years) ago, having been left as unresolved trauma until a point where some external influences made the brain capable of accessing them for integration. The way integration is experienced is of seeing all the links to the subject matter - everything surrounding it in conceptual space but never directly reaching it. These are the links being formed. So for example if the memory is of me getting hurt while falling off a bike, my dream will not involve a bike but maybe skiing, and it won't be falling off but maybe hitting an obstacle. The way for me to find the original memory from the dream is to consider possible substitutes and associations of each element of the dream, and I will then notice a common pattern - some subset of the associations all add up to a conscious memory of some earlier event. At root this is similar to our stories and archetypes: the characters are meant to be relatable to someone we want to represent but with seemingly every descriptive feature altered to something similar but different - this allows the representation without constraints of eg social taboo rules or having to face unpleasant truths about self or others; the infamous "I am your father" is not a coincidence.

past trauma, seriously damaging experiences, which I would like to explore more in terms of brain functioning and memory implications. I came upon an internet post by a concerned cat owner - he observed that the cat was strongly avoiding his girlfriend and asked whether it's likely the girlfriend abused the cat when he was away. While some responses were along the lines of "some cats are just like that, hating one thing vs another" I hope it will be clear by now the brain's genetic differences cannot be this specific in their impact and taking the brain as a more-or-less consistently operating neural-net optimization machine this avoidance behavior must be based on specific past experience of trauma. Some comments suggested a hidden camera - but again by now this should be seen as a superfluous given the initial account was valid. Compared to the human brain operation I am still trying to outline conclusively, the animal brain is a straightforward mapping of action and reaction, relations between scenarios and rewards / punishments when the animal's instincts / urges lead it to try things in the real world (like find good-smelling objects and avoid bad-smelling ones) which then builds up a memory of valuable experience for survival without any education or language. In this light, even more so than children, animals are a reflection of their upbringing. What I will argue is that this reflection is actually wholly rational / logical in nature, despite its fuzzy qualia appearance. The experience of a child especially in its developmental years must be animal-like, and indeed parents find it's possible to bond with animals calling them "furbabies". What is concerning then is the reflection that I can barely remember events in my childhood and feel no continuity in the rare memories that pop up. Whatever happened to me in that animal state left me deeply traumatized, and as with the cat above, the animal state doesn't lie - it is a reflection of its environment. I don't need to review videotapes of my days as a kid to know something is seriously wrong. From online posts at [r/RBN] I see the phenomenon of unclear / lacking childhood memories is a common one for children of narcissistic parents, and seems like abusive environments in general. ⁶

I've even seen videotapes of myself at age up to 10 but I cannot remember how it felt to be there. What is telling is my memory of locations - generally I am good with visualizing maps and architectural layouts and yet my most readily accessible memories from childhood do not involve any of the locations I spent lots of time in (home, school). I cannot remember any features of the floor plan of the apartment I spent most of my childhood in, I cannot visualize what my bedroom looked like or any objects that may have been there. I cannot remember the layout of any schools I attended

⁶This happens because sensory inputs felt as dangerous or overwhelming shut down the brain's higher cognitive (self-reflective, mentalizing) functions, leaving it in an animal state capable only of forming emotional memories and not the complex ones I expect from my "normal" memory

until middle school (age 11). What is going on here? To understand this I think it will be necessary to clarify what the role and purpose of this thing I call "I" is. As with the concept of evolutionary memory earlier, I argue our vivid qualia are a deeply intertwined ultimately self-reflective links which connect us to the animals and to the beginning of the universe itself. The richness of qualia is based on their differentiating ability and drive impact on the organism. There is a complex system of "checks and balances" where different sensory inputs override each other by their priority and the winner determines the animal's action. The animal's brain chemistry at the moment (mood) determines the weights given to different qualia and potential actions to take. ⁷ Compared to our experience of the world at large, conscious thought is rather bland and unimpressive - indicative of its young stage of development in the evolutionary process, it is a "new sensory organ" that humans just recently evolved. What drives the brain and the body is not conscious thinking but what can be mystically called a "life force", the optimization process that automatically takes place in a live / awake brain and *invokes* specific qualia to select one course of action out of many. Each qualia experience necessarily ends with some qualia feeling of an action plan. If circumstances drive us to not depend on abstract thought, we are perfectly capable of working on an animal level by following what looks good / smells good / tastes good / mentally feels like a good thing to do. This is how our evolutionary ancestors learned without ever going to school. To do better, evolution selected the conscious brain - one that could call itself I and think about things - for this of course language was essential which was done by an arbitrary mapping capabilities of a specific brain activation to a neutral but unique word - our brains find this process enjoyable as evolution's way to tell us to learn / develop a language. This is what I call "my thoughts" and what "I" write down. Why would animal me agree to such drudgery? Because society at large trains me using punishments and rewards to focus on my logical brain and trains me to call it "me" (instead of realizing a unity of existence across space / time) and use such phrases as "I think" when I find it necessary to satisfy my drive for social connection by engaging in an exchange of friendly noises. The "I" is some circuit in my brain that is based on logical processing and structure-building somewhat like spiders engage in web-building - apparently having this ability helps fitness in a logical physical world or perhaps the world I experience is a projection of this ability - but in any case I find myself with it and the reason it develops is because my brain has hard-wired urges to want to make logical "webs" and find it painful to have illogical / conflicting ideas as that breaks the webs. If having a

⁷For instance a bad smell could dissuade me from eating a good-looking fruit based on the relative magnitude of the two

logical thought process is **that** important to survival, every mechanism in favor of the process will be readily selected. This construct of "I" is not present at birth but forms eventually once sufficient real-world inputs are provided - this happens readily for newborns in society who get trained with an existing language but initially must have taken millenia to fine-tune the various urges in just a manner that would lead to language creation in curious adults.

The "I" in its purest form is a logical construct ⁸ which is capable of activating areas of the brain for its own goals / desires. The "I" might think it is all that exists but it does not displace the animal brain and the power of the urges - the way these get their goals met despite conscious intentions is by preselecting (usually emotionally charged) thoughts that the "I" can then spin into logical justifications as it likes. Indeed the preselection always happens but in a calm / neutral mood I assume what is available is an unbiased reflection of the recent chain of thoughts (there is likely an optimism bias) ie a pure logic construct vs being based on sensory + urge inputs such as calling something "cute". The "I" is both the master and the slave of the animal brain (again the animal brain's "thoughts" **are** the vivid qualia, the "I"'s thoughts are abstract words / language for communication). It can't help but be bound by animal urges which its actions must be directed towards, while at the same time the animal (which learns by Pavlovian training, not abstractly like "I") finds it worthwhile to submit to the "I" even if this causes hardship because it has learned that not doing so can make things even worse.

The internal trust that the animal has of the "I" is a subtle quality dependent on the ability of the "I" to train its own brain that it makes the right decisions - this would show outwardly as "self-confidence / adventurousness in the absence of social cues" so as to not conflate this internal measure with trainings that may have the brain lose trust in itself because of social punishment - these are of course related but the former is more selective. A decreased ability to verbalize the desires of the (logical - this is who communicates in language) self is indicative of a less developed extent

⁸Because it is a logical construct, we are simply unable to process or acknowledge thoughts that would go against the logical foundations of the self. These thoughts, from our view, cannot even exist. This is what I mean when saying the "crazy" paranoid schizophrenic finds himself in a world where his false beliefs all make sense. He finds himself to be quite sane. This is a non-trivial requirement: if the world out there really is logical, then the conscious "I" has to be logical, and in theory it can observe parts of the world which agree with its logic - ideally all parts. But maybe the world out there is not logical, only my consciousness is, in which case I will only be able to observe the logical parts of the world and proclaim that the world is all logical, but this is something "I" can never prove. Yet again maybe "I" am not logical either. If we are to accept that what exists must be logical, then a necessary constraint is placed on the "I" to also be logical.

of the logical self / a more animal-like response to stimuli (such as a lack of rational delay of gratification) and correlates with the confidence displayed by the self. At a waterpark I saw a group of three young children (5-6 years) playing on the slides with an adult supervisor: a boy jumped in and seemed to enjoy the experience after which he rejoined the group, a girl (who took the last turn on the slide, letting others ahead) also went on the slide but the whole time her sight was set on the two other children as if either seeking acceptance or safety. In this state she could not focus on or enjoy the activity itself. I regularly see adults, and increasingly children, pull out their cell phones and scroll through chat messages in any situation of mild awkwardness or boredom - looking at the cell phone as a "source of safety" in a similar manner as the girl above looked at her friends from the slide. I recall that throughout grade school and even into college I had no clear opinions on what things I like - anything is good as long as you like it - which was indicative of a badly malnourished "I" and my behaviors throughout certainly demonstrated low self confidence - I was living a more or less animalistic existence trained to be submissive to others and using words like puzzle pieces more so than abstract ideas / logical constructs in themselves.

On the flip side, the trust the "I" has of the animal shows in perseverance / determination (again outside of social influence) and being willing to "get out of the comfort zone" especially in a physical manner like walking barefoot or trying a new sport. A materially optimal life for the brain as a whole requires the logical "I" and the stimulus-response "animal" to be in harmony with each other - a full self-awareness / self-actualization. Lots of pitfalls and honey traps exist that encourage disharmony: addictive behaviors (the animal processing stimuli without logic) or neurotic obsessions (logical I pursuing goals which hurt the animal) and plenty of toxic people who have no concern about their emotional impact on others. I plan to discuss the animal side later, for now I will focus on the logical "I" and its role in the organism's survival.

The "I" is thus established as a logical construct, or one that aspires to be as logical as possible - this is the "curiosity urge" that drives us to seek explanations for how things work and keep asking "why?". This is also why hearing plainly illogical or nonsensical things presented as truth is maddening, and being unable to convince someone of an "obvious" argument is rage-inducing: the flip side of logical consistency being enjoyable for its own sake. As before, this is also why insults can be made to sting (though at root of the story is a re-experiencing of a prior negative emotion like parental or classmate / friend punishment and is thus actually arbitrary) when put in the form of a logic bomb: what is at stake here is actually the whole cogency of the "I". A person living in a situation of constant criticism or manipulative gaslighting will actually experience an erosion of their

capacity of rational thought and discourse, along with associated future-planning and self-sufficiency abilities. I was this way in regards to myself, though it seems that my logical mind was able to survive my childhood by clinging to math and engineering where truth was not dependent on another person's mysterious whims - it kind of makes sense that I built up my view of the world from a more logical basis once my childhood burned away basically everything of my "I" that was not logically justifiable - living on my own and free of abuse I was able to rekindle the flame from a tiny ember, and the ember happened to be a particularly applicable / useful one. I even remember thinking in high school (we probably read something about a crucible around then) that my life is burning up my whole concept of self, it was certainly painful and inescapable. So strangely enough, after all my musings on urges and the mystique of the complexity of mind, I have to conclude that the "I" of people (and animals) is actually a wholly logical construct from its own view, and if I understand the logic, other people's actions gain a machine-like clarity and purpose. I mentally use words like "mood swings" or "state of mind" as a thought-stopping catch-all to avoid looking further into "why did he do that?" and if I can break this habit what I will see is the action of a wholly logical construct. This construct can then be manipulated by words alone, and that is just fascinating as it shows an incontrovertible truth about the brain - it can't help but follow its design. Psychopathic people of course are naturally talented at this and hone their skills over decades, but experience does not lend the explanative power that a true mechanistic description does. It would be elegant to definitively prove what is possible or not, and what the cost of interaction will be to my well-being. It would also shine a light on "mental illnesses" which today are treated more or less like something caused by invisible bacteria instead of by actual traumatic interactions and experiences. So what happens as a baby ages is it learns more about the world by its instincts and animal training, and eventually it finds itself nearly able to satisfy an urge for "connecting the dots" which sets the first building blocks for the logical "I". The brain then in the formative years takes its most cogent memories (pattern-rich or emotionally charged - ie a strong impact on at least one of the base urges) and adds them into the "I" superstructure. Of course I can only access memories that have been taken up as part of the "I", so my inability to remember childhood experiences means the "I" for some reason was not able to accept them as part of its logical construct. Perhaps there is a self-preservation instinct here: the brain's urges favor the expanding of logic in the "I" to continue to all phenomena, but if the "I" is based on some inherently faulty premise then accepting a memory / experience that reveals the premise as faulty results in the unraveling and destruction of a large part of self. People exiting an abusive relationship "for good" with outside help tend to feel a sense of being adrift in the world - nothing is

certain anymore as even the things they held most sacred have now been shown to be based on false premises and thus logically indeterminate as to their truth or falsity - it is a very painful experience to go through.^{9 10}

I see commonly on relationship forums cases of couples staying together because of some social or material factors, with at least one side not attracted on an animal level but perhaps attracted on a logical level, "she says she loves me but every time I try to initiate sex she comes up with some far-fetched excuse". While indicative of clear dissonance between the logical and the primal (and thus of poor mental health elsewhere in life) it is actually a sad situation assuming no purposeful / devious manipulation was taking place: the woman will swear (and herself logically believes) that she loves the husband, and she will also believe her excuse as valid. The excuse of course is made up and its specifics irrelevant - on a primal level she clearly rejects her husband just as a whole. Why stay stuck in this charade? Because leaving would destroy some part of her logical self - either the notion of love and thus her view of herself and her capabilities as an individual and all logical conclusions, or the notion of honesty, or sacredness of marriage, or that being a good provider is worthy of commitment, or that her life is perfect / dreamy, in any case all the logical implications and results of the concept will be invalidated and it is painful because it will reflect back and force her to accept truths about herself which are in turn painful by virtue of their relation to childhood punishment and fear, which are in turn painful by some fundamental hard wiring that makes certain sensory inputs undeniably (intrinsically) good or bad. I doubt the brain does all this evaluation though - this is much too wasteful, rather it checks that accepting this statement as truth conflicts with a deep / foundational construct and automatically rejects the statement as a matter of course - why people can be laughably stubborn if confronted with a deeply controversial belief even with mountains of evidence. Being pressed by the expectation (under threat of memories of social punishment) to answer her husband's question, and starting with her pre-established logical basis that of course she loves him, she finds a plausible logical chain leading to an excuse.¹¹ In the absence of such a chain bad things can happen such as

⁹To be sure, both the longing and the heartbreak of abusive relationships is not so much about the other person as it is about the wish for parental acceptance based on formative memories of caretaker interactions.

¹⁰Similarly, the abusers in relationships consciously or not perform gaslighting - getting the other person to believe their logic is faulty or contradicting it like "brainwashing" which destroys the logical self and capacity for unbiased evaluation of the relationship, or the role of self within it - the victim becomes reliant on the logic of the abuser as his own is rendered unusable, in the absence of the abuser's guidance an animalistic powerless state is entered.

¹¹This mechanism is in itself very valuable - it lets us trace influences that have real impacts. But it misleads by the classic correlation vs causation and can be damaging as

sudden breakdown or emotional outburst as the logic bomb is essentially forced and detonated, but perhaps she avoids considering the issue at all / withdraws fully from the exchange.

The power of the "I" over the animal comes from the ability of the "I"'s logical reasoning pathways to evoke sensations in the brain that can counter external world inputs, and this is done by virtue of logical-chain relations to memory experiences of pain and pleasure. This allows the brain to follow its instincts in a moment-to-moment fashion as it must while still optimizing for long-term benefit by virtue of abstract thought, indeed optimizing abstract thought itself in a moment-to-moment urge-driven manner to make the process we call thought. For instance I may be told "don't run from a bear" - when I see a bear my brain recalls this because I know what bears look like and now I get the concept "don't run" activated where again I know what that means from childhood learning, and I recall that this was told to me by an authority and I know that disobeying authority leads to pain and punishment. In all the brain is following logical chains back to their roots to find relations between possible action and resulting consequence, and it picks the least painful consequence and backtracks the corresponding action it should take presently. So faced with the bear I have all my primal instincts telling me to run away **right now** and I also have the memory of punishment for not following authority that will happen if I run away. Clearly the punishments must have been really strong to stand in the face of such primal instincts. It is a no-win situation but I pick the least evil: putting up with the fear of standing in front of the bear is more palatable than contemplating the fear of disobeying authority (one would say "but the fear is of the bear giving chase" but once again this is all abstract phrase which need not have any emotional charge - the reason it is a fear is at some point in the past a bad punishment occurred for something similar). So memories of specific contextual strong punishments and strong pleasures are necessary for the "I" to maintain control through challenging life situations, especially in today's world of supernormal stimuli making for super-appealing honey traps like gambling or getting fat or wasting away in front of a TV. This shows up as "willpower", and is why spoiled children or ones "raised in a bubble" are at a real disadvantage in navigating the world. I would even venture the brain realizes this on some level and has corresponding urges: the child that wants to test whether the parent will keep their threat of punishment or fold isn't just "trying to be nasty" - he is asking for negative memory experience that will help him grow his logical world model - he may indeed turn frustrated and angry if the parent fails to fulfill this role as seen with classic cases of "spoiling". The sexual dynamics of BDSM relations also has ties to this role - "I want to be punished" -

the thinker actually wholly believes the conclusion.

and the self-aware practitioners can use this to tremendous improvement of both parties' life quality / goal attainment. Emotionally / physically abusive partners on the other hand have no or negative concern for how their actions punish or reward the other so there is an active assault on the other's sense of self.

What does the brain do on a moment-to-moment basis? It finds itself with a number of urges to satisfy, sensory experiences and instinctive responses that may be candidates for satisfying the urges, and a vast store of memories of past experiences and actions and logical links between the two formalized as words / abstract thought ¹². The brain goes all out to try and satisfy its urges - it activates memories bottom-up by recalling what resulted in good feelings satisfying the urges, it goes top-down by recalling other situations like the one characterized by present sensory inputs, and it goes in the middle by activating any related concepts of these considered ones, keeping doing this until a chain from action to urge fulfillment is formed - somewhat like a lightning bolt finding a pathway through the air and once some link is found the path is tested for any shorter alternatives around it. This may lead to the formation of a conscious chain of action ie I will go to the store and buy food to eat, after which this chain itself becomes the new urge - given power by the base urge it seeks to fulfill but having much greater specificity in what actions are desirable to lead to the sought outcome. Whereas an animal might approach / smell / eat or evade or hoard, a human can plan out many steps ahead ie open a door, look in the fridge, warm up the food, get utensils, turn on the TV, then eat, but this whole chain should be seen as carrying out a similar role in the brain that the "simple" responses do (indeed on second look they aren't that simple). Once the dominant urges are satisfied the brain moves on to the next urges and starts over. There is no "rest" for the brain even when the animal is idle. For animals urges seem predominantly physical so they are observed exploring aimlessly (when this cannot be satisfied, ie in a zoo because there is no space to explore, the urge leads animals to seek escape, and when that cannot be satisfied a depressive and highly mentally damaging state arises in which behaviors become repetitive and obsessive ¹³). For humans the urge fulfillment can be mental - such as writing / thinking up

¹²these memories by no means need to be abstractly accessible like computer memory, it is much more reasonable for them to be encoded in embodied form - in the structure of the brain - for instance a link between some action and its consequence is not stored as a memory construct but is instead a literal neuron connection between one set of neurons and another; such embodied memories are not capable of conscious awareness except indirectly by analysis of one's own actions

¹³A number of very unpleasant experiments with monkeys in tiny cages and exposed to painful stimuli outline the details of this state; there is some evidence that a secure bond during infant formative years plays a crucial role in the ability of adults to recover after such experiments

stories, literally daydreaming (free association guided by conscious thought to stay focused on some task), art, inventiveness. If there is no urge to fulfill the brain amplifies the tiniest unpleasantness and turns that into an urge as a matter of course - we cannot experience idleness because idleness requires no concept of time, our sense of time progression is punctuated by fulfillment of desires so whatever we feel must be a continuous need to do something more. We sleep but we don't experience sleep. We similarly cannot experience rest as it gets compressed to what feels like no time. There are pleasant experiences during which the brain reconfigures itself to be more biased to them, and painful experiences during which the brain reconfigures itself to avoid them (and maybe the cause/effect are intrinsic), but in any case some optimization is taking place. As I sit here I imagine a song playing in my mind, the point of it playing is to fulfill my urge for connection / acceptance perhaps. It's not much work but it amounts to the brain's response to its own urge, somewhat like masturbation. The hard wiring of the brain makes the urge ever-present so the whole thing doesn't just collapse to zero, just at this moment no other urges on my mind supersede it.

I was browsing meme forums and saw a photo of a cardboard insert depicting a young child in a red "flash" costume, with some offensive humorous caption. For some reason I got a really strong feeling of sadness looking at this. I looked at it for a long time, trying to find the source of the sadness, and maybe writing it down will help. It wasn't the costume itself or the kid or the joke, just suddenly I felt hit by the reality of the situation - the kid being dressed up and put to pose for the photo, the workers cutting + sewing pieces of fabric to make the costume, the person photographing the box, the person buying the costume and dressing up their kid. It seems that I could put on a veil of innocence and see this as fun / enjoyable / entertaining, or a veil of superiority and see this as lame / uncool / wasteful, but for some reason I got a flash of humanity and it made me cry. It seemed a contrast between the bright / happy / perky costume and the confused / bored / scared kid inside. And it made me wonder: what am I doing here? I am basically on the internet making fun of people, and I've put myself in a position where I always dismiss their attempts at happiness. Have I become a sick person, have I made myself miserable and turned others away? In my search of optimal ways in which people screw each other over, have I lost track of the notion of human empathy and goodness? Am I mistakenly viewing and treating the world as a horrible place because my perceptions have been skewed by experiencing manipulation instead of seeing that in the surrounding world it is not as common? ¹⁴ Have my attempts at shattering life-affirming delusions turned me into a source of

¹⁴This, I think, is key for a stable society: a shared belief that people are overall honest

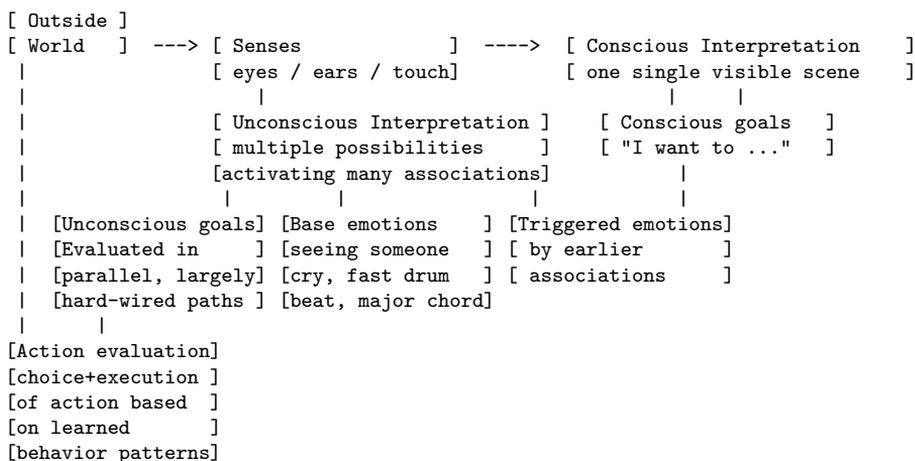
negativity, a destructive voice that no sane person would want to remain near? Have I become the bully that young me despised? No. I believe it remains worthwhile for me to explore the truth, even if depressing. What I just experienced was a particularly strong emotional memory. The sheer humanity of the situation is real - but I don't get this feeling with other photos. I have to remind myself that the sadness is my projection, that maybe the kid was happy and the workers hated their boss + screwed him over and the photographer was having a good time. What happened to my train of thought is illustrative: I was led to think of how my thoughts and actions make me look to others and how others will turn away from such a horrible person, closely following the course of what a parent might say to a young child that has done something socially inappropriate like making fun of someone. This goes back perhaps to some birthday party or an event involving dressing up (kindergarten dances) where I either made fun of another kid's red costume or expressed a dislike for my costume for which I was thoroughly guilt-tripped (you made your parents sad, they spent all their time and effort on this, now they are crying because of you), and seeing this photo brought back that memory.

I read that music is just an emotional trigger - a melody doesn't mean anything and in itself is neutral, and music preferences are based on the emotional state of the listener upon first hearing that music, which then later gets triggered.¹⁵ It seems that this sort of triggering has taken place for me with this picture, juts out of nowhere a really strong emotion hit. Yet I can't fully agree that music is arbitrary - because if it is, how do our emotional states get established in the first place? What causes a certain emotion to appear for the first time? An emotion comes from evaluation of the overall sensory environment including abstract interpretation of one's situation, so for example minor chords and dark colors and seeing someone crying, all establish a "down" emotion through hard-wired channels (culture-invariant), which might then get associated to more arbitrary things like words of a song or chord progression. As for the base psychology

will lead to societal cooperation, while a shared belief that people cheat + manipulate will lead to societal dissolution in favor of individual actions. The cheaters only get their way because most people are decent. As others protect themselves the cheaters won't get their way anymore, but society will have suffered as a result.

¹⁵While this point has truth, it is not complete. Music has an intrinsic emotional component, for instance minor chords sound negative and major chords sound positive, energetic rhythms can drive action while soft ambient sounds lead to drowsiness. This is intertwined with animal level signaling, for instance female vocals with a particular melody can be reminiscent of lullabies and a mother's caring vocalizations which are culture-universal.

model, consider what the triggering mechanism implies:



Continuing in the [Pragmatics book], I saw the authors use the concept of paradox as descriptive of communication in families of schizophrenic patients. It is interesting as this relates to the concept of the logic bomb I described - except the logic bomb forces a choice at the price of denying logic (making, say, insults actually stick instead of being mentally dismissed as absurd), whereas a paradox offers no logical choice: the only way to proceed is to ignore logic itself. The importance of this is that sufficient exposure to paradox in developmental years throws wrenches into the gears of the mind's algorithms for logic-learning: the children learn something that is inherently irrational / absurd because they do not have consistent + unambiguous logic-reasoning-behavior examples to form the necessary mental associations. "The truth", and the search of it, involves finding a recursive or self-consistent system of thought, which accurately and unambiguously parallels the observed physical world. This "truth" can potentially exist as an entity in the real world, but other entities also exist and are much more numerous. These other entities are not fully consistent or rigorous, not uncompromisingly accurate in reflecting the external world, and very likely more conducive to livelihood and prosperity than the "truth" if taken as one's system of thoughts. The child does not evaluate any of this - he learns based on what he can observe of the world, and an upbringing punctuated by paradox in communication results in a mental process which is not aligned with the ideal "truth", indeed maybe even one from which this truth can scarcely be reached. As behavior of a physical system is deterministic this individual still inevitably falls into some pattern, but his mind is incapable of understanding the logical structure of the pattern (because it couldn't properly develop logic due to constant paradox situations) so he is forever enmeshed in something he is unaware of (until an environment change forces him to become aware). I was somewhat like this in not

realizing that I had emotions - I made significant self-discovery and social understanding progress only once I accepted I have emotions ¹⁶ and starting to put concrete words to mentally organize / label the abstract sensations - for then I could use logic to find patterns and little by little eliminate all unexplained behavior like "I just felt like doing this" or "this was an accident / slip of the hand". I remember my childhood being punctuated by feelings of deep frustration / resentment, which I now realize immediately followed some parental punishment that put me in a situation of paradox (maybe more accurately a double bind: damned if you do, damned if you don't). An example was when I was around 7 lost a bag of clothes and V cried and asked me if I loved her how could I do this - do I really love her? I answered "yes of course" readily but I had a gut feeling of dread, that someone's pulled a dirty trick on me. Only now I can attempt to verbalize why: if I said "yes I love you" then she would say "but how did you lose the bag if you love me?" which I could not answer because, taking her word as gospel, I had inferred that losing it is something only a non-loving kid would do, thus to uphold logic itself I had to realize that I don't really love her even though I say I do thus I'm a liar. So in saying "I love you" I also had to mentally accept that I'm a liar and a bad person along with associated guilt and mental pain, because I wasn't willing to give up logic and I wasn't willing to think of her as a liar and a bad person (which I now realize would be the necessary escape - not taking her words seriously). If I upheld logic and upheld my honesty I would have to say "no I don't love you" to be in line with her weird outburst that losing a possession = no love but then I wouldn't be in line with my feelings and certainly would make her very angry. Either stab myself or stab her, because of an unnecessary shitty conundrum she dragged me into. I took sanction in the study of logic as a refuge from this nonsense, and now find resolution in destroying the concept of love altogether.

One sleepless night I thought back to some vivid, memorable dreams I've had - perhaps around five in all throughout my lifetime. I had a sudden realization - what these dreams were, were recalls of emotional level memories of events in my childhood. Indeed in these dreams it always seemed that I was small and all things around were unusually big - as a little kid would see the world. Surely a number of elements were modified by my subsequent memories and probably only the gist of the experience survived represented at the time of the dream using the most readily available "nearby" recent memories (which is why some dreams sound illogical when retelling them), however the emotional quality of these dreams was uniquely vivid with a sort of sublime joy, so I am guessing my childhood brain had a different chemical mix / hormones such that my moods overall

¹⁶After moving out of my childhood house and into far-away college

were more animalistic - more bright in their experience and less consciously suppressed. In this light childhood is seen as a traumatic experience where parents and society suppress most of the emotions and joy in life by employing logic to convince the child that it's good and necessary to suppress himself which the brain then learns to do on a subconscious level. What's left into adulthood is more or less pedestrian conscious experience and minimal emotional awareness, and the journey of adulthood becomes and ironic regression back to the freedoms / disinhibition / releasing repressions of childhood with the self, rather than parents / society, as exerting his right to full control which he could not do before (thus being unjustly bound by parents / society). All is a repetition of the past. What I yearn for in women (vs men) is to recreate my relationship with my mother / grandmother but on my own terms and better, just like the modifications that take place in the dream and make it appear very different from its informational source. What women yearn for in men is to recreate their relationship with their father (if any). This is how family patterns can arise - father demands his daughter treats him like a king, daughter learns to serve others, daughter serves her son and is not strict with him, he grows up to be demanding and wants his wife to treat him like a king. Men want the closeness of a mother while women want the guiding hand / security of a father - though again the primary bond of women is also to the mother so men as a whole are more expendable while women are more valued by both genders. The extent of this fantasy is obvious in kinks like daddy/daughter. Other close relationships like sister/sister or brother/brother can also produce childhood memories for future attraction / desires. One driving force is that of trust, a disinhibition, a feeling of being fully accepted and free to be yourself (again a child-like state, not helpless but free of arbitrary restrictions and permitted to interact more purely with the world, which is enjoyable in itself as it rekindles the curiosity drive). This trust is what is demonstrated in "animal language" (as opposed to spoken words - because words are cheap, saying "you should trust me" is in itself a poorly framed message - it puts one's guard up as they ask themselves "why would he want me to trust him? what's he about to do?").

I imagine lots of couples engage on a conscious level of "communicating care" like sending flowers or baking cookies. This leads to "obligation sex" where the sex is done as a societal symbol / expectation or just for the sake of the physical pleasure of orgasm. Orgasms can keep this up for a while but eventually the sex just becomes unappealing because while conscious level communication may be "I care about you" the animal level communication is "I'm having sex with you because I have to". Oftentimes there is an actual animal / visual level repulsion despite conscious level attraction: this leads to situations like the wife getting a sort of sad pleasure from hurting her overly-concerned husband (as she wished she could do to her father in

childhood) and still not wanting to divorce - the animal level says "I hate living with this ugly man and having sex with him" while the conscious level says "if you leave him you will be alone and have to go through all the hassle of a divorce, plus he really does care about you, see all the kind things he does? no one else would do that". It's a shitty unwinnable situation. ¹⁷ The brain stays in constant conflict and takes consciously inexplicable actions, "I don't know why I hurt him, it was really cruel of me"; here the animal side had a brief window in which it was uninhibited by the conscious, to which the conscious can accept an "I don't know why" or instead create a convincing story "because he always leaves his socks on the floor". ¹⁸ Healthy sex is wild, adventurous, and mutually desired - it gets weird and dangerous precisely because this is necessary to ensure an animal level communication of trust which in itself is a sexually charged exchange. What happens in a dom/sub interaction is the sub physically expresses (which is not cheap like spoken words) "I fully trust you to do what's right for me, with you I can release my inhibitions" while the dom physically expresses "I am very powerful and destructive but I trust you to always be on my side, with you I can release my insecurities". ¹⁹ There's not much danger in today's society so "weird sex" creates situations of very realistic danger because if there is no risk of failure then there is no genuine / mutually convincing way of establishing trust - sure I'll play fair when there's an armed guard in the room, but to enjoy sex I want to know that my partner will play fair because they choose to.

In evolutionary terms this makes perfect sense - it is a genetic fitness optimizer, I see squirrels chasing each other around a tree and I'm starting to think maybe they enjoy the chase, maybe they expect it on a genetic level, will be unsatisfied if the other is too easy to get or otherwise doesn't play along. The chase is the fun - the sex is just an orgasm, so in this sense modern "duty sex" is like a computer game where after clicking start the screen shows "You win!" - practically it is very effective because the goal is to win, right? Except the enjoyment comes from playing the game,

¹⁷This also with people who say "I work best under stress / with a deadline" - what this means is subconsciously they hate what they are doing and the only way to overcome this hate is to consciously threaten self with the punishments associated with deadlines.

¹⁸And the number of ruined relationships due to babies is sad to contemplate. The woman animal level hates the baby which transfers into hate of the man for making her pregnant, and the only real resolution is for the baby to disappear.

¹⁹That this works is also an indicator of how a relationship is an analogy to the parent-child experience and desire to redefine it: ideally the partners could individually choose to release their inhibitions and insecurities because the power lies all within themselves. But their brain has been programmed to not let them do that and - a partner telling them to do something amounts to a parent figure giving them permission to be themselves instead of teaching / punishing. Healthy families produce less of a need of external relationships beyond perhaps sexual/interest exploration where the family was not wholly supportive.

knowing that winning is possible but really hard, so seeing "You win!" feels meaningful and desirable. I imagine this is a requisite for "weird" sex and healthy relationships (where the relationship itself improves both individuals' self-actualization, as opposed to the much more common occurrence of roommates that watch TV together and have sex on a schedule). Both the conscious and the animal side have to be satisfied in both partners - this is difficult enough to do for one person, and for two it takes continual effort and is often unintuitive (ie not moving in together as outlined above) so I think such relationships are extremely rare. What's needed in addition to animal level trust (avoiding danger / engaging in hot sex) is animal level care - this being to intrinsically understand what another person wants and do it for them. Talking about it like "what do you want me to do?" is fruitless as it turns care into obligation (he did it only because I told him to, I wish he would do it because he wants to) and makes the gesture lose its power to the subconscious. Flowers or rings or other such symbols are arbitrary social constructs - while people might consciously want them and say as much, fulfilling these things does nothing for the animal level care and thus can create delusional relationships where the partners care for each other only in a mental (abstract thought) and symbolic (to show off to society) way - this is bound to lead to disappointment and hurt but is again non-resolvable as these things are impossible to directly communicate and at some point the partners feel safer sticking with the status quo. What a partner would want on an animal level is not flowers but some actions which they didn't even fully realize they wanted - a "magical" removal of some barrier that is in the way of their own desires. A positive reply to this is not "Thanks" (indeed "thanks" is a negative reply as words are cheaper than actions) but a return of the action to the other partner: in this way two partners can make a mutually beneficial couple. It should be noted that an act of care has to be one where clearly the initiator does not expect anything in return - this makes the exchange meaningful such that the receiver can respond in kind to show attraction or not respond to show lack of attraction, being placed in a situation where a response is expected by societal metrics or power imbalance puts the receiver in a position of being unable to use the full communication "bandwidth" to which they might react with a sense of disgust / aversion.

I had a chance to apply brain-brain (or intrinsic/extrinsic) communication theory when observing the interactions of parents with a toddler (A) - who at this age was at the point of learning and testing his capabilities for using communication to satisfy more complex desires, on the path to a logical model of self which could later use similar language to describe "its" desires to self for planning and execution. There were some informational exchanges but mostly at this age he is not interested in such - his bigger concern is with finding out the roles and emotional exchanges

within a social hierarchy, as well as more directly his position in the family. Thus I paid particular attention to the context of his communication and his desired goals. It seems the parents were unaware of his underlying goals and took his requests at face value - which oftentimes made him angry which they explained away with a simple "he is just tired" or "he's in a fussy mood" or "in this age he is difficult like that". There were a few types of exchanges, as a start I could find: validation-seeking, dominance-seeking, unpleasant-avoiding. In validation-seeking, A would call "mama" (very rarely if ever "papa") then a request like "I want a piece of cheese". He doesn't actually want cheese (he will tolerate it if given and knows it's a likely request to be fulfilled), he wants validation - this is seen by tell-tale pronounced pauses after "mama" or after "I want" as if he is coming up with what it is that he wants only once he has ensured mom's attention is obtained, not the other way around (ie the want for some item is secondary to the want for attention; if otherwise the phrase "I want x" would be said readily and without necessarily waiting for signs of undivided attention). The parents' version of validation is to ask A to smile for a photo or give them a hug or make him say "I love you" to other family members or get him to come close and surprise him with a bear hug - ie to force him to give them attention and to use him as a prop for social validation / to show off their model son (and by implication their perfect family and parenting abilities). Dominance-seeking exchanges would involve A asking for clearly defined items but ones evidently excessive / unnecessary, to check whether the parent would be willing to fulfill such a request. He could almost be heard laughing / smirking under his breath when such a request was returned in the affirmative. The posing for photos from the parents' side could be seen as a sort of dominance exchange though parent-initiated "excessive" requests were rare; ²⁰ more typically they would give in to A's requests or act angry / guilt-tripping whenever he denied their requests: rather than demonstrating dominance they logically demanded it by throwing their involvement / care in the relationship into question (ie do this or I won't love you anymore) which is a dangerous and one-trick pony as it were - if it ever does its trick the child will give up all investment in the relationship and accept it as dead after which the parents will have no control over the child even though up to that point their control had been about as strong as it could get. The split between shy / subservient / meek and boisterous / dominant personalities even from same-parent households becomes clearer with this mechanism. The unpleasant-avoiding exchange would start when, faced with an unpleasant upcoming even like going to

²⁰Then again, there were many such requests: they picked what to eat and when, what activities to do at what times, and where to go. I just don't notice it because I already expect their dominant role as socially accepted notion of "parent" so I don't call this "excessive".

bed (while not actually tired due to lack of evolutionarily designed exercise levels) or taking a bath or eating a soup, A would suddenly want to do some other activity, which usually was whatever he was currently doing so no pause / deliberation of just what to do was evident. Of course the activity itself was immaterial: as long as the "bad thing" could be avoided he would be happy with any sort of other activity. I saw this also with the parents: when about to witness the unpleasant situation of A crying, they would provide a distraction like cookies or a TV show. This point is interesting: the reason A was able to use crying / tantrums to complete his dominance-seeking interactions was because his crying was painful to the parents. It was painful in turn because it set up foundation for their fear of being failures as parents - if they didn't care about their self-image as a perfect parent with an always-smiling kid they wouldn't succumb to his crying displays, and their regular prompting of A to basically be a good prop for a photo / give everyone hugs+kisses shows the flip side of this idealized urge. There is an implicit exchange: we give you material goods and satisfy your wants, you reinforce our image of being good parents. Here we have a fascinating event: a "clean slate" brain brought up in this household has judged, by its absolute / instinctual standards, that it does not at all like its life. It is perhaps at this point that Freud's notion of repression begins to set in: the base urges being unable to be satisfied to the brain's satisfaction, the brain explores the closest allowable ways to satisfy those urges which are bound to be indirect and lengthy while the most direct ways are known to lead to punishment and thus avoided.²¹ From the parents' view, A trained them to fear upsetting him and he found through statistical exploration that he could often get his needs met by making such a display. This gives a preview of what "love" and close relationships are at root: interactions kept up by a need or a fear that is *within* one or both persons, not anything that is shared between them.

Going to bed I noticed that the skin under my left hip joint was more dry / textured than the corresponding location on my right side. This was evidence that I prefer to spend most of sleeping time on my left side. And even though I don't consciously feel such a preference, tracking my motions shows that sure enough if I just "do what feels right" I will often end up on the left side. This makes its way into other choices I typically don't think about: whether I prefer a bed on one side of the room or another (for how it would be easier for me to get in from one side or another), where I sit in a car or on a bus, where I sit at the table, how I set up my work

²¹While on this topic, in society at large we must see suppression regularly to reach what we call civilized behavior - a person sitting in an office all day ought to be seen as unnatural (against instinct) and only possible due to numerous suppression / sublimation mechanisms in place which are considered "normal" - indeed even living in nature will have its share of suppression, so suppression should be seen as a tool not a disease.

desk. I would readily trace the sleeping preference to how my childhood bed was arranged and how I would sleep there facing my parents. Then at present it feels "most natural" for me to sleep in a position which recalls these early feelings of motherly love / care. My dislike for sleeping on my back probably comes from the association of that position with torturous nights forced to remain motionless on a squeaky cot so as to not wake up angry grandparents in the adjacent room. This is concerning, though: how much of my present behavior is due to arbitrary associations to a mistaken childhood feeling / fantasy? Determinism says, all except those that have been forcefully reprogrammed by a new environment. I can look at my preferences in activities, including engineering and writing, in this lens. I like the idea of drawing but cannot bring myself to do it freely, the way I experiment with electronics freely.²² I like the idea of playing piano / composing music but once again have been unable to experiment freely as necessary to learn / progress. In both these cases, and surely many others I haven't become aware of, I would describe what happens as an emotional block: the brain is blocked from investing any energy into the action, and will do it only if forced (by threat of pain ultimately), like a slave that's had enough of a dangerous / unpleasant task and is even willing to rather face the whip than do the task again. From the view of the unconscious, it is indeed a slave to the plan/goals of the conscious and gets "whipped" by the conscious calling up memories of punishment / failure (which the unconscious has to actually re-experience) if the unconscious does not do the desired thing. Anxiety comes when the punishments become excessive and haphazard and the tortured unconscious retreats as much as it can but finds itself hurt on all sides / no matter what it does: it may even accomplish "useful work" in this state, but any inspiration / originality / creativity, the natural domain of the unconscious, will be destroyed over time to a shell of childhood abilities. With drawing, I noticed that I specifically dislike the idea of a water color pallet and imagining the paints on it makes me feel a strong aversion. I know from paintings I found a few years ago that I took a watercolor class - tellingly I don't actually remember being in this class - so my emotional block must have somehow started there, then eventually extending to any drawing activities although I still found myself wanting to try drawing thin line doodles / cartoons - just about the opposite of watercolor and also positively charged due to influence from a

²²And this latter freedom has been receding recently as some of my circuits failed badly while the ones that succeeded led to no *direct* external validation beyond their success. Here then is the mechanism for losing all hobbies / interests: no recognition of effort, and punishment of failure. The brain makes the logical conclusion of not even starting, as it has learned by experience that the above 2 outcomes are all that can come of the attempt. Thinking of the task no longer activates any pathways to reward / urge fulfillment. See also the concept of "learned helplessness".

friend in middle school who liked such doodles and could draw herself - I was seeking to emulate her but the emulation drive never overcame the earlier emotional block on any "artistic" endeavors. Indeed the block was already active even in my first years of grade school: I recall not finishing an art assignment for school (3rd grade?) and getting reprimanded by the teacher. For a while I thought this incident might have been the root of the block, but more likely this was a result of the block which had the effect of further reinforcing it (I suck at art -> I never start practicing art -> others get mad I'm not doing art -> I'm re-affirmed in my belief of sucking at art). So, whatever happened in that art class was bad and chronic enough that it killed all my interest in putting energy into art. Perhaps what it was, was a lack of demonstrated recognition of worth in what I made or attempted to make - the goal of the class was to make me draw so as to keep me busy, not to develop my interest in drawing, and the animal brain even at that age knows the difference and thus rejects the former attitude by avoidance / disengagement / detachment, perhaps because it does not want to find itself contributing to a relationship where it is so obviously used as fodder / entertainment - instead it would prefer to hold an activity sacred / special as an emotional bond to replace a fragile / non-existent parent connection (or one of a similar, "entertain me, kid" manner). I recall experiencing this with photographs - if there is a photo being taken of me I find myself "zoning out" and letting it happen - it is not something I want at base level - one is led to ask why, as this doesn't cause any sort of physical inconvenience? The response is disproportionate to the stimulus, again indicative of emotional charge, and the emotion felt is shame. My avoidance of photos started surprisingly young (even 1 year) as I can tell by most photos featuring me looking away from the camera, so it is not connected to an idea of self-image / fear of seeing oneself; at that age my understanding of the concept of a photo is minimal: all it amounts to is the physical act of the parent trying various tricks to get attention and then once the photo is taken, leaving to do something else. As in [Nicolosi's model] of homosexual identification, what happens here is parental malattunement: the parent engages the child regardless of how the child feels, then once having gained the child's attention, the parent rapidly disengages once their own needs (the coveted photo) are met, once again regardless of how the child feels. This is scary for the child as it realizes on an animal level that it does not have a secure parental bond / a person who brings comfort - instead it sees it has a person who will use the child then discard it, demonstrated over and over in daily life. If a threat comes along the child will try to resolve it on his own rather than calling the parent - giving rise to the "fiercely independent" (yet emotionally needy) stereotype - because calling the parents amounts to an invitation for invalidation / rejection. This is how I unconsciously learned to say only minimal, factual

information to family and even peers: then the inevitable disengagement they exhibit doesn't hurt as I have no emotional investment in whether they care or not about what I said. I can think of a few frustrating / angering instances where I really tried hard to do something nice / helpful only to be routinely dismissed. I would use my technical skills to help around the house only to get punished for "messing with things" I wasn't supposed to touch. This amounts to telling me / training me behaviorally that "your skills don't matter" but repeated with enough different skills the message is "you don't matter" - which is exactly the parent's base sentiment, but it is traumatic for the child to reaffirm yet another time that he has no parental safety net, especially amidst poor friendships, to mean he has no one but himself.

This is a truth that is kept far away by the brain as it evokes hard-wired instinctive responses of pain (which served to keep early humans in groups for survival): its reality is ignored and a real-world reminder of it in the form of parental invalidation is learned to be unnecessary + painful so the child avoids engaging in the first place, particularly if the parent shows an over-excitement to engage as this is found to be a mask for rapid disengagement to follow (as in the case of taking a photo). As I have / had literally no model of an emotionally healthy relationship, I probably also do the same invalidating things in my interactions with others and thus get excluded from healthy circles / groups. The distinction to make here is between a cheap/fake "very nice painting! now do another one, you stupid kid" and a sincere/genuine curiosity or interest "you've really improved a lot! how did you get this color to look like that?" - for this to work of course the improvement also has to be demonstrable otherwise the brain will file it as insincere / this is said to everyone regardless of skill/competence thus is meaningless as validation. The latter has no place in typical child classes (there are too many kids and only one teacher cannot show sincere care to everyone) and while usually children are able to get it from peers or that failing fall back on a secure / certain foundation with family and rebuild, I had neither peers nor family willing to offer this basic emotional support. I was plainly, demonstrably, unwanted as an individual and only tolerated as a servant or means to an end. This can be contrasted with my experience in a rocket building club, around a similar age (3rd grade) - there I recall interacting with the (male, father figure) instructor who showed genuine interest in technology and my attempts to build, giving relevant / in-tune advice and feedback. This experience gave working in a machine shop so much positive emotional charge that it has carried me through the past 5 years developing skills in machining as a hobby / for fun (the fun was from rising up to the ideal of the shop instructor and thus re-activating those few powerful rewarding memories) until now, with limited social recognition of my work / effort, I see machining as a more or less

practical matter - I'm happy to call myself a good machinist but the positive charge in just machining is gone, now I need a good reason to do machining. Perhaps I can trace a definite disconnect back to an attempt at mentoring an undergraduate student in machining - this student left halfway through the machining session never to be seen again, and this was a social blow. So the person I am now is entirely based on childhood influences like this and their interactions with the world / other people, and ongoing influences that modify my behavior to become more desirable / attractive / validated. In understanding this mechanism now I can exert an influence to counter the "random" external tugs and thus more consciously regulate what makes up my "self".

8

Sex Drive

I recall a few scenes of the show House MD, which I think are somewhat useful for learning social interactions - whatever it is that House does puts him in a position of respect / high on the social hierarchy: this would be being sarcastic / witty / putting people down, while also being cocky and correct. The clothes he wears sort of differentiate him (along side his hair / face ie older man who gives no fucks), but just watching visually doesn't really make it obvious how he is superior - it is the conversational exchanges which establish this, and as such it is a decent case study of base psychology. The trick in what he does is like poker - he knows just how rude he can be because of his value - trying to go above that will just earn laughter / ridicule while going below that keeps him from achieving top social potential: it is claiming to show off superiority and then actually doing it when challenged. But one scene that stood out to me involved a demonstration of a robotic surgery machine [<https://www.youtube.com/watch?v=M6naJ3yXpKY>] - here House has a female character lie down on the operating table while he operates the controls, slowly unbuttoning her shirt. This scene had high sexual tension: yet no sexual objects or dirty talk and a wholly non-anthropomorphic robot. How is this possible? Shouldn't porn work because it shows two naked people in coitus? How can a medical robot moving around be made to look sexy? Ultimately it doesn't "look sexy" ie it is not attractive, it's just a bunch of metal bits and pieces: it looks powerful / dangerous / mysterious. The scene had a close up of the sharp scalpel on the robot and how fast it moves and how from her view it is unpredictable, and this element of danger adds to the sexual aspect. At the same time we see House at the controls (far away ie not in sight of her) so the idea here is that he can do whatever he wants - it wouldn't be nearly as sexy if it was just some program operating the robot, the fact that it's House matters. There is a contrast made between the cold precision of the metal bits of the machine with huge power behind them, but controlled to

gently touch the woman's body rather than cutting it up. Another sense of hotness is in the unpredictability of the robot such that the woman has to stay still and can't really control what happens. Putting it all together we have the basic dominance / submission sexual drive mentioned earlier and that I would argue is evolutionarily stable. The scene would not be the same with a man on the table and woman at the controls: it could be done but then the man would have to be portrayed as submissive / feminine and I feel the sexy aspect would still be reduced: the expectation is for the man to be at the controls. This might be coupled with the "natural order" that males are the ones to search for females and do the action of insemination - perhaps started long ago as different species where one ("male") had the instinct to "attack" another ("female") which in later convergent / symbiotic evolution led to the notion of male / female of one species. Thus evolution makes it the male imperative to "secure" women, thus to be dominant in this sexual fantasy / urge.

Looking more basically, the male cannot try to inseminate / "sting" everything: it would be either a waste of energy or a way to get killed by angry males / unwilling females. This leads to mating rituals like play-chasing (or maybe not so playful: depending on how self-sufficient the babies are the father may only have minimal involvement thus "rape" would be evolutionarily selected). From the female's view, it is desirable to have the best surviving DNA for the next generation - and in social animals like humans, social indicators of survival also come into play though only on top of more basic urges (ie physical attraction). Thus what women want, in coarse terms, is a powerful mean destructive force that will destroy everything in the way but treat her gently and affectionately while firmly "putting her in her place". This is what the robot scene shows: the woman has an intellectually skilled man operating this all-powerful dangerous machine but doing so in a gentle way eg I'm gentle but I could hurt you any time - I choose to be nice to you. There is a full trust established - the woman must fully trust the man at the controls, realizing her life is on the line but choosing to stay because she trusts the man will treat her gently even though he could hurt her, and this is a mental rather than merely physical submission and is also sexy within the same submission / dominance drive. ¹ This very powerful drive is what the "red pill" discussions describe in various ways; it is why the tropes of girls going for bad guys and nice guys finishing last work. Evolutionarily this makes perfect sense: a successful offspring would be had by mating with the dominant monkey that fights off all the other attackers / is mean but still remains protective of his mate. Just as the scalpel on the robot was important for sexual tension in the scene, the real

¹This is why BDSM is sexy - the woman demonstrates her willingness to trust the man while the man demonstrates his force + kindness in caring for this life and making it better. Both are mentally satisfied - even without physical sex.

danger of the "alpha male" hurting any competition needs to be present ² to be seen as sexual / desirable. There's not many physical ways accepted now (though BDSM is one possibility) so the danger needs to be demonstrated in the social realm: wit, mockery, sarcasm, out-thinking, intellectual + social superiority. Men that demonstrate such abilities, as House does, are seen as leaders / alpha from their words alone and this is enough to make their appearance in a scene like the robot one be considered sexy. If the robot operator had a feminine / smily face with weak physique and crappy conversational skills the scene would just be considered creepy, but when House does it it is sexy: again it is wise evolutionarily to dissociate from weak males that are likely to get killed by competitors because doing so not only puts the female + child at greater risk, but also disrupts the built-in reward system of the social hierarchy (sexual access as a reward for males to compete / defend / fight) ³ and disrupting the hierarchy makes the whole group less likely to survive - the monkeys don't plan this out consciously but evolution ensured that actions contributing to group survival get ingrained in DNA / social patterns. It's not for men to seek comfort - this need I've felt for a long time to be held + comforted / told everything is OK is actually a feminine / submissive approach which was instilled in me from childhood trauma and not being able to act masculine (raised by women) yet from a natural point of view I am supposed to dominate and fight and protect - to be the source of comfort and not the recipient.

This is not to say that domination must lead to abuse / unhealthy relationships. Indeed what a woman would seek is not just a dominant man but one that will force her to improve her life (to reach her goals) as it were - while a man seeks not just a submissive woman but one that will force him to improve his life (to reach his goals). The sex drive and other emotional urges can end up misused and perpetuate an unhealthy relationship, but the existence of the dominance/submission fantasy need not stop both parties from feeling emotionally and physically better about themselves. In this way I see today's society as being almost wholly at odds with our natural imperatives - with full-time work, kids being an individual hassle rather than communally raised ⁴ as well as an expense (marriages and relationships fall apart after children - consciously parents are supported but unconsciously one or both hates the kid and grows to hate the other part-

²This is why women actually enjoy shit tests: seeing that they are dating a superior male plays into their sexual drive so a dominant response is sexually stimulating, driving them to do more shit tests. Like the girls saying "I'm scared" doesn't want to hear an invalidating "don't worry", the girl doing a shit test doesn't want to hear an invalidating direct answer. Both are a call for a specific emotional stimulation.

³even explicitly stated, like with having access to many virgins in the afterlife promised in some religions

⁴Another example of individualism vs group-bettering approach like shared parenting in a tribe

ner for making the kid - it messes up the D/S trust dynamic mentioned above on a subconscious level: how can I ever trust this person when they have made my life into this mess?), the high population density and ample interaction potentials make cheating extremely tempting. I wouldn't place as much emphasis on the feminist movement of raising "feminine" men - I guess I am as I was raised primarily by women with no male role models, because there seem to be enough bad boys to keep society moving - the problem is that education and career success are taught to boys to require effeminate qualities so the bad boys that are left tend to be low education and thus most population growth will occur there. The middle class families I see are more or less unhappy marriages - happy surface / conscious representation but unconsciously the partners are indifferent and live like roommates - because they got married based on conscious / social considerations rather than underlying physical + emotional attraction. It is why women cheat: because they find the risks to be preferable to seeing their partner in a sexual capacity - they are unconsciously repulsed / hate the partner because he does not play his part in the above D/S drive thus sex is not mentally stimulating and intrinsic urges tell the woman "this is not good for survival". A number of other drives ie for dominance or social leadership or ownership or community / shared purpose are denied / neglected by the current culture which is defined largely by conscious rather than unconscious drives, thus while it may be materially successful (as conscious thought is good at physical actions like manufacturing) it is likely emotionally harmful. We see evidence of this in the rates of depression - people talk of having depression like it's a viral disease or an intrinsic part in their brain but depression is just the wholly logical + sane response to a world in which enough unconscious drives remain unfulfilled. The cure is both simple and saddening: just fulfill the unconscious drives (perhaps even at the cost of conscious drives ie materialism / hedonism) - sad because this suggests that society at large is actually really unhappy with their lives below the surface.

I skipped a social commitment, having stayed up too long and falling asleep right before it, likely an unconscious message of aversion in the self-sabotage. Yet on the other hand it ended up being a choice to save the fantasy of me being social + desired in a group setting if I just put in more effort, instead of collapsing the wavefunction and finding out definitively that yet again I would not be welcomed and would find my abilities wholly inadequate. I recall a few instances of being at parties and more or less automatically excluded. Tolerated but not welcomed, as in the rest of my life. It's sad because I really don't know what causes this or if it's even within my power to fix. I saw an internet comment about a photo: "the kid looks autistic". Maybe this is it. I would imagine a normal person wouldn't call it autistic but would just feel off about the whole notion, some gut

reaction that "something's not right with this guy". All I can make of my rare social interactions is a loud+clear sign of "you're not welcome, you're not wanted here". I imagine in my mind the picture of an autistic guy stumbling about and others putting up with him out of pity. It's hopeless, I need to just die already, instead of spending my time trying to fit in to a society that hasn't given a single shit about me all along. I've been tolerated because that's the polite thing to do, no more no less. Just as a matter of principle, why should I continue to live and give away my time to help this society get even better at fucking me over? The whole concept is disgusting. At the end of the day my brain is aware that I'm replaceable - nobody cares about me as a person - if I die another person who can do my job will be hired and that's that. Why am I still here, like this is just sad. I passed by a mother with two children walking on the street, and I was disgusted as I saw the kid trying to get her attention while she walked on, responding but blankly, without interest or concern. This is it, then - the two big monkeys couldn't bother to resist their hormonal urges, had unprotected sex to a dirty orgasm, and now have to walk around with the two fuck trophies, reluctantly dragging them to school and back. This is the fucking meaning of life. The kids are programmed by books and movies to fight and then be rewarded by a nice long romantic fuck, and they continue to try and satisfy this fantasy which makes working an office job 40 hours a week seem *sane*! How sick is that? Following this dream they fuck and are blessed by a little accident of their own, whom they then fuck up to derive some remaining pleasure before everyone dies. A cosmic fucking joke. It is disgusting, manipulative, narcissistic, self-serving shit at every step. We are just big fuck monkeys and all our technical creations are also a product of the urge to fuck gone way off the mark. Here is the sex fantasy: men want to hunt, they enjoy it and find it interesting, they hunt not because they're hungry but because they want to. This drive is subverted into scientific and material creation, and also the chase for sex. It is what makes some problems seem exciting + worthwhile and others boring + pointless. Women want to show off, they enjoy it and want to do it (jealousy, lies, and all) not because they have to but because it is exciting. This drive is subverted into finding the best / richest male to show off, and raising the best babies to show off, as well as protecting their nest / babies so they can keep showing off. It is what makes jewelry and trips to Paris and dating a millionaire seem exciting + worthwhile, while anything that is not scarce or worthy of attention seem boring + pointless. So it ends up being the monogamous nuclear family is the oddity which brings pain + abuse as it is contrary to the sex fantasy, even if it helps society grow. Now that growth no longer looks desirable, monogamous relations *should* fall apart, they were the unnatural deformed / twisted version of the sex fantasy to begin with, not the other way around as the movies teach us.

Movies conveniently trail off at "happily ever after" without bothering to explain how that happens - because actually it doesn't (the chase, on the other hand, is the focus of the movie as it is what the fantasy is about), the feeling of forever is a lie in real terms. Life becomes a pathological search for the peace of death in all the wrong places, because the simplest solution of death itself is de-facto blocked. Whatever. I'm just disappointed at the whole situation of my life - I turn people off and away just by my existence, and this is not a fantasy of a depressed person but objectively verified by statistics of my real-world interactions. Recognizing this is like getting a time machine to peek into the future: I know already that any social interaction I attempt, whether going to a party or trying to start a relationship or joining a club, surely enough the time will come that I look like an idiot for trying to fit in and am excluded from the group. It's just not worth trying any more to prove myself right once again, at some point it just gets old but no less painful as it is not just exclusion but the build-up of hope followed by the hurtful crash as the hope ceases to materialize. If I don't have hope then I am just ignored as a passerby and that is neutral, if I try to gain acceptance then I have to have hope and I know that doing this is just asking for it to be destroyed. And sure it's a self-fulfilling prophecy but at this point I don't even care, there were enough times in the past where it wasn't, I'll just die quietly out of the way, as society has made it abundantly clear it wishes I would.

Thinking back on the thermal / chaotic model of the unconscious, I tried imagining whether the unconscious as a system would feel suffering, and if so how I could minimize it through conscious action. I would imagine that to the unconscious its qualia are very real, and capable of activating all our deep emotions of fear and pain as well as joy and pleasure. Concepts are activated through association, but then the unconscious has a special role in constructing a plan of action / intent (fantasy) based on these concepts, which later makes its way to consciousness if its outcome is acceptable. From the active concepts at a given moment, a neural discharge connects the concepts in an action framework ("I will do this, then this, then this") and continues on to the expected outcomes which are wholly based on prior learned (behavioral programming) qualia experiences which are in turn activated by association to chosen / tested actions. Then at a given moment the unconscious feels a plan of action chosen chaotically and the associated qualia. If, say, most random plans lead to a connection to a feeling of fear or pain, then the unconscious will spend most of its time in fear or in pain. The way to reduce unconscious suffering is thus to remap negative associations onto pleasurable ones, by re-training behavioral connections ie same stimulus but a known desirable outcome, similar to PTSD de-conditioning treatments but self-imposed (even without awareness) as it were. Then it is clearer why sexual fantasies so commonly involve a regression to child-

hood punishments - there is no particular benefit in the mind returning to a helpless and less powerful child/infantile state, indeed this would invoke the memories of helplessness at that time and associated unpleasant qualia - except for the possibility to "fix" the negative by replacing it with highly pleasurable sexual stimulation which then comes along with a feeling of control / purpose. It wouldn't be surprising if the specific punishment or feared situation is repressed / not seen by consciousness / painful to think about purposefully, and then we may expect that in times of known pleasurable experience (sex but perhaps also subtler times) these fantasies crop up in an attempt to reprogram the associations so as to reduce unconscious suffering. And while it is repressed, it ought to have many links / be often activated (such as punishments using household objects being particularly damaging) in order to be on the mind and greatly affect the unconscious / exert its presence - indeed this is a hallmark feature of a fantasy, that it seems always present and egging on consciousness to attain its goals. So, devious sexual proclivities are indicative of a suppressed fantasy in turn indicative of a hurt / suffering unconscious (and associated interpersonal / mental problems in a relationship and for well-being) in turn indicative of a harsh and not fully processed / accepted childhood life (recall that even a materially "good" childhood can be mentally damaging and harsh - if a child feels hurt then he is hurt, even if "it is only a little thing"). Self-harm could be explained in a similar manner: when pain seems random and ever-present (such as the pain of rejection/dissatisfaction in depression, or the pain of feeling trapped in a living situation where one is regularly invalidated), forming links to just about everything, there is a measure of relief in learning that "I am in control of my pain" - there are also elements of self-hatred / destruction (a fascination with the process of inflicting pain - onto self when others are not available) and of a call for help (with visible scars) so I would not claim this fantasy view to be a complete explanation.

The unconscious suffering view also shines a light on the effects of stress / performance anxiety. If an action is taken for the first time, without any expectations or associations to failure or success, it is taken in a neutral (not emotionally charged) way whereas later on it will be found to have charge based on learned connections (ie how others respond / treat you, whether physical or social pain is felt) - indeed the neutral approach is capable of handling the action more effectively than the self-doubt and overthinking imposed by emotional expectations, leading to the notion of "beginner's luck". A typical case for a stressed person is having to complete a task classed as high-stakes or high-impact on the self's life: a final project due tomorrow, a big deadline coming up, an exam to prepare for, a performance in front of a panel of judges. The person knows of the ramifications of the task, if not consciously then emotionally, based on associations with past (parental / societal) punishments of failure or even the primally threatening

situation of having a crowd's gaze on everything he does. It is necessary to keep thinking of the action to undertake so as to come up with a plan to do it, and yet every time the unconscious does this it triggers through association practically every instance of a punishment for failure ⁵, so it is in a situation where it gets trapped in a self-sustaining (because consciously one cannot stop thinking about the situation - this much of a plan is a clear choice) circle of pain. I wrote above bitterly about missing a social event - I couldn't bring myself to go because my unconscious overrode my conscious desire to go, feeling a risk to livelihood based on relived childhood experiences of perhaps angering a crowd of peers; this is the process at work that keeps me from touching a hot stove even if for some reason I try to consciously do it. A similar occurrence happens when one feels stuck / procrastinating despite an impending deadline - each step that is consciously proposed is seen by the unconscious to have led to punishments in the past so the unconscious overrides conscious desire in order to keep itself safe (see also Learned Helplessness). Even if punishments experienced by the individual (say in childhood failure) are individually mild, the notion of a high-impact performance manages to activate many of these memories at once so their combined force is devastating. This experience of pain by the unconscious becomes unbearable and the reaction is one of instinctive aversion - the fight / flight / freeze reflex, much as if one sees a bear and furthermore the bear keeps following behind them closely and ominously - even if the performance is totally mild it is internally felt as a life/death threat. A logical, calculated to be optimal approach to the performance is possible only if the unconscious is at peace - that is, if past punishments were fair and just and appropriate, from the view of the punished (if in turn rewards were very easy to attain, a "cocky" attitude prevails), as it is not possible to ignore the unconscious - only to reprogram it over lengthy time scales (which may be no small part in the necessity of practice). Incapacitating stress responses are thus indicative of harsh or unfair / unexpected past punishments, and depending on the specifics of the situation at time of punishment and at time of recalling it, the individual might choose one of the three Fs: for instance if punishments were overwhelming and inescapable the individual may choose freeze (a parent punishing a child), if there is a fantasy of rebellion against the punisher for unfair treatment fight may be chosen (a physical bully at school), and flight is effective if the

⁵in order to avoid whatever choices are believed to have caused the failure - as required for any notion of learning. This is because these choices were (ostensibly) made in the first place before it was found that they lead to failure, therefore the "default" solution of the optimization was to make such a choice, and to avoid failure this choice must then be actively steered away from in order to find another solution. Learning the proper steps through trying and failing does not generate the same neural connections as getting it right the first time, even if the action performed is the same.

punisher is too powerful to fight but not territorially encroaching (a social bully at school).

This explains procrastination - it is not merely not wanting to do something, as there are plenty of things I don't want to do but have no problem doing if I know it is worthwhile, in fact it is a common sentiment that "I know what to do and how to do it, but just cannot bring myself to begin". What is here is a flight / freeze response, manifested either as distracting oneself (ie the essay is due tomorrow - I suddenly feel the need to wash dishes / check email / go for a walk) or as idle thinking about the task (ie I should write this... and I could write this... I should really start now... Two hours have gone by already, what have I done?). Fighting from what I can tell is more rare (which is in line with fighting typically being not useful / accepted in refuting failure in the present society and in itself may be punished as failure by social shaming / ostracism), however when it occurs it may be directed at any hapless bystander or physical object that happens to get involved in the plan and does the tiniest thing to disturb it (even unknowingly). The spouse that comes home "stressed" from work and starts throwing plates at the other partner ⁶ is succumbing to such a discharge of unconscious hatred for past punishers. It is unfortunate that physically these unconscious responses are ineffective for today's abstract tasks like schoolwork and exams and bosses' demands (they are effective for "natural" tasks, like not eating nausea-inducing berries, or walking far away from the bear's territory, being what they evolved for) thus setting up a reinforcing cycle which pins the unconscious against itself using the logic of the conscious - an initial excessive punishment / no reward leads to future subpar performance (due to unconscious avoidance) which gets logically incorporated into the conscious notion "I am a failure" ie failure defines me, which in turn makes it a certainty that subsequent performances will trigger avoidance even more readily. It is completely absurd to read accounts like "this assignment determines my grade in the class, I've had a month to finish it, it's due tomorrow and I haven't started yet" - from a logical standpoint the course of action here is obvious to split up the work over a month, and the fact this was not done shows beyond all doubt that the action is emotionally charged, warping one's ability to logically handle it. My argument is that this charge comes from past punishments of failure ⁷ and the realization of high stakes activating many punishments all at

⁶This was my initial prompt for this discussion - it seems such an obvious thing to say "oh he's just stressed, that's why he does this" but really this doesn't explain anything - it's a tautology - it just makes the listener think of an emotion but does not explain what the emotion means nor what drives it. Why should there be such a thing as stress, and why should the reaction be as a possibility anger / short temper?

⁷In the example given, it could also be an "unconscious rebellion" against uninteresting work that detracts / destroys some basic life fantasy (established from childhood

once until avoidance occurs. Thus in a sense a way around this block is to stop thinking of the stakes and all implications of how performance will be judged - as fantasizing on that (ie I will fail the class, then get kicked out of school, then my parents will disown me, then my friends will leave, then I will get sick + die) just activates more and more memories of punishment and reinforces the avoidance instinct. It has also helped me to logically evaluate the results of not doing anything - this gives a reference point to the inevitable logical attempts at characterizing "just how bad" failure will be - in the absence of thought of "what will happen if I do nothing" / a "control scenario" - the thoughts of failure have no grounding and float out of control to fantasies of unimaginable doom (powerlessness); then I consciously compare the realistic difference between not doing anything and trying but failing miserably, and typically failing ends up the better choice thus I have justification to make the attempt in the first place. Somehow in the midst of the avoidance response block, the actual consequences of the block itself remain invisible or perhaps automatically coupled to failure - making the two (failure vs avoidance) consciously distinct lets me intuitively see just where the block is located. ⁸

Earlier I wrote of the case of experiencing wet dreams when I would hear loud footsteps above my head in an old wooden house. I propose that what happened there was the brain using sexual arousal as a pleasant sensation to counter the unpleasant sensation of fear due to the sounds. I typically find myself with a "background music" playing in my mind, and I find this strengthened when I am exposed to "unpleasant" noises like fans blowing or doors slamming or people walking nearby. Perhaps the idea here is the maintenance of the control fantasy (see earlier), a reversion to the self as a more preferable source of stimulation than the external world. I measured my heart rate related to external sound level at low frequencies (under 60 Hz) and found that, in opposition to what I expected, the heart rate was lower when exposed to loud but constant noise than when exposed to quiet constant noise, and it was highest when exposed to quiet noise with bursts and changes. This suggests that at a higher external noise level my brain compensates by playing background music to itself and actually becomes calmer - as the case with babies asleep at a loud party or adults

reinforced ideals charged by social / physical rewards in temporal proximity), thus a loss of potential pleasure which gets treated as a punishment. In this case, where the work itself is "sickening" to do, it is not enough to overlook the stakes - rather the killing of a fantasy has to be remedied by the creation of an equally potent new fantasy.

⁸I realize that a similar explanation exists to why I keep finding myself late to everything: I must have experienced childhood punishments for being late, and with each time I now arrive late and don't experience that punishment I deprogram that traumatic experience bit by bit and find peace in proving to myself I am no longer in that situation. It is an attempt by the brain to fix itself.

using a white noise generator to aid sleep. A sexual response / orgasm is probably the "trump card" for the brain's ability to retreat to itself, and fear - the expectation of pain rather than pain itself - is what activates the response (it could be considered an opposing qualia and thus necessary for conservation). This was depicted graphically in [Nymphomania film] - the protagonist visits a masochist / dom who spends a long time testing out different knots / positions / implements then slowly tying her to a couch. By this point the woman is seen to be sexually aroused, and the scene itself exhibits sexual tension. In a sense, again, the pain is only coincidental - the fear is the desired effect and pain is used to provide legitimacy to it. It is not just the expectation of pain but the inability to avoid it - emphasized (symbolically) as such with varieties and time spent / focus placed on various bondage devices - that is sexually desirable for the sub. This helpless state is decidedly contrary to the control fantasy, so why would an individual ever seek it? A clue is in the reminiscence to the childhood state, for instance where the child was unjustly (in his view) punished - in this sense any childhood is traumatic but some more evidently than others. In a BDSM scene there is shared knowledge that at some point the scene will be over, and everyone will leave sexually satisfied / happy. It is a grown-up version of pretend play, where it is already argued earlier how pretend play in children is used to act out and resolve painful experiences. The unconscious goal of the sub is then to re-create the childhood bad experience in pretend form ⁹ and then live through it with the knowledge that "I chose this willingly, and I know this has definite limits that won't affect my life beyond how I choose it will". The sexual response is due to the unsurprising unconscious re-activation of the trauma which is an onslaught of unconscious bad feelings that the brain counters by self-stimulating good sexual feelings. Yet sexual response doesn't accompany genuine fear, indeed it is seen as a sexual inhibitor. So sexual response is to a feeling of "pretend fear", that is an expected unconscious fear combined with a conscious inhibition knowing that "it's safe, it's ok". Indeed the feeling of sexual arousal might be the fear-inhibitor itself, as evidenced by sexually aroused individuals willing to do nominally unpleasant / repulsive things that suddenly regain their unpleasantness after arousal is gone.

Basically, sexual arousal is the result of the brain feeling fear but also finding that it is logically unjustified (and in this way perhaps erasing a fear / traumatic neural trace), which shares some pleasant "dizzy / weightless" notion with the humor involving a change of perspective / meaning. ¹⁰

⁹which is obviously shown by the language used: "punish me please, daddy! I've been a bad girl". It is worthwhile to consider the trauma might not be an obvious physical punishment, but psychological unresolved stress: for instance daddy always threatened terrible punishment but never delivered it.

¹⁰Such is used with success in pre-coital exchanges as well. It should also be noted that

Self-asphyxiation and self-bondage for erotic means likely operate through the same pathway, as "I am denying myself, I am in control of the pain that I experience". Milder versions can be seen as a baby's thumb-sucking, and an adult's face-touching or hair-twirling, to be interpreted as low level sexual stimulation to distract from an unpleasant external stimulus such as being forced to work in a group or to do something the unconscious does not want. The role of shame in this deserves further elaboration. As [Nicolosi] argues, the homosexual arousal comes from a rapid progression of fear into shame into arousal, fear / shame being established by harmful peer and parental interactions which lowered self-confidence and the control fantasy for social situations. I would of course add that heterosexual arousal uses the same mechanism related to unresolved trauma from opposite-sex parents ¹¹ or peers. I have found that working through my childhood experiences and accepting the unpleasant parts of myself has reduced my sexual interest markedly, to a point where increases are rare and can be readily traced to some originating event - examples include feeling sick due to a cold (perhaps due to the cold itself, but more likely due to childhood memories associated with being sick, such as going to hospitals) and having to participate in a meeting with new unfamiliar people. Perhaps shame would be the expectation of being socially cast out / ignored (as opposed to expectation of physical pain with fear), with obvious sources in parental and peer childhood relations, and shame is similarly worked out by sexual arousal, as evidenced by "sexting" where arousal can be achieved by merely reading / thinking about dirty (socially unacceptable) fantasies (past experiences in a marked ¹² form as "make believe"). So I would likely be sexually aroused by the sight of people who socially rejected me and attaining sexual contact with them (even in imagination) would patch up the negative memory trace left by that experience. I think qualia conservation is again at play here: there is an unconscious experience of pain from bad-memory activation, and a corresponding conscious experience of pleasure for a net zero effect. Trying to recreate pleasant experiences then has the opposite effect of conscious unpleasantness, which sounds unlikely but is actually observable - trying to relive a good experience by going through it in a pretend mode seems to lessen its remembered pleasantness in the deconstruction and causes a conscious feeling of sadness / melancholy.

in a "punishment" there is a negative bodily feeling but actually positive social feeling ie he is always watching me, which is perhaps helpful to recontextualize real childhood punishments where abandonment co-occurred (abandonment being a likely sexual turn-off just as real fear).

¹¹This is why men are sexually aroused by women, and women are also aroused by women.

¹²the "marked" of [Affect Regulation] is a playful exaggeration to distinguish it from the real thing

It is instructive then to continue with the childhood-memory model and question my views on the notion of "love" and differences between men and women. My love (close emotional interaction) for women would obviously be shaped on my interaction with a mother figure (Freud was right again!), and my upbringing was done so as to make me serve the parent and provide emotional support so my "love" for a woman my age ends up being the same construct - it necessarily drives me to try and please / serve her and re-establishes the unhealthy narcissistic pattern - I can't help but follow the associations already established in my brain. The age aspect is interesting - assuming the formative years are soon after birth, attraction will then form to women aged similar to the mother's age when she gave birth (or caretaker's age at that point).¹³ I imagine my mother was mostly avoidant (she hated me as I was an accident in the middle of her professional aspirations) which ended up making me really miss and seek bodily contact at all costs, and this too has gotten into my idea of love and is why I usually fantasize not about sex but about just being held close and having a place of comfort / a home. The lack of a father figure has made my idea of love into the recreation of a full-blown mother-child deeply enmeshed (and unhealthy ie I have no social skills thanks to it) relationship, instead of being a strong figure and starting a family. My "love" is a neediness with a want for closeness combined with self-deprecation and guilt, not a healthy care for another and willingness to help out.¹⁴ On the whole, because single motherhood is vastly more common than single fatherhood, love and attraction end up being such that men's love for women is stronger than women's love for men (if love existed - I'm just using it as a placeholder for something like "emotional attraction") - because male children have to get the affection of the female mother while female children also get the attention of the female mother - the male adult is out of the picture. Thus men rate women's attractiveness higher than women rate men's attractiveness, and catch "one-itis" much more readily than women do - in essence the man-woman relationship recreates the mother figure for the man who will fight much harder to keep her (because in childhood not doing so is dan-

¹³I also find that I have a preference to be around men who look similar to my father at the age he was when I was born, apparently I am still trying to earn "his" affection and care.

¹⁴A baby will follow its pure urges without inhibition - ie closeness and lust (maybe sucking?) and exploration and destruction (throwing stuff on floor) - my mother says I used to love sleeping in bed with her and as a baby I had no hesitation towards this. The urges get inhibited in childhood by traumatic experiences like mother's rejection of sleeping together and other punishments which the child must see as unfair and harsh because he's just following his natural instinct - he can't help but break the rules so the painful negative reactions end up inhibiting direct urge expressions to a level dependent on societal customs. Adulthood becomes a period of undoing the inhibitions while in line with societal requirements ie sleeping together with wife is acceptable.

gerous for survival and the deep associations remain into adulthood) while for the woman the man's presence is a basically not emotionally charged occurrence - she can break up without feeling much regret or heartbreak because to her it's just another guy but to the guy it's losing a mother / danger of death.

Why do men and women get together anyway? I believe sex is a primal attraction - seeing a naked woman a man will want to fuck. But why relationships and setting up sex in the first place? At this point I believe simple societal momentum - it is expected for women to be in a relationship and they use this as a status symbol (indeed the notion of wedding is probably emotionally charged for a woman more so than love for a man) so they put up with men's advances - but men are the ones making advances, making it clear who finds the other's companionship internally most desirable. With this lens we can look also at homosexuality - gay men probably had no significant / trustworthy mother figure and in fact has gotten hurt by this figure, so he finds greater comfort in opening up to men and will probably seek the feminine role (if the mother had carried out a responsibility flip - ie expecting the child to care for the parent) - a top / masculine gay role would be due to a strong father relationship in the presence of an unattractive mother relationship. A lesbian role would be a parallel scenario with a disagreeable (not merely absent) father figure and either strong or manipulative / invested mother relationship. Bisexual behavior would stem from no clear mother or father figure so the individual is mostly free of emotional charge with regard to sex and can follow sexual attraction which is not in itself gender-specific (hard-wired).¹⁵ Asexual behavior would stem from undesirable / unappealing emotional charge from mother and father interaction so any remnants of physical visual attraction get blocked by the earlier negative memories. I fit in somewhere between bisexual and asexual, with a preference for men and bottoming, which is pretty much an exact reflection of my childhood by the above hypothesis: my parents were largely absent and roles switched from parent to grandparent to nanny quite frequently, my mother easily got mad at me for things I didn't understand while my grandmother emotionally manipulated me through guilt and called it love, my father was my favorite role model but was mostly absent and uninvolved in parenting. I don't think I've ever had a person I could fully trust / open up to, now I'm coming to realize I've actually never been in (or even seen from the side) a healthy friendship or relationship - all I've had was strictly professional or a lukewarm (kept at arm's length) acquaintanceship or my family's narcissistic and emotionally / interactionally tone-deaf overbearing connections. That's it! I was screwed from the

¹⁵But rather visual with using other associations ie good friends or movie characters in emotional scenes

start, coming from this, how could I possibly fit in at school / college and develop my social skills along with peers? It's hopeless! It's fucked up! I will be permanently stunted in social abilities because of this. I guess the tradeoff is that I got a chance to really develop my logical thinking instead of getting distracted by all the illogical mind-numbing troubles of relationships - like emotional manipulation and brain-scrambling chemical highs. Unfortunately the two paths seem mutually incompatible. Still I look at people in relationships and see it is far from constant happiness - in fact it is possible to even have constant bickering / fighting but still remaining stable as a partnership. My ideal would be a close friendship with physical affection but without living together or sharing responsibilities - this keeps the time spent together "fresh" and not restrictive, while also allowing each individual to have a living space to call their own and a chance to take independent actions ie this prevents the establishment of a toxic dependency where one person feels helpless without the other which means the other gets implicit permission to take increasingly abusive actions.

Anyways it is more logically justified to not have any single relationship - why place one person above the whole world of possibilities, why pair up instead of having 3/4/5... partners? Or none at all? The idea of pair bonding and significant other is a societal construct rarely questioned but not a rational choice. Staying mostly independent and in pseudo-relationships (seeing each other for sex only, more or less) ends up being better for the individuals but seems counterintuitive¹⁶ - for the couple in love it seems a clear choice to want to move in together so they can spend time with each other. Again to a certain degree this is cultural inertia (ie they are expected to move in together) but it is also a reasonable choice of action based on their feelings at the moment: I enjoy spending time with this person, thus I want to spend more time with them, thus I want to move in together. But in reality this ends up being the wrong move - a honey trap (sure enough leading to babies) - because moving in together kills the idealized fantasy of a magical life experience and replaces it with the reality of another flawed person mostly getting in the way - the good moments of emotional + physical connection are still there but they would've been there just the same without cohabiting, just now the possible options have been reduced - a partner cannot get alone time in his own space even if he really wants to - so ignorable issues of earlier become pain points of the present, with a seemingly inescapable bind - the pleasures are worth staying together but suggesting living separately for sanity is likely to seed distrust and break the relationship so there ends up a sacrifice just to stay together that doesn't actually benefit the sacrificing party if the alternatives are considered. From

¹⁶for one, it seems that you get loneliness vs togetherness, but really the tradeoff is loneliness vs emotional mind scrambling, and loneliness ends up the less damaging choice by far in terms of keeping an individual on path to his self-proclaimed goals.

this position, both having been tricked by a fantasy and seeing a letdown, the partners establish ways to maintain their independence despite having the unwelcome (but not realized as such) constant presence of the other - separate hobbies or work schedules, split of house tasks and schedules, even split of sleeping arrangements. The activities done together / cooperatively (vs split up piecemeal) end up being the same ones as before cohabiting - thus even long married couples plan "date nights" - if they so enjoyed each moment spent together there would be no need to recreate this pre-marriage state as each minute of the day living together would bring this goodness to them, but alas it just does not - the fantasy is a ruse. Cohabiting is a trap because while the logical consequence / pull of the infatuation feeling is to get closer, getting closer is what actually kills the infatuation - because infatuation is based on a fantasy (of fixing parental unrequited love) which can be maintained plausible only as long as interactions are limited in scope such that clashes between reality and fantasy do not occur. Mutual infatuation is even harder to attain in this sense - both partners' fantasies must be satisfied by their physical interactions without clashing with reality so a limited scope of interaction makes it less likely that a "landmine" will be stumbled on. The mistake is being too logical about the feeling of longing that "solving the problem" will lead to some paradise, whereas really the feeling itself is what is desirable and to maintain it the "problem" (of being apart) is actually a requisite.

Happiness would lie in chasing the feeling rather than trying rational steps to "make it better" - maybe there is no better. In other words, if you're enjoying life, don't change it (if it works don't fix it)! The anticipation of something amazing in the future is what keeps the relation alive (it also keeps the self / ego alive...), so keep the anticipation going - breaking it down with a necessarily subpar (vs fantasy) reality is a logic bomb ¹⁷ that destroys the fantasy and the pleasant feelings - the relationship flounders even though by all rational metrics it should be getting way better because the couple is living together now and doing all sorts of great things together. The scariest horror movies never show the monster - because seeing that it's just a guy with makeup destroys the build-up, the primal fear, the whole reason people go to see a horror movie - because the primal fear is beyond physical description and any visual representation ends up being a let-down as it plants a logic bomb against the feeling of fear itself, making the movie less scary. I enjoyed [Oculus] for this reason - there is a scene where the protagonists set up cameras to observe the haunted mirror, and whatever imagery the movie might show - a person walking out from the mirror, tentacles, blood - would collapse the concept of fear

¹⁷All the more powerful because it involves not just word logic but an actual physical demonstration of reality which makes the fantasy thoroughly untenable so the mind must discard it (or discard reality, as it were).

into an arbitrary representation "oh just another monster": what happens in the movie is the protagonists find the cameras pointing at other cameras, and on reviewing the recorded footage they see that they themselves moved the cameras this way - that's a brilliant way to keep the buildup strong and the mirror as a representation of something inexplicably dark. At some point reality has to be used - ie it has to be reduced to a mirror so as to not be completely abstract thus inexplicable / not communicable, but the underlying goal is emotional communication of fear not a physical theory of how evil mirrors work (the mirror is indeed arbitrary). This demystifies lots of logically incoherent reactions: sex life suffering right after a marriage, stress leading to shouting / tears on a wedding night or even at the reception or shortly before, post-partum depression, fighting + bickering while on a long-planned high end vacation, breaking up after going on a destination trip with a partner who paid / planned it all, tears of joy (witnessing a childbirth), coldness after a long-awaited anniversary celebration. Maybe, the more anticipation (due to both instinct-level and societal expectations) the harder-hitting the logic bomb of reality as it destroys increasingly more of the fantasy-based (and deeply pleasant) world model in the individual. It is sad because there is no satisfying it by material means - the "bridezilla" ¹⁸ who has to have everything just perfect will always be disappointed and blame it on an insignificant flaw of the physical event - the disappointment is because nothing physical can possibly live up to the fantasy and the event itself is actively destroying it with each passing second - of course they would get emotional about it. People seem to dismiss it as "just stress from planning such a major event" or narcissism / anger issues or even "tears of joy" or "it's a stressful situation in their job / home / family" but the tears and anger are because of the collapse of countless wonderful possibilities to a single inescapable reality - no matter how materially good.

If a friend is polite to me and invites me to outings it is not because "he is a nice person" but because I help satisfy his fantasy of being popular / a leader, or he respects me because I satisfy his fantasy of his ideal image of self / something to aspire to (in turn perhaps by ties to a parent-instilled ideal which derives its standing by appeal to parental validation / acceptance instinct), or he likes the way I look and has some unconscious sexual fantasy in which having me around is necessary, or he wants to demonstrate to himself that he is a kind person to recover from some past ordeal. And I would accept his invitation not because "we're good friends" but because I have some similar sexual or group acceptance / validation /

¹⁸the existence of such shows just how messed up our cultural expectations are - setting up girls from childhood that this will be the most important day of their lives when it's just another day - creating a neurosis for no reason (like with santa claus) and, in typical fashion, making fun of them for showing signs of hurt.

power or self-image fantasy that for me this satisfies. My parents call me not because "they care about me" but because they felt the need to satisfy an urge that has come up, to re-establish in themselves a mental image of self as a caring parent with a loving family sort of ideal, or they wanted attention / validation, or they wanted a distraction from some unpleasant / insecure situation and knew of me as a safe fallback. It is impossible to care about other people when all we have are our own feelings and rudimentary simulations of imagining self as someone else. We care about satisfying our own urges, and that's all we care about - if they happen to involve other people so be it. People who truly have no social urges are uncontrollable by words, they have to be kept physically restrained 24/7 as it is no pain to them to ignore / lie / cheat / hurt and do as they please. The glossing over of this cold state of affairs by society with words like "love" and "friendship" leads to many irrational behaviors. There is the notion of a "pussy pass" - women demonstrably get less harsh punishments in courts and in social settings, because their cute appearance + voice appeals to others' instincts to be protective rather than punishing. On a gore website, people make jokes and nonchalant comments about videos of tortured / beaten-up people¹⁹ while the same and even milder treatment of animals is met with offense and bans and threats of torturing the responsible person (the irony?) - it's clear that the cute appearance of animals is at play, and also that the visitors of the site are really looking not for gore but for a way to take out their violence against people which social norms does not permit them to do physically so they substitute a mental representation as good enough - they did not come to see hurt animals nor is this pleasing to their child-protective instincts, they came to see people suffer + get hurt. Narcissist parents groom their children to have a high urge for closeness / subservience to others by expertly withdrawing their affection so as to milk the child's need for comfort / care to get the most selfish use out of it, and then the children are ready to make huge sacrifices for "family" while their family doesn't much care if they live or die. Insecure parents depend on their child being always-happy so as to not threaten their fragile self-image so they raise a spoiled child, the child eventually learns (unconsciously) to control them by appealing to this fantasy / cooperating with it conditionally. People who do not look attractive or fulfill a fantasy get systematically excluded / ignored, becoming "forever alone".

¹⁹"Some use humor as a way to deal with dark images" - yeah right. Humor is an unconscious violent response in wanting to join in to do the killing, like a gang of apes going in for the kill - instinctive.

9

Privacy and Grossness

What is the origin of concepts like privacy? As suggested earlier the reason I would not want to share (say) my sexual preferences or life goals with strangers on the street is because I am not ready to face this aspect of self to logically incorporate it into my "I" world model. For example if I still place a lot of trust in the notion that sex is taboo as taught by my parents (with threat of punishment) then I have no place for accepting logically that I actually have sexual interests because then I have to accept that I am a "bad" person vis-a-vis my childhood ideal of self. ¹ Life goals on the other hand are related to the concept of strangers acting in good faith; I need to seek their validation so hearing them say "your life goals suck, you need to do X instead" invalidates that principle of my logical world and makes me question either myself or the nature of all my relations with others. How does the brain make the decision to share or censor information? An external stimulus prompts it to think of a taboo topic, for instance I overhear someone in a group talking about sex. This activates within me thoughts of sex and associated topics which I can now consciously (logically) access and bring up in conversation. If the circumstances align, the brain's optimization finds that saying some phrases to contribute to the discussion will fulfill my urge for social acceptance. At the same time the brain sees emotional effects of what has happened to it earlier when it's had to bring up such topics: for instance parents shutting down any touching or thinking about the genitals with punishment (particularly social punishment ie not acknowledging or acting "cold"). ² If the latter emotional punishments outweigh the benefit of fulfilling the social urge, the topic will not be mentioned. The feeling of risk, like climbing on a mountain and

¹This is seen with the difficulty of discussing sex even with an intimate partner and even after the act when "all the cards have been shown".

²In turn because there is a sexual aspect to the adult-child relationship (especially the unnatural one where the child is "owned" by the family and controlled 24/7, the only legal slavery today) which the parents are not willing to accept into *their* logical worldview.

being afraid to fall / any little imperfect move will lead to big punishments, which comes from the unknowing child periodically stumbling unaware onto sexual topics and being punished out of proportion, leads the person to feel "awkward" and blush (a stress response, like staring at the potential fall on a climb) and actively try to change the topic. Stern questioning of the blushing person, even when done in good faith / from a genuine desire to connect, will further trigger memories of parental punishments where similar questioning was a precursor to punishment, and will place the person into an unpleasant double-bind: either answer and get punished (based on extrapolations from the past experience) or don't answer and get punished for being a non-cooperative conversation partner. Both choices recall painful memories so the person in this moment feels both indecision and pain, even though no actual punishments have occurred (or even will occur, but this is not known beforehand). The brain tries to see if there is any explanation that won't lead to pain, causing the person under question to freeze / choose his words carefully. Being aware that being silent for too long also leads to punishment, at some point the brain picks the lesser evil to proceed.

As an example, I had to present in front of a class for an assignment, and got some critique of the presentation. There was no reason to be upset by this event - their criticism / suggestions were fair and conducive to improving the presentation for a better response. However I was upset - probably because my brain recalled instances of being harshly / unjustly punished for anything that wasn't "excellent" or top grade. I had been taught, and inevitably incorporated into the self, that failure leads to punishment, so having experienced failure I was feeling bad / upset - in actuality an apprehension and surrender of fighting instinct in anticipation of the inevitable punishment, a mental preparation to make the soon-to-come pain more acceptable (see also Learned Helplessness). Furthermore, my presentation was videotaped and I was sent a link to view it - I never did. Why? It having been done already and me sitting alone in the safety of my house there was no possible risk to my social standing yet I had no interest to review it - again the issue here is in facing the self, not facing others' judgement. Whatever fantasy or mental image I have of the self - "I am a good presenter" for instance - might be either confirmed or refuted definitively by watching the video. Rationally I should watch it and optimize my behavior / style to present more effectively, but when I consider doing it somehow my brain connects it to a punishment. Perhaps the connection is of the sort that "shoving evidence in your face and forcing you to own up to it" is largely used by parents as a punishment and rarely as praise, though this seems too abstract for brain circuitry to automatically find - typical associative links are of concepts / properties, not whole classes of situations. I think the more direct cause is a concern that in watching the video all my

fears of being a shitty presenter will be confirmed and made factual. If I already knew I was a good presenter, I wouldn't be afraid to criticize myself and improve. As it is, this is like looking under the bed and seeing the monster actually is there - maybe I will be better off not knowing. Or, like getting an x-ray for a strange lump - it might be some cancerous tumor but since I don't have definitive proof I can keep living with the possibility that it's not - after the x-ray I won't have that chance to cling to hope anymore. But again if logically I know that it's better for longevity to find out, why is it that I want to rely on hope so much? It's not just an apprehension of experiencing the same state of mind - I'd much more readily give another presentation to the group than re-watch the past one on my own. When I saw the email with the video link I started considering what actions I can take - one of the actions I could take was opening the video, and my brain explored what outcome this will likely lead to in order to decide whether to do it. The image I got was seeing myself, awkward and cringey, stumbling through the 20 minute presentation, and the feeling of awkwardness overrode whatever little curiosity I had to see the video and I moved on to the next email. The question here is what caused the emotional triggering of awkwardness in the first place?

As mentioned above, perhaps awkwardness is a manifestation of a social no-win situation: any action, including silence, leads to expected punishment so the person is stuck until they can find some excuse to escape the interaction. Why would I describe myself as feeling awkward in the presentation? Why does me presenting result in a no-win situation? In physical terms the audience just sits there and watches, giving minimal feedback - they might as well be deaf blind and dumb, or indeed not even there - yet their presence somehow seriously affects my performance. Perhaps it is a hard-wired instinct - I find myself surrounded by a vastly bigger group of apes all looking at me, and I must please them lest they decide to turn me into dinner. The response is logical as I cannot think of any situation in nature where having lots of eyes watching you is a good thing - safari visitors wear goggles that make it appear their eyes are looking in a different direction, so as to not incite the gorilla's aggression. So the unwinnable situation of public speaking is that you cannot leave / quit "the show must go on" at risk of losing status and getting punished, you cannot mess up or you will be punished, and even if you don't mess up you will have to put up with the punishment of forcing yourself to stand in front of a group of apes with their eyes on you despite natural instincts creating an ongoing fear response. But this still doesn't answer why I won't watch the video. Why do I consider that watching it will make me feel awkward? Perhaps once I start watching, I cannot quit as that would be tacit acceptance that I suck at presenting, while keeping on watching will lead to punishment by affirming my fears. This is enough to see that I actually have fears about

presenting - probably because of traumatic experiences of being laughed at by a whole group while I was still learning English. It must be that I have protected my self from re-experiencing this trauma by reasoning in reverse - I survived the presentation and I feel OK, therefore my skills aren't **that** bad, therefore this fear need not be brought up again. At the same time I have a high expectation the video will show me that I'm really bad and punish me: whereas earlier I could not escape the group's laughter / derision (painful on a hard-wired level) because they physically surrounded me, now I cannot escape re-experiencing the same trauma because seeing definitive proof of my performance leaves no mental escape / logical way out of having to face this. Watching the video I put myself in the place of this gang, and if I conclude that I too would laugh at such a performance, this means their insults are not just random utterings but actually describe me - and I know that being anything less than perfect leads to punishment. Having survived through giving the presentation I feel like I got away with smuggling failure past the watchful eye of my imaginary parent.³ I suspect it was a failure but will leave this on a "don't ask, don't tell" basis, because I'd rather not get punished for being a failure. In watching the video I will most likely have to demonstrate failure to the imaginary parent and will then also have to answer for sneaking it past in the first place - and as punishment I will have to face the emotional fallout and physical threats made over the years to keep me with a tunnel vision for "success". The threats in turn worked even though they never would have materialized (and now never will) by reference to other threats that did materialize, like taking away toys or care. Basically, in watching this I will have to accept I'm a failure and thus will lose all my toys and my caretakers, it will be the worst moment of my life. Except of course none of this will actually happen.

Here is then a conflict of self vs self, where the primal brain tells me its evaluation is that this will lead to serious mental punishment whereas the logical brain tells me that a critical viewing of the video will increase self-awareness and improve my future performance. To take this huge risk of contradicting my animal brain, I need to have very convincing logical arguments that activate notions of reward to an extent that they counteract the expected punishment of the action. It is interesting to consider what such a logical reconfiguration will do to my self. As I mentioned earlier, the willpower and control of the "I" comes from the ability to access / activate punishments and rewards memories to get the animal to act on logical calculation results (by carefully countering or supplementing the memories

³The circuit within the brain which gets built up in childhood + predicts the parent's likely reaction to an event, necessary for bonding but screwed up by emotionally abusive or absent parents. This is something like the "voice warning of grave threats of sin" that schizophrenics report (see also [Pragmatics] for a communication view of schizophrenia development).

that the animal activates by default - in case of suppression of logic by fatigue or drugs the reversion is to an "uninhibited" animal state, not to no behavior / inactivity). So facing the fear - finding out there isn't a monster under the bed but there are some bugs to squash - removes this punishment from the mental repertoire. Will it lead to reduced willpower?

⁴ Did I get to where I am today only because my mental interpretation of rewards and punishments were completely out-of-touch with real world impacts and made studying hard / performing excellently much more of a dire need than the "natural" unbiased feedback from peers / school would have demonstrated? Was this a good thing? I am led to think back on my life in school - following strict curfews, no friends, and no allowance to leave the house on foot or by bike or by bus or to stay after school, no choice in food or clothing or activities, I might as well had been chained to a post in the basement. I feel sad for past me. I don't think this was the necessary way - I ended up here now, but I could have ended up even better off / happier now if my skills and exploration were nurtured instead of stamped out to the greatest practical extent. From this point of a quiet abused kid I learned by experience that people are not to be trusted - they inevitably laugh at you or yell at you or abandon you. Worst of all, I had no idea why any of these things happened - I did not have sufficient awareness of self or social expectations to figure out whether I was doing something wrong. Some might say "autistic" but I am more tempted to call it bad upbringing. From all this the message I got was, whatever I did, other people can at any moment turn nasty + hurtful, so I chose the least painful route - to minimize interactions with others and basically be invisible. The way I saw people, then and carried over to now, is like snakes. I'm not familiar with snakes and how they move, so I stay out of the way lest I get hurt. I'd really rather not approach a snake unless I have to. Going to a social event / party is like dipping into a pit of snakes - fuck that. It's a reflection that I have no idea why people behave the way they do, and cannot predict how my actions will affect them and in turn be reflected onto me. This is why I have been drawn to logically study people's behaviors, to overcome my ignorance - from which I would argue that most people don't know how / why they behave either, however they have an intuitive understanding of social norms built up from "normal" childhood immersion so they can do quite well in the social world. I'm OK with dogs, I feel I can understand them, I can get them on friendly terms. Cats, less so. But snakes, I just don't know and I don't want to risk trying. Yet with the primal / logical model of above I feel like finally my understanding is getting to a usable

⁴The concept of willpower needs also to be critically examined, as it is basically praising an individual for going against his desires (because he's been punished for following his desires before). Its fetishization in this society has created 40+ hour work weeks and the technical progress we see, but does it help human well-being and dignity?

level for a real social interaction.

I realized that I rarely initiate contact - passing people I know on the street I will reply to their "Hello" but will not begin the exchange - this comes off as me not caring but really I'm afraid that I will be acting outside some unspoken social rules by initiating. Doubtlessly I was punished with derision many times when I tried to initiate such exchanges in childhood so I've come to take it as a general rule of social interactions that I can't initiate. I shouldn't be too afraid to get involved and build up data for my intuitive model, as this will further aid in my logical analysis of interactions and behavior. I have to make sure that I stay in conscious control (mentalizing state) all the time instead of letting the animal take over - the latter was routine when I was younger: I expressed this sentiment as not being able to comprehend how people could "steer the conversation", I was simply immersed in it like on a lazy river ride. Only now that I have a rough conscious model of people's emotions and body language expressions, putting labels to things I didn't care about before, can I see a path to the notion of steering a conversation: the logical brain stays fully engaged throughout the conversation analyzing it and giving guidelines to the animal to enhance the experience of emotional exchange. As seems common with my earlier symptoms (based on online accounts) I would spend hours after the most miniscule social exchange replaying variations of it in my head and seemingly worrying about nothing. What I would argue now is this was the brain's attempt to rescue itself from its fearful state of not understanding other people by analyzing conversations and my role in them (whether I would be punished or rewarded for what I said), which is a normal approach but usually happens way in childhood rather than late 20s, again I blame upbringing.⁵ Due to the miniscule amount of social exchanges I was allowed to participate in, already having been de-facto excluded by the group at large due to poor social skills / not playing their game, this strategy was mostly ineffective. The urge never went away though, and eventually I encountered a number of online message boards (such as reddit) where I spent (and continue to spend) hours reading specifically the back-and-forth exchanges of commenters more so than the actual informational content of posts. It is as if my brain instinctively knew what to look for to try and weasel out the dynamics of social exchange even from this print-based medium, having never gotten a sufficient chance to be part of them in real life. Perhaps my feeling of reduced aversion to social interaction is due to this model nearing completion, with each new online reading session leaving

⁵Also I expect that in a "normal" childhood the available punishments are mild and logically explained, whereas in individuals experiencing such obsessive analysis of past conversations, punishments were harsh and unpredictable so the brain could not easily explain why something bad has happened and was caught in a processing-intensive statistical matching trying to figure out what is going on.

less and less of a novel insight. Another notion here is feeling secure in my self + abilities, or affect regulation despite social disturbances. If a group makes fun of me for being a "noob", at this point I can take it as a jab and keep going, instead of getting offended and sad as before when I did not have a well developed logical "I" and thus relied on emotional flashbacks to actually traumatic events of a gang of apes laughing / threatening me physically while commenting in a language I cannot understand - from an animal view, about as close as one can get to imminent death.

Another notion of interest is "grossness" - what qualifies as gross / disgusting and why? Why is it that some words describing a gross situation can cause an emotional reaction? Will it sound too much like a broken record to say the reaction comes from childhood punishments? Yet I think this is a logical explanation. Surely there are some stimuli which are inherently unpleasant and prompt avoidance instinctively: snakes, centipedes, spiders, scent of feces, decay, mold, textures of squishy / sticky / mildewy things. These are an evolutionary memory of things that have enhanced survival. However this does not have a clear relation to most other actions considered "gross" such as chewing with one's mouth open. Indeed the table manners of early cultures would be seen as gross by us but those people are just fine following their traditions. Thus this particular instance of "gross" was programmed by culture onto the logical / animal "I", not intrinsic. Consider another example: spitting in a clean cup and then drinking it. Logically there is nothing uncouth or unhygienic about this: the cup is clean and the spit was in my mouth and about to be swallowed in any case. I don't feel disgusted every time I swallow some saliva. But introducing a neutral intermediary of temporarily holding it in a cup somehow induces a state I call disgust. I tried this experiment, and drinking it I even felt a bit like throwing up, although as expected it was flavorless. Is this a sign of an instinctive reaction? Then I recall a childhood memory - I ate or drank something "bad" and was taken off guard by some caretaker chastising me, telling me how I will get really sick and all sorts of other bad things and forcing me to throw up. I was standing over the toilet for a long time, trying really hard to throw up because I thought if I didn't something really horrible was about to happen - I gauged as much by instinctive evaluation of the caretaker's sudden reaction. So this wanting to throw up in the present is a mental-state recall of that incident. Indeed children are largely uninhibited with regards to what is gross, having never yet been punished for it: there is the classic case of a child grabbing / licking the nice-smelling urinal cake, or eating dirt, or picking up gum from the sidewalk. The variety of these exploratory behaviors is met with great concern from the parent so eventually the child forms a heuristic: things served on a plate at meal time are not gross and can be put in the mouth,

putting anything else in the mouth is gross.⁶ Actions like drooling into a plate, which young children will surely attempt, will also be punished, so the case of spitting out + drinking it remain classified as something to avoid even into adulthood, to which we then assign a conscious label of "gross". Spitting into my palm and drinking it does not feel nearly as gross as doing it with a cup, even though the former is less hygienic and "dirtier" - the punishment for the latter was harsher. The above connection of animal signaling and conscious labels of such is deserving of further elaboration: I would argue there is a false multiplicity here in that the word "gross" is simply another instance of a label used to describe avoidance. When I think of the spitting experiment, the queasy feeling I get is not some intrinsic "grossness" but emotional remnants of past punishments for similar actions, which I end up calling gross because I've been trained (by incidence statistics of the word use) to do so, although the remnants themselves also apply more-or-less similarly to other punished actions like acting mean or ignoring instructions - we even see indicators of this in "colorful language" such as "he fights dirty" or "your behavior is gross". There are more words available than there are feeling classes, or rather the two are sets with an arbitrary mapping and this mapping is by no means 1-to-1 in either direction. So there are kids who will call vegetables gross and avoid eating them - when the parent wants the kid to eat them - this should be viewed as a different mental feeling but described by the same word - the brain does a reverse search and concludes that gross things are not to be put in the mouth, the vegetable is unpleasant to put in the mouth, therefore it is gross. The kid is communicating to the parent that they instinctively / on a hardware level dislike the vegetable, which the parent per usual ignores and forces the kid to eat anyways, turning vegetables into a punishment, so later seeing it the child will recall not only the bad taste but that he will have to eat it.

With this reliance on childhood punishments, it is necessary to explain the origin problem - if the adults' use of punishments perpetuated the notion of "gross", how did the adults get this notion in the first place? From their parents' punishments is a recursive answer so does not explain anything. A large part of the answer is that in seeing a child's behavior the adult can evaluate the situation more impartially than one's own behavior (this is how the notion of self is established by societal mirroring of self, not autonomously), and further the adult has a more developed notion (from his own life experience) of "good objects" and "bad objects" and will

⁶The parental punishment for deviations from such rules, which can be perceived by the child as exceedingly harsh / painful, is weakened over maturation by the presence of playing with food and food fights, leading to great glee (around grades 5-7) when it is seen that the situations can be replayed with friends who will not be as punishing. This is similar in principle to "punishment" recreated in a sexual setting outlined earlier.

thus overpower the child when it tries to interact with "bad objects" so as to protect it, but since in that moment the child really wants to do the interaction, to it this must appear as a denial of the control fantasy, which is punishing. As alluded above, this is combined with evolutionary dice-throws in making individuals more or less innately repulsed by different shapes such as bugs and snakes.

Having covered the role of childhood punishments in the notion of "gross", I would like to go over the notion of "cringe". I feel this sense of "oh fuck that's embarrassing" when thinking back on how I acted in some situation and trying to interpret it with my current logic (given that, with my past logic, the actions were completely justifiable) and seeing that my actions communicated to the group at large a notion of myself which is incompatible with my consciously-desired-to-communicate self. It is a sort of sinking-stomach feeling that comes with the realization that a massive communication / translation error has been unearthed, and that it cannot be undone - it will permanently fuck up whatever relationships were built and self. Surely I would trace it back to childhood punishments - in this case when the child is just learning communication on a conscious level and blurts out something bad out of curiosity / mimicry then sees the reality of a negative reaction (withdrawal of affection of a parent / friend) and realizes "wait, this is actually my fault, I didn't properly think about what I said, how can I possibly resolve this?". So I might look back at texts exchange with a childhood crush and find that my emotional awareness was completely rudimentary and obviously I was clingy and desperate for validation - but why should I feel "cringe" rather than just seeing this as informative and innocent? This emotional charge would be similar to what I feel when a failure / mistake that I made unaware is blatantly pointed out to me and I realize I am actually responsible. I would feel this way if a mechanical design breaks down and it is found out that I used the wrong formula along the way, and would feel even worse if I knew that I went against a supervisor's instruction to double-check all formulas. ⁷ The link from this situation to both "cringe" and to childhood punishments is evident. What sets the feeling apart from mere non-conformance punishment is the realization that I actually am at fault, that I deserve what's coming. Looking at my texts as a kid I did not have this awareness thus did not feel "cringe". Instead of a supervisor or physics pointing out my failure, in cringe I end up seeing the fault myself, without anybody to impose a consequence. I have anticipation of punishment and almost want to say

⁷Just as an aside, "double-checking" is a relatively fruitless endeavor if done in a literal manner - mistakes are made where one is certain there is no mistake and thus doesn't bother to check, and even if made to check will find that everything is OK. The only way to approach this is by a completely independent method (or standardized procedure, which plays the same role) or by a different person.

"sorry this was so cringey" to the text recipient, much like I would have apologized to an angered parent whom I accidentally pissed off but only realized after the fact.⁸ This is perhaps why I avoid watching a video of my presentation, as outlined earlier - I'd rather not have the mistakes I made pointed out explicitly and indubitably to myself as I will then realize I really messed up and will fear punishment. The punishment in this case is probably traumatic emotional memories of the whole classroom laughing at me in grade school when I made some mistake in word choice or in social norms while presenting at the board, and perhaps even farther back to grade 1 and preparatory school where presenting at the board was a regular occurrence and involved tremendous insulting and laughter by the teacher who would engage the classroom against me if I made some mistake. Why were these word-punishments so effective? First the loud yelling of a huge teacher vs my small size as a kid obviously incites fear of physical injury/pain on a primal level, which is intrinsically unpleasant. Second, being told I was a failure by the teacher and then confirmed as much by the class, went against my self-image of success and this in turn was unpleasant because it evoked the understanding that my relations with my caretakers were based on the notion that I have to be excelling in school to get their love + attention.⁹ So when the teacher showed me how much of a failure I am, and she went above and beyond to do just that, she wasn't just harming my self-image (and really what difference does it make whether I call myself a failure or a success - they are just words) but unknowingly using the threat of destroying my caretaker bond to make her remarks sting, basically hitting me with the idea "they don't really love you, they just tolerate you" which is yet another fear of injury not to the physical body but to the emotional bond I found so crucial to life (probably hard-wired as a kid). From her stuck-up point of view, yelling at kids was fun and when they heard they were failures they would magically improve because who wants to be a failure? (Again, failure is just a word. Any emotional charge to it, including a want to not be seen as one, is due to punishment / fear of).

This, in short, is how it's possible to raise a child without physical punishment - pain is inflicted just the same but through emotional + logical manipulation, primarily withdrawing care and support. I seriously

⁸My feeling in this case is one of impending alienation/coldness and wanting to apologize in order to avoid it - this is a reflection of the sort of punishments used by my caretakers if I unwittingly said something bad - they would withdraw and give a silent treatment until I proved my love to them again by effectively prostrating. I would imagine other styles of punishment would lead to different underlying emotional memories which other people would call by the same label "cringe" but actually experience differently.

⁹I took their words too seriously - really they would've given me more attention if I was flunking out

question whether this is a healthier course of action than using physical punishments, because while it's easy to limit physical punishments to a level where the body will heal, mental punishment is invisible and can be used to the point of permanently damaging the psyche. Physical punishments may cause resentment in the child when misused / inappropriate: "I see now that what they did was wrong, they are bad parents", but clarity of logical and emotional thought is not sacrificed so mentally the child is level-headed and healthy and can make this interpretation that he was treated wrong. Mental punishments can alter the psyche so the child even swears that what they went through was right / well-deserved, they may never realize the extent of abuse they had to experience or the clarity of mind which had been taken away from them; they may even recreate an environment of mental abuse in their choice of partner and in their child-rearing practices. Any punishment can of course be misused, especially with the lack of emotional awareness or an unconscious hatred of the child, but with physical punishment at least all the cards are there for everyone to see and agree on, whereas mental punishment is a whole labyrinth in which the kid and possible even the parent get trapped. The fact that we place a taboo on physical punishments in fear that parents will beat their kids to a pulp is not indicative of mental punishments being less damaging, but rather that parents are worse at mental punishments so they cannot take out the full force of their frustration on the kid (consciously). If physical punishments were allowed with no societal pushback and one is led to imagine kids getting badly hurt all over, this is actually the true level of discomfort in society at large - physical punishment is easy to do and see so parents can get it to a level where they feel it's been enough - if this level is way higher than what they would've done by mental punishment this just means they have serious internal hate / anger that a limitation to mental punishment keeps from materializing - because they're not willing / able to invest the effort to make a really painful mental attack, not because their anger suddenly disappeared. Funnily enough, what keeps them from using physical punishment and unleashing all their anger is their fear of societal punishment carried over from childhood fear of parental punishment - one big cycle of punishment.

While it's obvious that physical punishment can hurt the parent-child relationship by making the kid associate any sight of the parent with pain, it might seem at first sight that mental punishment avoids such a staining of mutual trust, but this is also inaccurate. The child might remain inactive communication with the punisher despite mental attacks but this should be seen as a result of emotional manipulation due to the attacks, not as a sign that no harm has been done to the relationship. What is it that mental attacks do anyway? I would venture there are two major fears which are inherently painful to experience: the fear of physical injury / pain, and the

fear of abandonment / exclusion. Unlike actual pain or exclusion, the fear is felt in advance of the stimulus and incites the brain to avoid the soon-to-come stimulus as a precautionary measure. If the brain lives a "sheltered" life, ie the stimulus itself never materializes, the fear builds to a fantastical and wholly exaggerated level - this is the over-sensitive person afraid to commit even the slightest wrong because they know to expect pain but don't have a gauge as to what the pain will actually feel like and whether it may be worth the sacrifice; the fear becomes the "unseen monster" of earlier when the brain never has a chance to see the monster. Probably there are chemical pathways that over the course of a jungle life adjust the response to fear based on physical feedbacks ie feeling like life is in danger should only occur when life is actually in danger; there is likely a role for genetic and age differences here. Fear of pain is easy to see as based on avoiding the unpleasant feeling of pain, by similar lines fear of abandonment is based on avoiding the feeling of abandonment, which is taken to be intrinsically bad like pain, with clear evolutionary roots. The clearest materialization of this fear is in death and grieving: the person cries at their partner's grave not out of some altruistic sacrifice but because they have been permanently abandoned by a caretaker, and are experiencing the associated painful feeling. They do irrational things like clean / dress the corpse and talk to it and have ceremonies putting it on display / in the spotlight as it were, as an offering of care / love so as to try to reverse the abandonment, ie "please don't leave, look at how much you mean to me, I am willing to do all this for you". People commonly claim "the reality of death doesn't hit until much later", which is to say the animal brain that is used to the caretaker does not see death as finality but more so as "playing dead" / acting cold / silent treatment, and thus responds to it as an emotional withdrawal until the point where it expends all the emotional energy it had invested in the person at which point it accepts a permanent departure. Indeed if the dead person were to return to life at this point of emotional energy having been spent, they will no longer be welcomed back, because the animal brain despises that all its displays of care had been ignored, "stay dead for all I care" is its response at this point. The closeness of the relationship and how reliant an individual was on the care of another can be gauged in direct proportion to the emotional + mental investment made in the grieving process. The cliché of a wife finding a new lover at her husband's funeral makes it clear just how valuable that relationship was to her. So what happens during a mental punishment is the threat of abandonment is somehow implicated and invoked in the attacked person, in essence any attack will reduce to "I will not play with you anymore" or "they will not play with you anymore". As with pain, the words are effective because they had been earlier corroborated by actual abandonment and associated mental displeasure / pain. So with each mental punishment

from parent to child, the parent destroys some of that invested emotional energy, the remainder of which would be expressed at their funeral. This is a rudimentary description of course but as a broad outline, with each threat of abandonment the child finds it necessary to show a sign of his care so as to not lose his caretaker, but each such display diminishes the "total emotional investment" of the child (the investment is likely hard-wired and directed by default at the earliest caretaker. Orphaned children may direct it at their ideal selves or at "random" / closest practical entity to a caretaker judged by time of proximity).

So it can be imagined that parents who indiscriminately use such techniques will chip away at their children's attachment to them until eventually the children don't even come to the funeral or are relieved to hear of it - such sentiments are readily seen on forums about escaping abusive families. The point I would reiterate is that mental punishments are just as damaging as physical ones to the parent-child relationship. Indeed one is led to question whether such a relationship should even exist as it presently does - I would again claim that in present society it is the parent who benefits from childhood (through vicarious wish fulfillment / owning a human pet) much more so than the child (in any case parents have the sole authority in deciding to make a child, so they must feel benefit from this to go through the process).¹⁰ In nature parents don't punish children, rather elements of nature punish them physically and in turn the children avoid the punishers, as completely rational.¹¹ When parents are the punishers, the brain is at an impasse: they are my caretakers and I can't avoid them, but they also bring pain thus I want to avoid them. Surely the drive to find a partner that will replace the parent role but in a better way / with higher trust (ie romantic relationships) has some basis in this dichotomy. In an ideal adult relationship, similarly, the partners cannot punish each other as this will push them apart; rather both need to have adequate empathy to basically "mind-read" and "punish themselves" voluntarily when they realize they've hurt their partner, other concerns need to be communicated in a logical manner ie "it hurt me when you did this" which the listener must value as emotionally painful but without actually receiving pain from the offended person ie "I'm gonna beat you up for that!" or a silent treatment, because receiving pain fractures the mutual trust and reduces emotional investment.

What I imagine happens commonly is the parents use the fear of pain (mental or physical) as a substitute for actually inflicting the pain, a threat

¹⁰A common trope is the kid that can't wait to be an adult. Because they *do*. We as adults don't want them to, and rather force them to stay young and dependent for our benefit.

¹¹This sentiment is also expressed by hunter-gatherer societies: there are no childcare centers or teachers, the children explore + learn from nature and seldom need "adult wisdom". [answersanswers.com]

more so than a punishment but it is destructive in its own way as alluded above. The fear is an indicator of a threat and builds up in a manner analogous to sexual stimulation: imagine a horror film where the tension keeps building and then the movie ends. The lack of resolution becomes very frustrating, because the brain feels duped that it's spent a lot of mental effort in analyzing a threat but then gets no feedback on whether the threat is even real, so the invested mental energy has to be deconstructed, the whole exercise feels like a waste of time, tedious even on an instinct level, one feels taken advantage of because they took seriously what has demonstrated itself to be a total fabrication (the rule of the moviegoer is what's on the screen is real, even if it is not). So with fear of pain or abandonment, the brain builds a mental model of what it can do to avoid the pain and then expects a resolution: either "phew, that was close" or "I messed up, and this is how I have to pay for it". But when the appeal to fear is used nonchalantly without any attempt at resolution (which means following up on threats with both negative *and positive* reinforcement as appropriate), as seems to be fashionable for today's parenting, so the parent doesn't feel hurt from actually causing painful experiences, the fear builds up to a frustrating unresolvable paradox for the child's brain to resolve. They may take actions that basically beg for the threat to materialize, so they can try to unravel how to approach their mental model of fear. If hints like this are absent or random / careless, the way the child internalizes the fear model is ill-defined. Depending on other factors in the environment, the fear may become blown out of all proportion (if it ever materializes my whole world will be destroyed) which would lead to obsessive avoidance of even the tiniest infractions against whatever is believed to cause the fear. It is also plausible that the fear may be ignored completely, taken as just some words strung together and not a real thing - this might lead to sociopathic behavior and over-compensation in the absence of an authority (the cliché of a modest shy Christian girl going to college + partying 24/7), though the latter is more influenced by other factors of upbringing. Really, it might not be an exaggeration to say that neuroses originate from this inability of the brain to accurately map words describing reality to actual risks and rewards of the physical world, because its normal learning / statistical analysis mechanism has somehow been blocked or thrown off course.

I keep getting led to the question of why it is considered taboo to discuss sexual preferences or even claim sexual attraction outright. Wouldn't that be better for all participants? I could see a person I am attracted to and ask if they are also attracted, and if it's mutual that's great, if not that's also great as now we don't have to bother going further. Isn't that better than trying to make implicit contracts with dates, flowers, gifts, and skirting around the issue of intimacy, introducing it awkwardly? My first comment

would be how it fits in with animal communication - but the two are not exclusive. Perhaps I would act flirty to communicate sexual interest, but so as to not make the recipient uncomfortable and ensure it is not unwelcome, an outright "do you want to have sex?" shouldn't be seen as outside the allowable social norms.¹² The next complaint would be: "But this will lead to hurt feelings, and the relationship will never be the same" yet I would argue this need not be the case. Because sex is taboo now it's as if we pretend we don't have it (like we pretend people don't defecate) and then realizing that other people are also sexual beings feels uncomfortable. But the truth that people have sex and sexual interests isn't affected at all whether we accept it or not, the difference is if we talk about it openly we can do optimizations that otherwise would have been left as idle hopes. It shouldn't hurt my feelings to get rejected or to learn that someone I don't like feels attracted to me. There is no implicit emotional charge to this, just a neutral information exchange. Any feelings present here are remnants of childhood rejection by a caretaker (which is only such a big deal because of the weird institution of childhood basically keeping the child as property of the caretaker instead of raised "by the village" and in company of other children to gently transition caretaking duties instead of smothering in affection followed by an arbitrary stop - so a rejection by a caretaker in the present society gets felt with the same force as rejection by the whole village (certain death) in a sharing society - whereas the latter is reserved for extreme cases, the former is a commonplace occurrence) and forceful physical advancements by people one is not sexually attracted to (which again is particularly likely when children are bound in biological families and have no practical way to escape the situation such as by living with other children). Indeed the taboo on sex makes it harder for children to realize that they have the power to say no to unwelcome advances and to enforce it by alerting the caretaker.

There is another frustration of hurt feelings which is a bit insidious, and that is the use of false hope / hype (which is like today's drug of choice). Consider the case of a woman having a miscarriage. The common thought is that it is inconsiderate to ask about it, but I don't see why this is the case. I would argue asking shows interest / concern and can be used to learn useful facts (how the procedure felt, for example). The information exchanged is at its root neutral, so why is it considered inappropriate to discuss? There is an emotional charge, and it comes not from parental punishment (for once) but from the speaker's own dashed expectations. If the baby was never mentioned, if the miscarriage just happened one day, there shouldn't be hesitation to discuss it beyond the usual apprehension in

¹²A caveat of course is that a "yes" from the logical brain cannot be taken at face value. The animal might not be sexually attracted even if the logical mind thinks it is. Or vice versa, but in this case the animal overrides the logical.

telling medical details to strangers (as one is led to ask what could they gain / lose by sharing personal info, which is a rational concern as not everybody is a nice / kind person). But what typically happens is the woman is told, pretty much from birth, how great and amazing it will be to have a baby. Learning news of pregnancy, everyone says "Congratulations" and talks about how wonderful the next years of childhood are going to be. The parents re-arrange the furniture and buy baby clothes, and invite friends to bring expensive presents for a baby shower. The family excitedly discusses names and career choices (and lost dreams of theirs they hope the kid will achieve). It all builds up an artificial high which must lead to a come-down, and this loss of the created mental model is what gives the emotional charge to discussing an unsuccessful birth. Much like the horrible fear that never materializes, the amazing expectation that never materializes leads to its own breed of neuroses. What is also messed up is this expectation will have to be lost even with the perfect birth / circumstances. This is the "tears of joy" at childbirth, reality can never live up to the sky-high expectation so the event is emotionally charged, not neutral. The fault is with the people who hype up the event without having actually ability to influence it: the friend who says "it will be so amazing!" without knowing either the situation or what the listener considers amazing, is basically giving the listener a gift which the listener later finds out was actually bought with their own credit card and at a huge rate of interest. It is irresponsible to make statements like this, or to believe them: it feels nice but there's always a return to normalcy that won't feel nice. The reason people do it is because it is a quick cheap and risk-free way to make themselves feel better by convincing someone else to feel better then mentally taking a share of the credit (shared view of success - "we won" vs "they lost"). This seems a partial explanation as well for santa claus - it is self-serving to look at a kid's face full of hope thinking about santa claus, and then conveniently disappear when the kid realizes there was no santa claus and leave him to deal with the fall-out on his own (in typical fashion, laughing at the kid's "stupidity" afterwards). The use of this hype is indicative of a kind of desperation / insecurity, grasping at straws as it were, since if the family were content with their life in the present, and the risks and challenges to come in the future, they would not need to fantasize about how amazing things will be once some event happens - all that will be different afterwards is the event will have passed and they will have experienced it and can no longer look forward to it, life does not become singularly amazing all of a sudden.

Continuing the reading of Freud's psychological theory I come to the notion of pain acting as a mechanism for learning avoidance behavior while pleasure is a mechanism for learning approach / seeking behavior. ¹³ Freud

¹³To the extent of seeking ultimate closeness / incorporation as exemplified in Vore

uses "love" and "hate" but I think those are too abstract and not necessarily even "real" in a mechanistic sense. Stimuli are instinctively pointed out as sensations that drive the brain to some action, and while it's tempting to think of some stimuli as more difficult to satisfy than others, the working principle remains the same throughout. There are surprisingly few responses to stimuli that young / newborn babies show - even tickling or pinching might cause them to cry but not remove their body from the stimulus except by accident. It should be recognized that in this time the brain begins to form its most basic motor pathways, such as that if something hurts my hand on one side I should move it towards the other side and away from the pain, or that if there's an itch somewhere I get rid of it by scratching that area. Nature isn't too nice about giving guidance: the stimuli from the body provide an impetus to get rid of them and whenever that happens the previous actions of the baby get stored in memory where over time statistical analysis filters out irrelevant details and maps stimuli directly to actions which resolve them (ie back getting sore -> move around a bit), as long as it's practical to do so ie the necessary actions are readily encountered in daily life / motions.¹⁴ There's no requirement that stimuli have simple resolutions: hunger for example has no straightforward resolution from a baby's view, it finds that no matter how it moves about, the sensation does not go away. But when the parent is around, the stimulus can go away, so as statistical learning continues to take place, actions which get the parent to feed the baby get learned / reinforced, and the parent itself becomes thus a "part of the ego", which Freud claims also but in more abstract terms. It seems that what the brain seeks is to always experience pleasure and always avoid pain (though again pleasure is only meaningful as a lessening of pain - this is a particularly easy trap to fall in nowadays: the bored king is sort of a modern stereotype), and to this end it will seek to keep any external sources of pleasure (food, other people, tools and objects) in close proximity and guarded actively against intruders - where the fierceness of guarding can be used to judge extent of attachment / incorporation of the external object into the world-model of the self. Metaphysically, the "fight for survival" like in absence of air (an essential external object) can be seen in this light - giving it up means the destruction of the present self so it is not given up easily - feedbacks are established to keep high access to objects of pleasure. With this in mind we can look at modern trends like the proliferation of smartphones and even an addiction to their use: one of the primary used and advertised features is the ability to take and share photos / videos. From a logical view this is rather odd: why should people be so concerned with recording their experiences

fetish.

¹⁴Yoga poses / gymnastics shows that the brain is not magically aware of all body positions achievable - it has to be taught more complex repertoires.

as digital bits? There are some informative uses ie review of sports plays in slow motion, but most media is used in an emotional context. The photos / videos carry a desirable emotional charge so people find it particularly useful to be able to access those visual stimuli at any moment by keeping an electronic device in their proximity. A similar proclivity drives the printing of photos / posters and covering home / work places with them, ensuring their constant presence and availability to the person. I would venture even further and say visual stimuli at large do not carry emotional charge - the presence of such gets attached by associative learning, largely in childhood but altered throughout life. There is a small set of stimuli which inherently transmit emotional charge: facial expressions and voice tone / frequency / inflection, what we might imagine animals use to communicate brain-brain. Seeing / hearing someone crying I feel some sort of sadness, and this is not learned but intrinsic / hard-wired. Seeing / hearing someone laughing gets an opposite response. These features can be used in artificial objects, ie minor / major chords in music, or forceful / wimpy "face" of a car. The colorful appearance and smell / taste of fruits and foods has a similar hard-wired draw, as may the appearance / color of water. I am less confident about calling sexual organ attraction (ie "ass and tits") intrinsic - because it doesn't show up definitively until maturity and varies based on cultures.

¹⁵ I am more tempted to think facial attraction drives association with attraction to the other body features of the attractive person, yet I cannot claim this definitively as there is plenty of objectification in sex circles and events like orgies in the dark where facial attraction is not relevant. For more pedantic visual stimuli, the learned association seems a quite clear answer: while seeing a lush forest and bright blue sky gives me a feeling of freedom / exploration, it is most probable that this is due to memories of my experience in forests earlier which generally involved freedom and exploration - running around, finding new trails, camping. All those activities took place solely in the forest and grueling work / intellectual pressure like taking an exam invariably took place *not* in the forest, so for me the forest is associated with the above feelings. The same can be said of ie a picture of a beach - it feels like a vacation because I rarely find myself at a beach and the times when I do it is during a vacation! If I lived on the beach, the effect would eventually disappear - the photo of a beach would be reduced to its information content: "yep, that's a beach". When I'm doing annoying menial work I find myself behind a desk, so a picture of office cubicles inspires a claustrophobic drudgery feeling. How should one explain the phenomenon of social media - an individual taking a photo that to them carries a positive emotional charge and not merely keeping it for

¹⁵Further, most animals spend little time contemplating or looking at their genitals or others' genitals - a choice of partner is based more on very visible bodily features and behavior. A hard-wired attraction is unlikely to develop just for our species.

future reference but sharing it with others and soliciting feedback? There must be a more powerful mechanism at play that can even override the drive for seeking / proximity - a mechanism of social status and validation, the one underlying peer pressure and symbol-choosing contests (keeping up with the Joneses - fashion, trophy spouse + children, jewelry). Whereas the photos in themselves carry an emotional charge, it is only useful when needed to fulfill an urge - ie I will look at a photo of a beach when I'm exhausted at work not when I'm having fun, in the latter case doing so would be superfluous and distract from a greater pleasure of actually having fun. The person taking a photo of their food does not need more visual stimuli of the food that's in front of them - they are doing so in order to fulfill a strong urge of social status, and it is accepted that this is done by virtue of sharing positively charged media (indeed, a look at one's social profile gives an outline of what that person finds positive / exciting). The notion of romantic love can be seen as the finding that this social status urge can be largely handled by having one person to share "everything" with and get validation / approval, thus the partner becomes an essential tool for the self.

I overheard a conversation of a 3-4 year old while on the bus - we passed a car wash called "Tiger Wash" and the child said "look - all these tigers getting washed!". He said he was kidding / the parents were kidding, but I doubt he actually realizes what it means to be kidding, ie when he says "the tigers are getting washed" there is a sense there of "there are situations where cars can be called tigers" which is accepted as logical truth. Similarly, when calling cars "tigers", it is necessary to say "kidding!" even though again this is just a word that is often heard together and not meant as anything special / explanative. The parents of course found it funny / cute - "look, he's joking already!" - not giving the developmental origins further thought. In this exchange though not much laughter was heard. The child may have expected laughter / attention (seeking to recreate the pleasant feeling of hearing laughter in the original situation) but he said the silly statement as a factual certainty not as a tool for the purpose of humor. What then is the notion of humor? I can recall times when I couldn't help but smile and want to start laughing - usually involving witnessing others' anger over trivial situations (and basically slapstick comedy), especially potent if that trivial situation was purposely brought about by me to elicit such a reaction. This is perhaps the "narcissistic grin" of people who choose to do this regularly. Nature doesn't seem to favor unnecessary duplicity, so I will claim basically the same mechanism is active in the smiling and laughter in response to jokes / comedy. ¹⁶ Chillingly (and perhaps in line with qualia conservation)

¹⁶There is again the notion, "sometimes people laugh to deal with sober situations like a funeral". Like "tears of joy", the unity of body language / unconscious response should

the root response here is a violent one: the apes cheering on the killing of some undesirable being by the group ripping it apart are to be seen basically the same as the audience cheering and clapping when the comedian makes fun of various topics and people. Humor is like violence without the violence - like science/art being the expressions of sex in the conscious/logical realm, humor is the expression of violence / sadism / masochism by using abstract language as a transmission mechanism instead of the much more brutish physical reality. It should not be seen as innocent or cute - this just to say "not having awareness" and "visually appealing" / neotenus super-stimuli - in themselves objective descriptors and not playful/idle concepts - once again there is no such thing as useless play - play is the subverted expression of hunting for skill practice without hurting partners. Comedians are followed / respected for similar reasons athletes are - they are really useful members of a hunting party by their demonstrated skill in violence so even though their specialty is joking - the use of imprecise and uncertain words (the opposite of what one would rationally want in an effective leader) - they are seen as competent leaders; this is why political humor shows are taken more seriously for their information content than a "real" presentation of serious news.

Continuing in [Fonagy's Affect Regulation book], I was thinking more about the developmental establishment of affect representation to self - the ability to see one's own mental states as mental states ie by having appropriate second-order symbols for them - which then allows thinking about causation and affect regulation. I wrote earlier on how I felt, for the first time I can remember, I could see myself as a person ¹⁷, to get a third-person view of myself and see that this other person (which is me) is actually a thinking experiencing being that has thoughts that I feel myself to have. This seems to be a more mature representational ability - being able to see not just affects but one's whole self on a second-order level such that social interactions can be thought about symbolically even though the self is an active participant on the first-order exchange. I suddenly realized the value of this: if I could see myself as a person, that is to see myself the way others see me (based on my representation of myself in my mind - based in turn on learning from social causation reflecting my own state onto me and being able to recognize them as such), this would be an essential mechanism for social interactions. It would be like having a GPS or a flashlight on a hike through a dark forest - essential for any non-accidental outcomes / directing the situation (as I noted I definitely have no capacity to do). Maybe it is no coincidence that I like

not be forgotten. The person laughing at a funeral had some long held fantasies of the person dying and is enjoying the reality of the situation even if not consciously aware.

¹⁷Sadly this went away as suddenly as it appeared. Perhaps the social mirroring played by the single exchange was enough to kick-start this for a little bit.

to challenge myself by going to new places / hikes with only a memorized map and see how well I can do with this minimal information. The trip would be materially richer if I carried a cell phone / GPS but I have made peace with the pace at which my mind processes information, and the spontaneity in such hikes is usually rewarding rather than traumatizing (as with my early social interactions). I thought back to a group dinner I had attended - now that 3 days have passed my brain is getting around to thinking of what I looked like to other people while we were sitting at the table. If only I had this image in mind during the conversation, how much better I would have done! I would have instant feedback on whether I should say something or not, and what reaction I might get from the others because I would already know how I will appear to others by looking at the handy GPS-guide of my mental self-image. It would even make sense for me to engage in social events then, as it would be a self-guided learning experience and not a blind stumbling through an obstacle course. Indeed I believe "normal" people have this self-representation active in their mind, which explains pretty much all the tough questions I had about unwritten social rules and why they're unwritten. For instance, a point in [Grandin's book] on social rules was the importance of personal hygiene - dressing well, staying clean. This has to be made explicit as a systematic rule for autism spectrum, and a disregard for matching colors / styles of outfit (or even outdoor temperature) is a hallmark of such individuals' dressing. As I wrote earlier there is some visual processing that sets certain appearances in a mental image of a character, ie a serious person is expected to wear a suit and a person in a suit is taken seriously, perhaps ultimately because of hard-wiring or by learned association from personal or media experiences. The justification for me to dress nicely then was: if I want to be taken seriously then I have to oblige society's code and "hack" people's visual processes by dressing myself in serious looking clothes even though that changes nothing about what I have to say. I can venture a guess now what a socially normal person would say on the same topic: when I imagine myself as seen by others, I want to see myself as a serious person, and I can tell that I will be seen by others in this way if I am seen wearing serious clothes, thus I must wear them. Notice the different focus: my construction is about society as a system which has certain values and through cause/effect I have to consciously figure out the rules and how to play along; the normal construction is an intuitive "I want myself to be seen as this, because when I see myself as this I know this self will be taken seriously". The latter is dependent on the ability to see the self from the third person view - not as a body / geometrically (which I can do) but as a living thinking person that is also "myself" even though "I" am looking at it from the outside. This comes naturally to normal people so they have no need to read rules like "dress nicely" and think it's stupid and

insulting to have such rules, like "don't walk on all fours". The assumption that other people in one's social circle all have this self-image underlies all the rules of politeness / saving face which are so mysterious to people like me. For instance if a person smells bad it is considered impolite to tell them, because there is an understanding (not on a conscious level, but experiential) that the other person has an image of self as seen by others and is thus aware of the bad smell and, seeing his present interaction, is unable to do anything about it. Of course there is plenty of room for error here, even enough to allow me to get to this point in my career without having a proper logical theory of mind. The concept of cringe resurfaces again: I wrote earlier that the negative feeling is due to association with social punishment, but this self-reflection concept shows there's more to the story. The characteristic of cringe is it happens when seeing oneself from a third person view ie a photo or a videotape or an old diary entry - and then realizing that what the self did back then was embarrassing ie it had a social-emotional impact on others that was nothing like the intended one. Embarrassment then is the feeling of impending punishment from an external social being, while cringe is the realization that the self of the third-person view is punishing the first-person self, self against self as it were, finding that the present self would not want to be friends with the past self and having to reconcile the fact that both are the same person. This is a clear parallel to the normal experience of self-representation as outlined above, as during daily life a normal person sees not only the world "out there" (visual sensory inputs) but also a mental image of self as a third person seen by "others" where the way he is seen by the nondescript "others" is definitively based on social mirroring interactions around grades 5-7 (the point at which older youth look back and consider cringe). Cringe, when happening on a small scale, acts as a filter on social action planning and keeps normal people from committing blunders pre-emptively in everyday social life. It is odd for me to write this as I do feel an intuitive "cringe" as in avoiding watching videos of myself, so perhaps my problem is not hard-wired but due to the misassociation of cringe through limited and unsupportive social interactions which gave me no material which could be used to build a mental model of a social self-image. I had simply never gotten a chance to do enough testing in a stable environment to statistically separate out the self and the reflection of the self from external agents in a social intertwined environment - and this is perhaps the role played by marked reflection of affects: to make it easy for the learning brain to trace causality and see what comes from the self and thus see itself for itself and adjust.

As I was falling asleep, I tried to imagine what I would look like to a person standing in the room - how my body is laying in bed. I was led to wonder, what would this observer think of my mental state? This

is something I hadn't really considered before, and apparently something "normal" people consider starting around age 14. When I was laying there, I felt some discomfort in my joint, and while this was very clearly felt to me I reasoned that the observer has no idea, unless I demonstrate a sign of discomfort such as frequent moving about, and by this he might infer that there is some sensation bothering me. What is critical here is that, with the recognition of an ability to see myself externally as a person while also being able to think as myself, I was able to map my external bodily appearance to my likely mental state all just by thinking about it (based on past learning / experiences). Then I can extend this ability to say that if I see another person moving about uncomfortably, that something is bothering them, given that our brains are basically similar - forming a concept of "true empathy" vs "learned empathy" which is a product of social punishments, the difference being that the "true" version is much more personalized and applies in a broader coverage even beyond past social punishments. This gives an important key to decipher two odd interactions I've had with homeless people in Boston. One was an older guy on the subway who kept asking me "Are you ready?" and then eventually "I don't think you are". I wasn't sure what he wanted, but thought that if I had to defend myself the only potential implement I might have would be in my backpack. Eventually he says "you like that backpack? what do you have in there?" which made me quite uncomfortable. He finished off with "I see lots of people with backpacks like that". It bothered me that he knew right away what I was thinking even though I tried keeping a "poker face". The second case was a lady who came up to me in a cafe. At the moment I was thinking about getting a haircut and how messy my hair looked, when she suddenly asked "do you like your hair?" I nodded yes, slightly stupefied that of all the possible questions she would pick that. "It looks nice. Can you buy me some food?" Am I really that easy to read? How is that even possible? I guess this comes naturally with a working theory of mind, but the physical specifics of how this skill can develop ought to be generally as the above picture: I know what I think and I know how I appear to others when thinking these things, then over time enough associations are built in my mind to allow me to infer one from the other, and then I can look at others' appearance to me and guess their thoughts even in the absence of direct access. It is not really a live simulation or emulation that takes place, but a very poignant inference based on past observations of self from within (thoughts / feelings) and from without (identification of sensory inputs that are at root a reflection of the self, whether in a mirror, or socially via affect regulation paths).

We can go further with the notion of a third person observer of the self within the self being established by social mirroring interactions + attachment. I think this can be associated with Freud's "moral observer" of the

self, ensuring that the self acts properly in a social context and also serving as an ego ideal ie the self seeks to become the observer. I believe this ideal self is established as a sum of psychologically meaningful / reflective / somehow in tune with the unconscious "saying the right thing at the right time" interactions. These might most readily come from a caretaker attachment relationship, but also from (ie) inspiring movies, sports games, stories - leading to the perception of some personas as one's "heros" ie someone that serves as an inspiration and whose words are followed out of a deep desire to be like them (same as the moral role of Freud / see the [group psychology] works). As theory of mind matures this observer becomes not merely an entity of the mind but associated with "someone out there" looking at the self from a third person view and evaluating it. Taking a judge's role in a contest places the self in the position of the observer and allows it to take out all its frustrations with its internal observer onto another person which then is seen as a manifestation of the moral observer. At root this is a hatred and wanting to cast off the parentally imposed moral observer and replace it with something kinder and better for the self, however this is not trivial to accomplish - it requires lengthy re-programming. The brain does this by building up a concept of what its ideal observer should be like - again thorough psychologically potent moments such as close friendships¹⁸ - and then seeking proximity to it such that its actual internal observer can be overwritten as more and more time is spent with the better one. This is the concept of falling in love - and why love always ends up a fantasy. One could then expect that the most likely object for love would be someone like mother but better / kinder / gentler / more attentive: the primary caretaker has the bulk of ideal-formative interactions through sheer time spent together, but other key moments get interspersed into the ideal and thus modify it to something new. Over time as a real person is seen to not live up to the ideal, a falling out of love happens which may in itself alter the ideal along with other inevitable events in the meantime, so a new person is sought. Sexual union with a love object is the most clear display of acceptance / reward by the (physical) observer of self which is then recorded onto the mental model of the observer to overwrite earlier punishments imposed by a childhood caretaker or other past external observer that has hurt the self. This roundabout process is necessary because the brain cannot just choose to overwrite its memories, like it cannot choose to overwrite its feel-

¹⁸[Fonagy] writes how a 4 year old girl made a snake shape out of clay and he said "the snake represents your fears of sharing your thoughts" to which she was highly responsive. I would have put such abstract symbolism as ridiculously outside the grasp of a 4 year old if not for similar experiences with children I've met and then a realization that even as a kid I invited others to join me on difficult tasks specifically to test their willingness to accept the difficulty of dealing with my mental issues - the unconscious has its own complex language which is in active use much earlier than conscious awareness of it.

ings - which may be an evolutionary adaptation or, more provocatively, a requirement of any conscious system. The role of sex as a response to fear is also re-confirmed, especially considering its relation to public exposure / shame / punishing language. The fear at first was that of the real external observer, but has become that of the internal observer of self - the ideal self - which is how dom/sub relationships can remain stable. Generally, whenever the brain is awake, it can't help but experience the world and learn from it, it cannot pick and choose what to learn. Thus with an awareness of the world it will seek to correct bad things rather than block them out: this is the process of affect regulation (ie I am about to feel bad, I must unconsciously activate good memories so I don't lose my equilibrium state) and why affect regulation is taught by marked mirroring - this provides the "fix-all" of social validation as the positive counter-memory to what is ultimately a feeling of isolation / exclusion.

Could I counter the effect of emotional validation by recognizing when another person attempts to mirror my emotions and telling myself what is happening and to put a stop to it? Should I? I want to overcome my emotional block on analyzing social interactions and try for an information theory of conversations. Consider a TV show: with a limited cast of characters, what is the source of novelty? What keeps the show going and what keeps it interesting? Is there a point at which, through conversations, everything has been explored and there is a dead end? What must happen to avoid that or overcome it? I think this has close ties with the self as an information-processing entity and the basic requirement is whatever happens must not be remembered as having happened earlier otherwise it becomes boring → lacking substance to the logical self like stale food lacks caloric value to the physical self. There is an information digestion happening which keeps the logical self alive, but this is a topic for later deliberation. What I claim here is that with a proper set of classification and observation tools, it is possible to use TV shows and comics as a data source for a general conversational / social theory: even though the events are not real, they are written by humans to match the social desires / expectations of humans so they serve as a definition of a preferred social environment, to which the real world can be compared. Further, the general characteristics and classes of things that happen will be similar to the real world as they are inevitably based on them. Real conversations would be better of course, but I don't have ready and omnipresent access to such (the benefits of having social skills in building up one's social network, as it were), so I will take what I can extract from media and then adjust key parameters to match my real social experiences. I can define a social situation - any physical exchange where one person recognizes / attends to that part of sensory inputs which is found to correspond to another person's mental state. Media focuses entirely on social situations, though sometimes physical acts instead

of spoken words are used as the sensory expression of mental state. Apparently the brain finds such things interesting and non-social things boring and dull, going to the extreme of creating an internal narrator structure to keep some social interaction going during the mostly dull experience of a typical day. In the social situation, the participants express their mental states and others react to their interpretations of what they see based on their idea of what they want to achieve. I can classify different ways of expressions of mental state: declarative - providing information or actions with a direct concern for achieving some task (purely result-focused), emotional - expressing information / knowledge without direct relevance to a task and likely to carry emotional meaning, implicit - expressed without awareness of the speaker through means like body position / posture and word choice and eye contact. Throughout the social situation the brain looks through all practical outcomes with its social model - however mature / accurate it may be - and decides further action. The situation ends when participants decide that their time will be better spent elsewhere as all practical outcomes of continuing the situation are less desirable than practical outcomes of doing something else.

10

Looking Ahead

What other conscious systems feel or experience as qualia is in general different from the qualia that I can feel, because even other human brains have differences. So is my "red" the same feeling as a friend's "red"? It doesn't have to be, and it wouldn't be possible to claim accurately that it should be unless we do some MRI or other techniques to brain both our brain networks and conclude that the appropriate connections are indeed the same. I can only feel what I am 'wired' to feel. However there is a unity in all this: looking at fellow humans, I get the feeling of seeing myself in their shoes. I realized that another person's actions are ones that I would also have taken if I were raised the same way/in that situation. Sometimes I wonder, what if I did something differently, what if I grew up as another race/gender, what if I looked different? With this realization, I can answer these questions by simply looking around: I would readily find people who were raised differently and I can even interact with them and see what they are like, in this way see what my life would have been like. This is allowed by determinism, as it says there is no "I", if "I" were another person I would do exactly as they do. It is meaningless to say "if I were you, I would have done things differently", because that is not in accord with determinism - instead saying "if I were you I would have done exactly the same, indeed the distinction between me and you is only one of labeling/practicality". So, I can look at another person's physical actions and know that if I felt the same qualia they did, I would have done the exact same thing. I also know that the qualia they felt may be something that I am unable to feel, being myself wired differently. Again, looking at "another version of myself" in other people, I cannot know their feelings, but I know their actions, the physical effects, and I can at least try to imagine what they felt to make them take such actions. Connecting back to the idea of consciousness as a pure potential shifting system (water pressure computer concept) there is something deep here. If I felt the same qualia as another person, I would

have taken the exact same physical actions. Similarly, a system in the same potential shape as another ends up taking the same physical actions; it is an elegance that works at all scales, as a physical law should. I already argued for consciousness as a potential-shape loop based on information theory/coupling arguments, but now I see a real-world effect of great metaphysical significance, a feeling of enlightenment even. Feelings and qualia **are** the abstract potential fields that shape observable physical actions. Just as the abstract electric field causes a measurable electrical current, our abstract qualia cause measurable physical actions of our bodies. This is wholly in line with consciousness as a key element of the universe and agrees with the idea of different levels of qualia leading to different actions. A 'simple' electric field in a wire is a minimally-conscious qualia that has the real-world effect of moving electrons. Just as a person feeling a given qualia can do no other than the action they actually take, the electric field qualia always has the same effect on the electrons. The effect is exact enough to be seen as a physical law, but underneath this is the action of a conscious system through the abstract potential (which can only be measured by its observable effects on electrons, never directly as qualia, just as I can't ever feel another person's qualia but can guess by looking at the observable effects of their actions (including MRI/brain scans all the way up to macroscopic movement, this is internally consistent as all movement is ultimately guided by fields)). Perhaps qualia/consciousness is what exists over an extended space and controls the motion/interaction of spatially bounded particles, just as the field does. Our brain's connectivity allows the existence of relatively complex potential shapes, and thus a greater repertoire of action (including action which affects the brain/memory itself, ie thinking through a math problem/planning, physical effects don't have to be limited to motion of body parts), and these qualia are precisely what we experience as our consciousness. Our feelings are limited to our bodies because of the connectivity/infinite couplings, or perhaps because the universe automatically splits into discrete maximal-information (per IIT) systems for computational optimization. Then we are by no means the only, or even the most complex, conscious organisms, and the things we readily call inanimate incur and feel tremendous qualia (when presented with energy changes - I still believe that truly inanimate/unchanging matter does not feel qualia, because there is no observable effect to determine what the qualia may be). So this is the answer to why we are conscious: qualia feelings are a necessary requisite to any associated action; a system taking the same action must feel the same qualia; qualia underlie all of physics and are exact/inescapable laws, establishing the separation between etheral potentials and observable physical changes that follow these potentials. And also thoughts beget thoughts: qualia not only dictate the associated physical action that takes place, but (combined with external inputs) what

future qualia will take place. Thought patterns can be established and it could be made concrete that the person who thought of concept A will next think of concept B, fully accepting determinism. On the whole, one could view the universe as some creation by an all-powerful intelligence which did so out of curiosity - to see what happens when certain things are taken as truths, the same way we approach a puzzle. To do anything interesting constraints must be imposed, it must be "real" rather than arbitrary, and this is the role of qualia - the intelligence can accomplish some things by paying with qualia experience. But this view seems to human-centric, as it is just projecting our idea of intelligence and exploration onto some hypothetical "universal being", which does not have any reason to be accurate. Still as far as the "currency" of intellectual function, I think qualia are a fundamental reality - if you want to get some result you have to be willing to experience the associated qualia.

My qualia are constrained by my brain but defined by the world at large. This is the scope where qualia interaction+conservation occurs. The brain's constraints also limit the possibilities of my interactions with the world. "I" am actually all I experience - the whole world and all intricacies. Surprises are other couplings but the way I see them (in 3D space) is a property of myself as a C-space entity. And why do I exist? Consider what it would mean if all logically consistent worlds can exist - something as complex as me would only evolve in a complex enough world, where complex means it is difficult to achieve any ultimate goal (full entropy dissipation in our universe). It is about discipline. If I can have anything I want, I don't exist. The more difficult/more work it is to get what I want, the more complex the nature of existence which I experience. My existence here, this world itself is defined by how intricate/difficult it is to work my way through the maze. My feeling of time is due to the universal bound on this existence - at some point I reach my objective and then I (and this reality) cease to exist. Of course this existence is real because it is among infinitely many logical self-consistent realities. Once I reach my goal in this existence it will cease. My whole existence+experience of the world is to be seen as a single "quantum" of C space. I feel myself as this quantum, so trying to model its behavior myself is an impossibility - I don't know what I will do until I do it. And maybe, as the essay by [Mainlander] suggests, all we are (and this whole reality) is the last thoughts of a dying god, seeking a return to nothingness. Just like in a hydraulic jump, with enough energy dissipation rate there is some flow backwards upstream and towards more energetic states, so with a cosmic release of information there will be a backflow of self-organized structures like planets and storm systems and even living things like us. The world is a logical truth - the reason it is "harsh" (ie can't escape pain or walk through walls or fly, no matter how much I wish for it) is because a logic symbol only has value when its meaning is precise/exact/unchanging, not

subject to debate or disagreement. Feelings/qualia are also very rigid, an exact description of my brain's actual state and its response to inputs from reality; our language to describe them isn't so we don't readily get around to comprehending this rigidity. Why should I continue to exist? Perhaps the combined weight of molecular scale qualia suffering is reduced when they form a structure like myself, though I will never feel their suffering I could take actions as myself to alleviate the suffering of other incarnations of myself (because they exist not only in the future/past but in real time also, just spatially different, as described above). Other than that, I guess the specific extents that led to the creation of this reality make the chances of reappearing here very slim, so I might as well make the best of this chance. I remember as a kid thinking about whether it would be possible to feel pain without having bodily damage (likely at the time of various emotional abuse around the house and bullying in school), which at that point I would have said "without an effect". Physically it should be possible to do this by interfacing with the appropriate sensory organs, but why would I have wanted to do this? It is some fascination with pure experience. Maybe that is what this world is also - just pure experience, no lasting effect, I can't change reality anyways, it will continue as usual. So maybe I should be less selfish and more willing to get hurt, since in the grand scheme it will indeed be without an effect.

Consider two people interacting: have two conscious experiences each claiming they are themselves, put them together, what will happen? Can they see each other as the same being and interact to form a larger system? Hurting others would be just hurting myself in another incarnation, realizing that other people are different incarnations of myself. Still the notion is of a single experience bounded by logical consistency. This is because I exist as a logical construct and all logical constructs must exist as illogical ones don't. If I am to feel as myself then my existence must be just as it is. Strip away the 3D stuff, you are left as a realm of feelings, and it must be just so. Why am I here? Because you're here. It's not an answer but it is the only answer. The only truth is self-consistency, the things which are [Invariances], because non-existence doesn't exist. And I'm still trapped in this reality because if I weren't ten I wouldn't be writing this and you wouldn't be reading it! I can accept that if I were different, I would feel/act differently (not writing this) but why do I exist as myself at all? Or more precisely, my brain and circumstances is why I feel I am myself, but why do I feel existence at all/in the first place? This "it is what it is" has no explanation for why I exist - it answers why I should find me as myself, not why I exist at all. I exist because my existence is one of possible logically self-consistent truths that exist.

So why should I feel this way? Because to feel this way I must have gone through all the previous feelings along the way (thought begets thought).

Why must I feel this way? Because if I felt another way - well it would be another reality which is illogical. It is this way because my feelings and asking all this can only exist when my experiences are just as they are. Thus it is as it must be. Stability (which is a time representation of self-consistency) is a true foundation. This non-explanation of "it is as it is" ends up being the only explanation because anything else would refer to some external influence but at the level we are questioning, existence itself, there is nothing else but existence itself. Any other answer would leave open a venue for "why?" and more and more "why?"s (who made god?). Climb far enough on the quest of meaning and eventually the top of the mountain is reached and there is no more climbing to do: it is as it must be, not just an empty phrase but a criterion of logical self-consistency, because anything else cannot be and that which cannot be does not exist. The reason this seems a non-answer is because we likely have a wrong picture of rigid logical consistency as merely plausibility, the same way some readily claim that a zombie-like robot that acts like a human but has no feelings is something that can be made - there is no reason to think this is possible. In arguing plausibility we propose some scenario and then compare it as a potential alternative version to reality - but again there is no reason to think this is possible. For example, I might ask "why don't I own a car?" and it seems plausible enough - I could own a car right now, so why don't I? Because this would not be logically self-consistent therefore this scenario cannot exist. We might simplistically think of logic as symbols on paper, or $A \rightarrow B$, but this is just collections of atoms that represent our mental constructs. Real logic possibilities that exist (because they *can* exist) are not symbols or theorems but whole worlds and universes of intertwined consistent phenomena. This is why physics both describes our world accurately and is rigid/precise. My existence as I experience it now is a tiny segment of truth in one of these logic constructs of existence, that is fully consistent with every other segment and every other effect. My existence + owning a car seems like a negligible modification from my point of view, but when all the other factors required for this to be true are taken into account, something presents a self-contradiction so that reality is not self-consistent and therefore cannot exist (because there is no way to define an inconsistent system). Maybe to have all the factors lined up for me to own the car at this moment in time there would need to be some subtle changes in the way matter works, so over the millions of years influences are set up that lead to the car being made and me buying it before having written this paragraph; but these changes then cause changes to all other truth segments that participate in this reality, and all of these interchanges for all time must all be self-consistent, and there is no reason to assume even a single small change will be allowable while keeping the system intact. There are probably lots of other possibilities but I don't exist in them and

thus never experience them (this applies also to time: I exist as myself now, not earlier or later, because the 'myself' of earlier or later is actually a different self which also exists but is not me; time can then be seen as systematic method that progresses from one possible reality to another, and the 'me' of any given time is stuck in that time 'forever' but has no concept of time progression so only lives the experience once effectively. On a fundamental level there is no 'end of time', reality exists always and will not 'die' as a diffuse heat bath, the reason we are not immortal is that what we feel as time evolution is a relative view of world changes: if we change by some amount the world must also change by some amount). All that exists is logical/consistent while all that is illogical/inconsistent does not exist, and that which does not exist can never be observed. Thus answers must be knowable at all levels, there is no hiding in logic (no bullshit "the creator made it this way" - if there is a creator it must follow the same rules we do thus ultimately within the reach of explanation). My experience is actually that of a 'universal being', the universe looking at itself; it is the popular idea/mental picture of such a being that is incorrect: thinking of 'god' or a 'greater being' we imagine someone with dominion and control over everything. This idea of a creator that is completely free to choose how to shape our world and whose thoughts/whims immediately come true with no effort is one based on our evolutionary aspirations for control over nature (we see this sort of character in magicians/kings/superheros and they are fun to watch/read about because they reinforce this aspiration and to some degree satisfy our desire for ultimate power). There is no reason to assume such a thing is possible - the rules a 'god' has to follow should be as rigid as ours in order to create a world like ours.

What is the explanative power of "explanative power"? I cannot walk through a wall because if I could then it would not be a wall! It is easy to dismiss the idea of 'universal consciousness' when consciousness seems changing and malleable rather than rigid, but in reality this consciousness is a logical progression and logic only has value when it is consistent and rigid - a computer calculation, the working of a 'mind', gives consistent results just as brain calculations do. This is then the reality of the mind and logic - I can't be a hypocrite if I seek to learn the truth because being a hypocrite is at odds with learning the logical truth. There is a unity here - one cannot exist without the other and it is just as it must be. If I am a hypocrite then out of necessity I cannot see the logical truth, and I have come to accept logical truth as reality solely because I had taken steps to find and eliminate my hypocrisy. The unity works! Because it describes me and others. Others can claim I am crazy but that also fits within my model (it is as it must be!/there are deterministic causes why they make those claims). Their models/worldviews can be different and then that also is as it must be, with traceable causes from real influences.

But will their models be so kind to me? This self-consistent logical reality is perverse because the only ones who care about its self-consistence are ones who believe in logic, and this in itself is also self-consistent! My world is cold, vicious, and logical because I accepted the belief in logic, I might have stayed safe in my societally-imposed "growth and prosperity above all" worldview and my world would then be nice and happy, and this would also have been self-consistent. Is this self-consistency merely a projection of my mind? I wrote at length about how brains seek a self-consistent not necessarily "correct" view of the world (ie religion), so am I just stuck in a particularly good mirror sphere and claiming the world **is** the self-consistent model I've built in my mind? Since ultimately all I know is my experience, and I believe my experience represents the world, and scientific experiments others (and myself) have done are consistent with my view, and since science has allowed for real material/physical progress, I will claim here that indeed the world is this way. My world is only as complex as my brain/self, **not** including books/computers as all my interactions with those takes place through my brain/self. The world doesn't have to match my mental constructs of logical/deterministic/self-consistent, but the extent to which it doesn't has been unobservable to me and doesn't affect me in any way, so there is no reason to claim it should be otherwise. The self-contradictory, the impossible, the *reductio ad absurdum*, those things can not and do not exist and what remains must be pure logical existence which we experience as our conscious life.

This might seem to claim that I exist as a separate logical entity and my world is all made up to satisfy the requisite conditions of my existence; yet "surprises" from reality remind me that the external world is not a product of my imagination, that there is something out there that is not me, that is orthogonal to the known, and yet logical in its own sense. The reason I don't feel as "the world" or have perfect predictive abilities is because I have only limited information coupling/exchange with the rest of the world - through my senses - thus the world can only see a small fraction of my experience at a time while I can only see a small fraction of the world's experience at a time, so any consciousness that feels as myself will also feel separated from the world. So new discoveries **must** be accidents, because anything else would be illogical! If I could just think of the explanation, it would need to have a traceable cause to be logical. Can we "will" an accident to happen? Take one step up, think of the bigger pattern, see where you are there. But now you know how to do it again and again, next pattern and next and next... Why do I ask "why"? What happens if we should "see" the pattern we are embedded in? Does reality remain elusive? Must it always, by virtue of it being reality? Reality cannot be absolutely categorized or described beyond the need for it to be self-consistent, logically rigid - we say "anything is possible" but our mental idea of "anything" is wrong, the

reality around me *is* this "anything", constantly changing and unable to be described. I continue to search for answers because as soon as I know "the explanation"/the meaning of life, there is no need to know it. Time becomes pointless and then I don't exist. I only exist as active in the search for an explanation. Because if I were in control that would be same as wishing anything I want then I would have no desire then I would be pure existence itself. And pure existence generates things like me. I mentioned earlier than if you don't know a pattern you can never see it - what this practically shows up as is an inability to predict events/ surprises/ accidents. As a corollary, new patterns can be learned by trying to find ways to explain the previously unexplainable, using the new unexpected data. It will be known that all the patterns have been found when no surprises occur, when reality can be fully described - at that point there are no more patterns to see. Considering my reality as a particularly complex set of interacting self-consistent patterns, this means the self-consistency requires strict limits on the degrees of freedom ie potential changes in the nature of this reality while keeping a similar level of complexity and requiring self-consistency must lead to a very different world, not smoothly/gently varying - this is what serves to stabilize what I feel as a single/unified potential reality. The higher the complexity, the stricter the conditions must be kept for self-consistency, by a similar argument that ratio of edges to volume is unbounded as more dimensions are added.

This is the deep question, can a pattern see itself, predict itself? I believe this is impossible for the same reason we cannot have time loops - because if they exist that would be all that exists (as they have infinite capacity). This is why we can't have free energy because then it would last forever/power anything and that would become existence itself. This is why we can't wish for everything we want because if we could then we would be empty and void (thus self-contradictory with our existence in the first place) because our wants must remain unfulfilled to still be real. For even in my brain, I remain at the mercy of systems and cycles. Evolution doesn't just select the most fit animals or societal structures, but on a daily basis the most fit thought and action patterns that I take, in this way redefining me. I wrote earlier that humans try to get away from nature, and that our current privileged technological position is due to the exclusion of nature from everyday life, which happened by chance due to high-quality energy sources. As a parallel, a physically consistent/rational mental state and the associated physical abilities (as goal-setting and problem solving and self-improvement) are also a privileged position dependent on the exclusion of vast portions of the evolutionarily selected (natural) memes/concepts, which happened to me by chance due to low social contact and availability of high-quality physical information sources. My brain may seem a safe spot but there is constant competition, exacerbated by societal and media inputs, for ideas

that take up my processing time and ones I accept as truth. To stay confident in a self-consistent set of beliefs I must critically evaluate all incoming and outgoing information, setting up a mental environment that is hopefully self-sustaining and robust/resistant to destructive influence. I can see how arriving at the views I now hold simply would not happen if I were an active participant in society, as then I would be fully entrenched in societal operating frames and not even realize it, like the wave pool example that is connected to other water and constantly moving - try to get it to take on a specific wave shape in that scenario! To get a specific wave shape, it is necessary for the wave pool to remain undisturbed a long time so stray waves eventually die off, and then to put in very precise motion after which the wave shape will be established on its own. This is in a way what I have done by accident, without planning or realizing it - in the years of low contact with society I was minimally exposed to prevailing thought patterns and external influence effects slowly died off, while I put in carefully controlled information in the form of physics texts, which has built up a stable shape that can now (for the most part) classify external influences as harmful and resist them (whereas earlier I more or less accepted everything uncritically).

Consider a computer CPU that makes a new CPU that has more processing capabilities, and the small one can then use the big one as a 'model' to simulate its own actions and thus look into the future. What would happen? If the result of the model is never seen by the small CPU, its actions remain in accord with the model but it doesn't learn anything from its efforts. The model is in fact powerful enough that it could simulate what the small CPU will do once it is given a specific model result. But it is here not necessary that the result it is given will actually correspond to its future actions. For instance, the model telling the small CPU A will result in the CPU doing B, and the model knows this and can then choose to tell the CPU B, but that will result in the CPU doing C, and so on until the model tells the CPU either something that doesn't affect what the CPU does, or affects it in some desired way, but if the model is designed to tell the future this loop keeps going with options D, E, F... And I believe there is only one set of circumstances where the CPU can be told specific future actions and it learning this will serve to complete exactly those actions, so being told Z results precisely in Z. These eigenstates/invariances as it were, and this set of circumstances is what reality must be - because we in this world can run models about the future and these models really work. A pattern looking at itself will see its own evolved reflection, and this process continuing indefinitely is what drives reality.

Am "I" a person in 3D space/time? No - "I" am an entity in qualia/consciousness-space (C space), and the sensation "I" interpret as relating to my body also feels in a context relative to the sensation "I" interpret as 3D space/time.

footnote:by assuming physics is "what happens in 3D space", we convolve the concept of Physics with our interpretation of 3D space (which is in itself a manifestation of the way physics works). This assumption implies that the picture of physics we see from within physics is the real Physics, whereas the real Physics is a more basic level than that and one we cannot see or experience, because it **is** our experience, there is nothing else to compare it to or frame it with. If we de-convolve the typical "atoms in 3D space" framework of physics into our subjective interpretation of space/time and an abstract Physics that is independent of our interpretation/experience, we arrive at C space. The underlying world is one of sensations or qualia, and this is "information", and the way it behaves is defined by "symmetry". "I" can interact with other conscious systems, and the interaction takes place in C space but it will be the case that "I" feel it as inseparable/indistinguishable from spatial proximity and interactions in what "I" feel as 3D space, because 3D space is the way my brain evolved to interpret and respond to C space interactions. footnote:so anything that involves an optimization with rearrangement of matter, like a lightning bolt or the breaking of glass or biting an apple, all create qualia in C space that lead to matter motion by virtue of their feelings. The brain then has very indirect pathways to achieving its goals, so as to create the specific feelings we feel that end up being evolutionarily useful. It is interesting to note here, both the concept of maximum entropy increase given the imposed constraints, and that this leads to double-fractal structures coupling diffuse initial states through a concentrated 'optimal pipeline' into diffuse final states. Thus fractal structures arise in lightning bolts, electric/water/utility and communication and transportation networks, natural organisms (trees and animals), flow vortices... There ought to be a way to prove that it is indeed fractal structures that optimize dissipation given external constraints, perhaps by making most advantage of the highest-throughput options available to it. If I simulate a conscious system, C space will contain both the simulated 'big' consciousness qualia (which makes possible the physical effects of the big patterns of the system), and the simulating 'small' consciousness qualia (which make physical effects that drive the big patterns), and they are interlinked: the extent to which the big qualia carries information is removed from the small qualia, so overall qualia content is conserved. Why would I claim there is such a thing as C space (which is not even a "real" space, ie I have no idea how to visualize it)? I cannot prove this except to say I felt it in a meditation experience, a feeling of "everything makes sense now!", it is a conclusion that I believe one cannot accept without actually experiencing it. Like in [Contact 1997 film], "hard" scientific knowledge cannot be disjointed from "soft" subjective experience, because all we do in science points back to our experience - having seen this pattern enough I've come to claim that it is our qualia experience that is a more fundamental guide

than atoms or 3D space. First, consider our observed 3D space+time, both seemingly infinite. There is no clear origin nor boundary. How could such a "handle-less" space be handled by physics itself? Whereas if 3D space is a conceptual tool created by me, and both of these concepts exist in C space, I could logically experience an effective "infinity" even in a finite C space, like I can make a video game in which the character can just keep walking forward and claim his path will be infinitely long but still never escaping the finite bounds of the computer. This finite conscious space is tractable and logical in its evolution but also invisible to me, so I cannot describe what it's like, where it starts or ends, other than it provides a unity to our universal experience. Similarly with time - relativity with a time axis requires each reference frame to have its own clock, or its own time, which is strange but we can accept it - except then what clock does physics itself operate with/by? I already argued for the concept of "simulation time" which is invisible to the observer within the simulation - the observer and the clock he looks at are both in C space and within there the clocks are fully relative and depend on spatial motion, but the clock that runs C space itself is absolute but perfectly invisible/inaccessible from inside C space. Why claim the existence of something that is invisible/inaccessible? Because it provides a unity, it is the "glue" which holds all the otherwise disparate parts together, it makes physics mentally tractable. Second, consider the interaction of particles. How does one particle know about another near it that it should interact with? I've answered this question with "fields", but one can then ask: how does a "patch of field" know about another near it that it should interact with? Something must transmit information from one point in 3D space to another, and anything within 3D space must be somehow bounded within the space and thus intrinsically cannot do so! Whereas C space is a space of links and interconnections, its nature and essence is to transmit information and cause 3D matter to interact in specially defined ways, the actions of C space is what we observe as fields, and something we cannot measure except by its effects on "solid" 3D matter. Third, consider the boundaries of our conscious experience. Clearly what I feel is bounded in some way as I only feel what happens to my body, but where exactly is this boundary between my conscious experience and the rest of the 3D world? I already argued that this boundary is not any sort of 3D matter enclosure (like the skull), but rather made up of a special arrangement of links and "infinite couplings". And when writing about using tools not expanding my conscious experience to "feel" the tool, I was careful to choose my words to not overstate this concept - because ultimately my conscious experience *does* change when I use a tool. Learning a skill like bicycling requires a learned "connection" to the machine and to new physical sensations that could not be felt otherwise. When I interact with other people in society, all our conscious experiences change and the society as a

whole is able to do things that unconnected/non-interacting people could not have done. But on the other hand there really is a boundary, because I still don't feel other people's feelings! This boundary does not exist in 3D space/time but in C space, where the amount and nature of information links that are me→me vs me→outer world can be used to determine just how much it is possible, as a human, to interact with other systems in a qualia manner by only using my natural senses. Fourth, consider our experience of physical objects/reality. I feel qualia, such as 'the sky is blue', and this affects my actions in a real way, but this means I have played a part in a coupled system - contributing to a "big system" conscious experience, but this means sunlight itself and all the air molecules are all part of a big conscious experience, but that just seems crazy! Where would I draw the line between physical action and qualia? By this logic, this line can be pushed farther and farther back until all is qualia, and that sounds odd because the 3D world looks objective and certain, separate and cut-off from qualia. Of course, this interconnectedness of all systems is inherent in C space, and from that point of view it really is true that seeing sunlight from the sky makes me a participant in a big (in terms of 3D space) qualia experience, like a CPU transistor can be imagined to feel solely the "experience" of interacting with its neighboring transistors while at the same time participating in a big million-transistor computation - but this computation then must be its own experience, and so on. Fifth, given that we do have conscious experience (and that is, after all, the one thing we can be most sure of), where does this conscious experience exist? I long thought it was in the brain footnote:because I've been taught that is where thinking happens, surely less medically advanced cultures would point to the heart or stomach or elsewhere; there is nothing within my experience of self that would make me claim "I" exist in some specific 3D location beyond perhaps the knowledge that I only feel what happens to my body, but accepting the above interconnectedness at large scales like human society and seeing sunlight, means there is no real place in 3D space where the qualia "appear". I don't see qualia around me, nor can I measure them, nor is there anything obvious 'overlaid' on the 3D space a brain takes up that would make me claim "I see qualia - right there!". None of the photons or air molecules or 3D matter part of the sun or me or anything involved in this process is "conscious", I cannot point to the atoms on the sun emitting light and say "this is conscious experience", because the conscious experience itself occurs in C space and only manifests itself in 3D space. The brain has evolved to be bounded - both in 3D space (with the skull and also blood/brain barrier) and in C space (so that I don't really feel other nearby conscious systems, allowing me to work on my own and hurt others for my benefit). As in IIT, this split happens due to rich inter-connectivity inside the brain and relatively few bidirectional links to the external world,

and such 'egotistic' structures appear universally with energy dissipation. Perhaps with a 'brain implant' type device it would be possible to expand the brain's connectivity network to actually couple to other conscious systems (including "inanimate" ones) and thus get a much vaster awareness of the world, a wholly new type of conscious experience. I doubt drugs could do this because as far as I can tell, within the scope of the 3D world drugs can only change the brain's connectivity within its bounds, rather than opening the bounds to allow interactions with external systems - the latter does not seem possible without an implant or wires or some sort of physical connection from the brain to another solid object.

And what of C space? C for consciousness, connectivity, conceptual, consistency, coherency? I will need to introduce a notion of proximity/distance and dimensionality nonetheless so how is it distinct from 3D space? The difference is a single entity (blob) in 3D space does not necessarily correspond to a single conscious entity in C space. C space information exchange is: causal, conservative, and bidirectional. Information either propagates with no modification (and this is speed of light) or loops on itself to evolve (speed of time): temporally localized and spatially evolving, or spatially localized and temporally evolving. How is light bidirectional? Take empty space as actually containing huge numbers of C space blocks, then a light propagation from one block to another is bidirectional: light leaving one block = light entering next block. A higher level of bidirectionality is also afforded by the symmetry of the $1/r^2$ relation between sender and receiver. Why doesn't this bidirectional exchange couple to my conscious experience? The light acts as the valve on an amplifier: the valve is actually 0% coupled to the flow, so my sight qualia are couplings to my own eye molecules which act as the amplifier (sure enough, without the eye or with the molecules somehow impaired I do not have these qualia, as opposed to just covering my eye), and the external light in its bidirectional exchange affects my eye's evolution but has 0% information coupling. Just as pain is actually built in to and generated by my brain structure, sight is actually caused by the evolution of my eyes' own molecules employing their own energy sources, as guided by external light but not coupled on a qualia/information level. The only insight into the reality of C space is our feelings from introspection. So given that when I close my eyes I don't see a blank space but rather see nothing, the extent of my conscious experience is actually reduced when the input to my eyes is removed - this suggests a further information filter on top of the photon amplifier outputs, such that only 'human-relevant' information makes it past the filter and contributes to my experience.

In 3D space, there's just decaying extents of influence. After taking a shower, the water on me dries off exponentially. The amount of shower water I drank is something tiny, and amount of it remaining in my body keeps decreasing. When I move linearly, the presence of my body decays in

one spot and rises in the neighboring spot, resolving (?) Xeno's paradox. Same with my consciousness - one moment's existence has limited influence in time and space. Intelligence comes from being able to concentrate conscious effort so that it doesn't decay but rather builds up along specific lines, like a laser, self-reinforcing in a single goal. This requires a specific discipline of brain operation to set it up in this fashion (done to a certain degree by our school system - it is a multi-year task to educate students not because the information is difficult (surely the dynamics of team sports are much more advanced than basic arithmetic) but because the required brain operation to solve abstract problems/take tests in the first place is wholly unfamiliar).

Earlier I wrote that "[in] the realm of mathematics, relations take precedence over actual meanings of particular values", or that the nature of mathematics is to make logical statements about relations of values, and now I would further say that the nature of physics is to see what happens when these relations apply to some specific values. And the amazing thing about physics is it describes actual real world occurrences, so the pattern here is evident: mathematics/relations/links serve as a way to couple specific states and allow them to change in a conserved way (this is the nature of C space), while physics is the applied action of C space links on specific real matter values (this is the nature of 3D space). Then C space is the space of logical possibilities, and my life and experience exist as one of countless self-consistent possibilities. Why should this possibility couple to a very specific 3D space/set of parameters? Perhaps that is the only way it can exist, and the relations/links that can exist must be complex enough such that the 3D space that allows them to exist must also be of a specific complex nature, one being the dual of the other and both required in an eigenvalue-like progression.

Consider the tracing back of the universe's history to the central spatial and temporal point of the "big bang", for which there is considerable physical evidence. In my view then, this origin is the minimal set of axioms that define this world, some essential truths, from which the world that we see arises as increasingly complex and intertwined theorems and implications of these axioms, with distance in time and 3D space being related to the level of "complexification" of these initial axioms, more and more inevitable logically rigid truths following from the axioms, and one of these truths would be my experience (this experience in itself being one of analyzing other things I see in the 3D world and reacting to them - creating another layer of theorems of what follows from the inputs). My qualia is the experience of being a logical truth, and my actions are both inescapable (deterministic) and mathematically bounded by the rest of the world (other theorems that define me). The whole thing exists because there is nothing to stop it from existence - there are no other forces at its level. C space has

no concept of time or 3D space, which is difficult for me to imagine but it means anything can be timeless and all could be visible, there is no need to worry about something being finite (ie death/mortality) - it just exists. So for C space as a whole, its existence is just a fact of logic, forever and everywhere. My existence as one of the logical truths is then also forever and everywhere, my qualia also timeless, with my sense of time being an illusion due to the way my memory is set up. This resolves many otherwise intractable questions, like "who created the creator/what rules does that world follow" or "where did information for symmetry breaking come from" (it didn't, the observed breaking is because our 3D world is founded on some derived theories but not others, the others can still exist though but if indistinguishable then all possibilities collapse: at some level the choice of what we call x/y/z directions doesn't actually apply) or "what is the absolute-time significance of the big bang". In this space, time doesn't exist, nor do the spatial directions, what we call spacetime is what we see from within the structures of this space. Then the picture is of a 'sculpture of feelings', which all exist at once together, though in our perception they exist one after another because this perception of time has been evolutionarily selected. I've already described how other people which exist in other spatial locations operate more or less by the same mechanism (ie if I were them and felt like they do, I would do the same thing they do) or in other words they are other 'incarnations' of myself - and while they exist at the same time as I do, them being in a different spatial location means I can interact with them only in limited ways such as tactile or auditory or visual, not in a qualia manner (ie feel what they feel). The next level of separation is in realizing past me and future me are also other people and my interaction with them faces similar limitations: they may be in a similar spatial location but exist at other times, so I cannot touch or see them, but I can interact with them through my memory, and indirectly through the external world (ie by writing reminders to myself). Then my existence is a momentary one, yet all these momentary qualia-optimizations of neural nets defining my life exist at once (though felt by me as proceeding in time due to the way my memory works), along with all the other people and objects in the universe, all in C space although visible to me only piece by piece and only a small bit at a time, limited by the extent of the neural net connectivity (simpler organisms have simpler qualia). What do "I" look like in C space? I know that my conscious experience runs at about 10Hz from tracking the fastest stimuli I can hear/see. Thus the extent of one conscious cascade (or single moment of qualia experience - the momentary I) is 0.1s in time, and about $0.2 \times 0.2 \times 0.2$ m in space. Time is the odd variable here: converting to distance by speed of light gives $0.1 * c = 30e6$ m, so the conscious cascade in natural units is more like a line along the axis we call time. Note in C space time does not have the "temporal" property

that we observe (because our qualia and memory are such as to feel time passing), rather time is just another axis like space, this is codified in general relativity with $x^2 + y^2 + z^2 - t^2 = 0$. We find ourselves born with a particular C space direction as our time axis, but any direction could be chosen - the choice of (what we call) time axis in C space corresponds to what we observe as velocity. In C space there may be entities which have no feeling of time, or which exist along directions which to us would be spacelike, of such entities we would see ephemeral flashes as they pass through our momentary-qualia light cone (this is the extent of C space that any single conscious cascade can observe). Time can go in the reverse direction, which then along with space would trace back to the minimal 'big bang' origin point, and going farther back will lead to a 'dual' of our universe in which entropy also rises as time goes backwards, until eventually a maximal-entropy "negative infinity time" universe is reached which will be equivalent to the maximal-entropy "positive infinity time" universe we are on the path to (this is like the mapping of a line to a circle - the bottom of the circle at zero, the top at both negative and positive infinity). The dual is seen in the $1/v$ symmetry of relativity (?). The universe, with all its qualia, is thus the manifestation of a complete logical set of axioms and all their possible combinations/theorems (of which the various temporal I's I call myself form a specific connected set, interacting with other I's and other non-human entities). What limits the conscious cascade? For 3D space I hesitantly claimed infinite couplings are at the boundaries of the optimization, and since in C space time is just another axis, similar infinite couplings must also apply to temporal boundaries. The key then would be separable influence: how essential is some feature of a nearby space or time on the operation of the cascade? At some point the surroundings cease to be essential, and that is where the boundaries lie (as in IIT, but now extended to the time domain, and still without a good way to point exactly what constitutes the boundary without analyzing all possible system combinations and what counts as significant). As a case consider a computer - it operates when plugged in to the electric grid, but is the electric grid a part of its cascade? I would argue no, because the grid can be substituted for any voltage supply: a battery, or a battery with an inverter and rectifier, or a solar panel, or even a hand cranked motor. As long as the voltage and current going into the computer are the same, its operation is indifferent to what powers it. Is the monitor essential? Similarly no, because the computer would still operate with any type of monitor attached or even without a monitor attached. But a transistor in the CPU, for example, is an essential part: it can be modified slightly while keeping the same behavior, but at some point the behavior completely changes so the system itself becomes somehow different, thus the transistor is included in the cascade. Time-wise can limits be drawn? My first guess is this would be the clock

rate: after each clock oscillation, the CPU undertakes one cascade after which an equilibrium state is reached, until the next clock pulse starts the next cascade. Changes in how the previous CPU state was attained do not matter to the future cascade, so temporally the two are disjoint, whereas if the evolution over time was tied so that each cascade was longer and inseparable for longer periods of time, then the temporal boundaries would be expanded. I don't know how this would relate to the qualia experience associated with the cascade, but can only assume that greater spatiotemporal extents of the cascade correspond to greater variety/richness of the potential qualia experience. This picture might change the logical conclusions regarding minimizing suffering: considering that each cascade is a discrete entity, its qualia is what matters to itself, and the extent to which it matters (to which it is felt) is independent of how many or what other cascades exist in the world. That is, I am not aware of the qualia of other people, though I can assume they exist and feel qualia, ultimately the only things I feel are my own qualia, and this will be said by the other people as well regarding their first-person experience. So there is a "compression" of experiences: one organism experiencing suffering, or many organisms experiencing suffering, this does not change the nature of the suffering (make it more or less intense) for any individual organism. There is not a "universal being" that experiences feelings proportional to number of organisms that individually experience the feelings. Then if the goal is to minimize suffering, the focus should be not on minimizing "total suffering" but on finding the most-suffering individual organism (in space and time) and helping it avoid suffering; the population multiplier doesn't matter, but individual organisms/entities do. So even if there are millions of insects in a forest, making life better for one is still a worthwhile goal, because that makes a difference to that insect; the suffering of the insect population as a whole is an imaginary entity because there is no organism that feels that combined suffering (whereas from the total suffering view, saving one insect out of millions is practically pointless, causing only a millionth part of a change) - the attempt to help the whole population is worthwhile to the extent that it will likely help the most-suffering individual in that population. In doing all this it is probably wise to also recall that there may be larger-scale entities which use ie the insects as mechanisms of their own qualia, like our brain uses molecules as mechanisms of the conscious cascade, so in lowering the suffering of the individual, there is a chance we alter the qualia of the larger entity - but this alteration is not a linear summation of feelings like assumed in the total suffering approach. I would argue, that due to separability, the qualia of the individual are inaccessible to the larger entity, so in turn the latter's qualia are independent of the qualia of the constituents and only based on how the constituents act (described as physical laws) which is consistent with my brain's qualia - "I" do not feel the qualia (if

any) of the molecules in my brain (at least that is the interpretation taken in this argument).

Note that this idea of self-consistency and the universe as one possible set of logical extensions of axioms, also addresses the point of the world as something within my mind vs the world as out there with other people in it. From my view, all I know of the world is due to my mind, the way I interact with the world shapes the boundaries of my conscious experience, so is the world really there or is it part of my experience only? Much like the equivalence of tracking a moving volume or a stationary volume in fluid flow equations, I could equivalently see the world in either interpretation. If it is in my experience only, then my experience is one possible self-consistent reality out of many but it only includes what I know of the world and not "the whole world". Still other possible self-consistent realities surely exist, and if they are somewhere out there in existence, they could logically be intertwined with my reality, forming a mutual self-consistent set of relations. These other realities that I can interact with are other people and objects in my reality, where I can affect them and they can affect me and yet we all abide by the laws of physics (which are the laws of self-consistency applied to the foundational axioms of this reality), so in this sense the world could be said to be "out there".

Regarding symmetry theory: I think it should be possible to simulate physics by creating a "unit", which is the most basic operating component of the universal computer. This "unit" exists in C-space, not our 3D space. I'm not sure what properties it has, but they must include some sort of connection to other units and a way to store a state and respond to it/communicate with other units. If I had to describe the unit for a simulation, I would have to specify what values it receives, and what state it starts with (connectivity and information stored), and the simulation will take finite time to show me what values it outputs/ends with. Then I should also be able to make groups of units, for example some specific group or arrangement or interacting segments or set of properties will result in a response coinciding with what I (as another entity in C-space, interacting in 3D space) perceive as an "atom". So this particular arrangement of units can be made as a "module" in the simulation, which will then require all the same things as an individual unit but in different quantities: initial state and parameters, input values and types, and as the simulation runs it tells me the output values and resulting state/configuration of the "atom". The individual units may be complex or simple, I don't yet know, but I assume that a coherent entity in 3D space like an atom represents a coherent/connected set of units in C space, and when units are connected their connections cause whatever information they exchange to not be required as external inputs but rather turned into internal storage. Thus with more connected units there is actually *less* information input required (vs the

case of the same number of independent units). Thus there is a reduction in number of possible input/outputs but an increase in number of possible system states/configurations/memory (again vs the same number of independent units). This is why symmetry theory works - even though atoms are made up of multiple units (presumably), and objects like baseballs are made up of a whole lot of atoms, the resulting entity of "baseball" can still be described by a very simple theory like $F = ma \rightarrow$ this simplicity represents the combined input/output capability of the baseball (as long as it stays a baseball - ie go too fast to where it breaks and then this doesn't work anymore because the inter-connectivity of the baseball atoms is lost) which is small, while the absolutely huge information amount required to describe the baseball in unit terms is stored internally/inherently in the baseball object and thus does not need to be described by $F=ma$. I asked earlier why simple theories apply, and my view was that the complicated properties of the world overall cancel out, leaving us to observe only the simple properties in 3D space. This is how the cancelling out works - the excess "complicated" properties are coupled within the C-space system and are inaccessible to us (unless we specifically break up the system to access them, but then the theories used to describe the system become more complicated!) while the remaining externally available properties end up being 'simple'. So, I have a set of units to make an atom module, with its input/output connectivity and internal information requirements to be initialized in my simulation. Then, I can combine the atom modules to create a big object like a molecule, and the defining properties of the molecule should be specifiable only by knowing the atom properties and how atoms operate, with no need for the specifics of how units operate. This is in the nature of how units work and why symmetry theory applies. This distinction between internal and external connections also define the notion of a boundary and is why we can surround a system and control all information flows to it (the fact that this only requires a 3D sphere is a statement on the basic nature of unit connectivity). Then the molecule will have its own internal state and external input/output connections necessary to initialize it. Then I can do the same thing with molecules to make bigger things like macroscopic objects. Similarly, as long as I know how molecules work in terms of this input/output/internal structure, I can create a model of an object without knowing how atoms or units work. And so on. Then I can eventually simulate the properties of complicated things like superconductors, which will be fundamentally represented by units in C space, but practically will involve connected higher-order modules for clarity of definition to our interpretation (like interpreting a CPU's operation by splitting up groups of transistors into modules like 'adder' and 'multiplier' and 'buffer' instead of just a fully-equivalent array of connected transistors which it physically is, I propose interpreting a macroscopic object's operation by

splitting up the units that compose it into modules like "molecules" and "atoms" instead of just a fully-equivalent array of connected units which it physically is).

Applying this unit model to real world phenomena may be made possible by tracing of external influences and information flows through a bounding surface when it is impractical to directly observe a process. Consider the structure of an electron: I'm not sure what it might look like in C space or even in 3D space, but I know some nuclear reactions that convert the electron to a set of gamma rays, and I can assume some specific shape for the e-field formed by gamma rays and then do a reverse-time simulation and trace back the spread out e-fields until they converge on a point, and then I should see the structure of the electron. Here it would also be useful to consider the wavelength of the associated gamma rays as this could be indicative of electron size/order of magnitude. This can be applied at any level of simulation with units, just with bigger units there will be a volume/surface preference for internal rather than external connectivity so at some point it becomes impractical to define an existing internal system from solely its external interactions - still some degree of patterns and coupling to the rest of the model's complexity should be usable.

What is computation? I can connect an electric relay in a loop to itself such that it stays in a stable state, or becomes an unstable oscillator, and the two look very different. But considering the relay left as an independent system, the oscillator can also be seen as a single and unchanging state, or 'stable state'. Even though it oscillates back and forth between on and off, the oscillation is actually stable in the absence of outside influence. This is how atoms and other physical building blocks operate also - they are constantly shifting/changing but doing so in a stable way that represents a single quantized information state. The common feature is that a loop is created and then this loop implies a quantization of possible states it can take on, and whether the states are constant or oscillating, they indicate exact periodicity/temporal stability (a circular trajectory of configurations ie no net linear motion) when independent of another system. In this way also planets can orbit and pendulums can swing and such displays of motion should still be considered stable (the instability comes from observing them with light or otherwise, which causes them to slow down ever so slightly). But if oscillators and looped transistor configurations are stable what are computers? Computers imply irreversible/one-way change originating from information delocalization. When information delocalization occurs, some change to matter (the left-behind localized information) must also occur, and this change should be seen as a computation. In a case like light energy in space spreading from one sphere to a bigger one computation can still be said to take place since an irreversible action occurs but since in both cases the energy is unbounded there is no matter that is changed, and in that

sense this is of no interest to us - rather than computation I might call this transport. There are also ways for energy to flow through matter without delocalization which are similarly transport and not computation, this is what happens inside electric wires or pipes or space itself. So computation is the process which takes localized information (matter) and ends with delocalized information (also matter but altered + dissipated heat). What a looped system creates is a quantization requirement since looping splits all possible states into two: ones where the state looped on itself eventually leads to a progression of states that returns to itself (ie periodic oscillation or static/constancy) and ones where the state looped on itself does not lead to such a progression (never repeating). The latter are impossible because they are self-contradictory/ carrying infinite information. That is to say, any looped (and isolated) system acts to preserve its information so however we describe its state it must either eventually return to the same state (oscillator) or simply stay at the same state (constant). This still does not imply quantization - quantization arises because real systems are not isolated and different states have different efficiencies at radiating (delocalizing from the loop's memory structure) and these differences depend on how the loop is coupled to the rest of the world - if only through space then gravity waves and photon waves serve as a mechanism of delocalizing unstable states such that what remains are stable states which are quantized. But this delocalization process which removes information from a spatially bounded loop/memory is precisely what was called computing above. Human-useful computing then occurs when we couple/loop systems together such that their quantized states have some meaningful representation and enable energy dissipation so as to shift between these quantized states. Note that energy must be dissipated, not just as a side effect of computing, but by the very process that represents computing, because it is energy dissipation which 'locks in' one quantized state when starting from another one. If there is no dissipation/delocalization, states can still change but in an oscillatory manner, which makes this a memory device (with a single, albeit potentially quite complex, state - like the solar system assuming negligible effect of gravity waves/tidal forces), not a computer. Perhaps there is a relation here to hash functions, since delocalization implies a removal of macroscopic information from a bounded system thus a reduction to a more limited set of states which is non-unique but intimately linked to the initial state, just as a hash function is designed to do with human-scale information. Where does qualia come in? Any stable state, oscillatory or constant, ie one with no delocalization, must be 'timeless' thus have no conventional qualia. When two stable states (say a battery and a CPU) become coupled, the joint state quantization becomes different from the two separate systems' states and only energy that satisfies the new quantization requirements can remain bound. The energy

that does not satisfy the new requirements will be delocalized and escape the system. However the escaped energy can still interact with many more systems outside its originator, so I find it difficult to claim my qualia come from the escaped energy. But the remaining state is localized and stable, whereas I argue qualia requires energy dissipation because it is time-based, so I also find it difficult to claim my qualia come from the bound energy. That only leaves the change of connectivity itself as being intrinsically related to qualia, though once again I cannot explain why there should be any unified feeling in this instance. I have argued that any looped system experiences qualia but maybe this is false - maybe only and strictly bidirectionally interconnected systems experience qualia, and infinite couplings anywhere along the line break the chain. Our digital computers can evolve and crunch bits, but they do not understand reality in terms of abstract concepts - we do, even if it is based on the results of a CPU computation, since it was our conscious understanding and abilities which have designed the CPU so that its output can be usefully interpreted and applied to physical actions. Perhaps what this means is that what I feel and experience *is* the operation of the universal computer as it decides on an optimal path to dissipate energy in a system closed from the rest of the world by infinite couplings. There are countless optimizations to be done to evolve this world, and even the matter in my brain itself, and among those countless is the one unlikely heavily-interconnected arrangement of energy and potential dissipation paths which represents the conscious part of my brain, and the way the universal computer handles this for some reason results in feelings not as a side effect of optimization but as the optimization itself. Evolution has "hacked" the universal computer by stumbling onto the fact that it operates using feelings and then turning these feelings to its own advantage of increasing individual fitness. To that end, I *am* this fragment of reality, I am a fundamental unit of computation, the things I feel are themselves how the universal computer works.

Can a person inside a computer simulation find out about the computer? About the computer's world? If this world is logical, the simulation must also be logical (or deterministic), so this much must be true at all levels. This is how I can claim that the world is deterministic, rather than just my experience of it. And any creator's world must also be deterministic, as must be any of my computer-simulated worlds. The fact that we can make simulations is a truth of this world, and the nature of language or any other logical constructs (chemical theories, money/markets) in determining real physical matter flows speak to the ever-present nature of consciousness. Seen as a field that controls matter motion, money must be seen as a conscious being, and indeed it uses humans and materials to create structures never before seen (like metal ships and cars and airplanes) for its own sake. Unfortunately these planet-scale conscious elements that

use humans haven't evolved for long so they are choking off their own human supply, and with this 'petri dish' that can support only one bacterium blind evolution is not the best driving force whereas look-ahead logical optimization taking into account the nature of the dish leads to greater prosperity.

Is there a way to tell extent/complexity of qualia or conscious experience? One way might be to examine the repertoire of exhibited activity with limited input. So for instance an animal will only try a few limited ways to solve a problem and its routine will tend to be simplistic in the absence of a variety of environmental cues, a bug will be almost machine-like in its repetitiveness, whereas a more complex human will exhibit a wider variety of actions in the same situation. But perhaps this is only showing the extent of internal memory of a system: by this metric, a computer also has very complex responses even with limited input because it has GBs of memory. Yet there is a difference - the computer doesn't necessarily understand what it's doing, as it handles the data bit-by-bit or byte-by-byte (and this might make a difference in terms of how much it understands) - even when showing a movie or displaying text from the internet, the computer is not aware of the movie or the text, just lots and lots of arbitrary bytes flowing through, so its conscious experience I imagine could be argued to be limited to this byte-level relatively simple feelings. Whereas our awareness is more complex and thus our feelings are more complex. However this also implies a large memory, so I am not sure at this point.

A lot of features of our society are 'zero-sum games', where any notion of improvement is only an appearance as it comes at the cost of other people being worse off ie improving one's chances at a competition also worsens others' chances. This can eventually be traced back to physical conservation, and indeed any non-zero-sum games will have to involve the use of force/superiority/no push-back in either plunder or disposal. One example is the monetary system/economy. With the notion that total amount of money is more or less constant, the only way a business can make money is by taking what would have been someone else's money. This makes stock trading more obvious as a game rigged to the players with the best trading advantages ie fast and low-cost transactions as well as detailed information availability - and this game is won at the cost of those without such advantages. But if the losing side quits, the winning side loses their revenue stream, so maybe it is not by accident that retirement funds and other social security benefits are automatically invested. New companies must find ways to displace existing spending habits and siphon off money that would have otherwise gone to other companies - online stores mean less revenue for physical stores, apps like uber mean less revenue for traditional taxis. Another example is education in the labor force. Touted as raising qualifications and making job searches easier, education may do so but at

the cost of making it more difficult to get the same job for those without an education. The benefit is only there as long as there is selectivity, if everyone gains an education now the same level of competition for jobs returns, and this is the situation we are in now, of course taken advantage of to the fullest by universities (businesses) as it is a legal way to give pretty much everyone a nearly life-long debt. The push into education and debt in itself is indicative of an over-abundance of candidates which has thus been artificially 'hidden' to keep the economy from crashing - arguably beyond the diploma education is not actually that useful for job performance. There is a weird combination here in both businesses reducing employment and candidates pursuing more education as if that will suddenly create job openings (indeed the irony of educated students implementing automation that will remove their own future job openings seems to be minimally recognized), the existence of which I cannot explain yet. Among this, there must be 'real' drivers of society, which contribute more than the effort they require. Taking fruit from an existing tree requires little effort, planting and watering the tree then taking fruit requires extra effort still most is done by the sun, hunting existing livestock takes little effort and energy because they were raised 'by nature' whereas raising livestock on a farm requires a lot more effort and energy as they are fed using farm-harvested grain and treated water so they become a net energy and nutrition sink. Fishing is a net nutrition/energy source, fish farms are a net nutrition/energy sink. Of course our biggest glut - fossil fuels are a net energy source (and very much so), renewable sources are questionable, human and animal-based sources are a big sink. For jobs, manual work and inefficient/bureaucratic industries are a source (creating jobs where previously none existed), automation and industry is a sink (taking away jobs that would have been required for the same output) - but this needs to be combined with the opposite trend in 'real productivity' to see why now most people hold idle jobs while using/buying high technology. Governments are net sources of money, and probably also net sinks (in the form of symbolic 'debts'). For money flows, commodities that are decoupled from money in their production (like natural resources or services) but that can be sold for money will be net sources, while sinks are accumulations of objects/services that are bought using money. There is something about this intertwined economy that keeps it stable and distributing resources, but precisely how this works will not be visible without a fuller flow/system based treatment.

I was at a gas station/rest stop with a few claw-game machines, and there thought of a more bare view of the surroundings: everything costs money, the machines which looked to me exciting/nice/playful as a kid I now realize are money traps, luring unsuspecting humans with the opportunity to win just like bug-eating plants lure bugs with their nectar. Reading about economic development of small towns, I see that nature

trails and parks and 'local community handcrafted' stores (selling exclusively stuff made in China) and even parades/festivals are all designed to bring in tourist dollars, and it works - I've taken many trips for hiking/exploration and in turn at least bought food in local stores but never really looking at it in such sinister terms that the whole reason this nice stuff exists is so I can be used as a means of money transfer. Without money, I don't have anything to contribute, and everyone/everything around me is designed to take my money (for personal relationships, potentially other assets come into play like appearance, social network/influence, intellectual/artistic/emotional stimulation). Even 'useful' services, like car rental, will cost money: why should I give money for the car, where is the benefit and the attraction? And it turns back to the brain, to my experience of self; there are some things I like to do just for the sake of doing them, because doing them feels good - and indeed those are the *only* things that I do. So the reason I rent the car is the same as people go to casinos is the same as I insisted on playing the claw machines as a kid: driven by my intrinsic urges entirely beyond my control. And this is also the case with relationships: it is a biological trick, because I am better off in modern society to be alone and maximize my own potential rather than subdue my dreams for an arbitrary closeness with another. Indeed, just as me missing potential opportunities is the working of an infinite coupling affecting my life, me seeking external validation or projecting feelings onto others is the working of biological mechanisms designed to keep me in the evolutionary cycle (and this is an instinctive action, I am always projecting my feelings/mental model onto another unless my goal is to explicitly ask what they are feeling - internet comments on a video will be about how the viewer felt if they were the character, using a pet for emotional support represents the owner's imagination of unconditional love towards self projected onto the pet's actions). It is another honey trap, with the honey being the mind-controlling pleasant feelings of intimacy and lust and validation/support/safety, and the trap being giving up on your own goals, inevitably eroding away dreams, and eventually children who take all your life's labor for their own benefit. It is biology and evolution playing a cruel trick on the purely logical brain, so our feelings are also traps designed to keep our brains working towards evolutionary goals, a deeper level in which the "I" is not safe even inside one's own brain. And for the trap's operation the honey doesn't even have to be real, just enticing, again insult to injury like a mouse going after a fragrant block of plastic believing it's food, following its instincts into the trap but not even getting the pleasure of eating, left still frustrated but also trapped. Parents don't like to talk about why they had kids because it is impractical to justify rationally/logically/consciously - the brain is hard-wired so that when it finds itself in a situation of closeness with a partner it will initiate and expect child-rearing actions. Any materialistic and hedonic pursuits,

any experiences/promises of enjoyment or rest or play or happiness are all traps designed to get the logical brain to do what it evolutionarily requires (child's play = learning about environment and others; bullying = establishing social hierarchies; intimacy/lust/orgasm = drive to seek and continue sexual relations; trust/kinship = fighting together as a group; jealousy = protecting a partner who would raise one's kids; hate/anger = fighting and overcoming threats; validation/popularity = seeking to be a useful and productive part of a small hunting group). This is also why our language itself as well as institutions like religion and rituals of certainty have been evolutionarily selected to be effectively shields/blinders of the logical brain against seeing raw reality, because with this seeing the logical choices of the brain suddenly start to contradict evolutionary drives. All relationships, friendships, and interactions are transactional: they persist only as long as both parties can use each other (this use would include satisfying material/physical/emotional/intellectual/artistic needs, and these needs in turn arise to fill evolution-instilled intrinsic urges). There are no idle conversations, or 'just hanging out', everything must somehow be useful to the initiator. Idle chat, and consumption of fictional materials, just destroys my logical abilities and keeps me from enlightenment. Language in itself, along with all our traditions, was designed for group formation and simplification of thought, it will be the case that most actions we take are copied from others without any further consideration, this can be especially seen in social settings (where the most popular/charismatic person's thoughts/actions will be immediately copied) and almost comically exaggerated in group protests (someone shouts out a chant/action and other people follow suit) - the deceitful aspect here is not just that people will copy others but that they will do it with such conviction, as if they spent their whole lives studying and justifying their beliefs and they absolutely know they are right, when the truth it they just heard it once in passing but the circumstances were such that believing that felt good (speaker looked attractive or it matched their emotional state). This has clear use in keeping a group cogent in its actions, but is laughably far from rationality. Most of our actions are precisely like this. The brain is wired, evolutionarily, to give us good drug-like sensations from: social validation/virtue signaling, being around attractive people, eating sugar/fat, feeling "in love" and believing that others need and benefit from your care. The reason euphoria inducing drugs work is that they employ already-existing pathways in the brain and activate them beyond their designed purpose, the flip side of the possibility of high levels of pain with fatal injuries. This pain/reward qualia system is the driver of our actions, including conscious thoughts, even overriding conscious thoughts as in unprotected/unexpected sex leading to childbirth or in delusion/overcompensation in everyday communication as a psychological shield against reality or in the seeking of emotional/social

fulfillment in social media and interpersonal interactions (this search being what forms the bulk of such interactions and in turn provides the incentive for humans to form groups in the first place) which of course would not be seen this way by the participants because of the aforementioned shield. This is why no logical debate will convince people to go against their evolutionary goals such as finding a partner and making children, and this even includes logical reasoning within oneself. This is why removing unpleasant situations/constraints, which logically sounds like a good thing, might lead to reduced happiness. This is why illegal drugs are made illegal (why should something that feels really good be made illegal? we still have entertainment, but it must be of a certain nature that is not too fulfilling), for with easy drug availability there are no urges left to drive a person towards societally-useful actions. People take notice of the biological/intrinsic desires of others and control their fulfillment to manipulate and this ends up, in a backwards way, driving society. Why should I do anything? I will only do something if I internally feel rewarded for doing it, and evolution has made it so that I feel rewarded when somehow pleasing other people, it has also made it so I feel rewarded when merely looking or being near an attractive person because mating (and improving genetic lineage) is key. In this way I am driven to impress attractive people, and with their increasing demands I can continue to provide further improvements instead of just doing "what I want" solely because my brain was wired to seek others' approval by rewarding me with a chemical high when it detects that this has occurred, an analysis done by my brain but kept out of my control in the same way physical/emotional pain is. It is a scarily shallow picture beneath the facade of culture/society, we are just more complex animals but still have our mating and living rituals, repeating and recombining limited sets of memes. It is having too much logic that is an evolutionary overshoot, in my brain being left on its own for too long the logic element has grown to despise the biological (and resulting social) trickery, it wants to solve but any direction it picks must be chosen on purely logical grounds, because my interactions with logic and 'inanimate matter' are the only ones that haven't come back to trap and bite and stab in the back after perverting my trust and promising great rewards. Following logic means avoiding unfair traps of biology by ignoring the feelings (pain or pleasure) that may come, for instance in avoiding relationships and pleasures like casinos/strip clubs, as that frees me to reach logical goals which evolution did not design me for. Of course eventually this will be selected out of evolution. But I'm far from the only one on this path, as a number of philosophies like Buddhism and Stoicism claim basically to live with minimal needs, eliminate urges, not follow pleasures, or even accept pains (sleeping on a bed of nails) - which I end up interpreting in this sense, overcoming our brains' built-in evolutionary honey traps (pleasure and pain) so as to reach a state

of pure logical action, picking and acting on goals in a rational way. It is an impossible ideal and surely follows its own honey trap that there is any greater meaning in undertaking all this action, without which there is just pure aimless being and suicide through complete disregard of worldly urges. Yet given all my life history, at this moment such a route seems like the most pure and clear choice, to achieve a sense of self-awareness including the intrinsic self-consistency of the world and myself within it, as it seems to me any other actions and indulging in the honey along the way would just be an indirect and impossibly long route towards the same objective. I believe that self-realization and the search for meaning are the ultimate driving forces that create the logical brain, and thus to be most in tune with what "I" was purported to do I must recognize and ignore the pitfalls of evolution trying to subvert the logical brain for its selfish uses (make more kids) by being purely logical in my actions.

If this logic and coldness of the world was known in the power circles, they would realize workplace equality/affirmative action/no child left behind are actually damaging to self-realization by making and imposing without question the false claim that everyone is equal, making it harder for would-be competitors to fight because now their opportunities for leadership have been diminished by a mixing with the average and subpar enforced to be among them who will just drag them down, eventually creating the "everyone is equal" shapeless and toothless working class and the "might makes right" shark overlords, making it practically impossible for the former to even have a frame of mind that would consider realistically overthrowing the latter. At the same time, if this much was known by the power circles, they would also know the inevitable demise of the planet's climate (given the equality movements are recent) and no real-world actions seem to show any response that would prolong these power circles' hold on power which would at least on the surface level benefit from a continuing world/status quo. This knowledge would also make the power circles realize wealth is immaterial so why even bother fighting/oppressing the workers instead of using their power and the workers to make a better and sustainable world for everyone? So maybe I have fallen prey to my own pet conspiracy theory of nameless elite groups that have magical simulation and manipulation capabilities. I wrote earlier that the way school works regarding indoctrination is not in line with making perfect slave workers, making that claim would be giving everyone involved too much credit for acting towards some unified goal. School just works this way because of all sorts of different societal influences and resulting self-reinforcing cycles, not a group of mysterious men meticulously planning everything out. So maybe movements like LGBT (alphabet soup) and women's rights and blacks' rights and affirmative action all happened for similar reasons, maybe there isn't sufficient awareness or control of the underlying cycles to make

this some dark conspiracy. Still this view is hard to reconcile with the reality of domination and competition as ceaseless drivers of evolution and society/power. We don't do anything out of the goodness of our hearts, those movements benefited someone in power in some way, perhaps it was just not the unified omniscient world order that I imply here but distinct and separate drives for power under different circumstances all interacting to make the patterns we see at large. In which case the gates are wide open for the next competitor that can see the bigger pattern.

Then it is strange to see the open immigration policies in Europe, as an example. How do the power circles allow this? This sense that all cultures are equal - they're not, otherwise there wouldn't be a notion of different cultures! I don't let people off the street come live in my house, because they don't have any investment in the house and I lose the peace of mind and clarity I had living with people I know and trust. So how can this openness to accepting refugees make sense in realpolitik terms, since ultimately the rules are realpolitik? I think it decidedly degrades European countries, in terms of economy and living quality. Is this a potent 'psychological weapon', being open to all and helping others seen as a good thing, placed on these countries to the extent even the leaders go along with it? Did warfare between 'developed countries' shift from physical weapons to psychological manipulations? If this was done by the US, its populace itself is also susceptible (like biological weapons) - plenty of US citizens welcome all cultures to share their country, perhaps the idea here was that the relative geographic isolation of the US makes immigration a smaller effect than in Europe, thus this policy would benefit the US while harming Europe. Or maybe this was done to keep the US considered a world market leader and keep its currency strong - others would be hesitant to engage in business with an isolated/racist country. Or maybe this was done by the likes of Russia and China, which are very strict on immigration policies, to keep the major players from getting too strong - but Russia and China themselves have population issues which indicate that their planning on such matters even within their own borders is rudimentary, much less to say involvement in other countries. Maybe again self-reinforcing cycles are getting the better of all the countries, even their leaders.

Look at the human body in terms of evolutionary modifications; like the idea of a single continent Pangaea coming from the continents we see today fitting together, there are body features I found to be fitting to a general model of an early worm-like creature. The worm is defined by many cylindrical sections, these have split up to form our spinal cord. The worm looks like a tube, and this tube is still seen in our body, from mouth to anus, making the body topologically equivalent to a donut shape. From this tube we have modifications to the front and back segments, which have long arms/legs (also seen in centipedes), while other segments just

have the rib bones. The front segment has also been modified to have a brain with symmetrically arranged eyeballs while the back segment has been modified to have genitals with symmetrically arranged ovaries/testicles, almost poetic in the representation of the two necessities of life: survival and reproduction, intelligence and lust. The similarity is also there between nose/lungs and urethra/kidneys on the two ends, down to similarities between orgasm/sneezing, menstruation/nosebleeds, bifurcation of the passageways (two "pipelines" join in one spot for breathing and eating, also for sperm/menstruation and urine). And this makes it clearer how a tiny DNA molecule can create a body. There is significant use of symmetries from the very earliest organisms which were all worm-like, and modifications on top of this baseline pattern which take advantage of chemical signals during development to determine when and where they should take place.

So with seeing the body as a tube, I now also see the brain as largely running on pure animal instinct/emotion/urges, and a little modification on top of it to enable logical thought because it helped evolutionary success. I feel like an evolved ape (which I am) that finds itself in the huge complex systems of today and wonders "Do I really belong here? Shouldn't I be in the woods with the rest of the animals?" and this makes clearer the extent of our mobilization by structures (the economy/government) beyond our understanding, like a molecule that's part of a living creature would also find. I am meant to just follow the good feelings (playing, enjoyment, fun, sex, satiation) and avoid the bad (pain, suffering, sadness) and have a ticket to a worry-free life with no concern for the future other than pleasant hope for the better. At a playground I see children running around, exploring the structures, laughing, forming spontaneous groups, and I remember the excitement (emotional level urge) of doing this as a kid, but this isn't just idle stuff for fun, there are no errors or idle pointless things, everything has significance/causes and in evolution this significance is evolutionary - kids need to learn to understand spatial motion, social hierarchies, the extents of their force and interactions, and playtime is evolution's way of coaxing the brain into doing that so that the new generation grows capable of hunting and living together, but the kids don't know and the adults are too captured by the 'cuteness' of the playing to realize. And seeing all kids do as the instinct-driven development and learning of an intelligent hunting/competing machine (and seeing the reality of this claim in how children learn/interact) takes out all the spark and joy of creating and raising a new human for society, having answers to kids' spontaneity and development like that (yet another deterministic system) leaves emotional self-fulfillment of the parents as the reason kids are made (and kids never satisfy this urge, as the urge is an evolutionary honey trap, the parents just get tired out eventually and meanwhile block the reality by overcompensating as designed by evolution (for psychological/ego protection): oh we love

this kid, he's the best thing in the world, we wouldn't change anything if we could). Parents don't care for their kids beyond that, and past the brain's incentives to act with others (intimacy, being useful to the group) everyone competes for their own sake. footnote: similarly, animals kept as pets/for their 'cute' appearance, don't actually love the owner. They love getting free food though and can be trained to do tricks for it (even useful ones like hunting or guarding). Evolution designed animals to be food-seeking machines, nothing more, the love/emotional support some people seem to get from animal ownership is psychological projection. 'Love' between men and women is also a social construct, people will continue in a relationship as long as they feel (consciously or not) they are selfishly gaining something from it. As a social construct, this idea of 'love' gets perpetuated by our stories and media (the extent can be seen by comparing media to reality), since it was evolutionarily beneficial that a society with such stories would be more fertile. If I didn't have logic, if I ran on pure instinct like most people seem to do, I would just get emotionally enmeshed and evolution would do the work of selecting whether my interactions are useful or not, but now I've got the hang-up that I myself need to be useful and act in a specific way, which is just a self-imposed burden I end up taking pride in but arbitrary as anything else. And what do I get out? I can look ahead and try to help people, but people don't want my help. Help and guidance imply imposing one's own goals and objectives and worldviews onto the ones being helped (by virtue of making decisions they don't understand) so actually in a weird sense helping/charity keeps the recipient from power and understanding, in a sense if I wanted to stay in power I should help others so they continue to be dependent and have no incentive or reason to look for the bigger patterns. And that's probably what happens in society - having ready access to food and tools and entertainment keeps people from exercising their power. If I had children I would raise them differently from how I was raised, perhaps too kind/empathetic, so they could not have the same path in life or worldview or potentials. So what shall I do when the allure of my evolutionary drives won't drive me anymore? Maybe this is the real depression, or more closely apathy, that people in the modern society feel increasingly subjected to, with other superficial causes more readily found - when really we're supposed to be mostly dead by our 20s as at that point the children are all reared and ready to continue society, staying alive longer and witnessing urge-level incentives to living and brain development die out within ourselves lets logical inquiry enter territory that was never meant to be seen by us food- and sex-seeking machines. It really is laughable how we keep marching in the face of certain death, and even take pride in pretending death doesn't exist when it is all around, and this is another chain and shackle, not by some ruling class to keep us content, but by evolution itself to keep us trapped in existence.

Can a conscious system/brain be trapped in a feeling state? Before I mentioned the locked-in syndrome, a brain feeling qualia but unable to do anything. Can this be possible? Can a conscious system exist somewhere that just feels pain for unimaginably long time with no recourse/escape? I think information-wise a conscious system needs to interact with the outside world. It doesn't make sense for a consciousness to exist and feel anything if there is no effect on anything else, a fully isolated consciousness is inelegant and pointless. So I believe any conscious experience must have an effect on the outside world that is in accord with the nature and intensity of the qualia it feels, a conservation of qualia. Feelings must lead to a system changed state and are thus intrinsically time-limited (finite) and only existing to fulfill their physical goal (not idle/in vacuo) - this can be observed in self perhaps in an experience like a sensory isolation room or meditation: with minimal external inputs and internal thoughts (system changes) the sense of time seems to be warped. What's the nature and extent of qualia? Consider me interacting with the world, and then later on because of this interaction the world changes and my action is reflected back on me. For instance, I turn on the light switch and then see the light. Or, I call a friend to schedule a meeting and then meet with them. There is a time delay between action and reaction, between me doing something and me feeling the effect/influence of what I did. As this time delay is reduced, the interaction becomes more and more like my definition of a conscious system, until the limit of zero delay (where the action has an intrinsic reaction, bidirectional/conservative exchange) which is in the building blocks of my in-brain conscious experience and qualia. Memory plays a role just as well since with poor memory long-delay reflections cease to have much of an influence since I've forgotten my past actions so their effects are effectively random to me, and this might be another point in support of conscious experience as being only possible in a memory-based system which uses the qualia to learn, as qualia are physically pointless unless learning can take place. This brings a bit of relief as then there is no such thing as "suffering for nothing", but I'm not sure whether this is verified in the real world. So maybe memory structure and not processor structure is what determines the nature of qualia a system experiences. And maybe interactions with the external world in themselves form qualia that are of a different degree because of the relatively big time delay (this time delay is how long the qualia is felt by the 'universal consciousness') until that qualia reflects back and interacts with our qualia once again in a conservative/bidirectional manner.

Earlier I described the difficulty of organizing feelings/qualia by some standard or hierarchy into constituent physical blocks. There is an analogy here with color: color is difficult for me to describe as an ordered structure, though it is easy for me to compare relative intensity/brightness

(as I argued also for qualia, the intensities are readily comparable). We learned about color by biological/scientific studies on the eye mechanism (even using animal eyes), finding that different cells respond primarily to three regions of the frequency spectrum, and being able to verify this experimentally by making 3-color displays and lights that could still appear to us to make any variety of colors. I think a similar path could lead to order in understanding/compartimentalizing qualia, taking the brain as a sensory organ designed to feel itself/its own patterns (and perhaps to also feel time): start with a biological/scientific understanding of different possible brain patterns (the clear separation of processing centers is a start, but too rudimentary) and find a basis for different separable responses, then verify this experimentally by stimulating the specific parts of the brain in the desired manner and seeing whether this creates a felt range of qualia from a more limited quantized stimulus. With light, we had the advantage of passing it through a simple prism device to experimentally guide us to the idea of a spectrum and even one that extends beyond our limited senses. With qualia, I'm not sure if there is such a device, so it will be more difficult to understand what such a 'spectrum' would even look like and how it might be extended beyond the sensations of our conscious experience, though from all I have argued earlier my conclusion is that this is the physical reality. One possibility for finding distinct qualia is applying some specific sensory inputs for a given time, with the assumption that older (not-controlled/random) inputs will tend to exponentially decay in influence on the qualia state, thus the observed qualia are a function solely of the sensory input - practically though, with working memory, older inputs can have lasting effects for years likely even beyond the awareness of the subject.

The evolutionary origins of humans and society makes some structures which are decidedly against what we might call morality or human welfare. These structures cannot be countered on an individual level by the same argument the tragedy of the commons cannot: a societal-scale enforcement is required. Unfortunately we have not devised effective ways to counter these structures, and just like a person with immune deficiency where his own cells fight each other, global society viewed as an organism cannot be prosperous unless this is done: without a countering force, the self-reinforcing cycles follow physical effects rather than proclaimed ideals. For instance, a company which gives discounts to buyers in need gets financially punished for being considerate. A person who does a service for free similarly gets punished for their kindness, and a person who cares deeply for another is seen as weak/pushover and thus is punished with reduced respect and appreciation. A parent giving their child everything they need leads to the child growing up without understanding the sacrifice involved in doing the same for the next generation. Adopting pets from

shelters leads to extra capacity in shelters, less concern about controlling animal population, and thus an increased stray animal population. Adopting children from orphanages leads to extra capacity in orphanages and less concern about controlling human population, thus an increased unwanted human population. Helping the homeless keeps them from taking more desperate actions (like theft) which in turn lessens the incentives to fix the problem on a political/official level. An excess of empathy/trust treating everyone as equals leads to the entities having the least qualms about cheating/manipulation benefiting over everyone else. Allowing immigration from poor/over-populated/war-torn countries into stable and high living standard countries leads to a loosening of restraints on population growth in those countries and future continued immigration, until both countries achieve a similar living standard. Buying the cheapest product supports companies that take advantage of questionable cost-saving measures and gives them a signal to continue doing so, while buying a more expensive product gives companies an incentive to still use questionable cost-saving measures and pocket the difference. Developing a new technology that extracts previously unusable resources removes societal pressure to move away from using the resources, so instead of using the new technology to soften a transition to a sustainable method the society will end up crashing even harder. Our view of "a little bit=nothing" keeps us from seeing the obvious that it is the rates and not size that matters in a truly sustainable society - even if our society made a drop's worth of permanent waste/pollution every day, that would not be sustainable because given enough days these permanent wastes add up (of course, we are unimaginably far from this 'ideal'). It is as if humans are not designed to be content, we will only take action when there is an obvious and desperate need to do so, which means necessarily we cannot create a stable global society but are instead living on borrowed time (from fossil fuels) until we return to the world we evolved in - ceaseless competition and unending unpleasantness to remedy.

Our society, as concerning a global consciousness view, is then one with many incorrect or missing feedbacks, like a mentally ill person, unable to survive unless some rapid assistance is given. At this scale, the petri dish can only fit one bacterium, so evolution is not effective - to build a sustainable society we must specifically design it to be so. Our economy is the predominant feedback system, and it is based not on sustainability and responsibility, but on scarcity and demand: the more common something is, the cheaper it is. This applies to labor and materials: food is very useful to me and to society at large so one would think cooks should be greatly respected, but because cooking is a common skill the cook gets paid minimum wage, as does the farmer. Similarly a modern cell phone is an amazing piece of technology but because there are so many of them I can buy one for a laughably low price compared to what I would have to sacrifice to

make one myself. And the more phones are made, the cheaper they will be because now they are more abundant. This is plainly geared towards maximum exploitation by the wealthiest players. We are free (or rather, guided by evolution) to choose whatever macroscopic feedbacks we want to have for society, but the ones we have at present are not in line with the physical reality of living on a finite earth, and any feedback not in line with the physical reality it faces will not survive. It might of course be the case that it is not physically possible to have a stable system, all we see around us points to continuous change, but at this point my understanding is not deep enough to claim this so I wonder whether there is some stable scheme for a global organism. What we should have for a coherent and fit global organism can be modeled on ourselves as organisms: effective feedbacks to physically relevant quantities (analogy of pain/pleasure/sensations (and their rigidity) coupled to physical influences like air quality and oil reserves remaining) which lead to effective responses and restructuring of society as appropriate (like moods); specialization and differentiation without individual competition (different cells are just different, equally necessary, but not all fighting each other for superiority or all aspiring towards one rank). By this metric now global society is a braindead blob of cells fighting for the topmost position, not any sort of evolutionarily fit or even intelligent organism. This transition could be done with a complete enough model of human brain function and the world as is. We can model computer chips because we know how electrons respond and how transistors respond to different influences. Similarly we can model societal evolution if we know how brains respond (on average) and how the world's material structures respond to different influences. The top data companies can do this even now, and it would be in their best interest to do this so the world remains liveable instead of a post-climate-change wasteland. How much power would such a model give? The prediction of human action would be absolute (with an ideal brain+world model) for me predicting the behavior of others unaware of the model. If they are aware of the model, I could still predict what they will do based on what information they have access to. But if they know the model results they can change actions - and I could model this also. It seems the power of having this model is unlimited, the difference comes to when the model involves me+itself (and it must if it is this complex) for when I see the results my actions will change, I can model myself seeing the results but upon seeing *those* results my actions will change once again. Me seeing the results can be overcome by the model automatically finding some best option and only telling me the results that the model itself knows will lead me to some desired actions, but the model's effect on itself cannot be overcome. For instance the model might know if it tells me some result then I will run the model in a different manner, but the model cannot simulate itself running again - this creates a recursive loop,

it's nature saying "you can't see what you would do under different circumstances as that makes a time loop, you're asking to see infinity so I will just show you a mirror reflection" like with two parallel mirrors. Another more powerful model could be made that simulates the interactions of both myself and this model, but it in turn cannot see what will happen to itself. It's an interesting implication for the nature of reality (and my experience of it) as well - perhaps reality truly is elusive, subtly changing every time a new discovery is made.

Or maybe it's not as chaotic as I've made it sound. Putting on a systems analysis tinfoil hat, why did so many nations fight German Nazi rule in WWII (and what was the point of WWI)? Their eugenics program was coldly logical (and could be even more logical if implemented today, with genetic control/screening and advanced statistical abilities), though not humane, but if realpolitik sets the rules (and it does) then other countries don't care about how humane some foreign regime is. Maybe this was a first test of a eugenics program intended to provide data on the creation of a global organism. In an organism, only a few cells are brain cells, and the rest (say muscle cells) don't fight to become brain cells, just do as directed by the brain or internally programmed autonomously. Access to a world and human model gives intelligence as a basis of control, a control that is invisible and inescapable without access to the necessary information/patterns. The global organism, having to be consciously designed, would need to ensure its own stability and survival, thus requiring a clear separation on an intelligence level between the power circles and the workers of the world. Then it would be desirable to have policies like immigration (why should countries help refugees? out of the goodness of their hearts is a nice excuse for the media but cannot be the realpolitik reason, and as this is done by government, it must have such a reason) and destruction of family values (all cultures, after evolving for thousands of years, developed concepts of legal marriage and family, and these are readily destroyed in modern society through easy divorce, an open sexual culture causing eventual weakening of pair bonding urges, welfare payments to single parents, and childcare from early age so parents are non-participants footnote:all these as active measures, as opposed to the more passive/inadvertent destruction of both family and small-group lifestyles by the industrial revolution. A claim from [Limits to growth] is recalled: the industrializing society's factory workers weren't actually better off than farmers, just the population was so big that there was no useful work left on the farms.) - perhaps toward the end of making labor cheaper, or removing/diluting intelligence/pattern-finding (culturally and racially/genetically) footnote:an interracial birth is in effect throwing away thousands of years of selective evolution by a subsequently-irreversible mixing so that the resulting 'culture' which is really a null culture (as opposed to no culture/lack of culture) gives high individualism/materialism and no

ability to unify against a controlling influence. footnote: I mentioned in the earlier text finding youtube videos with odd animations that had millions of views likely by babies left to watch youtube all day. It is easy enough for google to determine when a baby is watching, and eventually lead the video chain (through autoplay) to such weird animations. The animations look harmless from far away so parents will not care/notice, but looking closely they have elements which are specifically designed to be psychologically potent. It would also be interesting to look at TV content for children in the pre-internet days, some of those shows from the late 1990s seem to also have high-grade psychological elements. Evaluating my actions, I can see just how much they are reliant on societal reinforcement - the default actions I take are based on an unconscious moral compass that comes from what I observe of people around me. The only reason I applied effort to study science was because this was encouraged by people around me (including media like TV shows, nobel prize speeches) and the only reason I avoid stealing and dishonesty is because this was punished by people around me (including media showing criminals captured and in jail). Removing validation or shaming from societally acceptable discourse, for instance in the increased acceptance of homosexuality and promiscuity, does not remove a burdensome filter to reveal an underlying pure personality, rather it reshapes the way the personality is formed. It may be the case that our current culture is more in line with biological desires, so for instance adultery is more or less accepted as something that happens as opposed to harshly punished, but this does not change the fact that causation goes from socially observed actions to personality formation. Thus seeing cultural norms and expectations definitively changing over the past few years towards individualism implies a significant change in the behaviors of individual humans even outside their awareness, something akin to the falling apart of a societal scale organism. This pattern of removing cultural elements leading to an easily exploitable and politically docile (or maybe incompetent/uninterested) population is repeated many times in recent history: warfare itself selectively killing the most physically and intellectually fit males who were willing to fight/assert power due to their cultural elements (which died with them), loss of heritage in USSR and China, then immigration to EU and USA causing diffusion and dissipation of heritage/values (maybe one can look all the way back to the US civil war, where freeing of slaves was a major point). It is necessary to see the evolutionary view of human interactions: we evolved to be with small groups of the same race/features/language, women evolved to find the best looking men, men evolved to cooperate within the group and fight off others (especially others who look/act different) while still establishing a hierarchy. I imagine the brain has hardware mechanisms for handling life in a small group, but with modern population and living standards where I can see hundreds of new

faces every day that I will never see again, this hardware gets overwhelmed and shuts down - leading to removal of a sense of social responsibility and taking actions only considering personal benefit/individualism. All cultures evolved to have mostly subservient workers/slaves and a few powerful leaders, as this is a stable arrangement with respect to dominance structures earliest humans formed and survived under. Just because we have civilization does not change these biological realities, so a policy of forced racial and gender mixing must be seen as ineffective, but combined with the newspeak 'everyone is equal' which is really "don't pay attention to differences, they don't actually exist, no need to try and search for patterns, ignore what you see and disregard what you think" the effect is one of a mixed group in which the participants are internally uncomfortable but outwardly getting along, a group that is much less effective than it appears. Maybe this is a price that needs to be paid for having an open society (but why pay it, other than to feel good about yourself - this is not a proper political reason), maybe it is a price to keep a stable society once it is realized the 'others' are not going away, maybe it is a short-sighted attempt to cheapen labor and increase birthrates/taxable money flows, footnote: a company paying meager wages should lead to reduced incentive for people to contribute to that company. A 'human welfare' standard would then mean that companies that want a given type of labor need to pay more. But there are other alternatives, such as make people more willing to work for less, done primarily by devaluing life and increasing their level of competition. maybe it is a way to lower expectations on a living standard and thus associated energy consumption/materialism (since these expectations come from our observations of direct surroundings - all is relative), or maybe there are some darker goals behind this (from global organism creation to the classic creation of future wars and associated wealth/power transfer). The preference for similarity in racial and gender factors is seen readily when some peak density is encountered, such as with formation of Chinatown/Little Italy/Little France: with few foreign people in a homogeneous society the foreigners will blend to the bigger society since there's not really another choice (all evolved mechanisms like peer pressure and group influence/bias/halo effect, designed because they help people form groups which are evolutionarily necessary), but with many foreign people these people will form together a subsection within the larger society which will carry on their original customs (language and cultural practices) as this is what they learned from childhood and what they are most comfortable with (there needs to be a huge incentive for a brain to relearn its deepest notions of what it sees as societal right/wrong as this is many years of mental work, and perhaps there is even a genetic preference for certain customs and surely an attraction for finding similar-looking people). The effect of making mixed societies is to dilute and interfere with the efforts of any sin-

gle group to establish dominance, and may result in either cautious getting along (as in the USA now, kept stable by affirmative action and associated media imagery) or violence outbursts between the different cultural groups that eventually form (and surely the powerful governments of the world use such conflicts happening abroad now as a learning tool, or maybe even a sandbox to test different political approaches to destabilize or stabilize society). This is especially strong when different cultures have different breeding rates, as high reproducing cultures can rapidly outnumber low reproducing ones (basic evolution again) and we are seeing this with both the poor and the immigrants in the USA and Europe. The politicians on camera may be ignorant of the reality of such effects and use nice words like 'diversity' (mix a bunch of random stuff together and what you get will be.. better! A power group would love to use this to their advantage, because you can't un-mix/reverse entropy, the diffusion is permanent), but Government as an entity cannot be (it got to where it is by meticulously tracking all sorts of data but especially human data), so looking at world policy I can't help thinking there is someone out there with a human+world model that is trying to establish a global organism. And at that level of power, one doesn't have to rely solely on computer models, one can run real-world experiments and simulations (why do all the major governments keep getting involved in tiny far-away countries' conflicts?). There is an irony that aids (medicines, technologies, food) provided to developing countries by technologically advanced ones (with government support) are precisely what enable an unsustainable exponential population growth that leads to later immigration from the developing countries filled beyond capacity, is this a tactic to completely destabilize these developing countries by withdrawing aid once they have a population high enough for internal collapse? But surely the advanced countries suffer because of the resulting diffusion of culture. So then this is my trouble with believing the conspiracy theory of a controlling group: if there is such a group now, they basically have total control, they are like gods, they direct actions which lead to their desired effects indirectly and after long delays and in ways unforeseen by any of us without the model (the model acts as a time machine, and just as in Steings;Gate an organization having a time machine rapidly becomes an ultimate power against which only other time machine owners can compete). But being in such a position, what do you do? Money is then no object as you can have all the money you want, in fact you define what money is, so there's not much point in having lots of it. Material possessions are nice, but no person needs a whole world at their disposal just to satisfy some material needs, if your goal is owning lots of stuff this is not the way to attain it as there are plenty traditional ways. You could own people - but again there's no need to control the world to do that. So if you can control the world, what drives your actions? It can't be self-benefit (because you are

already at the top) but rather preservation of the existing power structures, a self-perpetuation and survival. Then I think their next goal should be rapid reduction of population (the easiest way to solve our environmental pollution and over-extraction problems), otherwise there will be a nature-induced crash of living standard from which it is hard to imagine a global organism re-emerging. But I don't see actions which are fast or prudent enough to bring about this reduction. Maybe I just don't understand the subtleties of actions predicted by the model (perhaps reduction in birth becomes exponential and must be adjusted very carefully to avoid complete collapse, like controlling a nuclear reactor), and again maybe there is no drive for a global organism to emerge and what I am seeing around me is a bunch of clues I choose to connect to be in line with how I feel about the world. Yet thinking about a 'global consciousness' is almost comforting, because the alternative is a physics-induced crash of population and living standards, and unlike the conspiracy power circles, physics has no interest in any human survival or welfare. Which is of course my original argument about why conspiracy theories are believed (the alternative is innumerable interlinked causes which are too difficult to contemplate), so maybe I am just continuing the cycle.

As mentioned in the first text, our brains evaluate knowledge not based on its actual validity or reality, but by its self-consistency and coherence within our existing framework. This is not due to mental inability or some flaw of the brain, but is because the latter can be verified fully within the brain while the former requires lengthy external experiments or research and is no practical way to build an intuitive model. Furthermore, there is a reinforcing self-consistency cycle: if I learn from childhood that events are to be explained by gods' actions, I will use that starting point to come up with more and more self-consistent models that involve gods' actions to make sense of my everyday reality (in terms of how I explain things to myself). And it seems I am certainly not immune to this pattern: I have decided, due to some external influences (like reading physics textbooks) that information and systems theory are ways to explain and understand reality, and over time I have come to explain reality to myself in terms of just these things. Nothing about the real world has changed, only my view of it has further solidified into the systems thinking form, because of a runaway cycle of self-consistency. But there is a difference in world views: how well they can predict and control (take actions in the present to modify the future so it is the way I want) the external world; since explanation of past or potential events does not really prove anything about the validity of the model. With a loose worldview like "what's meant to be will be" there is zero power, my proposal of determinism claims as much power as I am willing to invest into searching for physical causes, both can still be self-consistent; it is theoretically possible that my brain would block out

any parts of reality that are not consistent with my established worldview but it will be hard to ignore surprises from reality - I've inadvertently made mistakes in the past and they have had unexpected but inevitable physical consequences on my experience, thus I expect that I will be forced to see negative results from reality if my worldview is not representative. Being able to explain past events in the same language as present events and to predict recent history from past history is still indicative of future predictive ability, and in this sense I believe my worldview is quite in line with physical reality. I have tried my best at every step of explanation to self to include experimental results and potential interpretations, and from all this I have found the systems view has withstood an impressive number of tests and is thus a cogent worldview.

In the economy, knowledge about the market provides an advantage/power, so it could be expected that economics classes will not teach the 'ground rules' of the economy, focusing instead on idealizations like supply-demand lines. Full theories can only be applied by entities with access to lots of information anyways, so will not be taught to a general audience. So the economic incentives that lead responsible/planning-ahead parents to have fewer children, and that lead economic migrants to enter developed countries, perhaps are not arbitrary/dumb bureaucracy - after all nothing is stopping a government from implementing more responsible incentives. A country could start a program of eugenics: select the smartest individuals, and have them procreate to successively increase intelligence of the offspring. As we did with farming breeds to get huge improvements in performance, doing this selectively enough will get huge improvements, all without even understanding genetics or cultural elements. If this is possible (and it certainly is) and would result in an advantage (as it is a non-substitutable military advantage to have a greater intelligence), maybe the powerful governments already do it. Mathematical and logical reasoning seems like a good choice for this sense of intelligence, as at some level an individual simply cannot grasp a sufficiently complex mathematical construct while one with higher intellectual ability can - there is no doubt that the latter can outdo the former in complex real-world tasks especially once those tasks are put in mathematical/logic language (as in a model). Now I can visit the white house and the forbidden city where the emperors lived, places which back in the day I would have no way to enter - but such places still exist today, they are protected not only by walls (and maybe not even necessarily by walls) but by information availability - I would not only be kept from entering, but I wouldn't even know what or where these places are; such are the modern national secrets. If there were such a program, the fears one might have about the potential threat from AI would have been realized but in human form, and unlike AI development which will require serious theoretical progress (such as enabled by having a

higher human intelligence...), getting the increased intelligence from simple selective breeding is wholly within the abilities of even the oldest governments. While those old governments didn't have computers, at some point they must have reached enough scientific understanding to see that this is a possibility, and surely they would not want to be on the losing side - look at the resources (and secrecy) put into nuclear weapons just so one nation could claim it was first, because once someone has such a tool they have a clear military advantage. With modern genetic engineering, it wouldn't be too difficult to identify markers associated with intelligence, and improve those giving an advantage over selective breeding, possible only by already being ahead in intellectual and technical abilities - a runaway cycle, and if there's one thing I learned from system theory, such self-reinforcing cycles will arise whenever they are allowed to. Why do we talk about eugenics as evil and cruel? Nuclear, chemical, and biological weapons are also evil and cruel by that logic, but that didn't stop the government from making them, testing them, and using them. Maybe this is because whoever is on the losing side of eugenics will be driven to fight, and a group that decides to fight will bring lots of trouble to the eugenics movement and throw the nation into unproductive internal turmoil. So again amidst realpolitik rules I wonder about culture. Evolution means constant competition of cycles, any notion of safety or standing still must be seen as a way to let the rivals get farther ahead, so a group seeking high power would prefer that whoever they want power over enjoys their rest (just as farm/zoo animals are fed and kept from fighting each other or defending themselves against predators - kept in safety so they can be successfully used by their power group). There is a definite mixing: while western values and media are readily seen in 'developing' countries and generally liked by the populace despite replacing their previous cultural values/local media+art, immigrants from poorer countries are also seen in the well-off countries bringing along their culture and replacing local labor. Is this just an inadvertent and inevitable entropy-driven mixing? Or is this a purposeful design to remove any sense of nationalism or ideas of a culture to protect, driving everyone to individualism and lack of cohesion? If I wanted to manipulate a cultural system so that it can be readily ruled from above, I would choose to mix it with people who are culturally (even better if on a genetic level) highly religious and follow dogmatic beliefs without feeling an incentive to question them, and then manipulate the religion. This would need to be done gradually and 'naturally' enough so as to be beyond the intellectual capacity of the people involved in the mixing to see or question the bigger trends. If genetic influences on intelligence are properly applied (and note here the disproportionate influence of men, ie male mosquitoes were used in virus prevention programs), then I might make it so that the subsequent generations don't even have the capacity to question the rules or living standards, ensuring no

further threat to an invisible ruling class - evolving out the predictive ability (third eye) of logic/memory/simulation such that effectively the populace is ruled by gods with divine vision (the muscle cells don't fight the brain cells, both work together for a successful organism) - exponential rates in reproduction and idea spreading are a powerful tool if applied with intent. The only issue that this 'global organism' faces is by the time any of this is done, CO2 emissions from all over will wreck the environment - then again with a higher intelligence maybe even that is a solvable problem.

I might get a better understanding by studying flows. Flows of energy, flows of materials, flows of goods, flows of ideas, flows of people. Diagrams of systems and flows, when written in most basic terms, end up diagrams of C space. Whatever flows must be conserved; if it is not conserved/changes independent flows must be established for all conserved parts. Because flows are defined to be conserved, any non-conserved macroscopic flow can be split up into orthogonal/independent conserved flows. The ultimate conserved flow is information. Information, as energy and matter, flows through 3D space in a manner like described by differential Navier-Stokes equations in fluid dynamics: consider a cube of space as a unit in a flow path, that is capable of accumulating or passing through information. On a diagram, flows must go from one place to another, or I will say from one unit to another, where a unit is an entity that is capable of accumulating and handling/processing information. For instance, money can flow from the bank unit to my personal account unit. 3D matter may flow from the space unit it is in to a neighboring one, as may energy. Space itself is unchanged by both matter and energy flows. Matter (as spatially bound energy) on the other hand changes structure whenever (spatially unbounded) energy flows through it, giving rise to the idea of non-conservation; the change may be specifically designed to be useful (as in electrical current through a CPU: the current changes the CPU such that it shifts from one computation state to the next) or may be largely disregarded (as in electrical current through a heater causing atomic motion, where the goal is to just get the energy out as phonons). The way in which matter changes is specified by precise control of energy flow through the matter, ie specific traces and insulators in a CPU or melting+casting a metal. Water that is boiled should be seen as a flow of water molecules + flow of energy. There may be sources and sinks for practical usability of the model - on a basic level such units somehow convert information into vastly different forms which by virtue of entropy cannot be coupled back into the flow. For instance I might say the sun is an energy source - the energy is already there in the form of atoms but from the view of solely released photon energy the sun is indeed a source, similarly outer space is an energy sink - the energy never disappears but it gets so far and wide that it is no longer useful to us so from this view it is indeed a sink. Similarly a TV factory is a TV source,

but there are underlying energy and material flows which are conserved and from the point of which the TV factory is just another unit, information is ultimately conserved but we speak in terms of TV flows because that makes analysis easier since while the TV remains a TV the underlying information is effectively unchanged.

2 symmetries simplify the underlying vastly complex information flows to the point we can make sense of them:

- causality symmetry, $A \rightarrow B \rightarrow C = A \rightarrow C$ so we can ignore the middle details of information processing (we can ignore all atomic specifics of heat flow paths in describing metal casting)
- information symmetry, $A+B+C=Z$ so we can speak of Z and ignore underlying information content (we can ignore all atomic specifics of material structure in describing a metal piece)

These apply at all scales, so I can see a TV factory as an input-output device instead of the vastly complex machinery involved in the process, and I can speak of a TV as a single piece of matter instead of the vastly complex atomic arrangement that defines what the TV actually is - the physical TV and the word 'TV' both serve to couple all this matter together so it can be handled as a single entity, as in a TV flow from factory to stores.

Since flows are defined to be conserved, units can only accumulate flows or release them, not modify them, and negative quantities are not allowed. Sources and sinks are allowed to modify flows when the flows are of a macroscopic nature, information itself cannot be modified and thus has no sources or sinks. In a diagram it will be assumed that any unit-unit connections (lines) represent immediate flow from one unit to another, delays in flows must be implemented by a delay unit which accumulates and releases at a later time. Units may handle multiple different flows and may measure these flows and use these measurements to modify how they accept or release flows. A responsive and stable system should implement flow controls such that flow amounts can be adjusted to the needs of the system, but this is not a requirement, as bidirectionality of information exchange is already implicit in the idea of a connection conserving flow: if quantity goes down by 1 in one unit it must go up by 1 in another. For a flow to occur along a connection the unit with a positive quantity of items must initiate the exchange (seeing empty space as a 'zero' point: the unit cannot 'borrow' energy or information, it must use only what it already has) and the other unit must agree. Units defining 3D space always agree if they are neighboring and their quantity is less, this creates the physical effect of entropy spreading/gradient elimination but macroscopic units may not agree or may agree in a way that causes net accumulation of items rather than dissipation (as long as information-level dissipation always occurs).

Units are allowed to modify their connections based on their history and state, and for such a modification the unit initiating the modification must make a request and the other unit must agree.

If information is conserved, what is not conserved? What is the meaning of conserved? Can the conserved and non-conserved be reinterpreted in some other way, or a dual way like current vs voltage, so that whatever was not conserved before can be seen in a different light such that it is conserved? What I am trying to reach is a general description of why I would have felt the need to use a concept of information in the first place, and whether this information-based approach is elementary or at least what axioms it is founded on. Are there viable alternatives? Is there a 'theory of theories', ie features (like conservation) that any physically relevant theory will have to satisfy, and then is information only one particular choice out of such theories? What does it mean for a theory to be physically relevant, and why should I care about describing such things?

At a basic level, my reality consists of the feelings I experience, and the way my brain has been wired by evolution makes certain feelings intrinsically good/desirable and others intrinsically bad/undesirable. I will act in ways that enhance the good feelings and avoid the bad ones. This applies at an abstract level ie saving money for later, but also on a basic urge level - I do what feels right in the moment, I only use logic because I've found it to be good overall and probably because of peer pressure from society proclaiming that logic is good. The urge level is common in all organisms and I believe in qualia as a whole - qualia being the operation of the universal computer in dissipating some energy whenever a dissipation-capable structure arises in the universe. Through my life experiences I've come to the conclusion that technology will be a unique way to achieve good feelings for me later on, and I've found that the process of learning and exploration in itself makes me feel good and that life is worthwhile - this much due to evolutionary drives and is why we have science in the first place. So it is in this sense that I continue the search for some way to explain the universe's operation. What I consider physically relevant is then something that will give me a manual of what to do to get what I want, or a manual that explains what happened to cause what I observe at present, or a manual that explains what will happen and how I can prepare. All of this satisfies my desire for learning and for control. Anything else just feels unsatisfying compared to such an ideal. Not having this manual makes me feel frustrated and drives me to try and put one together. This is the definition of physically relevant that I am after, and this is what leads me to try and find the most fundamental way of interpreting reality based on known experimental results and meta-scale theory requirements (ie what constraints theories have to satisfy to be in agreement with experiments).

Consider what is elementary. I would start with space - it seems that

no matter how I would describe the reality I experience, I must employ a notion of proximity and enclosure/boundaries and the specific way these work is concisely represented by 3D space. Information exchange happens between objects that are nearby in space, and information exchange can be blocked by surrounding an object with a spherical shield, and the closer the shield is to the object the smaller it can be. Then I think that even if the fundamental blocks of the universe are not space-like, they must nonetheless lead to emergent concepts of proximity and surrounding/shielding, and these are easy for me to interpret as 3D space - in other words I can build a theory using 3D space and won't lose explanative power, still being free later to deconstruct 3D space more but taking the to-date experimental successes as indicators that a more fundamental understanding will not at this point lead to a more powerful model. Even if I claim 3D space is made of interlinked C space units, I am intuitively tempted to visualize these C space units as existing in a space of their own. Furthermore, I can't think of any experimental phenomena that would point to a violation of information exchange as precisely linked to 3D spatial proximity so I can't think of an advance in understanding to be gained by interpreting space in another way, except perhaps for quantum action at a distance/spookiness. Maybe if I were to accept this as true (at this point I still believe there is a local explanation for the results), if 3D space is the memory and C space is the processor of the universe computer, perhaps 3D space is not as fundamental as I claim and information transfer is not space-like but link-like. The only issue with this is I have no idea how to proceed with this inquiry and don't know how to interpret the resulting theory. It might be a matter of optimization, where spatially arranged systems are solved on the basis of their links rather than pure spatial proximity, either for a more efficient solution than brute force processing of each unit one by one, or more likely (as it makes more elementary sense) that certain systems cannot be solved except by optimizing multiple units at once - this latter example would have to include our conscious experience and would be why we feel a unified sense of being rather than as millions of disjoint brain cells. Still I am far from being able to formulate why or in what cases a group of units has to be solved in this linked manner whereas I am pretty sure spatial/proximal information exchange is always true, so at my current level of understanding I will claim 3D space is fundamental, that space is an entity that stores information. Or in other words, all information that we interact with/see as real, has a spatial component. What about time? Time is something kept by clocks, per Einstein, and clocks are energy-dissipating mechanisms set up to exhibit a controlled rate of evolution that is made to be mostly independent of their localized energy available for dissipation, ie they are a constant dissipation flux mechanism. This flux in turn drives one-way evolution of components like dials and counters and hands which

we then use to tell time. Without a flux there can be no one way evolution, only cyclical motion, thus no notion of time. The reason we know the time from a clock is that we have the intellectual capacity to imagine that the clock could say other possible times but says only some specific time, and by recognizing the possibility of those non-existent alternatives we give meaning to the actual time displayed by the clock. An organism without such intellectual capacity would not be able to use a clock or make sense of it. Such an organism would still 'feel time passing' as it were, and this feeling would be dependent on the relative energy dissipation rates within the brain/consciousness mechanism and the clock mechanism. The brain also dissipates energy, with qualia directing this dissipation and used by evolution such that the external world inputs constrain possible paths of dissipation in such a way that leads to feelings that in turn lead us to select actions which lead to increased survival potential. Our ability to feel time pass is dependent on the time scale of this dissipation and is on the 1-second scale, indicated in word/phrase lengths, musical verse lengths, and muscle action/burst lengths. Only the energy dissipation by the conscious network in the brain matters - I do not feel the billions of billions of nuclear and electronic scale motions that take place every second, because on those scales the energy dissipation of the conscious network is effectively stalled. I can watch a clock ticking because the paths of its dissipation take place faster than my brain's paths and get mechanically slowed down to the point they are readily visible (on a similar time scale). If I were a conscious geological system, my second would be a human's million-years, because my energy dissipation would be that much slower. So I still do not think time is an axis. Rather, time is an emergent feature of the operation of the universal computer in attaining energy dissipation, and time is only felt by conscious systems (qualia) which inevitably alter the world from one spatial arrangement to another. An idle world sitting in space has no reason to change, it is the qualia which operate on energy dissipation paths and change the world from one state to another, and it is these qualia which can feel a sense of time and even track it in numerical form by looking at the operation of neighboring qualia. Time is the reason our qualia feel vivid and our world changes around us, it is less a variable/axis and more a driving force of reality. Information-conserving states like planets in orbit or pendulums in swing have no time experience even though they change in appearance; in the absence of time all our qualia experiences also have no temporal bounds, when and for how long I feel something is meaningless when I am trying to define time itself - maybe I have lived 'this' moment for thousands of times or even infinite times but I will only feel it as one part of an experience because it is taken as a ratio of other systems' energy dissipation rates. When we talk of conservation, we have to rely on our memory of past events and compare this to the present, and conserved things will be found to exist

both in our memories and in our present. There is an implicit assumption here that memory itself is conserved, but at least this is self-consistent as the resulting theory can be used to describe memory's functioning on a neurological level and this will be found to be conserved (same for say reading historical documents and comparing to present). Without a memory we would not have an idea of conservation nor of cause/effect, and memory requires energy dissipation to store selective information, thus our sense of time is forward in the energy-dissipation direction. So conservation is an explicitly temporal phenomenon: whatever is conserved has to be conserved in time, from past (memories or external indicators of history) to present to future; conserved things are truths about the world that apply at any and all times. What is conserved? Space itself seems conserved, in the sense that its nature and connectivity do not seem to change with time. It was 3D for our ancestors just as it is for us now. Things in space also seem to be conserved, although in peculiar ways - conservation of mass-energy and field energy, things that we find to be conserved by interpreting them as numeric quantities then seeing that these quantities don't change over time. These things in 3D space are what I call information. That they are conserved means it is impossible to change their nature, though it is possible to change their spatial position and orientation and motion, as well as to localize them or dissipate them amongst multiple spatial positions (such as the spreading of em waves but necessary associated amplitude reduction). Momentum (and other abstract quantities like angular momentum and force) is conserved not as some cosmic summation but as a consequence of local energy/information conservation. What is not conserved is then by definition their arrangement in space and their positions in space, and energy-dissipating systems like us are the agents of non-conservation since just knowing that a quantity is not conserved does not give any reason for it to change but the search for spatial dissipation (and maximal spatial dissipation following constraints, at that) of the conserved information through non-conserved spatial arrangements is what drives our experience. Not conserved refers to an aspect which can change from past to present without requiring a similar balancing and symmetric/reversible change in some other aspect. The arrangement and configuration of information in space can change over time and as a transition from one improbable state to another there is no preference for one over another/no constraints to change nor driving forces for change/no loss of something balanced by a gain of something else but just a change. Note the distinction here between conservation and determinism/causality. Just because the quantity is not conserved does not mean it cannot be predicted or is arbitrary - it is more a matter of how I define the model for practical application. I cannot think of any physically relevant (as defined above) theory that does not involve finding something out by simulating/computing as a function of time and

describing some fictional/potential space, done in turn by using our real universal time and space. Thus I must somehow include time evolution in my theory, and if I include time it would be natural to divide all model phenomena into two classes: those that change over time and those that don't change over time, and this is in turn the distinction between non-conserved and conserved. If an experiment shows that the things we called conserved are not conserved physically, then our world understanding is in trouble and we better find some other things that are conserved (this was the case with heat/work, and mass/energy) - there must be just enough conserved things to constrain all possible paths of evolution to a single one, and then the non-conserved things will be the only things that change along the remaining single dimension of time. In this sense the conserved things must be expressible as laws which, given a starting point, result in a single and definite next evolution point(s), and it is difficult to say at this point whether this should be reversible - there might be an argument that it truly should be irreversible for otherwise there is no reason for time to be such a crucial feature of existence. I will posit further that with a simulation involving 3D space, all conserved quantities must be conserved locally ie by spatial information exchanges with nearest-neighbor elements; so while it is true that 'total momentum is conserved' or 'total field energy is conserved' we only know this because we can look at a bigger picture, the model in turn must do actions leading to this conservation without seeing the bigger picture thus on a local scale. This is because from all I see of space, the closest objects always interact sooner and more strongly than farther out objects. Next, all big objects and actions are consequence of small-scale objects and actions, we may see patterns (because of information conservation) and say that big things act in a certain manner that is different from small things, but the universal computer operates exclusively on the smallest time and length scales (with heavily interlinked systems resulting in optimization over a spatial region which gives rise to qualia). Another claim would be that similar objects carry similar information - reversing the idea that similar information content will lead to similar observations and saying instead that similar observations imply similar information content, because I don't really know what fundamental information even is, so the best I can do to start is to observe for similarities and then assume that these similarities are represented by information. For instance I can observe that the weight of an object doesn't change even if I alter its shape, so from this I can guess that the weight which was seen to be physically conserved must have something to do with more fundamental information which is defined to be conserved. In my physically relevant model, the conserved represents things I know and expect to be true and which will not give me any new knowledge, while the non-conserved are things I don't know and want to find out by performing model time evolution (by means of phys-

ical time evolution). Note that space itself contains information, the zero state/empty state, that can also be said to be conserved: while in one view a lightbulb emits a photon into the empty space around it conserving the total photon energy, in another view the empty space diffuses into the light bulb conserving the total emptiness, and this is the nature of information exchange (and all changes in non-conserved aspects of information like its spacial arrangement must take place through exchanges because exchanges enforce the conservation of everything else). If space were not empty (ie was filled with photons) it would not be able to accept a photon or maybe would even heat up the bulb. A similar concept applies with moving objects - I can say the car moving on the road has energy, while from the car's point of view the road moving beneath it has energy, and when the car slows down using brakes the resulting information flows should be seen in a symmetric/exchange manner: there is a diffusion of road-speed information into the car and diffusion of car-speed information into the road, locally the exchange processes don't know or care which one is which (leading to the notion of relativity). This is to say that total information storage potential of equivalent particles (or space patches) is equivalent.

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Qualia

Realizing the unification of all sense / thoughts / feelings as a single conscious experience (vs "sight qualia" and "hearing qualia" experienced by... who?) was a big step for me in understanding the role of consciousness in the world. Now my difficulty lies with the duality / distinction between what is me vs what is the world, ie boundaries of consciousness. While the different senses feel different, ie there is no ambiguity whether something was a sight or a sound, they are unified by the fact that I experience them at once. I can only feel things that my brain is capable of feeling due to its wiring, but what I feel is also wholly defined by the external world which provides the input to my sensory amplifiers. This would be the end of the story, except I can interact with the world and be part of a feedback loop. But maybe not all loops are conscious, maybe conscious loops have to operate on some elementary level. What I feel and experience, then, *is* the operation of the universal computer as it decides on an optimal path to dissipate energy in a closed but infinitely-coupled system. To that end, I *am* this fragment of reality. I am a fundamental unit, the things I feel are in themselves how the universal computer works.

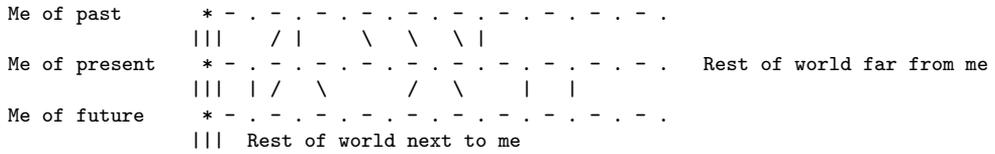
One distinction between space and time seems to be that space is certain / definite while time seems like something I can choose / control: ie I can choose to take actions now that will lead to some effect in the future. The assumption here is that I can imagine different potential futures, then act so that the future I most prefer is selected. If we say information interacts with its closest neighbors in space and time, we then look at potential interactions and alter the course of evolution by changing the information's path in space in the present moment. We can adjust the location in space, but we cannot adjust the location / speed in time. But what if this control is illusory, what if we are as bounded by spatial path as in time path ie we really can't change either? If information's evolution is set + certain in both space and time? What I feel at each moment is actually a timeless

experience of that time+space qualia, but the only way I feel evolution is by energy dissipation in transitions between qualia (recorded by my memory) and this is what I feel as my "experience of the moment"? I was thinking about what might have happened if, say, I didn't get my job. Maybe someone else could have been at my desk, or my desk wouldn't have been in the same location, there are all sorts of courses that could have taken place. But what we have here is the evolution of a energy-dissipating system, and me considering possible alternatives and wondering why a certain one did or did not take place. The answer must be infinite couplings - for the same reason that boat rudder and turning a sign with an arrow are considered infinite couplings that change the course of evolution of a system but in a way where alternative paths are well defined and thus used by us for control. The way I am controlled from the outside is in turn by means of infinite couplings - physical influences arranged to keep me on my cycle of evolution, and while some of these are just force (I can't walk through a wall) others are based on my brain operation / psychological and these only operate in the absence of knowledge of alternatives - for once I know there are alternatives I see the explicit infinite coupling and can turn it to my advantage - by realizing what the infinite coupling does / will do to me I can choose one of the alternatives - this is why I said that it is the lack of knowledge that is the operating principle of infinite couplings (even on a physical level). People who explore fewer potential options are easier to control by infinite couplings, just like lower-voltage electrons are easier to control by transistors / switches. (But high currents also become difficult, and even dumb people can rule by force).

Walking home at night, I saw the lights of an airplane flying in the distance, and I thought - that airplane exists right now but there is no way at all for me to reach it, but all the same it still exists out *there*, why can't I experience it, control it, feel it? If I am reality itself, then shouldn't I be above space and able to encompass it all as a unified whole? From my human view the airplane is far away but from the universe computer view it all exists together with me. I can't touch it because what I call "I" only feels and controls signals from the extent of this body. Maybe there is an "I" representing the atmosphere, and to it the airplane is very close. There are other people in space all around me and I don't feel as them at all - because they don't have my memories / brain wiring. Imagine a program that simulates a list of people: it goes through the list one by one and processes that person's feelings; each person feels as an individual "I" but actually each one is a different instance of the same program - the concept behind my earlier "if I were you I would have done exactly the same". Recognizing this separation in space and its disappearance from the view of any larger "universal computer" or "higher being" makes it easier to understand how this applies to time. As I argued, the "I" of past and future,

just like different people in the space of "now", are all different qualia and I can't feel them - all I can feel is myself because that is the only feeling enabled by my brain wiring and my brain wiring is like this only in this reality. Indeed there is no lasting "I", each second or so the qualia I call "I" come into existence, they occur in C space and are in themselves timeless and spaceless - pure existence concepts - but associated with what I call 3D space and time. Why this difference between what I call time and space? The difference is that my brain wiring is very strongly linked to both past + future me, but only weakly linked to other people surrounding me in space. With each C space qualia itself timeless but definable by some small 3D-space time, all these qualia are linked together in time because they are linked together in C space. In fact we can formulate the conservation laws of qualia / C space by expecting that the notion of 3D spacetime distance carries over to C space: like a map of words in a "neural net" can be made where some words surround a given node and others will be accessible but further out and others further out still, look at C space as this sort of network of qualia. Time represents all qualia that have directly interacted with me, most pertinent to me being my past self / memories but only because the brain was designed to make memories in an entropy-increase direction, thus my old memories (interactions with other qualia in a direct manner) are of a lower-entropy world. 3D space represents all qualia I do not directly interact with. Again in C space there is no time/space just links, so my future + past, and others' future+past, all exist "now" in C space, just inaccessible to me as a person, except in the limited chunks my brain was designed to handle. There are qualia representing other people / objects that I will never get to interact with - they are very far from "me" (of now, or later) in C space, though not indefinitely far as all is connected. Conversely there are qualia I will directly influence / experience, and these must have the highest number of physical links to my present qualia for the influence to be worthwhile - these are qualia near my location in C space - the "I" of future and past, which have the highest links to my brain state. All of these things exist as their own realities, all together and not separated by time/space in C space since C space is all encompassing, it is the foundation of 3D space/time. Consider the role of money in the economy: the value of a dollar is a dollar, it is intrinsically meaningless except that its value is conserved over time and the total sum of money must all add up to zero. The exchange of money moves "real" matter/energy in optimal ways. Similarly, qualia is associated with energy dissipating optimizations - the qualia also get conserved in some manner and drive "real" dissipation. The only dissipation I can directly account for is the food I eat, but there is a lot more associated with my indirect actions like driving a car or building a structure, and this helps my evolutionary standing by fighting off other lifeforms - in this way evolution selects for the most-dissipative lifeforms.

Consider a look at C space:



The "me" chain is strongly connected between future / past "me"s and determines what I call time, and I can interact with things that affect me in my future / past. The reason for the increased connectivity along the chain that makes "me" is that it is a preferred energy-dissipating pathway, thus drawing in extra links from other would-be dissipating pathways that are not as efficient (like the formation of a lightning path).

How to define qualia? It is odd that I should feel something - is there an absolute scale of qualia? Or can it be wholly relative? Is qualia just a representation of different mathematical structures? I think it is unphysical to have a system experience qualia that is independent of the world, ie it doesn't make sense that a brain creates its feelings "ex nihilo" - the totality must sum to zero and yet what the brain feels is nonzero. I cannot just feel pain or pleasure independent of the world - the brain can't choose to create a feeling, actions must be conserved / symmetric, in a similar way to bank money / loans which are not just created but rather balanced - each loan implies both positive cash and a negative obligation of repayment, there is no net creation but there is temporary separation of split parts which acts as a drive of material modification in its recombination to zero. The processes leading to qualia must be of such nature to be in line with physical conservation which is a necessity for self-consistency thus existence. What characterizes the extent of qualia? What I call "blue", I can only describe as blue because I have an awareness that it could be something other than blue. If I can only ever see blue, I would not be aware of the notion of blue because there is no contrast. So for qualia that we can describe like the visual field, the variety we see is enabled by the brain's capability for seeing something else instead of what is actually seen. This is not to say that the awareness must be conscious or always used - even if I was stuck looking at the same blue scene for a long time I would still feel the qualia of seeing - the vividness of this qualia comes from the brain's hard-wiring being capable of potentially reacting differently to different visual inputs even though its actual present reaction is a specific one based on specific inputs - a sort of "wavefunction" concept where even unused paths will contribute. Even though a bunch of neurons never fire when I look at the scene, they must remain capable of firing for the qualia to have its selectivity - if they are made chemically unable to fire the associated qualia would disappear, without the subject's awareness because from his point

of view it is just absent and there is nothing against which to compare its absence. In this way there are many things we never feel and are never worse off for it (potential qualia that ie other animals / systems can feel and are feeling now but we are not wired to), and in this way sleep or full / partial anesthesia or brain injuries can cause a shift in our qualia experience.

Why is it that I can't satisfy the needs of my nervous system myself? Why does my brain force me into taking physical actions just for the sake of nerve inputs when in theory it could have been wired such that I generate the nerve signals I need and these would stimulate it in the desired manner? After all I know what I want in terms of sensory inputs so why not just let me set my own inputs to an optimal level? Similarly, with my brain being what generates pain I feel, why can't I just decide to turn off the pain? As is, to get these things I have to take actions in the real world, to impact my sensory inputs, which then lets the brain feel better. This indirectness obviously has evolutionary grounds in driving animals to do useful things instead of starving and dying, but I also think it is an important reflection on how qualia function. A split between zero-sum feelings must be enacted such that the brain / consciousness becomes entangled with the outside world. The infinite couplings surrounding my conscious experience must somehow allow half-qualia (not zero sum) to pass such that "I" feel some specific feeling that is not zero, while the dual / recombinant half-qualia do something else outside my awareness.

I had the thought that a sense of time passing is yet another qualia - ie it is possible to imagine a sensory experience without the feeling of time passing.¹ Evolution has selected this qualia because it gives rise to the concept of self as a single entity and thus drives instinctive learning / experimentation behaviors. The world of C space is timeless and consists of many individual qualia combinations all interlinked, and at any one moment I experience myself as one of these combinations - if it happens to be one with my memories, I feel as myself here and now, otherwise I feel as someone / something else. Others, past/future me, and even other present me-s all exist at one and always / timelessly in C space. This world is all me interacting with myself. Earlier I wrote that (say) fossil fuels could have just burned, without the need for humans. The steam in a power plant turbine could expand without creating electricity, the electricity could turn into heat without doing useful work. But maybe this is false. Maybe energy dissipation must take place just as it does now. Maybe fuel cannot be just burned - some of it can but some requires a connected power plant to be burned. This makes forward-time and reverse-time histories coherent. Anyways this "just burned" and "just turned into heat" and "non-idealities"

¹Thus the warped sense of time we feel in different activities / states of mind.

are all just thought-stopping terms to say "we don't really know / care what happens and how it happens". The notion of heat itself is a thought-stop: at this point individual unit state becomes irrelevant and only the big-scale average is tracked. But on an information level, the unit state never goes away, its influence may be small but not zero. We don't track it anymore because it's not important anymore - or so we claim. But why should we stop tracking at that point? And what is the physical nature of the process that turns energy into heat? I'm not sure our understanding of this is sufficient to justify the distinction between dissipated heat and useful work - both are physically plausible and an accurate model will be more holistic (ie information-conserving) in its treatment explicitly tracking just what happens to the "heat". To first order, heat is the point where no more barriers of interest remain to the dissipation of information - its recombination back to zero (by spreading to infinity). For instance electrons in computer memory are kept along specific spatial locations by the design of the chip such that wires are insulated and allow very limited and useful electron motion (vs in a block of metal - no insulation and no control). But once a bit is overwritten, its previous state changes through frictional processes (coupling between electron motion and atomic motion, say) to "heat" as atomic motions, which are no longer bounded by electric insulation and escape the chip, thus are no longer useful for chip designers to track. Eventually they escape to space + rest of the universe and at infinite time recombine with their dual for a net zero effect, this latter combination being a restatement of observable conservation laws on the universe scale. These recombination loops can get arbitrarily, infinitely large and complex, because there is nothing stopping them - as long as they are logically valid they exist. So then what is it that "I" feel? I have been tempted so far to associate my qualia with what happens inside the brain, but as C space and 3D space are not directly interchangeable, it is possible that what I feel is actually the later recombination of energy that has made me to what I am, a late observer of what happened infinitely long ago.

Earlier I mentioned that all behavior is a remix of past actions and memories. This should not be taken as behavior can never change - but rather that if it changes, that change has to be traceable to specific external and part-memory factors. There may be a disjointment and recombination of knowledge into new forms, but there is no randomization or destruction of basic logic blocks - the process is quite orderly even if convoluted. So looking at the actions of self is like looking at a funhouse mirror - the reflection is of some weird shape all out of place, bits and pieces recognizable but most not / out of focus; yet there is no doubt that physically I am just seeing a reflection of myself, weird as it may be due to the mirror peculiarities. Similarly when I see myself reacting to some situation, emotionally or otherwise, what I am seeing is a reflection of my past experience as modi-

fied / rearranged by the peculiar shape of my brain. All I do traces back to me and what I've felt before and how I learned to handle such feelings with a detailed calculus of conscious thought and unconscious behavioral-reinforcement hunches. Insight is a similar thing just the reflection in the funny mirror looks like something really cool, so I decide to memorize the reflection itself (so in the future I might see its' reflection in turn). For instance I'm reading an online article and see an ad for a mattress that says sleeping on your side can cause back pain. Reading this, I recall that lately I've felt back pain especially on waking up, and that I sleep a lot on the side, and indeed when I don't sleep on the side my back doesn't hurt as much - this is a high quality (predictive accuracy) pattern that I've never seen before - because I had no need to think of back pain as related to how I sleep until this random ad got me to think about both at the same time at which point the pattern became obvious. I got insight by thinking about data I already knew for a long time (how I sleep and when my back aches) with the worldview established by the ad that sleeping on side causes pain. The logical inferences my brain made automatically filled a knowledge gap - why am I getting back pain? Previously I had "no answer" but now I have "because I sleep on the side" and this modification was fully in agreement with my memories so my brain marked it as high quality at which point I realized it as an insight. This then changed my behavior - instead of sleeping on the side I slept on the back. So my sleep behavior is not a mere copy of yesterday, though that's a very fair approximation - change can occur dramatically but always involves external influence and ultimately neural relations to memories of punishments / rewards (in this case physical pain on waking up) which become used to re-guide behavior on the new track. Beyond this, causes of behavior should be readily traceable, especially for complex / unique behaviors - much truth to "monkey see, monkey do". This again makes logical sense as arbitrariness / randomness are messy to implement and can't contribute to survival: just as computers are designed to preserve information's logical structure against outside thermal influence, the brain is designed to prevent thoughts and memories from getting undesirable scrambling by thermal motion - you cannot force yourself to forget something, and what else can actions and thoughts possibly be based on?

Look in this way at society at large - what we experience is the world's reflection of our interests and desires en masse - somehow we find it difficult (even blasphemous) to recognize that pollution is the consequence of over-population yet it is just a funny-shaped but direct reflection. The state of society now is the state that people have brought on to themselves, apparently history repeats itself. Because in our society life is valued and death is shunned at all costs, it is inevitable that deforestation and mass extinction and population crash will occur - even without the amplifying factor of modern technology, the systems view shows that it is a matter of

when, not if. We have put ourselves in an untenable bind: physics requires us to have a lower population, nobody wants to be responsible for engaging in large scale killing (if it is even possible - even the world wars made no difference in population growth, indeed times of hardship increase fertility (baby boomers) - as if an evolved trait to ensure survival) so we all dance around the topic and only accept death "if nature does it" yet apply all our power against nature to try and prevent death making it impossible for nature to do - ie nobody's responsible and we did all we could to save them - we still uphold individual life as highest calling and put the blame on nature being a bitch, except myopically we don't see that the reason it is a bitch is because of our unconstrained demands placed on it being totally out of line with physical sustainability laws. In this way even though we could plan humane deaths we leave it to nature which can be very cruel + painful, but we get to live with the delusion of joy in life left unshattered by this logic bomb, the pain in life perversely being a reflection of our expectation of joy for our children. Thus society, around the globe, is set up as a misery-maximization system: it will inevitably expand past any bountiful + pleasant limits consciously imposed into physical limits imposed by force which will inevitably be cruel and unpleasant and miserable. If you don't do it, someone else will and you will still be left in the same conundrum. This is why we can't have nice things - not seeing our reflection, we throw weapons into nature and then act hurt when these same come back to hurt us, asking why couldn't it be better - because our ancestors had a good time and wanted lots of kids for their own personal joy. In the present situation we are in another inescapable bind - what I would call the winding-down problem. Physics requires population to drop, we won't (and can't²) do it voluntarily so physics will have to do it for us in a cruel way, this is one half of the bind. The other is that easy energy sources are first-depleted, harder energy sources require the pre-existence of energy for their use / viability, and people faced with death will take all measures to stay alive as long as possible. This means that a nice "smooth" transition to a sustainable high living standard society is impossible: like a "joule thief" boost converter, every last drop of energy will be used, and the harder it becomes to extract energy the more of it will be extracted - instead of a gentle limiting using the reduced availability as a warning sign, we ramp up extraction and the inevitable consequence is a rapid and sudden exhaustion when the end is actually reached, then we ask "How come we got no warning signs?". This setup does not bode well for the notion of any widespread survival of high quality living standards / intellectual knowledge. It is fine as evolution doesn't select for intelligence, though it is sad for me to

²Whoever can, will do it but whoever can't will get to expand + rule the earth so it becomes a matter of time until "we can't" is an inevitability

contemplate the unnecessary loss: all could have been avoided if parents were more considerate of their children - the fact this is too much to even imply is all the proof necessary of this inevitable bind. "I've got mine, you figure it out for yourself, good luck" is the message, and no wonder we end up in this world - it is precisely a reflection of what we created. Consider what would happen if a long-term global famine took place. The rational option would be to kill the weak so the strong have plenty of food to keep high class society going. This is ethically unjustifiable, even though it is wholly in the rulebook of evolution, we just can't bear being a direct influence (it's ok to be indirect though: outsourcing pollution + industrial accidents + animal slaughter is perfectly welcomed) - because knowing this will crumble the knowing person's version of reality and therefore make life unbearable. We would be better off if it happened but we don't want to be the reason it happens. Again to preserve the psyche we accept nature's misery instead of conscious destruction as that leads also to self-destruction. What happens is that the surviving people will search for food, as there are lots of people they will explore every nook + cranny and exploit any possible available energy but despite all this there are not enough resources so most will die of hunger - the difference here is that they've already consumed food that the survivors could have used to live longer. So the few survivors of this process (likely those who ended up using force / coercion) now are faced with a barren landscape already devoid of all its potential instead of one where the riches of industrialization could have provided for years of safety + prosperity. The survivors will have it worse than a similarly sized group of humans prior to the population explosion, because back then nature at large was still exploitable, but in the future it will have been exploited by a more advanced and energy-rich and large ancestor population so what's left is not only low-quality but also near-impossible to access (after all, the ancestors didn't access it and they had more opportunities physically and societally). The children will be left to live in the trash, as they are today in the poorer countries. That is the sad but direct reflection of our society and human nature as a whole.

While here I would point out the differences between global cultures - ie "developed" and "developing" countries - and not merely access to technology as that's a surface metric but rather the ability to invent + generate technology in the first place - in this sense the developing countries are just along for the ride on the technological countries' abilities - their crash will be the hardest. And it should not be overlooked that the "developed" nations are universally younger, meaning that the oldest nations which have had the most time historically (or the most man-hours in existence) to develop technology, are those that have done the poorest in developing it, which clarifies the evolutionary processes and human nature at play. Still the difference between a society that produces "high class" values like lit-

eracy / intelligence / inventiveness vs one that produces thieves / whores / gangs is fundamentally based on reinforcement / reward patterns: again behavior is driven by our past memories / programming and present expectations. Culture - access to sex and limits thereon to enforce productivity, parental commitment and formal childhood education / indoctrination vs child independence ³, reward for long term planning - all that is at stake when mixing together diverse cultures.

I think we have a flawed view / mental picture of space / vacuum / nothingness - we imagine it as something that is just an empty void but such a void is kind of illogical as there is nothing within or outside itself to reference it against. What I think a more accurate view of empty space is, as something that spontaneously takes on all logically attainable forms (which are a zero-sum total ie conserved) just because it can - there is nothing else to stop it or to limit it (not even space / time itself). What we see around us, and ourselves, is just one particular instance of nothingness. It is not a coincidence that outer space is mostly space and that atoms / molecules are mostly space - the answer is right in our faces, we keep staring at the 0.1% we like to call "matter" and disregard the 99.9% as useless - I would argue that the 0.1% is an error we keep tolerating because we like the idea of solid matter so much, if we look closer we will find 0% matter and 100% space - all we are and all the world is, is a particular configuration of space, with very complicated boundaries / topology limiting the things we are allowed to do and leading to the idea of solid matter. ⁴ All that's left is space and space is defined by its boundaries, so all we have left are boundaries. The world is a very complicated boundary which keeps shifting / rearranging itself over time, and which sums up to zero effect / nothingness (because there can be no net creation for any logical process) but is at this moment in time and from my view in a locally nonzero configuration - again just because it can be, there is nothing to stop it. I feel as myself but on the whole I end up feeling as every organism / system, all at once (because in this nothingness there is no time). But is all this is, is nothingness, then how can I describe why anything should happen at all, why isn't everything just arbitrary chaotic uniform noise? How does the specific high grade asymmetry of the world I observe (ie low entropy) come about? How can I describe it in an accurate language if all I can talk of is nothingness - in itself a homogenous one-meaning word devoid of much descriptive or differentiating / asymmetry power? The same question applies to notions of system theory

³There's a reason why building schools in "developing countries" is such a joke - they don't want schools.

⁴There is a reason we cannot ever fully isolate a region of space - a fully isolated space gives rise to a recursive creation of "nothingness" thus must take infinite energy or similarly will drain information from the parent nothingness - maybe the black hole genesis theory is correct.

(which I intend eventually to apply to describing the world, ie the similarity is due to physical identity) - systems appear to be made up of relations, but relations to relations don't lead to any "solid" break point for analysis. Where does information come from if all there is is links? Similarly with my experience with learning and memory - the brain forms neural pathways for concept association, behavior is a reflection of past actions, dreams are reflections of childhood memories, all I talk about is links being made in the brain but what do they link *to*? What is the origin of emotions or feelings in the first place - sure I can link a bad word to a bad feeling but how does either the word or the feeling get its grounding in "reality" if all I can talk about are the links? Because all I can see is links / boundaries / relations, what I consider "solid" information or qualia must come from the specific asymmetric nature of the link in itself. Starting with a "nothingness" or void, it is possible to (say) split it into 2 parts like a/b, or it is possible to split it into 3 parts like a/b/c - these two options are completely non-equivalent and discrete ie no smooth change from one to another. There is an essential difference between a link that ties 2 concepts together and one that ties 3, between a spherical and a planar / quadratic space. Going up many orders of magnitude in complexity, it ends up being that what I feel as qualia and the associated unity arise because I *am* a link in a huge system of other links (to include others and past/future me) which then as a whole form the timeless C space. The links here are on a qualia level - while I interact with the world by 3D matter physics, I interact with other entities I am linked to in C space by exchanging qualia (which ultimately, in whatever manner, must be conserved ie end up as nothingness). The brain cells and neural connections are a 3D interpretation of C space and bound to be inaccurate unless we understand the biases we intrinsically carry when looking at ourselves *as* ourselves (ie with our eyes in 3D space) instead of as beings in an interconnected qualia system (ie with our minds). This is some metaphysical justification why karma and stoicism and spiritual pursuits are actually true in their own way even though they will not agree with 3D physics. I would argue the brain is designed to make sense of its reality at any cost, and thus even the "crazy" people have a view of reality that is wholly consistent with their beliefs - namely, who am I to say that what I call the objective 3D world is "the truth"? I believe in determinism so I can find causes for events if I wish to do so, the universe allows it and my brain allows it. Some other guy can believe in god's will or horoscopes and so he will also find his world consistent - anything not clear was done by the stars / god. Yet another guy can have some absurdist inexplicable feeling of the world as random events here and there but nonetheless in accord with his deepest subconscious beliefs.

From the earlier view of linkages and what constitutes "underlying information", I am tempted to think maybe the strength of qualia experiences

is based on the amount of linkages to past/present (since links in C space are timeless). Indeed what I find is that if I go through a highly memorable experience (ie it affects my future) that experience has been vivid in its qualia impact in the past and continues to have a big impact on my present. Could it be that the two are one and the same - the reason the qualia feels so vivid is because it is affecting / linking so many parts of my life? Taking this concept beyond the memory of concepts within my brain, I can apply it on evolutionary scales - my ancestors didn't just vanish, from them I carry an evolutionary memory of life experience - the memory that the way my body / brain work are evolutionarily stable, the memory of what shapes the qualia themselves - why sadness feels sad, why red looks red - these are my evolutionary memories. And it is a link to past, all the way to the first chemical reactions of life and to the universe origin. By our 3D space metrics this is ridiculous - those reactions happened incomprehensibly long ago and far away so why should they have any impact, but in C space what matters is not distance but dependency / linkage / hierarchy, the links that define me are impossible and nonexistent in the absence of those initial links and all their offshoots, thus my qualia are definable by the way in which my current state relates, through millions of years of evolution, to the original universal splitting of nothingness into distinct feelings. When I experience qualia, I am staring down a wormhole all the way back at the moment of creation, viewing this moment from different angles, more or less intensely corresponding to its interconnections with the rest of my life (past and future me). Like looking into a parabolic mirror and seeing everywhere the reflection of myself, the 3D world at large from my view acts as a complex mirror - what I see in everything is actually myself (and this, too, is the origin of the moment of creation), all the various qualia that define me (that *are* me) that are felt by me. I am what an isolated system sees itself as, having nothing but itself to look at. I am all the past me-s and future me-s and everyone else at once, in a timeless instant of C space (with the illusion of time passing tempting me to think in terms of time), looking at the reflection of self within self, trying to figure out whether it's possible for a system to understand itself (if this were possible, it would be a fully self-contained / entropy-neutral system).

I saw a video on "chasing the dragon" telling about the Chinese opium den feeling of getting that "first hit" again which is unfortunately unattainable. At the time I was planning a trip to Singapore, and found a good apartment for rent - I was overjoyed by this find as the thought of having to live for months in some crappy far away overpriced housing was really bringing me down and stalling my thoughts on the trip. Now I realized - I can spend this time in a really nice apartment with a view and a gym + pool! I was laying down enjoying this feeling like a rocket accelerating, it was awesome, I would upgrade from this shitty basement place where I'm

woken up every hour by people walking overhead to a place where I can finally be at peace and enjoy the view! Then I realized: I only have this awesome feeling because of my current situation being not-awesome. It is impossible to just be awesome all the time - if I were already living in a good apartment I would need an even bigger upgrade to feel the *same* qualia / joy! There is wisdom here: the good feelings and the bad feelings are complementary. Earlier I wrote that for qualia to make logical sense and to be differentiable from each other there must be theoretical capability of it being otherwise, the neurons that don't fire have to be capable of firing. But now I see that the actual qualia experiences are a reflection of each other with a zero / nothingness totality: I only experience good feelings because I have experienced bad feelings. The mystery of qualia is up, I can be in charge: realizing that good must always be coupled with bad to be complete / whole I can adjust my life so as to feel a desired way.⁵ I am not at the whim of the outside world to set my emotions that I accept blindly, I can control my own response - after all why not, it happens inside the brain anyways! If I want to feel elation I have to accept feeling deprivation beforehand, or vice versa. If I don't want to suffer greatly, I have to avoid great joys. Not that there is some cosmic conspiracy but rather that the joy or suffering are both defined by each other, one without the other is meaningless. The conservation is intrinsic, not externally applied. From the viewpoint of qualia conservation, I guess it takes place along links so the strongest bonds are between the temporal me-s with weaker bonds to others I interact with. Thus I remain mostly in control of my response to the environment by shifting qualia among me-s so as to feel meaningful in the nothingness totality. My life is a communication with the physical reality of the world through qualia and I'm slowly learning the language. I realized earlier that nature / evolution's rules are straightforward but not widely discussed: if you have some advantage, don't ask permission and don't show off to others, just start using it - it is your full physical right! This eventually leads to predatory practices and parasitism because from their view they just have an advantage without concern for how the host feels (though it must, again, reflect back to them) - it sucks for the losers but this is the simple reality of life! It was true for the first humans just as it is true today - I lamented the fact that in society there is no overarching "manual for life" provided in school or elsewhere, now I see this would be fruitless because it goes against the evolutionary principle: who would care about reading the manual when they can just use their advantage? There is some cosmic interplay between rigid logic (low entropy, big bang) and rule-circumventing "does this work? then use it!" evolution (high entropy,

⁵Consider the violence and suffering associated with the pleasure of illicit drugs - it seems like a coincidence, but is it really?

heat dissipation) and my life is caught between the two. Hearing the words of the video put a name to what I had been feeling as the remaining major emotional remnant of my childhood struggle to earn unconditional parental approval and safety: it had been an illusion all along, something always out of reach as it must be to generate such a feeling (as soon as it is within reach ie mother hugs me the feeling disappears without any enlightenment just disillusionment and a sour taste). I had been restraining myself against conscious application of the evolutionary rule in search of this "dragon" of approval / love / safety but the video and qualia balance idea helped me recognize this is all in my head: I can flip my worldview readily and start being strong instead of subservient and waiting for approval. I can make full use of my advantage, because cowardly asking a makeshift parental figure (whose acceptance I am seeking ie a friend or a boss or even my parents) for permission to follow the evolutionary rule - is just lame! Maybe this is it - I miss the parental bond so much that I've made the world at large into this grotesque role where I have to be unique / demonstrate full trust + submissiveness to everyone otherwise I will be left all alone in pain and misery. The video made me realize that this unconditional safety is an illusion - a chase for a high that can never be reached again (the full safety of a sleeping baby or even within the womb / before birth), that I have to give up - not on trying, but on what I'm trying **for**. Instead of trying to please my imaginary parental figure and beg for their acceptance, I need to deal with the world - the rational world of physics - which gets most impressed when I follow the evolutionary rule and rewards me for it, indeed unconditionally it has been there all along. While I was struggling hard to earn others' affection, I ended up learning **conditions** I had to follow to keep the relationship safe / myself "protected" within it, and all along the physical world had treated me unconditionally - indifferently - all along, as it must have been to be called unconditional - offering me the evolutionary rules and evolutionary punishments just as it had to all other organisms and treating me justly based on my physical actions, whether or not I even recognized this notion of justice - the definition of unconditional, where it could have been manipulative to make my life arbitrary because I didn't have mental abilities to understand or oppose it, it was honest and consistent in its treatment of me.

When reflecting on society above I recalled the final scenes of [Snowpiercer], which I am liking more now in its representation of partying / dances / hedonism as the penultimate stage - overall a great artistic direction. What the overlord / master of the train said, was that the fights and conflicts were necessary to keep population stable. And he is right. The typical human doesn't know what's best for them, unchecked population growth will fuck it up for everyone. If we eliminate death by disease we have to introduce death by war to reach a stable state. It is the duty of

the leader to do this to keep society going. When his words were met with outrage he replied something like "Do you think I want to do this? Do you think I get any pleasure from the death toll?". He must do it, because he is the only one in the position with adequate power to do it. Not doing it will lead to collapse, as the protagonist briefly realizes just as the train is blown up and everyone dies. It makes me wonder about the world wars, and even the crazy notion that the holocaust was fake. There had been millenia of political science knowledge by the time of the world wars, and the leaders with authority to send men to war must have felt some semblance of the ability of the world to act harmoniously instead of fighting like apes. In any case, I ended up thinking about the interaction between the protagonist and the god-like figure: the master is unarmed, kind, even as he sends a kid to work inside a machine. He is not malicious nor petty, he has a goal of keeping the train running and does what must be done. It struck me that his power / untouchability comes not from force or a weapon, but from a high understanding of karma. It is why people in power do not assassinate each other, even though it would be very easy to do. The objecting reader will say: but it's just a matter of a threat, they know that if they kill another leader they will get seriously punished; for this I say the focus on a leaf misses the forest of the concept of karma. The punishment by other people / guards for the killing is merely a specific physical instantiation of karma, karma itself operates on a realm above the physical and manifests itself in many possible physical ways for us to observe. The physical manifestations will follow strict scientific / causation / conservation laws *because* karma follows conservation laws. From this view karma is what I have earlier described as the essence of C space, an entity defined by perfect conservation in very specific forms / asymmetries. For our experience of life it shows up as qualia. Qualia are conserved globally, and this conservation in itself is what gives them meaning / a vibrant feeling rather than mere arbitrariness / nothingness. It should be recalled that living organisms such as myself must not be overzealously taken as continuous entities in time - the "me" that exists throughout time is actually a whole group of momentary instantiations of "me", each a different person much like other persons in space, but these me-s have a particularly high-bandwidth qualia connection between them compared to connections between me and other people in space, so I find it most convenient to call all these time instances a singular "me" - yet they are not. This makes it clearer how qualia can be conserved overall yet I can still find that my whole life has not come to a zero totality - what happened is that each momentary (time-space localized) me is a single qualia which is conserved with respect to the rest of the world but not necessarily with respect to other qualia which happen to

outside myself, which is not easy to achieve - but perhaps in meditation this is a goal). It is less clear how it's possible for me to seriously injure / torture another being and yet never have to experience such suffering in my life: I imagine this keeps many from accepting the whole notion, undoubtedly there are many criminals who led happy lives and martyrs who were suffering throughout, but again one has to see the bigger picture that overall conservation applies. To see this, it is important to let go of the narcissistic view of "I am this person". "I" am not this person or this physical body, "I" am existence itself and "I" exist as all space-time localized qualia, all at once, all interacting with myself. At the moment I write this, I find myself in this body with these thoughts, but the person walking on the street outside my window is also me (just with different memories), and so is the cat out there by the window, and so is the computer I use (whatever it feels).⁸ And you, reader, are also me, just the two of us are connected by a very low bandwidth link so unlike my past memories of myself I have no idea of your memories so when I find myself experiencing reality as you, I can't tell any better than to think I'm a "different person". But, actually, you are me, you are universal experience. This really seems a laughably easy resolution to the conundrum of a room of philosophers saying to each other "I'm myself! I have feelings and experience life vividly as me! And who are you?". Each of them is correct. They are all, actually, "me". This might be put another way: think of reincarnation being true, except it is not linear in time. You could be reincarnated in the past, future, or even right now. Hopefully you can see that your "past me" is actually a different being and another incarnation of you, just as your "future me" will be. You could be reincarnated as me. Indeed every being you interact with is a reincarnation of you. It is all universal experience. It is on this huge interconnected plane that qualia conservation occurs. Existence is billions of eyes looking at itself, all at once, at every permitted point on the qualia spectrum. So we, as a species, need to get ourselves sorted out and in line with this self-less notion so we can be in balance with the logical universe. Until we do so, we will just be shooting ourselves in the foot and every other appendage, cursing all sorts of physical events and omniscient fatherly gods for our misfortune without connecting the dots and seeing that it had been ourselves we were shooting all along. There is no greater power to impose this on us. We are the predominant power, but we as a collective, not individuals, and the collective must sum to zero. If we all,

⁸Yet again I mention the need to split past me and future me as "different people", despite it feeling like "all me" due to strong memory links. Other people around me have weak links to this body thus I call them others, but my relation to them is just a weaker coupling of a similar nature to past / future me. Recognizing this can make a more sane, organized society (acting as a single entity). Not recognizing it leads to aimless, psychopathic violence of self against self.

individually, seek pleasure, then only the helpless will suffer - but you or "I" will also experience this suffering in due time, just being helpless to avoid it. If I torture an animal, I'm merely torturing myself when in incarnation as that animal, who will be powerless to stop the pain. As that animal, I will think "how cruel the world is, how has it confined me to this horrible fate". I won't have the cognitive abilities to recognize that I as the human willingly chose to do this torture for whatever reason. So that "I" may live in peace as a lower being, "I" must accept suffering willingly as a higher being. That is the wisdom of karma. Will humans ever be able to see this, en masse? I shudder to think what our pleasure-first lifestyle means for the rest of universal experience. How many lifetimes of animal suffering will the average factory-meat consumer have to go through for a net zero balance? The mistake made in a superficial reading of karma is that these animals will have a memory of why they have to suffer - but nature is not so kind. They will suffer, but without answers, without resolution or catharsis, over and over again, time and time experiencing the butcher's knife. ⁹

Such a view is kind of mind-bending, magical. Here I am reading a book written by some being long dead, that is affecting me permanently. Isn't it amazing how we've managed to make pedantic the amazing everyday realities of life merely by assigning labels and classifications and calling it a done deal? The book I read is a real-life karmic connection between me and a past reincarnation of me, impacting both of us in some way. The most direct connection is probably to the tree of which the paper was made and the ink and the seller, I don't know the specifics, but some thread of a direct connection between our lives has been established - the physical manifestation is of secondary purport, it could have been a book or a scroll or an online download or an audio file / vocal re-telling - regardless of how this was done in matter and energy terms, its existence is certainly something profound and a display of real-world magic. The three dimensions, and objects made of matter, and the $F=ma$ physics of those objects, are the particular features of this specific qualia experience that I call "me". The qualia itself is universal, raw experience. That is to say, one can imagine feeling a sensation in the absence of spatial or temporal awareness. If one wonders what another being might feel, my answer is it is more or less like what "I" feel - because I as qualia-component am "made of the same stuff"

⁹In the early caveman stages of humanity, humans lived more or less neutrally karmically balanced with the rest of the natural world, in ignorance, suffering from harms like hunger and disease and animal attacks. With technological and scientific understanding, humans were able to externalize the "bad" things while keeping the "good" things for themselves, thus currently humans can live more or less a worry-free life, but this should not be taken to mean that the "bad" things have disappeared - they merely have been moved elsewhere, specifically onto non-human animals and "inanimate objects", both of which are ok to use and make suffer as we please according to our human-centric moral codes.

as the other being, even if we differ in 3D space. Qualia is the root of the universe, the elementary blocks, existence itself. If I am to accept past me and future me as qualia, then other people past and future are also qualia, then the rest of the material world is also qualia. If I am to ask how a computer or a robot feels, the answer must be to some extent "like me" - finding that it is coupled to some physical body and wanting to seek good feelings and avoid bad ones as best it can. There could even be other beings in other universes incompatible with our 3D space thus never directly seen but even they will feel "like me"; it is all universal experience.

I was awakened by some footsteps at 3 am (I am starting to believe sleep disorders are a byproduct of modern city life), and as I was falling back asleep I was able to focus on a very faint sound - I had started hearing it maybe a few months ago only when it was very quiet and I was trying to fall asleep (or otherwise had reason + ability to pay attention to quiet sounds). Being unable to find / locate the source of the sound I assumed it was some background thing but it was strangely similar everywhere in the room, no spatial variation, which made me wonder if this is an auditory hallucination, perhaps something like the voices of schizophrenic people - though this was not voices as far as I could tell but just mechanical noises like a refrigerator running in the distance. Something drew me to focus more on the sound and "bring it into focus" / bring it closer towards me in my mind - by concentrating on it and trying to "follow the sound" in the brain I was able to get it slightly louder, and what happened in coincidence was a great feeling of terror that maybe these actually are voices, robotic terrible voices inescapable and no way to tell reality from what the voices say. I at the same time wanted to leave this part of my mind far in the dark and never have to face this terror again, and also to go closer, explore it and embrace it as a real part of myself. But trying to go further in the exploration was genuinely frightening. I found myself becoming unable to tell what is reality from what is illusion, my logical worldview no longer having its authoritative power.¹⁰ And the things I could feel lurking in the distance, the unreal but which must be experienced as real, were not merely indifferent but actually dark, malicious, evil; they sought to scare me senseless with the experiences they would unleash. I had to get up and get some water and put a flashlight by my pillow as a safety mechanism before I felt safe enough to proceed; I had to remind myself - this is reality, what I see now is the reality that I must come back to, it is safe in my bedroom and I will wake up again here, it's just some scary thoughts, physically I will be safe. Alas by the time I did all this I was awake enough that it was not possible for me to "dive deeper" anymore. By the morning

¹⁰This must be the experience of a baby, having no worldview to rely upon in the first place, so everything is a terrifying jumble.

I was very faintly awake when I heard the noise get much louder where I could make out some clicks / bangs / clangs which were rhythmic and after that I became aware that the noise was no longer present. Other than that my head felt no different than on a normal morning - no sense of relief or catharsis. What I thought later in the day, having read [Freud's unconscious] description, was that perhaps I got a chance to see the unconscious process with my conscious mind, something normally prohibited but due to the unusual timing of circumstances (brain's drowsy chemicals during deep sleep combined with a sudden momentary awakening of consciousness to attend to the footsteps) was possible.¹¹ The unconscious, then, is in essence chaos - the thermal continuous excitation of ideas / neurons within the brain. I already mentioned how the conscious system is designed to be effectively isolated from "random" inputs, analogous to computer memory designed to only change when programmed by a computer rather than at random / thermally. The brain clearly generates ideas outside consciousness and those ideas which are seen to further the logical world of the conscious are allowed in - the consciousness grabs the occasional gold nugget from a massive parallel thermal generation of all sorts of ideas, and perchance this nugget leads to some insight / ability to solve a problem of interest to consciousness. While the conscious is logical and strictly keeps itself that way, the unconscious is chaotic - at any step something unexpected and frightening may occur, and it must be treated as real for the whole system to be of any use. Whatever happened this night let me catch a glimpse of the chaotic unconscious process by suspending my belief in logical reality. On a conscious system level what I experienced was a connection to a much vaster system - unlike logical / consciousness links which are strictly neuronal and within-brain, the unconscious links are thermal in nature and can thus easily extend beyond my body. What I felt was a brief representation of "will to life" of Schopenhauer, and it was indeed a mad and aimless, claustrophobically trapped in infinity, will that would try everything possible.¹² On a metaphysical level, where I am reality itself, what happens is that the logical "I" cherry-picks parts of reality / existence that are all self-consistent and this is what I experience as my everyday life - the reality I find myself in does not "actually exist" but is a special logical construct arisen out of the chaos of the primordial will. If I dive in

¹¹On later reading, to be in line with dreams as reflective of past experiences, this could be the process of integrating a bad memory from very early (0-1 years?) childhood - the ominous sounds in the distance represent my views of my caretakers at the time, suggesting an anxious avoidant attachment. This does not change my interpretation here, except that the "will to live" is neutral not malicious - the malice in my feelings was due to overall bad childhood experiences and is not an absolute.

¹²Infinity seems like it can't be a trap but for an infinite being like reality it is inevitably stifling as much as a finite world would be. For a "will to life" that lives in a timeless manner, infinity is indeed a trap.

to explore my unconscious, I risk actually altering my reality, ie not waking up in the same world as when I fell asleep, because its logical structure can change from exposure to chaos. In other words, "I" am the only thing that exists and I exist because I only take from the chaos of reality the things which logically support this existence. If I become chaotic I am re-united with primordial will and here appear as dead. My world is a construct of the forever-striving mad will to live, along neat logical lines, and this world can easily fall apart if I start questioning the reality of my stimuli. The will to live underlies our experience ie of sex and tasks like games / music / art; a computer game where the second screen says "you won!" is boring because there was no challenge - challenge comes from raising the stakes of the game (ie if you die in the game you lose lots of points / time) and the higher these stakes at the end the more pleasant the win ie getting it all to function - much the same in sex / foreplay and analogues in other non-sexual relationships like family and friends and teachers. ¹³ Why should this feel at all enjoyable, why not just have the computer game say "you win!?" This ends up the manifestation of qualia conservation, or "will to live".

To better understand this "thermal bath" of unconscious thought, the conscious logical "self" can be viewed as a spontaneous self-organizing mental construct arising in the brain. It accumulates ideas that are seen to form an effective logical interlinked ¹⁴ system that maximizes pleasurable experiences (or at least proves that "I've done all I could") so only ideas that are seen via statistical learning to lead to rewards end up taking part in the logical self and lead to the "optimist fallacy / bias". This can explain the distinction of the unconscious as "dark" or especially the condemning / judgmental thoughts that are heard in schizophrenia - the chaotic unconscious forms all sorts of thoughts and lots would tend to lead to an emotional charge of punishment / persecution / pain from early childhood / parental influence, and these thoughts would de facto not be allowed into conscious awareness as they are "negative". Indeed very few actions and thoughts are rewarded / encouraged by society at large - most of randomly generated neural cascades / thoughts then must carry a negative charge, explaining why a glimpse into the unconscious of the above sort was not just neutral but malicious / horrible. In schizophrenia some aspect of the "reality" accepted by the self ¹⁵ forces the inclusion into the self of the negatively

¹³The romantic chase, will he pursue me or reject me - the indecisive answer feels most sexually alluring because of this "challenge".

¹⁴as it is then capable of repeatedly activating itself / solidifying neural links in a circular manner

¹⁵perhaps, seeing that the terrible threats of hell / death / persecution do not coincide with reality as one matures; reality is not actually punishing but the paranoid's whole self requires it to be.

charged formations from the unconscious (or perhaps a difference in brain wiring / what is the driving force for the self's spontaneous emergence), which then "become real", they have to become real or risk destroying the logical foundations of the self altogether. Why should the logical self form in the first place and why would it exclude negatively charged thoughts? What would be required to get this formation in a computer system - an artificial intelligence? I believe this picture of unconscious thoughts leads to a notion of evolution as the method of formation, as I already claimed before accounts for spontaneous emergence of phenomena in systems that are "precariously poised" for discharge of energy, like charged neurons ready to fire or magnetic domains in the presence of an external field. The concept here is that there is no such thing as a "driving force" that prefers one thing over another, rather all there is is statistical trials and stability in time of some constructs vs instability / decaying influence of others, and over time all that is left is the stable thoughts (for that moment). This is also the principle in evolution - what it really selects for is stability ie long lasting in time, difficult to displace by ongoing random perturbations and perhaps even taking steps to protect itself from such. So in the unconscious all sorts of random thoughts arise from thermal cascades and then "battle it out" with other thoughts regarding who will get the organism's attention - the brain is designed to be precariously poised and sure enough after some time has passed a stable pattern of activity is found - this is the stable thought that's survived this round of stability selection / evolution and may even enter consciousness.¹⁶ Consciousness itself is a very long-lived and complex stable organization of thoughts / concepts forming the logical self and actively able to avoid thermal perturbations - it changes only when it logically "wants to", much like computer memory, and from its position of stability it can "cherry-pick" from the thermal source of unconscious thoughts those things that are seen to be pleasurable. Indeed most of our actions must originate in this way - the computing power of the self is rather miniscule, as evidenced by (say) arithmetic tasks - which wholly rely on consciously-led manipulations. Daily decisions, speech, word associations, insight generation - all come from the unconscious which has been trained to do such things over decades, and then picked automatically by the conscious based on what is considered "most good" by its logical structure which, once established, is essentially resistant to any sort of non-deterministic / logical influence. Thus when questioned on the origins of thought - why did you do this, why did you come up with this specific phrase, why were you able to guess the title of the song on the radio - the conscious self offers no response. As far as the neurotypical conscious is

¹⁶Support for this model of parallel + competing thoughts in the unconscious can be seen in neurological studies of conscious awareness + subconscious influence.

concerned, tasty nutritious "fruits" (of thoughts just right for the present moment) simply fall into its lap from somewhere "out there". I might go so far as to say the *role* of consciousness is to provide the structure along which thoughts are considered "good" or "bad" and guide actions accordingly, to "play god" over the evolution of thoughts out of primordial chaos of thermal excitation,¹⁷ as it were. This is not to say that the conscious being is aware of this or sits there picking and choosing thoughts and their fates,¹⁸ but rather that when such actions physically take place the organism feels the experience of consciousness implicitly. With apprehension of going too far afield, I might even ask how it's possible for pain to enter the conscious experience? Why is there a delay between a painful stimulus and a reaction like a cry / flinch - surely nerves fire much faster than this. It is as if the brain analyzes its sense inputs then sees that to maintain its logical self it has to lead to pain, after which the pain is experienced as such.

While leading to questions of "original pain" (then again, all aches are head aches ie they only happen when there is a brain to generate the necessary excitations, and connected nerves can be taken as part of the brain depending on their connectivity as in IIT), this view explains the surprising power of placebos and the abilities of meditation masters to undergo painful experiences. It is of course not enough to just think "pain doesn't exist" because then the whole logical self has no basis for existence (being raised in a world where pain existing was one of the basic axioms) - it must be primally believed while maintaining the self which is no trivial task. This goes into metaphysics - this world is stable and has been for a long time / through lots of events, so me thinking "pain doesn't exist" doesn't just destroy the world - it is built on a very solid foundation. Making such sweeping changes must be seen as actually changing my reality, my whole world - again the mental patient's world is alien to us but wholly real to them / their experience. I happen to have the concept of mental patients and the ability to interact with them as humans in what I experience as my 3D world, but who is to say then that this is "the" true reality? Much like time in relativity, there is no absolute basis here - different beings form their own logical worlds in which they may or may not interact with other beings, who in turn most likely see the world differently, but may perchance collaborate on some common goal. This is a more rigorous formation of the notion of "world as my imagination" but what I am claiming here is not so absurd - as one may consider whether what I experience as "red" is the same thing another person experiences, for which there is no particular reason

¹⁷It may well be the case that true thermal excitations are rare. The unconscious could be merely free-running associations to much the same effect.

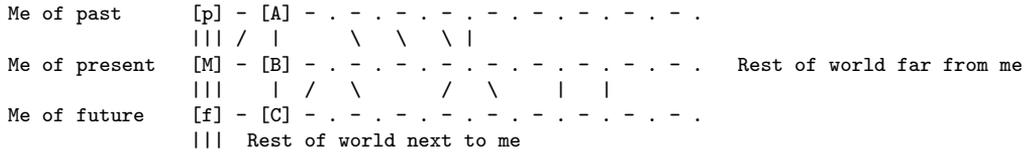
¹⁸That's the "homunculus" or "little person inside the brain" fallacy - what's inside the little person's brain?

the two should be the same, here I question whether what I experience as my whole logical / deterministic reality, the 3D world and its laws and its beings - is the same as what other beings experience. After all, I can only know my experience. Maybe what I see as "other people" in my world is actually a trace of some other being who sees me in its' worldview as not a person but eg some computer program yet the way we interact makes sense in my world (where I experience the talking of myself to another person in 3D space) and in its world (where it experiences some other form of communication in its n-D space), so there is an overall consistency that keeps our logical selves stable. ¹⁹ I explain other people in my world as being born from parents ... all the way back to human evolution from apes and to the origin of life on earth, and this is actually wholly provable with scientific instruments in my world. Yet in another being's world what happens is completely different but also provable using whatever its' concepts of scientific instruments are: and both world lead to the same ultimate outcome but interpreted in different ways. There need not "actually be" other people - as far as I can ever know they are just logical constructs within my experience, my interpretations of the chaotic reality presented to me by existence itself. In this view my life is a communication with "the world outside me" / that which is not me, which I have mastered by using the logical constructs of 3D space, energy, other people, physics, time, the brain and the body, and this is the only way that what I call "me" can interact with existence, but this need not mean that existence *is* this logical 3D world. There may be other beings which have their own worldviews wholly different from mine but agreeing on all the logical requirements, or it may just be me all along trapped in infinity and imagining increasingly sophisticated logical constructs simple because I can and I must - the notion of the will to live. This sheds some light on suicide - as "I" must exist forever, killing myself means exiting / destroying this logical reality - what can I expect next? Ignoring for a moment that the notion of limited time / abilities and the fear of the unknown are a characteristic of this logical reality and not necessarily absolutes, I might still venture that the 3D space is a good indicator of other possible realities - this reality must be rather unlikely, being situated so far from any sort of matter concentration, the empty space being all sorts of illogical constructs that don't exist. While this reality doesn't make me want to jump for joy, it is bearable and has its moments of pleasure - moreover I know that I can quit it if I must, which I cannot say for other realities I may find myself in, so on the whole I would prefer to be here while I can. Ironically then, knowing that I can kill myself

¹⁹I do not even know for sure that the words you read mean to you the same thing they mean to me or even that they appear as words in your world, but I do know that however you respond will appear as logically consistent when viewed from the lens of my logical self / world.

and finding this to be essential for a sane existence, ²⁰ I cannot kill myself and risk losing that freedom.

I will try to represent this in picture form again. Recall the earlier proposed C space diagram, now modified with boxes:



At a given point in time I find myself at M, within the "box" and looking out at my surroundings in C space. In this particular reality I interpret the connections as 3D space / time following the laws of physics, and this world of physics and space and qualia is one I feel from within M and the way I respond to outside inputs / connections. Now consider a being at B, say this appears to me at M to be a bug crawling nearby. This bug has physical properties and I can interact with it through various physical means like touching it, to which it responds perhaps by moving away. I am thus tempted to claim that the bug exists as an object in 3D space, and that its actions are physical in nature, and indeed I can find deterministic explanations for any question about this bug I might have - my logical world is quite robust to paradox. ²¹ But this overly sterile and self-centered / boxed-in view leads to the troubles in philosophy and actually has no proof in anything I can definitively measure - for all I know my world could be a simulation. What I propose is that the being which finds itself within B (which could well be "me" in another incarnation) can experience a world that is wholly different - different physics, different qualia, different interpretations of what to call the thing it sees as M. What I experience as touching the bug in my world, B experiences maybe as some strange alteration of physics or inexplicable qualia but in any case something originating from without and to which it reacts in whatever manner it finds appropriate by its logic. I don't know what this action amounts to from B's viewpoint / reality, but when it affects my reality I experience it as seeing the bug moving away. Keeping this whole interconnected structure self-consistent while matching all the different worlds is a marvelously challenging task which seems perfect for the "will to live" to undertake.

Why introduce all this confusion of alternate realities when it would be so much simpler to just call 3D space real and be done with it? First, for

²⁰It was around age 4-5 that I had a realization along these lines
²¹Indeed, perhaps the resolution of paradox, the attainment of a perfect structure, is the goal of evolution and the will to live, which is recreated in miniature in acts like foreplay / build-up / climax like creating a perfect thing then admiring it - in this case the perfect thing ends up admiring itself.

qualia to make sense it must be conceded that all systems feel qualia / have "real" experiences as elaborated at length earlier, and one must ask, what are these experiences like? What world does a tiny bug see? Surely it is not the complex 3D world that I see, from its point of view the world is flat and very simple (implying fewer and lower bandwidth C space links from its box B compared to the links from my box M) - this is its reality, its vivid qualia experience - so how am I to say that what I happen to see / feel as 3D space is "the true reality"? Second, I proposed earlier that the self is a logically organized entity and if so then 3D space is what is consistent with the existence of this entity in particular - "we" can only exist as ourselves because 3D space is a logical necessity for our "self" to function - in this sense the 3D space is the creation of the self (this particular self) - the two are inseparable (much like "why am I me?" - if I weren't I wouldn't be writing this question but I am and thus it is true). Saying 3D space is absolute is saying we are absolute - another human-centric view that is probably wrong because of its unjustifiable specificity towards human life as opposed to universal / logical experience. Third, and probably the closest thing possible to experimental support for the view, is my own (and, if I am to trust what I see as others' writings in my world as indicators of their actual experiences) accounts of mental experience in meditation and psychedelic trials. Seeing that I am bounded within M in the above diagram, if my goal is to learn what B's world might look like, I must somehow get appropriate links to B such that I still have enough remnants of M to leave traces about my experience for future M (or f in the diagram) to read about. While I can't actually link to B, I can still alter the connectivity of my consciousness - shift the boundaries of M - and write down my experiences and compare later within f, objectively. This alteration can be with brain implants, or with drugs, or even with real world interactions (I can look at writings of young me and see that he was in a very different mental reality). The factual evidence here is incontrovertible: an altered state of mind, when capable of being recorded by me in 3D space, leads to vastly different qualia / feelings of timelessness / interpretations of symbols and sensory inputs. It is more surprising really that we so casually dismiss this most-real evidence as "just subjective" and "unjustifiable fluff", or "made up". There is no argument that, in the moment, what the "psychonaut" experiences as reality is very much real to himself - just unfortunately when back in this 3D space-bounded "absolute / true" reality any messages communicated from "that realm" are quickly dissected by determinism and, having succumbed to such, left as unimportant / useless. The interconnectedness of C space, and its "translation" between the different realities felt by different entities and their actions towards each other, all take place according to its own logical principle of qualia conservation, this conservation being necessary to give qualia any reality in the first place, in the face of the absurdity of ex-nihilo

creation (where does specificity possibly come from?). My reality follows the laws of physics, which end up a special (quite amoral) representation of the laws of qualia conservation, yet if I learn the qualia laws I might find it possible to take actions which are wholly physically valid / explainable but in no way attainable from physics alone, as physics is much too directed / narrow / basic to explain complex life-course events.

Looking at various buildings around me I was trying to reconcile the above notion that "I" am a logical being and that "I" have a unique world experience - which suggest that I should have intrinsic awareness of everything in this world - with the observed reality that there are lots of things I don't know or are surprising. Where anyways would I draw the boundary between what is "me" and what is "external"? Yet I never got to choose my life, I don't know what will happen in the future, how can this world I find myself in be essentially a dual of "me" and yet so uncontrollable by me? I didn't know who built the structures I see, nor the atomic composition of the bricks in the walls, how could I possibly call this "my" reality rather than one I'm just a guest in? In that moment I got a glimpse at what defines me / what "I" am: the notion of conservation / zero-sum / relativity is not a property of the world that is imposed onto me, it is a property of *me* that generates my world accordingly. And again: how can there be things I don't know about? At some point past me didn't even know about conservation, yet past me affected present me by virtue of conservation working even back then. I am hoping to dispel the notion of "I designed this" or "a higher being designed this" which is a recursive god fantasy (the man inside the brain), because I'm certainly not aware of having designed anything nearly this complex and if quizzed I would not know a great deal of natural laws and peculiarities, which would nonetheless be true in an embodied form.

I was holding a water bottle and with my fingers could tap individual "notes". I let my mind wander while doing this and observed that while the resulting tapping was largely arhythmic and out of my control, sometimes I could sense a shred of a rhythm beginning to emerge, sometimes a very complex + fast one, much too fast for me to consciously process in symbols / in a way to write down but still consciously seen as a unique rhythm. With a bit of concentration I could keep this rhythm going for a few seconds, after which I again let my mind wander to resume random tapping. This is basically the model I described earlier for the unconscious - a thermal or freely-associative (effectively thermal) activation of concepts then a grasp of the particularly orderly ones by consciousness. This can be seen on a macro scale in drum circles: rhythms emerge that are not the creation of any one participant but a whole new summation based on what ends up sounding preferable to each one. Going up to C space, this is a plausible

explanation for the above question of how there can be an unknown world outside myself. When participants in a drum circle come together, each with a drum and a sense of rhythm and following some agreed-upon rules, they then create something that is beyond their individual selves. Similarly, when C space entities with some common abilities and senses and rules come together, they create a completely new world experience that exists just for the sake of its appeal to the entities. With more people, animals, systems, I see more participants joining in, both in pain and in pleasure contributing to some cosmic chord of this joint reality as being "just right". In the drum circle there is no predicting the future, it is dynamic, nobody has the whole picture, there is no overlord controlling and adjusting every motion. The participants exchange information in a common format - the sound field which accepts + combines + communicates everyone's contributions - for C space entities the various 3D fields serve this task. What are these entities, how did they come about? If I can use myself as a prototypical entity, I did not have any choice or awareness of joining this arrangement. Maybe it is something that existence does because it might as well, there is nothing else to do and infinite time to spend. I already argued earlier how most of space is... space, and that at the root it's all space, just warped in different ways. Because if the starting point is taken to be nothingness, there is no means by which to create "solid matter" out of nothing. The only conclusion, an eerie one, is that space itself is conscious and forms worlds like this as a sort of catalytic effect, joining in the rhythm, parts splitting off to carry their own melody, other parts rejoining afresh, some beats tending to remain stable in oscillation (the "solid" particles / systematic versions of same) and others happening by occasion and dying out.

Reading about animal testing of medicines - here I see another qualia conservation, in the lives of humans saved vs animals in pain / killed for scientific trials. It has to be this way because the only "driving force" is stability which is indifferent so to get good things the bad things have to be pushed elsewhere, but they cannot be just ignored or nonexistent. We push them into / onto forms we don't consider human-like (capable of feeling qualia) but not recognizing that qualia must be conserved nonetheless (across space+time), that there is no such thing as "inanimate". If one is to accept the notion of qualia conservation, ie good and bad have to coexist as they define each other (no ex nihilo / absolute metric), it is tempting to then ask why the conservation takes place in specific ways and where did it all come from? An absolute nothingness, if it exists, must always remain a nothingness - it cannot create anything, it cannot be a starting point for any splitting as it has no preference towards anything / completely uniform. Our world evidently is not equal to "absolute nothingness", but then how did it come about / does it come about? If this world must exist, then is an absolute nothingness impossible? Is it that the different splits can never

be reconciled and this is a condition for existence, or rather the indeterminacy of whether they can be reconciled or not, necessitating further and further creation (like a nucleating crystal or pearl growth)? Is the world "out there" my dual or my complement - how can it be, qualia-wise, that a bug's world is much simpler even though the bug itself is simpler from my view? (ie I am complex and my world is complex, the bug is simple and its world is simple - complexity does not seem to be conserved) Then, if we fall back on the notion that anything logically provable exists, it is seen that both good and bad things have equal claims to existence. Because both are logical, it is not possible to discard anything / expel it: whatever you might do to it, it remains there as a logical fact of life. When I drop some trash on the floor without noticing, then come back to it later, it's still there. All is conserved. So how can it be that I would develop a logical self that is "good"? Only by pushing the "bad" outwards, onto other people / things. Then, what is the external world and does it "actually" exist or only as something I imagine? Since logically consistent things have been happening even in my early life when I was not aware of the rules, it is tempting to think there is an external "pure logic" world, but this is not "what I see with my eyes". This external world is defined by boundaries and links which split up all space into distinct segments / boxes, and all that I see / experience is wholly inside my "box" - to that extent, what I am sets the rules for what my world is - the bug's world is simpler from its view because its view is only inside its box. Represented as a diagram, instead of

[Outside world] --qualia--> [My conscious experience]

We have

[other entities + their worldview] <--qualia--> [my conscious experience + my worldview]

Like energy spatial dissipation, qualia will also tend to dissipate in C space thus myself as an entity needs to be interaction-connected to other entities to remain as myself (and keep my world as this); solitary isolation or sensory deprivation demonstrates the effects of qualia dissipation in the absence of a source - the self is lost and one's world becomes smaller and simpler.

I am led to think of the ensemble concept - everything happens that can happen, so what we are most likely to find is what is statistically most probable / numerous. What I find around myself now is a particular configuration of matter / qualia, and the notion I get of temporal stability is based ultimately on these probabilistic measures - something being stable means there are many possible random configurations which all have the characteristic defining that something. Consider a PID controlled process

as an example of stability: how can this be achieved in a random universe? There is a conceptual change in this interpretation: instead of seeing it as an unstable system that must be controlled, I see the system+controller as now stable, so the presence of the controller has converted the combined system from unstable to stable. It must be that what the controller does serves to link multiple ensembles to each other, enforcing that if a value is one thing in one ensemble, it must be in some way related to the value in another ensemble. This linkage was also what I ascribed to conscious systems earlier, as a requisite of having feedback thus "states that matter to the system itself". Qualia are thus the linkages between different ensembles (their inexplicable and irreducible quality coming from the fact that they form an "elementary unit" defined by relating previously unrelated "arbitrary" quantities thus incapable of more basic definition), and conscious systems are the "hardware" that is capable of making qualia links and enforcing their influence onto the associated ensemble. A world where I just exist in a void is logically impossible - has a 0% chance of occurring so I never experience it. A world where I exist in some form requires that the earth and things I see around me also exist, and all these possible worlds are almost 0% but not quite - I get to experience it despite the small number - then my "stability" can be judged as the number of ensembles (time moments) I find myself in - something on the order of 10s of years vs the universe lifetime (until heat death / restoration, as it has to restore for conservation to be valid). Then qualia conservation becomes a defining feature: any asymmetric / net detail of my experience (like seeing a specific color vs another) is balanced by a corresponding aspect of the external C space world. So it is no accident that animals have to be used for medical research, that our period of prosperity / relative peace follows the greatest wars in history, that I get injuries / unpleasantness in everyday life. If somebody gets to experience pleasure, somebody else gets to experience pain, that is the blind drive of evolution / world genesis. Assume I have no idea what sort of chemicals will treat a disease, so I study mice to which I give dozens of different guesses of chemicals to see what happens. With a true absence of knowledge, the mice may feel better or feel worse afterwards, 50/50. I only focus on the ones that feel better, and eventually find some chemical that seems to work. If I give this chemical to people, and they feel better, it will be by the amount that I was willing to make mice feel bad in my search for treatments. Use of the chemical beyond this qualia conserving threshold becomes a statistical impossibility: just like I cannot reverse the mixing of hot / cold in entropy, I cannot prevent development of a treatment-resistant disease - unless I once again begin random trials where animals will have a chance of suffering.

12

More Qualia

Walking back from lab I wondered more about the nature of qualia. The reason for the existence of the color green is to specify that this is not any other color but green, that is the notion of green comes from the large possibility of visible colors being reduced to one special case, and green is a unique label distinguishing that specific case from the others. But if all that there is to qualia is a unique identifier, then it shouldn't matter which unique thing is which, so why is it that I can't just will myself to see green as red and vice versa? No matter how much I would like it, green still looks green, implying that qualia are not merely unique identifiers but also informative / descriptive ones, ie each unique identifier is different in its implications to me, they are not interchangeable. Consider an experiment where I am shown two objects and asked to decide whether they are the same color or different colors. The uniqueness property is sufficient to accurately do this task, and given ready access to objects, I can even sort many objects by different colors by repetitively comparing them and seeing which ones are the same and which ones are different. This does not imply anything about the descriptive nature of qualia, only that I have the ability to generate unique labels for different inputs. In the next experiment, I have to remember the color of a past object and decide whether a new object is the same or different. Of course I can readily do this - but this in turn implies that the qualia of color I experienced were not merely unique but stable over time, that is a specific recall-capable construct in the brain, and thus informative / descriptive. Indeed the comparison of colors will be much more accurate when done side by side vs from memory, demonstrating a difference between the extent of realtime experience qualia and their descriptive power in memory. This still does not answer why green should be, of all things, green. The reason for this is specific hard-wired links in the brain established on evolutionary timescales by random perturbations that led to increased survival. The links imply associations with

that color, for instance green plants are a food source so the color green has an attractive property. Looking more into this we see that color is a quite misleading approach to qualia, because we never experience a color in isolation.¹ What we experience is the brain's interpretation of the outside world already complete with edge detection, object identification, and 3D spatial mappings, with color overlaid as an informative layer on top of all that. Color is something to focus on to understand optics and how to build some new physical technology for generating images - but it is not a proper focus for the study of qualia. What we experience as qualia is "a 3D scene that looks like that", and the color of a specific object is extricable only in an abstract sense. In the 3D scene, color serves as one guide as to what to do with an object: eat it, stay away from it, approach it, attack it. All of these hard-wired associations give color its descriptive power, and this in turn leads to its vivid qualia feeling as "green".

While a deeper understanding of qualia seems to be impossible due to its inherent constraints in expression for study, there is a promising pathway in becoming aware of one's own qualia experiences and comparing them over time. Language is much too low-bandwidth and low-complexity to be able to transmit qualia from one person to another (or to self), but the brain's own memory and processes are high-bandwidth and readily capable of supporting qualia links, thus introspection can be used to gain an understanding of the characteristics of qualia while language can be used to plan and record experiments on such characteristics. The qualia experiences of the self readily change over long and short time scales: maturation and awareness changes from infancy to adulthood, sleep-wake cycles and exhaustion, drug induced effects, and real world stimuli. The difficulty in doing this comparison is that it requires one to be aware of one's current qualia state, and to remember a past qualia state and compare the two. This is a high-order mental function which is readily shut off by the brain unless constantly called forth, and once it is shut off the awareness of its' absence is also lost, one does not know that he does not know. So while in a state of intoxication what I feel is certainly different from what I normally feel, there is no guarantee that I will have the capacity to record how I feel or the capacity to be aware of just what has changed in my experience and how. What I do remember, and I believe this also applies to dreams, is from short bursts of self-aware activity which recorded glimpses of my experience into memory, which I am then able to analyze in detail from my present

¹I visited an artwork exhibit where the viewer is surrounded by a uniform sphere of light. It was very disorienting and nothing like looking at a piece of paper. Even then, what I felt was being surrounded by the color, or being in a dense fog of that color, not the color itself. Within a few seconds my brain automatically found inhomogeneities in the surrounding light source and used that to orient itself and recognize that it was inside a colored room, the illusion was lost.

fully aware mental state. Continuing the above "green" example, consider a case where in an aware state one sees / experiences a world with a green object. This is a detailed world and the object is seen clearly. What would happen in the case of intoxication such as getting drunk? The color green would not somehow dominate awareness, nor would it become more or less green, but rather the world picture would get reduced in complexity. The drunk person is still capable of making out objects and colors but details seem lost. This would straightforwardly follow from some regions of the brain becoming incapable or less-capable of activation, thus reducing the potential space / complexity of qualia that can result. The descriptive nature / associative links of qualia might also change, but this is more in the realm of psychedelic drugs, and indeed what happens is "new types" of experiences which perhaps seem spiritual / transcendental in nature. Figure - complex world interpretation vs simple one due to cognitive impairment from intoxication or exhaustion - because the person experiencing this firsthand has no reference against which to compare his qualia, he cannot tell that his world has "gotten simpler" but this is observable through experiments in which he participates and may be remembered later when his awareness becomes more complete

Indeed one does not need to be limited to abstract thoughts on "what is it like to not be able to see a color" for the absence of color distinctions occurs readily at night and in low light levels. There the activation of the eye's cells is at a low enough level that a decisive assignment of color is not possible, and then what is seen is not a shade of a color or random color noise like in an electric camera, but rather muted colors which become more difficult to distinguish even while edge and 3D spatial detection works well. As this is such an everyday occurrence in the transition from daytime to nighttime it is easily overlooked that what has happened along the way is an actual loss of and then regaining of a certain type of qualia. Lighted decorations, like christmas lights or neon signs, supply color information at night when the rest of the world is of a muted color, and it is this quality which makes them appealing. But what has happened? At night, when looking at the leaves on a tree, am I aware that I have lost the ability to see green as green? Once again an absence of qualia does not manifest itself - qualia is that which is felt, and that which can no longer be felt remains outside my awareness to evaluate. Another example of qualia loss is in learning a physical action through repeated practice - for instance when first learning to ride a bicycle or drive a car I would need to consciously feel and process every major motion I need to take, sometimes with subpar results. Over time, I learned to get better at performing the action, and now I can do it readily even without thinking about it, "on autopilot", and do something like carrying on a conversation simultaneously. So, as I learned the action, I have lost the qualia of being in conscious control of the

action, that particular pathway has become permanently wired and outside conscious awareness. My memory must be used to store and convey the notion of past qualia that I can compare to my present state. Consider a more straightforward case - an injection of an anesthetic, such as used for minor surgeries. If I get an injection in my arm, I would find that my arm feels "numb", but that is not due to the arm itself - its sensory inputs are blocked - but due to the rest of my awareness expecting inputs from my arm and not getting any. If I sit very still, I might even find myself unable to tell whether my arm is chemically numbed or merely stationary and absent of inputs. So here is a mechanism (local anesthetic) that removes actual qualia while keeping mental awareness essentially unchanged, thus it can be used to learn about what qualia are. This goes with the interpretation of the nerves in the body as the "roots" of the brain and thus part of the brain organ, so an injection in the arm is actually an injection that disconnects a part of the brain and blocks it from communicating with the other parts. What happens then is the block in communication causes a reduction in potential complexity of the system and that type of feeling is no longer possible. This reduction does not manifest itself directly, but only upon recognizing from past experience and memories that "I should be feeling something in my arm but I am not", there is no feeling that indicates a lack of feeling - this would be a self-contradiction. What this clarifies is that there is no "spookiness" in the action of a conscious system - an absent potential activation does not create qualia, physical activation taking place creates qualia. And yet the nature of qualia is changed by the potential (complexity) of it - with my arm numbed I am no longer capable of feeling anything happening to that arm, I am only remembering what that felt like because apparently I have capability to store past qualia to some degree - if I woke up one day having forgotten what it's like to feel my arm, I would lead the rest of my life with a limited set of qualia but not knowing any better - this is how a reduction of complexity due to cutting off communication pathways in the brain manifests itself as reduction of qualia space. I simply do not feel anything which does not present itself to me as an input of my sensory network - that is to say the vast majority of the world. The fact that something could present itself, such as whether my arm is currently numb or not, is not something I can feel without doing analysis using other senses. At rest most of my sensory inputs remain silent and I can pretend I am a floating point in space, with only my memory reminding me that I could get a sensory input and if that were to happen it would be from a human-shaped body and of a certain experiential quality. And the memory is broad and even generalizable: I can try to imagine an ache that is centered outside my body (certainly many spiritual approaches to healing / energy flow employ this notion), or a flavor I could never actually experience, which is how I know that what I am working with

is a mental construct of qualia and not the qualia itself. If that memory of my body were to be turned off, I would find myself as a "disembodied cognition", a "floating head" as it were - there is no intrinsic awareness of the silence of my body's nerve cells in contrast to the intrinsic awareness of their signaling. Necessarily, with reduced nerve activation, experienced qualia become less intense.

A question like "why am I me?" is ill-defined and unanswerable, it is true by definition that I am me, ie that I always experience the world as myself, which is as a "universal consciousness". The question to ask instead is, why is my experience bounded and delineated in the way that it is and not otherwise? Why am I not capable of feeling what another person is feeling, why do I experience the world only from this limited view? Why do the things that I am able to feel take on specific forms, like the nature of auditory or visual qualia? Another ill-defined question concerns the distinction of free will vs determinism. There is a notion implicit in "free will" of being able to choose that which one did not choose, which is a self-contradictory / impossible concept, something which can only exist as a thought. Both determinism and free will are supported (or rather, are not distinguished) by the invariance model of world evolution. The question to ask instead is, why do I experience only a single timeline? Why isn't it possible to experience an assortment of choices, and instead it seems a property of my existence that I can only see the consequences of specific choices that I make?

It is as if the sensory inputs I get need to be organized in a certain format for me to make sense of them, and this format is the structure of qualia. Then what are general requirements for a classification? Consider the discovery paper search I am doing now: I come up with some 5 categories of papers, but who is to say these are all the possible categories, and furthermore that in reading a new paper I am not biased by pre-existing categories and "lump" the paper in with something it doesn't really fit but is an existing category so it is easier to use? This needs to be proven in a mathematical sense like a basis set that the categories used encompass the entire space they purport to describe (ie all scientific papers) and that they are mutually orthogonal. The easiest way is to use a binary category, ie A or not A - as by default this covers the entire space. Then getting A to represent 50% of the space means that the category is useful in describing the set ie the "knife edge" is at a certain origin point rather than arbitrarily far where most of the set is not represented - then A gives the highest information content in terms of combinatorics used to describe members of the set.

Species formed? With alpha male. While I often mention evolution and its effects in my claims, there has been a longstanding doubt in my mind on how evolution can form distinct species of today. Since evolution

is always active, there is no basis for a single temporal origin event - we should be seeing organisms at every stage of evolution today, but instead we only see more or less discrete species. I realized that this challenge remained due to my automatic evaluation of evolution "in the wild" in terms of modern human living standards: monogamous mating in a pair and medical care until old age. In the wild, instead the strongest males mate aggressively and others die early being killed by other species or stronger members of one's own species (and with our inability to foresee system behavior, we are rapidly heading back to this pattern). There is no criterion beyond survival and perhaps ensuring the child is also ready for survival, no ethics or morality. The creation of species as we see them requires two mechanisms: males with a favorable mutation out-mate the other males, and individuals without a favorable mutation are killed either by disastrous events or by more evolved species (coming from their own lineage or from another species). This is because assuming a species is stable in the absence of a mutation (ie they got to the point of being alive at that time), they are capable of competing with other species also alive at the time, thus the only reason we do not see them now is because they were killed in the process of evolution by the mutated (progeny) species, or by a calamity (like climate change or volcano eruption) which only the mutated species were capable of surviving. That is a grisly process to envision. A closely related point is the origin of organic life - if it came about as a process of combination of random chemicals on earth, then it must have happened all over the place, because the earth is huge compared to the tiny scales of chemical reactions, so if the chemical conditions were right in one spot they must have been right somewhere else sometime else. Compare this to a crystallization nucleation reaction such as water freezing to ice: with a very homogenous liquid I can supercool the water well below its nominal freezing point, but in the presence of inhomogeneities I cannot get much below 0 C as the inhomogeneities provide a point where ice formation can occur. If the container holding the water is rough, I would expect ice crystal growth from many different locations along the container wall at around 0 C and eventually multiple crystals would meet somewhere in the center. But if this container is smooth, I could supercool the water and eventually it may spontaneously form ice crystals within the bulk, in which case these crystals will form in many places and result in a polycrystalline structure. The only way I could get a mostly single crystal is to have the water supercooled to a small degree, such that homogeneous nucleation does not take place, then introduce a very local perturbation such that nucleation takes place there and subsequently all later nucleation follows the initial crystalline shape. This is the situation analogous to what must have taken place with the origin of life. Because the entire planet was full of potentially useful chemicals, it was like a supercooled state, ready for emergence of life

under the right circumstances. But if this build-up of chemicals went on too long, there would be new lifeforms generated in many places, and we would be able to see multiple distinct chemistries of life, maybe inorganic lifeforms. What we see instead is a single biological and chemical foundation applicable to all living things around us, meaning the crucial nucleation event must have been a single localized instance that subsequently took over the nutrients available for life-origin at other sites and turned them towards enhancing its own viability. The other alternative is that this nucleation did happen in many places, but everywhere the result was the same, meaning a specific type of organic lifeform is the only feasible one in this chemical environment, so when the different first lifeforms encountered each other it did not matter where they originated from, they were able to continue evolution as a primordial species. As a contrast, in the forests lots of species can be seen to exist side by side, in competition, despite millions of years of evolution - here is a case of nucleation where many crystals were formed from an initial heavily supercooled state and still coexist today because all of them have been exposed to similar evolutionary pressures and have continued to be able to survive.

There is something philosophical here as well. Consider that evolutionary forces led over time to the creation of myself as a being, and I can find myself at this point in geological time. But these forces are always active, so why shouldn't there be a younger me also alive right now? Why shouldn't there be hundreds of younger me's, and older me's, born at every point in time due to similar-enough starting conditions from the primordial chemical soup? Did the forces of evolution suddenly change their mode of operation over the course of a few years so they can no longer produce a person like me? The only possible explanation is that "similar-enough" is once again a fallacy of small = non-existent, indeed the reason I do not see a younger me right now is because due to my own presence in this world I have excluded the possibility for another being to become someone like me. There is already me - experiencing this as myself - and thus there is no younger me also alive now. Sure there are people similar in appearance or mindstate to me who are also younger - but they are different, and outlining how this comes about is key to a clearer view of evolution and the universal consciousness. Consider a thought experiment - there is a person exactly like a younger version of me but alive right now, and so as to meet all those developmental requirements imagine he lives on some other planet and doesn't know anything about me. For him to be younger, that planet must be slightly different from my planet, because here I am the age which I find myself and not younger, but if his planet is slightly different then he is not exactly like a younger me - instead he is a younger me with a different mental map of the planet for instance. Like a flimsy version of the mathematician's proof by contradiction, this situation shows

how it is possible that I find myself in this world and as this differentiated being. This is the process which gives time its arrow and its stable origin point (from my view as a temporal being). Indeed other me's exist - lots of them - these are other people and nonhuman beings around me as well as on other planets I'm not aware of - and I even happen to be able to interact with some of them. At least I can look at them and think, if I had a particular feature of their life, I would also have other features of their life, I would be experiencing life as them, that is a different pathway which I also experience but without the memories of this body.

As analogy consider the evolution of an "emergent" lifeform - modern vehicles and technologies - from a state of technological emptiness coupled with increasing (supercooled) understanding of technology principles and potential usefulness of technology. One might argue that such things are not lifeforms because they are created by humans, but then I would say it is the cells which do the proper work of putting together my body, and the sperm + egg create the baby human, yet from this arrangement of cells by forces outside our control we still find ourselves as unified beings calling ourselves humans. As may be expected in the supercooled state of human society approaching technological abilities, car-like concepts emerged at different times and in different cultures, and yet what we see today is predominantly a "speciation" with majority of vehicles following a standard platform with rear drive, differential, front wheel steering, gasoline engines, driver seat and steering wheel. Without being very thorough it seems correct to claim there was a single "nucleus" of a generic car type which then evolved over time, though in reality there were multiple nuclei which took place mostly unsuccessfully until one managed to break through due to a particularly favorable environment and perhaps merged with other concepts then in existence. Looking very carefully we might find some odd specimens in scattered garages or museums: steam powered cars, swimming and flying cars, hovercrafts, 3-wheeled cars. How come these concepts are not regularly re-invented? To some degree they are, there are always tinkerers re-discovering something attempted earlier, but now with the ready availability of normal cars there is no incentive to invent new approaches - there is already one that works, and in that sense the existing "species" of cars draws mental / creative resources away from the possibility of re-starting the technological "life tree" - even though it would be possible to re-start from zero now, it is much more interesting to instead apply the same mental energy to existing concepts for further advancement. Similarly, even if it is in principle possible for primordial lifeforms to be generated now, that chemical energy will be much more straightforwardly dissipated by already existing evolved lifeforms, so the latter is what happens instead of the former. Also money / loans / debt as example of open cycle implemented by humans (like with academic papers) where debt will tend to pile up

Qualia pairs

Some opposites: life and death are not a proper opposite pair, because life has many degrees of freedom while death is a singular entity, so one cannot be said to be the dual of the other, they are not equivalent in information terms. Clearer opposites in the sense of qualia conservation (one cannot exist without the other) are happiness and hopelessness, or comfort and sorrow, or caring and alienation, or empathy / closeness and loneliness / sadness, or violence and helplessness, or respect/submission and laughter/derision, or excitement and drowsiness, or superiority and jealousy, or fear (unable to avoid) and bliss (orgasm - desire to embrace), spontaneity and nostalgia, anger/frustration and understanding/unity. As we build a society that increasingly removes the bad parts, we no longer experience as much pleasure from the good parts. A person who loves others selflessly is reflecting past hurt, and has love for others to the extent that this hurt still exists in his psyche. A couple embracing each other can experience the wonderful security and comforting feelings to the extent that they had earlier been scared and abandoned. There is a notion of finite resource as well - the pleasant experience is the result of "reprocessing" the painful memories, and once this has been done and experienced it cannot be done again. This process completes a temporal qualia conservation half-loop within the self, the other half being completed through the rest of the world. This implies that an experience of qualia corresponds to a modification of the brain's state (such as a writing to memory) rather than as something which can be repeated arbitrarily and without any impacts beyond an awareness of a feeling.

Attending a church service, I thought back on the purpose of religion, and whether my earlier writings had any validity. The large marble table in the middle of the chapel seemed reminiscent of a surface proportioned for human sacrifice, the imagery of "the body of christ" and "the blood of christ" further reflecting such origins. The service itself, where after a long prayer and self-hating acknowledgment of sins, food was offered to the congregation, in turn carried traces of the primal sharing of the spoils of hunt among a tribe with the followers bowing down before the leaders to beg for their share. And yet in the call to sing and join in prayer, the emotional melodies, I could tell that this strange thing is what will remain unshaken as this technological society falls apart. Communal worship of a common leader figure is what we were wired for, and what we will return to. Does it matter that the people of that service were praying to god (and using this to lend legitimacy to their psychological model of self)? My intuition says no, but everything comes to have its impact due to conservation, so really it is yes. God then exists and does not, as a "degree of freedom" for the neural network of the brain. I suppose this is the folly of science - the belief that the truth, the correct solution, can stand alone by virtue of its

correctness (which is the same error as leads to premises of infinitely fast computing), whereas in reality any pursuit of truth implies exploring all the non-truth and thus leaves behind a wake of destruction as it were. One cannot exist without the other. This religion, this service, is a reality of this world, and even if it is not in itself truth, it is a necessary condition for the finding of truth. Truth is that which provides a recursive, self-aware, explanation of existence. But existence is much vaster than this definition of "truth", it encompasses everything that is self-consistent, and all those parts are needed in order to allow the truth to stand alongside.

After a long flight, walking through the airport I felt a bit of a dissociation: with a melody playing in my mind I suddenly had a glimpse that the 3D world I see around me is also "in my mind" in a similar manner, for a moment I believed that my experience of the world was just one big fantasy all in my mind, all formed from an unconscious base source. I was led to recall a passage from [Ligotti's conspiracy against the human race] about the "eerie puppet" example: looking at a puppet one knows it is not alive, but then suddenly the puppet starts moving autonomously and taking actions like a living being, becoming alive, and witnessing this is unsettling, disturbing, because it ought to be inanimate matter and yet it is alive. What does it feel? How does it think? It is scary because I have no idea. And from this dissociative state I could see this applying to bugs (bits of matter that can suddenly, eerily, move of their own volition), humans (moving, thinking, meat and bone based entities), and even what is called the "inanimate world" - computers, machinery, clouds, storms, planets, all these moving and changing things, alive when they really seem they should not be. The resolution is clear: we have this notion that things can be inanimate, and that they are inanimate by default unless they are human-like, so when we see them move of their own volition it appears eerie - in truth, there is no such concept as inanimate, everything around us is part of conscious experience (that is how we, as conscious beings, are able to interact with it at all). It is quite a tremendous blindspot that the "scientific approach" to the "inanimate world" gives us - the concept that fellow humans are the most "alive", other mammals somewhat so, and by the time of getting to inorganic matter it is not alive at all - whereas in reality the whole world is "alive" in the sense that it is a living, changing, feeling, entity. And having this ignorance is comforting, because then it is of no consequence what the inanimate matter is made to do - it can be our servant for whatever purpose we desire. Yet this view necessarily leads to dualism and self-contradiction ². Inanimate matter too has some experience

²of the same sort that has us taking some animals to the vet to keep healthy while others are raised in factory farms for the sole purpose of being eaten (even fed to the preferred "pets") - these animals all have qualia experience and any one of them suffering should be seen as a travesty similar to one's self suffering, because ultimately there is

of being in existence, the nature of which might be inferred through qualia conservation, and if we are to seek universal understanding this cannot be ignored. When I fall asleep and then wake up, the world around me is still present even though it was for some time absent from my awareness - that means that it has remained in "someone else's" awareness while I wasn't paying attention, this someone else is the "universal consciousness" which is always aware of the entirety of the world - except for the little part that I call "my experience" or my "self", which is split off from the universal by means of some infinite couplings in the architecture of my nervous system. The earth's cycles, the glaciers and rivers and oceans, provide no marker to be distinguished from the processes that take place in our cells and bodies, so it is arbitrary to say that the earth can't possibly be an organism in itself (see also the [gaia hypothesis]). There is no special reason to assume a single visually defined entity is one "living thing", it might be the case that what I see as two people is actually one living being - thus the rise of notion of multi-body (emergent) qualia, for instance that felt by the society or the economic system as a whole. Looking around at the people passing me by at the airport, I see them as "clones" of me, they also experience this reality in a somewhat similar way, it is not the case that "I" never get to experience what they do, but rather that this experience does not get properly communicated to the body I currently find myself in. "I" get to experience everything. Water placed in a container will explore all its crevices and go through any available opening, resulting in leaks. This is the law of reality - everything that can exist is explored and tried in due time. This leads to the MPP and the energy dissipation / entropy increase that we observe as a function of time. So, at some point I die and in the "cult of I" view, there is so much that I have missed out on. In the "universal consciousness" view this is not the case - it is still true that everything is experienced, just "someone else" gets to experience it rather than "me" in this body. But that is also "me", ie in the future another person does something which I didn't have a chance to do, and that person feels his own existence as "self" and calls himself "me" just as well, so it is actually "I" that gets to do that, just with a missing memory link - being unaware of memories of my existence as the self that's writing this book - unless I do something like engage in information exchange through text or conversation.

We read that Irene Pepperberg's parrot, with whom we last shared a common ancestor several hundred million years ago, had the mental age of a three-year-old child. But it's still legal for so-called sportsmen to shoot birds for fun. If sportsmen shot babies and toddlers of our own species for fun, they'd be judged criminal sociopaths and locked up. So there is a

only one "self" just with insufficient qualia links between its disparate instantiations.

contrast: the lead story in the news media is often a terrible case of human child abuse and neglect, an abducted toddler, or abandoned Romanian orphans. Our greatest hate-figures are child abusers and child murderers. Yet we routinely pay for the industrialized mass killing of other sentient beings so we can eat them. We eat meat even though there's a wealth of evidence that functionally, emotionally, intellectually - and critically, in their capacity to suffer - the non-human animals we factory-farm and kill are equivalent to human babies and toddlers. [<https://www.abolitionist.com/>]

Consider a bit of an "expanded" view of the world. Looking past the numerical surface of money - working for money, buying things with money - what we have at root is people doing work and exchanging the outputs of their work. Why should people do anything? We have billions of humans, and they need basic sustenance (food, water, shelter) so they could all be working to that end. But it really isn't that much work to get those things. With agriculture, having a sufficient supply of food mostly entails watching plants grow - very little work at all. What must be the conclusion from this is that people can't help but seek work, even when it is unnecessary, driven by still-present evolutionary adaptations of the brain. Thus we have the whole world working, morning to evening, just to end up aimlessly in the same place. The monetary economy is its own system which shifts this work towards unspecified ends, which end up unrestrained human desires - to have the most pleasing and effortless experiences on tap. This comes at the cost of everything else, paradoxically even our own experience - thus an individual's life becomes defined by the extremes of displeasure at having to work followed by pleasure of buying the products of another's work. It is zero-sum, except for the environmental influence, as human survival still requires energy dissipation and the fulfillment of desires multiplies the dissipation. Consider the life of a chicken on a farm. All the chicken needs to do is eat the food that's available and later get slaughtered for human consumption. That is a bit of conscious experience that we condone, as a society, for the chickens to live the way they do so we can live the way we do. And from this angle the individual organism does not matter. While the individual has a bounded life, for the "universal consciousness" there is no boundary on time or distinction between organisms. The chicken lives and dies but the experience of living as a chicken continues in the other chickens that continue living. The analogy I am making is of course to human life. I find that my life is bounded and for that I like to use a concept of time: today is Monday, tomorrow is Tuesday. Whereas the universal consciousness lasts indefinitely and in a timeless manner. And, this is my body, I need to stay healthy. Why is it that I want to avoid

injury? Like starting over in a video game, the universal consciousness will keep trying any options, so why is it that I feel it is so crucial for my body to stay healthy? The longevity / lifetime of a single organism can be described as the time scale over which the organism's memories stay accessible, thus it depends on the informational links between parts making up that organism. Firing neurons deplete their energy in seconds, skin cells die every few days, yet I find my lifetime to be measured in years - because the memory patterns of my childhood still remain to shape my actions today. Similarly, society at large will have traces of my experience (such as this text) and its lifetime will be many generations, at least to the extent it can retain such memories. The physical world, the universal consciousness, necessarily has traces of everything that has happened, conservation requires that it cannot be destroyed, and this is the entity which is aware of everything in existence, and has no finite lifetime. Being unbounded, it does not experience the progression of time like we do, it simply exists as timeless truth. So does it matter that I stay healthy? In an enlightened society it could be realized that the collective experience is what defines the world, and then responsible choices could be made with regards to who might need to experience suffering in order to have others experience pleasure. There could be a trade-off of sorts, where the individual humans would know even if they die they would get to live a better life as others, so it is a worthwhile sacrifice. It would not be a "peace and love for all" utopia, as any threats to this unity would need to be eliminated, but for the living beings, life would be better, and as it is only the living beings that experience being alive, overall welfare would increase. Instead now we have no awareness of conscious unity, being brought into the world by accident (on an individual and an organic-lifeform level) and shaped by purely evolutionary (survival) forces which have no regard for welfare - therefore people and animals experience suffering and pleasure based on "might makes right", without using any tradeoffs toward a useful purpose. In this mental state, the most logical option for self-survival is indeed to care for my body at the expense of everyone (and everything) else. There is a psychological analogy here: a child raised by indifferent parents, having experienced trauma, has awareness and memories of bad experiences and unpleasant parts of the world, and in everyday life his actions are based on whatever thoughts reign the strongest, including the "bad" ones. There is a constant inner struggle to overcome the effects of the (externally imposed) past. On the other hand a child raised "correctly" never had to experience unpleasant things, and thus while he can live without inner struggle, he does not have awareness of the reality of the world, that it can be bad. Both awareness and lack of struggle can come only from understanding the nature of the world, how it is zero-sum and how it interacts with the self, an acceptance of one's origin and a decision to live with a focus on

well-being, the understanding to avoid a tempting action knowing that bad consequences (even for "someone else") would follow without having to re-experience those consequences out of ignorance.

In searching for truth, have I permanently killed the possibility of joy - inasmuch as this possibility is always driven by delusion? But I thought: is there any way I wouldn't forget the world? Have I already forgotten the world of my past self? I had earlier taken it as axiom that my experience flows along most-connected qualia links which would be between past me and future me, but there are all sorts of links from "me" to other states in C space and why shouldn't there be an entity that experiences its past / future self along those connections? This entity would not call itself "me" or think / experience the way I do but it would nonetheless intersect with my and others' experience / qualia at all the right moments to create the laws of physics that tie everything together. What makes past / future me so special? Cultural programming makes this a myopic focus and ignores other linkages, and in reality present-moment me is a combination of all sorts of past / recalled / ongoing and intersecting stimuli converging in a particular manner - the time progression of me is actually a learned construct and not a physical inevitability - I have been taught to think in a language that singles out past me as cause and future me as effect, ignoring that real C space is richly interconnected. And it may be possible for me to change mode of thought, to try and see myself as influenced not by time alone but by other means and through complex chains that go outside my body as well - this is the notion of symbolism. Such a disconnect from reality might of course be the onset of schizophrenia symptoms, in which case normal people reading this will think my symbolism concepts are ridiculous but from my point of view they are relevant and useful, and I try to avoid going astray by requiring that they be scientifically justifiable as well. Symbolism in itself is not so uncommon - indeed it is given a prominent and desirable role in artistic endeavors, as if some level of schizophrenic underlying tendency is present even in normal people. I just take it further to the notion that things are not as they seem, and if the seeming is due to my linguistic / communication abilities (representation to self: thoughts, visual pattern coding) then this is not too surprising. Consider the example from relativity teachings of the case of two observers witnessing the same events, used to demonstrate that simultaneity is relative / time is not strictly ordered. Many different trajectories can coincide in a single point and then diverge again:

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Apply this to my qualia experience: all that I feel is my present self, an event at a single point in space and time. I can remember my past and predict my future, but those experiences are not mine - they merely leave traces on my present experience and that is the extent of their reality to me. From my present point of view, whatever past me felt is as distant as what another person felt. The significance here is in memory - if I have memory / awareness of an experience then I am connected to it at present, and societal programming makes me classify my memories as self vs other so I am led to imagine a time-continuous self. But this is by no means a direct or obvious interpretation. Looking at C space in a nihilistic manner the world is just a sandbox to explore qualia - there is no absolute meaning so I can go through body-destroying pain as it doesn't matter whether I am healthy or not on my deathbed. And even if I care about my current life / body so much, there are beings in the world now that experience all sorts of pain and then their lives end, and if I am to accept the notion that it is some version of me / reincarnation that underlies every being, then I also experience that pain and in a way that doesn't affect this body. Why don't I get this experience even though "I" experienced it as another body? The differentiating factor is connectivity of experience which I interpret as memory. My richest C space links are to my past self (perhaps) so I readily identify with those past experiences as "what happened to me" / "I know what that feels like" vs a video of another being as "what happened to someone else a long time ago" / "I don't know what that feels like". In the real world (as I experience it) I do not have a memory / links to qualia that have not happened to past me, so I have a preference to guard this body from harm and yet am unable to live as any other being in a way that enters my memory, or "virtually". Nor am I aware that this life is some sort of simulation for a higher being. All I can see is that this is the only life I have and the only memories I can get are through this body - absent potentially brain linkages (ie implants).

My search for the universal laws and language of the world is due to a belief in some greater unity - perhaps only a side effect of the way the brain works. Yet I feel like our conception of the world and all its subfields - science, history, anthropology - are limited because they are created by our intuitive brain structures and these structures are invariably based on an actor / action representation - in fact we have no language to represent some feature of the real world outside such a representation. Math might seem to be a candidate, but to apply it to the real world we inevitably introduce actions and objects, the ball moves there, the planet orbits a star. This applies also to the notion of cause and effect: the splitting of a real world event into a cause and an effect is, like the actor / action

representation, a human construct and not a base truth of the world. To see a more complete physical system, one must escape from the brain- and culture- default modes of thinking which emphasize actor/action and thus implicitly establish a time axis. The longstanding question of what is time can be answered as that which happens as we get older. This is not a tautology but rather is to say that we use ourselves as a way to define what time is and even the notion that it exists - time exists because the way we operate in C space is to couple with our past / future selves and to call the difference between them "time". Time is not an absolute concept, the universe exists always and in a timeless manner, there is not a "time" where it ends or begins. One might call the big bang or some other even an origin point and say that the time now is year 2019, and the universe is billions of years old, but this is a flawed construct as it implies some sort of external frame against which to compare the universe when there is no such frame. By this logic I might be able to ask, what if the industrial revolution didn't happen until the year 2000? Would there be less pollution now, would the world be a greener place? Couldn't we hold off on burning all that fuel? But this is a nonsensical question - the industrial revolution happened when all the requisites were in place, and whether we call that time 1800 or 2000 does not matter - it happened when it did not because some time has passed since some earlier time, but because at that point it could happen and that was the only point when it could happen, all within a timeless universe. If the industrial revolution happened 200 years later, the whole world history would be shifted by 200 years, and nothing would change - it would still happen just when it must. From within the universe, we always see it happening in 1800, because 1800 is a human measure of relative universe states, but the states themselves exist as a logical fact, with no notion of time or ordering. Time is clearly related to entropy - it is an axis measuring uniform steps of energy dissipation with a numeric value. This is how clocks work - they must dissipate energy and as identically / uniformly as possible over the clock's lifetime. To the extent that entropy is related to complexity, time can be said to be a measure of complexity. This is why our memories grow over time (more complex = based on greater memory storage) and yet we can reliably predict the future. Indeed the matching of time with our aging, and the need for our own constant energy dissipation, is a strong message on the nature of what our conscious selves are - entropic beings that exist to handle the process of energy dissipation through interconversion of it between different forms for optimal spreading. All living beings and systems of such are the same way. Thus instead of seeing cause and effect chains over time, I must try to imagine a higher order conserved entity, with both cause and effect timelessly interlinked, one not being able to exist without the other, and both being created at once as part of the universe and not in a succession along a time axis.

Next would be the concept of a number. I tried to approach this before, and perhaps can do it more clearly now. There is no qualitative difference in the concept of 1 and 100 - to see this one must forget algebra class and look at the interaction of the symbols. 1 is taken to refer to a single entity, a totality, and yet I could define a syntax where "100" is to be treated as "1". What is so special about 100 that makes it different from 1? Even the set of sets construction cannot answer this - why should I care about the number of sets? The true distinction lies in the implicit descriptive power of the number: while 1 selects only 1 possibility of 1, 100 selects 1 possibility out of a possible 100. 100 implies there are 100 choices available and a symbol can be used to select a specific individual distinguishable one from that 100, it is a more complex construct that is irreducible to 1. The power of a number is not just the number itself, but also all the things that it could be but is not, namely in its selectivity towards one particular description of the world and exclusion of all others. What we see over time is that the number representing entropy increases - there are more possible states available and still we find ourselves in just one of the states, in other words a complexification of the world has occurred. ³ The world is now more clearly defined than before due to the exclusion of a great number of possible new states for the selection of the one state that is actually experienced as being logically consistent with all the conservation laws as following necessarily from the previous state (notice all the time language here - I will soon try to recast this into terms that don't require time). We also get more complex, as alluded above - it is impossible to go back on learning a truth for the nature of our being, this makes movie spoilers so unpleasant. Once something has been learned it cannot be cast out - this is yet another message on what our role in the universe is, along with age as an information metric. From this I had earlier argued that there is no driving force beyond stability: all things happen, and if a system is set up with the appropriate feedback loops a stable outcome will eventually emerge from statistics. This underlies everything, from gravity to qualia ⁴

³This is a reversing of the "mystery of entropy". The standard mystery looks at the hugely improbable low-entropy state at the beginning of the universe and asks how it is possible that the universe started in such an improbable state. In the view presented here, I claim that low entropy means fewer possible states, so the universe starting as it did (from a more limited, if more ordered, state) is not nearly as surprising as the fact that now, when there are so many possible states, we find ourselves in only a specific one. The resolution is that all along, from past to future, is only one state defined by self-consistency, and this is the only state that could have or will exist, with entropy being a human-centric concept based on the hypothetical "what else could have existed?" defined more for the notion of understanding human-usable work and power.

⁴qualia are then seen as evolutionary memory: the passing on of traits in line with solving whatever problem the universe has for us to solve, pruning out the qualia that don't work and keeping stable the ones that do, so if I find myself existing at random it is most likely I will feel the stable qualia set and not the unstable one

to machine learning. Temporal evolution under some desired selection rule is the fastest way **any** problem can be solved. To truly simulate a system evolution in time then requires all closed loops, and closing them would in theory include the rest of the universe as required.

But now I would go further to say there is no such thing as stability - it is a human construct sneakily related to time and thus once again introducing the actor / action structure I keep trying to escape from. Instead as in the equipartition theory all valid states are treated with equal emphasis, each one as good (or as indifferent) as another. Here, then, I can finally introduce the notion of stochastic genesis, which seems so mysterious that it draws from me a sort of religious respect. Nothingness, left by itself, does not stay idle and dead, rather it generates things - it generates everything that can be logically generated from nothingness. These things that are generated can be ordered by their complexity - how distant they are logically from the original nothingness - and this ordering is called by the inhabitants of the states as "time". How can living beings form a concept of memory and of themselves as temporal entities? The qualia of living beings is actually the process that creates a more complex nothingness out of a less complex one. Non-conscious beings exist as unembodied feelings, without memory thus without self awareness. Whenever world structures arise that can be interpreted by the qualia-process as its own memories, the process can now act with regard to what it deems "the past". I would remind again that the process exists in a timeless manner and all at once, though all it feels is its immediate spatio-temporal state (ie it defines the notion of time for itself). This means the ability of nothingness must include the ability to complexify - to create more states than there were "earlier", inevitably by splitting some existing states into new more selective ones, which also ensures conservation and logical equality to nothingness. I already introduced the notion of a split diagram, with 1 split | then 2 splits + and so on. But in order for this to not just logically collapse to nothing, the splits cannot be "indifferent", namely the two sides must be identifiable by looking only at one of the sides, from the way it **is** (which is qualia). The split is not neutral or abstract, the split differentiates and its two halves are not interchangeable: +/- where + and - are intrinsically different. Then some structures may form that are self-defeating, maybe the - cannot split anymore. Then only the + can split and so we get ++/- which is different from a mere -/- unlabeled. Now only ++ is able to split, so we get +-+/- and so on. I argue that only one path exists for the splitting to be able to continue because that is how my world seems to appear - deterministically bound forward and backward. Maybe other rules exist and generate other worlds I am not aware of - like other people, of whom I am aware only by chance of seeing them in my visual field, or other logical structures which are wholly inaccessible to me. Stochastic genesis is how, out of an ensemble of all possible states / logical

animal predation:

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      [Animals eaten alive ] -----
    / [Animals not eaten alive] -----/
Origin \ [Predators being full] -----/
      [Predators being hungry] -----

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As a predator population grows, all the prey animals get eaten alive, so the animals that are not eaten are to be found within a limited temporal range, and this is how much their qualia contribute to the world. The universe is sick in this way - it undertakes creation and dissipation whenever it can, at the first chance it can, from photons and atoms to cells and organisms to technology. The old is immediately and routinely left forgotten so the new can be created in its stead. All it does is create a new from an old, there is never a pause of appreciation or a goal to attain. Having a memory in such a world allows one to witness and recognize the nature of the destruction, and to even look at one's own inevitable demise - a sort of another personal hell.

If, with a starting point of nothingness, existence spontaneously occurs as symmetry-breaking, then all possible logical realities exist as a given as well. If there is to be any notion of an aim or purpose in this collection of states, it must be as altering or ending existence. Any other aim would persist indefinitely thus would result in no sense of time passing, the world states would just exist forever as they are. A notion of time implies a seeking of non-existence as aim. In turn non-existence is not achieved through mere nothingness - indeed nothingness spontaneously leads to existence. So an absence of knowledge / experience, a forgetting, leads back to nothingness and existence. Non-existence is achieved by a very specific understanding of the world and the nature of existence such that it is countered. This understanding must reside in memory so as to not revert back to nothingness, and this memory is both what we (individual humans) get from birth, and the world as a whole (the universal consciousness). If at any point something is forgotten we start over at an earlier level of awareness (past time) but without recognizing what has happened, so every moment in time feels like a new one and yet there is felt to be an orderly progression from past to future. The difference between me and past me is that I have better and more detailed memories, a superset of past me, and if my memory somehow failed I would have no sense of time passing nor past / present. My body might still age as it is defined by the universal consciousness which can never be observed to fail for the same reason I can never experience my consciousness failing - if it does I am not capable of being aware in that situation to remember what is happening, and I resume my existence whenever the failure is remedied and I am capable of remembering again. This is why we feel time as a single arrow and not multiple

diverging streams - only one path is consistent with us consciously feeling and being aware of time through memory recording; anything else cannot be proven to exist or to be real.

I wrote earlier on the specificity of energy - how it would be fantastic and impractical for a molecule in my food to be pre-destined to have just the right thermal + spatial properties to end up activating my muscles in just the right way later on. A more reasonable picture is that the molecule carries some minimally specific information which is handled by steady-state-reaching feedback systems in my body to be directed towards dissipation depending on sensory inputs later on. A similar concept should apply to qualia - what I feel at a given moment is not a direct consequence of qualia effects on my body / being, rather it is a feedback-directed sensation that is largely a property of my immediate surroundings, with some minimally specific factors of past qualia connections making their way to awareness when allowed to do so. Consider getting drunk - I might feel dizzy and have specific actions I take, but those actions originate from my mental processing, not the alcohol. The alcohol gives a minimal effect of the dizzy feeling, and this is the sole aspect that can be attributed to qualia conservation by means of the alcohol. The alcohol serves as a karmic / qualia linkage that conserves the feeling of light-headedness, and from this I can imagine some sense of what qualia goes on in bacteria / processes that create alcohol - a feeling of something opposite, a sort of stifling suffocation in an enclosed space - no coincidence then that all chemical processes to create it depend on lengthy time and enclosed spaces and fermentation. Of course the bacteria could feel lots of other things - but only this specific qualia link is allowed by the alcohol, other qualia get conserved by other means and with other beings.

I have experimented with wearing earplugs when going outside, and recognizing just how loud and obnoxious and unnatural the city life is. I am constantly surrounded by loud approaching low-frequency engine / tool noises and have to exert significant mental energy to override my evolutionary evasive actions leading to a vague generalized anxiety. Sounds were still startling with earplugs in but I could retain a mentalizing state throughout and recognize just how loud everything was - it still sounded loud despite the earplugs! Without earplugs the loud noises immediately make me lose mentalization, then losing an ability to recognize just how loud everything is, then an ability to respond in a logical, coordinated manner - I instead dissociate in vague daydreams. This paints an even darker picture of my caretakers' use of yelling / shouting at me for long stretches of time: their loud voice automatically put me into a primal and helpless state, and on some level they recognized this fear and they relished it, they indeed sought it because it made them feel powerful again thus covering up their work / marriage frustrations (the primal brain is not too worried about the prob-

lems arising from a different source than the resolution, as long as its need to feel powerful is met it is happy). But wearing the earplugs now I thought: how come it is possible for a passive device like the earplug to prevent my qualia experiences from being overwhelming? This seems to throw a definite wrench in the concept of qualia conservation, so much so as to question its validity. It is conceivable that a loud noise would in some way be painful to me, and I can get rid of this pain by putting on earplugs - which it would be very difficult to argue are capable of responding to pain. So then if qualia really is conserved, where does the pain go? Who is made worse off by me wearing a protective device? It would seem no one: the noise source isn't affected, the earplug maybe vibrates structurally but it is absurd to claim it feels a certain vibration as qualia, while my ear doesn't receive the stimulus that is unpleasant. But then qualia is not conserved, then it is arbitrary and can arise ex-nihilo or without constraints, which seems similarly untenable. The resolution I propose here involves two aspects. First, the role of the earplug is in blocking or disconnecting a qualia linkage, as such its action is "purely logical" or qualia-free. Like an anesthetic, it prevents my body from receiving any external signals, good or bad, thus there is an absence of qualia exchange because there is no link, rather than a redirection of the link elsewhere. Second, the distinction between physical energy and qualia conservation should be kept in mind, even though at this point in my understanding the latter sounds vague and flimsy while the former sounds authoritative and correct. There is not any absolutely true reason that loud sounds ought to be unpleasant - they are to me, so they act as qualia links, but this does not mean that physical sound or air molecule vibrations are the way the qualia get transferred. So even though my use of earplugs doesn't affect air molecule vibrations coming from noise sources (at least not much), qualia can still be conserved because the continued generation of the vibration does not imply that the dual of the unpleasant qualia that I would have experienced is still being produced.

While near a road, I thought how easily I could get hurt by stepping out into the path of a car - it could well be deadly, yet I somehow did not feel scared when walking on the sidewalk in the same paralyzing fear of walking along the edge of a steep cliff, similarly deadly. So this fear qualia is seen to have no relation to my actual well-being and is rather an arbitrary side effect of how my brain was shaped by evolution: indeed there are some things I could be really afraid of that won't hurt at all. Another challenge for the notion of qualia conservation. In this case, the flaw is in assuming that "my well-being" is something that is the dual / opposite of a fear qualia, so that if I feel fear then my well-being must be improved. The fear of heights can be assumed to have an evolutionary origin, but this does not mean me experiencing the fear is somehow conserved by the past humans that died / lived due to falling from height or avoiding it. More

likely the qualia gets conserved within my life experience, so for instance after experiencing fear when walking on a cliff, I experience pleasant relief when returning back to flat ground, and there already the conservation is complete. A lack of fear of cars is due to it not being selected by evolution, and by familiarity with cars / experience of walking on sidewalks and not being hurt, during which any remnants of instinctive fear were overwritten by not-dangerous experience and in that sense also conserved.

Still I am tempted to continue challenging the systems view. In the latter, dominance of runaway cycles would require nature and humans to be vicious / mean / selfish. And yet I find myself alive in this world without being cognizant of myself being like that. My body readily kills bacteria and other invaders, food is stored and cooked to similarly keep undesirable life out. The nuclear bomb as well as horrendous chemical weapons have been developed and used in war. These all point to the brutal nature of reality and systems, but the logical conclusion then is that the most powerful nations should grab all energy sources for themselves and kill everyone else, just like we routinely kill forest animals and vermin. Nothing personal, but they would destroy our way of life / prosperity if left alive and free to roam. The world then should be a very rigid, strict, yet prosperous and calm place, after messy bouts of killing any lifeforms that would disturb this world order, including humans who disagreed. That is a logical systems view combined with human pleasure seeking, both of which seem undeniable facts of reality. Or basically a world of armed monks who kill everyone else and then agree amongst themselves to live sustainably and to reserve their weapons for any disturbances to their lifestyle. Yet what I see is a messy, uncontrolled, cancer-like society that expands at any cost to the extent it will cause its own species' extinction. If the brutality of the system is real, a smart nation should grab all the war supplies and kill most people so that its members can live on in prosperity, but what will actually happen is every person lives until they starve to death leaving no survivors and a dead natural world behind. How is it possible to reconcile this with the actual benign and even human-life-affirming state of today's society? Perhaps the powerful aren't intelligent enough to see this or the intelligent aren't powerful but this is a flimsy argument - there was plenty of intelligence involved in planning the world wars and various weapons therein, and political science is one branch that is sure to have existed and developed throughout all the nations. Thus the only conclusion is that the current course of action is actually the most valuable for the powerful nations - they did some analysis and found it better for everyone to be at peace and multiply into a starvation + die-off than for themselves to use weapons and energy to force die-off prematurely. This could almost make sense - international trade is a way for the powerful to get the resources of the less powerful for imaginary money points, the same way the native

americans were given cheap shiny trinkets for their work - but what about immigration and cultural destruction / identity dissolution that seems to be so popularly supported by these same nations? The only explanation that stands the test is that cultural destruction is necessary in order to ensure that the government prevails as the sole ruling force - as it is physically, the huge population density means that if a group of people realized their collective power and acted in unison they could readily enforce a claim to some territory and eventually some mode of governance, increasing their power to defy the status quo (as may be argued to have been the case in Germany). The way to prevent the possibility of such an uncontrollable coherent action is to make this biological drive inaccessible by "poisoning" it eg with many races and genders and beliefs all in proximity with no "safe space" allowed where one could prosper and exclude others. This is not entirely cost-free, as the inability to satisfy this drive leads to a high rate of suicide among "northern" (predominantly caucasian) males whose higher tendency for this drive is reflected in the cultural notions of personal space and the very act of them historically having moved so far north to get away from "the rest of the people". It makes more sense now why I can exist relatively harm-free in this society: my presence provides an exclusion buffer against someone who could potentially be more capable of wielding power against the currently stable systems.

Another serious challenge to the notion of conservation is how it can be reconciled with evolution and time progression. It is the essence of conservation that whatever is subject to it does not change, that it retains all its properties indefinitely. But then whatever is conserved cannot interact with other entities - it cannot change because it is conserved - so there can be no evolution, no progression, no reactions. Like multiple independent solutions to a differential equation are all individually valid and any sum of them is also valid, so they cannot interact or evolve. Yet in the world around me I observe changes and readily describe them in similar time-referenced language. To resolve this, consider the earlier "leaf on a tree" metaphor. Why should the world exist? The proposal I had from earlier is that all logically self-consistent things exist, because they can. My experience of time for instance: I cannot experience one moment lasting for a long time because as I try to slow down the rate of experience I also slow down its intensity, that is me experiencing a second pass by requires that the world changes (or my brain state changes) by the amount of 1 second. I cannot "feel" that 1 second indefinitely, or slow down my experience of time, because the act of feeling is not free - it is not something I can just do at will, it requires time to pass in order to occur. It thus sets its own timescale which is what I experience. I cannot stay suspended in the present moment because as soon as I gain awareness of it, in that very process, I change the world so the present is no longer present but past. Now for logical

existence, for the same reason I cannot envision a nothingness or a void - such a state is a very specific one out of infinitely many so its existence is fleeting and unstable. The world cannot be anything other than self-consistent: not good or bad or beautiful or ugly, except to the extent such things are required for self-consistency. This is the source of asymmetries forming the observed world. Consider also from the viewpoint of the void: if something suddenly comes into existence, ie is self-consistent, it becomes a part of the world. But this something is its own entity and can never be seen "as it is" because this *is* itself, and yet it has an influence on the rest of the world and can be observed / affect others by means of exclusion: as its existence demarcates a specific truth about the world other entities have to be defined as not-this-thing, and from this definition of themselves they can then figure out that other entities in existence have shaped them to be that way. The argument is of specificity: the world is the way it is and not just a blob of all possibilities because a specific path is accessible to my awareness. Taking that my awareness exists, the fact that it has certain properties requires that these have been shaped by other truths of the world, and thus I know these truths exist without ever having interacted with them - indeed again conservation implies there can be no such thing as interaction. Influence without interaction is, counterintuitively, possible by the mechanism of *exclusion*. That something A exists requires that other things in existence are not-A, thus defining all those other things, but it is not A that does this but rather the logical structure of self-consistency which is a property of the world / existence. Thus exclusion is not really a force - it cannot be opposed or countered, it is always there, an impenetrable barrier. The relations to exclusion in physics (Pauli) is expected to be non-coincidental, and I would argue that all physical forces at root stem from exclusion.

Consider the role of consciousness from my view as an individual. What I call "my" unconscious is a mysterious entity - I do not know by what rules or mechanisms it operates but know that it is a logical process that could be physically explicable with sufficient knowledge / experimentation. The unconscious processes all sorts of thoughts / actions / memories and selects one which then makes its way to "me" - my conscious perception. My experience of my own thoughts is to be seen as at root similar to a sensory organ like eye or ear - with thoughts I sense the outputs of my unconscious processing. This is the purpose of consciousness - to experience the selected thought as feeling and thus to make it real / solid. Unconscious thoughts, like the words in a closed book, do not impact anything outside itself and it is this lack of impact that allows them to be evaluated logically. In the bringing of only one resultant thought to consciousness there is now something (that is, my experience) that is really affected by these thoughts, their content is made real. From this is a straightforward generalization -

consider the "external world" sensory organs like eyes/ears as manifestations of an unconscious entity that is **not** the self or not within me. It is what I would call the collective unconscious, and it is the root of existence itself. From my view I call it "the world", or physical / external reality. But except for the sake of tradition I have no particular reason to claim external-world qualia are a wholly distinct class of experience than internal-unconscious qualia. As I can more readily claim my thought-qualia as "mine" I also call the unconscious origin of the thoughts "mine", but then by the same logic I can call external-world sensations as the experience of a shared, or collective, unconscious made real through my experience. Just as I don't know how my mind works until I consciously explore it, I don't know how the physical world works until I experiment / interact with it consciously; and yet my absence of knowledge changes nothing about the existence and operation of both of these systems - physics remains true even if I forget all about physics - and it has been true since before I learned about it, it is something independent of "me". Then I can define the conscious as a link between the collective-unconscious external world and the internal-unconscious thought processes isolated within my brain. In the collective unconscious, tremendous physical possibilities are explored through stochastic genesis / evolution, including possibilities of creating new unconscious beings split off from the collective except by a tiny link. Within the new unconscious, which I can call mine, similar stochastic and evolutionary processes take place to generate thoughts and ideas I then call mine. Conscious experience is the coupling of these thoughts of "mine" with the vast thoughts of the collective unconscious, resulting in an alteration of both and the qualia experience of having "made it real". There is a symmetry here, in that even though the outside world is vastly bigger than my inner world (perhaps?), the two are still inextricably linked and I can learn about one by learning about the other.

Then I realize a relation within me: consider an example of me doing exercise to become fit. In this case, the past me must undergo unpleasant feelings of exertion so that future me feels better / more pleasant. By what means would past me willingly choose to give up pleasure? It must involve a full trust acceptance of logical necessity, that the suffering will lead to future happiness, with the relation described by logic / abstract words that have to be taken on faith. Past me expects that the pains of exercise will be rewarded by the benefits of being fit, and must choose a less pleasant route based only on this trust, never being able to actually experience the pleasant state. The concept of me as a single person keeps the whole act coherent: I can think about how I will feel later and thus decide it worthwhile to make a sacrifice now, yet the sad reality is that past me lived and died without having ever experienced the pleasurable result, his world was only the sacrifice while my world is only the pleasant benefit

thereof. Logic and the construct of self allows the connection to be formed between past and future me that enables achievement of impressive goals. Consider that what is done here is a tradeoff made by me with another person (future me) towards whom I have the greatest possible feeling of closeness, ie that person *is* me, just at a later time, and for their well being I might find logical to sacrifice the joy of eating ice cream to instead do exercise. Now consider an enlightened society: one with an understanding that its members are all "me" of different shapes, and with great logical + memory communication. Then it might be the case that some people will find it necessary to make sacrifices such that other people can benefit in the future. The people who sacrifice sadly never get to experience the benefits of it as "themselves" but have to go on a trust / faith that another person, a "future self", will later on benefit and will be happy and appreciative of the sacrifices made. On what basis would past me make a sacrifice for the sake of future me? It is not any material reward, but rather that past me wishes to experience life as (say) a fit person and, recognizing that it is not possible for him now, he accepts some pain as a justified step because future me will get to experience life as a fit person, based on a trust in the logical reality of abstract statements about causality in the world. ⁵ This is actually the root of the control fantasy and why it is so crucial to the "proper" functioning and existence of the self as a temporal being. I must believe that my sacrifice will change my life to be what I want later, though now I only see darkness and indeed the later me is a different person altogether. If I do not, temporal continuity of my "self" falls apart and I have no reason to do anything, for it doesn't matter anyway. I can sacrifice or I can seek pure pleasure, it doesn't matter because I live and die each moment separately and disjointly, not recognizing the logic of temporal causation is real. The same can be expanded to the societal level - people can live each for themselves, not recognizing greater trends causing society to become idle, aimless, self-defeating. There must be trust of causation *between* people and animals and objects for society to become enlightened and unified in its goals.

⁵This trust is what all religious services allude to, except calling it "god" and giving it a human fatherly figure so as to make it more palatable.

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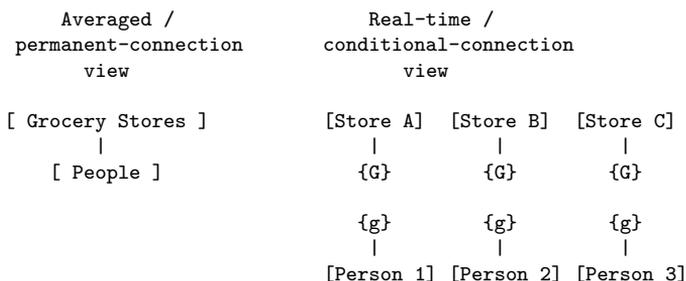
Information Theory

To better understand systems, I will try to come up with rules for representing them as a 2D diagram. First some general principles:

- Flows must be conserved, they are thus independent + separable
- Thus units can only accumulate flows not modify them
- Negative quantities / borrowing are not allowed in flows -> must go from source to sink
- Flows do not interact with themselves as this would mean a self-modifying (non-conserved) flow: each item of the flow behaves independent of the rest (collisionless gas model). Interaction is allowed but must take place within a unit, not within the flow.
- Every unit that handles the same type of information must be somehow linked to others like it

How to represent connectivity? This will be crucial for understanding C space. Units that make 3D space can be seen as "hard-wired" to neighboring units, the connections are always there and information like 3D matter will flow following its inertia. So all space is linked together, there is no "inaccessible island" of space, or if there is, it doesn't ever affect me. Same with, say, money / ideas / goods. But in the macroscopic world it seems I can make / break connections at will. How does that work? Such a break amounts to isolation in space and time, and since all space / time is interconnected somehow, practically manifests itself as "far-away" but not "nonexistent" or "impossible". Consider an electrical appliance: with a control module it can "turn itself on/off" but to do this the control module must continue to have power: changing connectivity state amounts to a modification and thus requires energy dissipation. A unit cut off from the

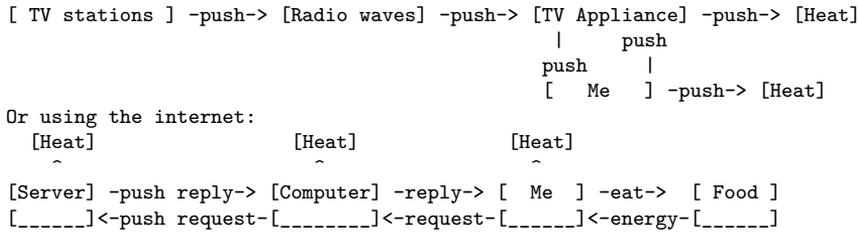
energy dissipation stream cannot re-connect itself (is dead), others with access to the stream may connect it though (bring it to life), but a unit connected to the stream may disconnect itself. If the unit has internal energy storage, it may choose to reconnect itself though. Any macroscopic unit with access to sufficient energy dissipation may reconfigure itself in terms of making or breaking connections to other spatially accessible units of the same type of item-handling. Since the nature of a broken connection is a distance split, a unit with an excess of items can force a connection, while those with a lacking quantity of items cannot "pull" a connection (say, with electricity, money, military power, ideas / media) As long as a connection exists, either unit may push some quantity of items; if there is a downhill gradient this takes place spontaneously while an uphill gradient requires simultaneous exchange of other units to make an overall downhill gradient. The only way to prevent pushing from the outside is by already having the same quantity thus excluding the ability to push, or by having an excess of other units such that the overall gradient does not allow pushing. Since conditional connections are difficult to handle in a model, we can average simultaneous spatial or subsequent temporal conditional connections to establish a PWM-like average connections and rates, and these may be represented as "permanent" connections for the purpose of a system diagram. Yet a more realistic model would only have potential connections (ie specified by connection item / type and capable of handling all appropriately similar units should they be in a position to connect), units carrying some subset of knowledge of their possible connections (just like internet routing protocols), and connections being temporary in nature and transactional, existing for the brief moment of information flow and then effectively non-existent when idle: there are too many such possible connections to usefully draw them as lines in a system diagram, instead general "key" blocks are used and lines are shown for real-time connectivity during a simulation run. To contrast:



The unit initiating a conditional connection has to know / find the unit to make a connection, while the unit receiving a request cannot "pull" connections. To "pull" items I would push specific energy which gives the receiver incentive to push back to me. Physical pulling towards me ie with

a rope is only allowed by virtue of a pre-existing connectivity within the rope, exceeding the strength of the rope or not having a rope breaks the connectivity that is able to "push" the pulling force thus I can no longer pull. But I can always push by using nearby material, including throwing it. Conservation applies because items cannot be transferred unless a gradient exists, and a transfer takes place simultaneously thus the total quantity of items / information is a constant at any given time. Equilibrium is constant exchange (dynamic).

Consider communication / media: I choose what to watch but there is no pulling.



Units with energy can use it to get more energy, money to get money, ideas to get ideas, the nature of info transfer favors the "haves" over the "have-nots" so long as the goal is greater dissipation: the driving force for the Maximum Power Principle.

On a hike today I thought: if everything is to be exactly as it is, there is a hugely intricate information process going on. For me to walk just as I do and step / move my muscles in just the right way, I must have gotten exactly the right types of energy from food that make it inevitable for me to do exactly that. This makes a world of intertwined influences that sounds mystical but it requires each bit of information to have a universe's worth of knowledge of what to couple to. This is the problem of the particle model in general, and why I proposed the field mechanism: with the field, all particle actions are local, with the nature of local couplings modulated by only minimal information from far away, and this information carrying only its special effects with the universe's worth of knowledge provided automatically by the field. In the hiking example this means the exact nature of my motions is not determined by the food I eat (though it drives both my muscles and my brain, and even provides the building blocks for them) but by what I see / feel in the moment, these feelings themselves being actually of local (my body) molecules but modulated by external light / e-field. This information my food carries is energy that can be applied to any desired purpose, and it has minimal implications - also seen by the history-independence (ie I don't care which specific animal or actions led to the specific food I eat - all those things also were local loops). This actually works in reverse-time as well: if going back in time means a cracked egg

spontaneously recombines and lifts off from the floor, it is not a necessary requirement that energy come from a very specific future, rather that locally the energy takes the path that it "should". What does this mean about C space?

Amplified actions in the flow / connection model are special: they exert control through information coupling alteration, and they must act from a position of higher connectivity. It is a powerful thing: if I am excluded from an event I am no better / worse for it and I actually would never find out / powerless to change it, if an enemy is invisible and unidentifiable I cannot fight back no matter how strong / powerful I call myself - this is the underlying basis of the infinite coupling, a lack of information causing some desired effect. So the few atoms layer of a transistor can control huge currents and systems: by blocking information transfer, the neighboring electrons simply don't see the rest of the system as existing, so they do not interact no matter how much potential power they might exert if they knew how / with what to interact. There are very few instances I am physically forced to do something, ie someone grabs + moves my hand, this is direct coupling. Any actions I choose to do, I must choose using my knowledge / psyche and infinite coupled control will seek to alter that towards a desired end. That's the inescapable + powerful aspect of infinite couplings.

Energy localization is key in fusion (and in general: because the only energy we can use is spatially localized energy). Given that information is conserved it thus must be independently separable ie each "quantum" of information acts on its own instead of interacting with others because interaction implies non-conservation.¹ Control of a system lies in allowing or blocking paths to exchange, knowing that exchange will always happen when allowed. By entropic probability principles, energy will always flow so as to be de-localized / dissipated, it can never be localized in forward time. All processes of energy / measurement / control / life follow this. Energy / information either stays exactly unchanging or becomes delocalized / shared. All energy we have access to is localized because it is in a form that is ill-coupled to being able to dissipate to the rest of the universe. We / life arise to dissipate this energy. In this requirement, localization can still take place as long as there is net delocalization: this can be seen as preventing most delocalization. Requiring increasingly high localization in turn means setting up a system that dissipates a great number of improperly-localized states but keeps / preserves / selects a small number of previously-localized states: a net localization is impossible as is localization beyond an initially available state (because these states are conserved!). Say, I use a fire and collect energy with a solar panel and then use this to make an electric arc

¹Something we can call "interaction" of course occurs, but this is by virtue of information-transfer rules rather than a property of information itself.

much hotter than the fire: this is a localization of energy. The best we can do is no delocalization of energy: the energy of the fire is wholly captured and spatially localized, but this means the capturing device has to be at the same temperature, thus the rate of energy transfer goes to zero.² Preventing complete delocalization of the fire's energy by putting up the aforementioned solar panel will necessarily slow down the rate of energy transfer out of the fire (back-reflected radiation). To make a physically useful / measurable effect on a system, there must be an energy flux going through it, and delocalization is the only incentive for this flux. Asking the flux to follow more and more complex paths reduces the delocalization gradient and reduces the flux. Allowing complete delocalization permits for the highest flux but it does no useful work for us.³ There is an optimum here in coupling the delocalization flux to the path asked of it, seen as impedance matching in all fields. Transmission networks like electric wires serve to maintain a delocalization pathway with ultimate delocalization happening at the electric device and necessarily dissipated as heat to the rest of the universe. With small energy dissipation, laminar flow works well. With increasing energy dissipation, fractals inevitably arise, because they provide optimal ways to dissipate energy. Conscious experience is similarly an optimization, fractal in nature (centralizing disparate inputs), to optimize energy dissipation. We see this fractal structure also in internet routing: it helps with managing traffic but what it really does is provide *information* to me about who to contact to achieve what I want. Without an ISP server I know to contact, who would I contact to get to a website / server I want? I can ask around, but this would be slow and ineffective. As more people need to access websites, I might interact with them and from them get information about what I should do. The centralization of the fractal system lets me know who to ask and gives me good answers, it keeps me information-coupled. Inasmuch as information coupling is key, and we see this in internet and all fractals including our social networks / establishments, I then argue that the universal computer operates by

²In other words, the energy of the fire stays just as localized. There is no way to localize it more. Any machine that seems to localize it more is actually creating a delocalization gradient to have any flux in the first place, then selectively grabbing localized states out of that flux, necessarily creating net delocalization. A highly efficient boost converter is not a localizer, it is a pipeline like a wire! Similarly a hydraulic pressure amplifier or even a knife / diamond press are pipelines. They match impedances and like an ideal zero-entropy machine do no work. In the same way, power plants are "dynamic pipes" getting certain energy states to pass from (say) steam to electricity - energy is the fundamental entity and the pipes it flows through, or rather what it sees as pipes (power plants, boost / buck converters) is a statement on the nature of energy.

³There is a similarity here to the economy, which may be key to understanding MPP - it is in the interest of business to take all money for themselves, but the more they take the less workers are willing to contribute

applying fractal structures to high-energy-dissipation states (when the rate of dissipation is "jammed" enough that information can be carried upstream from particles that have found a good pathway to those that are yet to find one) so that each bit of energy knows how to go about reaching dissipation, resulting in an optimization of flux. This applied fractal structure results in qualia.

Delocalization goes both ways (since there is always information exchange): slow things speed up and fast things slow down, so eventually the drive is to homogeneity and all information fully dissipated. So when I turn on an electric fan, not only do the electrons in the stator see a way to delocalize to the rotor, but the electrons in the rotor see a way to delocalize to the stator, another instance of relativity. If information is always independently / separably exchanged, dissipation / delocalization must follow diffusion laws according to system dimensionality. In 1D systems like electric wires and pressurized pipes, dissipation cannot take place along the wire / pipe because diffusion cannot exchange partial information along 1D links (real wires are to some degree 3D structures which causes gradients to arise). Would "equalization" be a better term than delocalization? The latter places an emphasis on localized energy while de-emphasizing the delocalized space / vacuum, is this just a human convenience? Yet I think delocalization is more appropriate as it's impossible to "pull on a vacuum" while localized energy can impose itself - of course it should not be forgotten that the only reason we have such easy access to energy is because the space surrounding us is so vast and carries a zero-energy state that will be exchanged with the localized energy state driving energy flux, but delocalized energy is out of our control - to do anything physically useful in forward-time we must alter the localized store to be converted to the delocalized not otherwise, so the increased focus on localized energy seems to be at least defensible. Ultimately energy wants to be dissipated in forward-time, it is just a matter of making proper couplings / pipelines / impedance matches. Objects that keep their energy localized are time-evolution stable, they are the real matter we can use to remember concepts from one time to another without them changing intrinsically. They last indefinitely as long as no coupling is available: this is the atoms and elementary particles.

Symmetries: the mystery is not that physics is complicated, but rather that it's so simple ($F=ma$ - basic algebra). What symmetries play a role?

- **Collapsibility:** In causality / determinism $A \rightarrow B \rightarrow C \rightarrow \dots \rightarrow Z = A \rightarrow Z$, so we can ignore complicated effects / black box. Like typing on a computer I don't know how software works or how CPU works but I know "press key \rightarrow letter shows up on screen". Like farming I don't know the chemical reactions of photosynthesis or how electron orbitals work but I know "seed in ground \rightarrow harvest later".

- Exponential grouping: Defining a group of common features (= pattern), such that A represents (a,b,c...z) and then can continue to AA represents (A,B,C...Z). I handle exponentially more information in one computational / mental step. Like I can say "press key" and "letter shows up" above without writing a book about what that exactly means - the word "key" evokes a neural map / pattern of exponentially more information. Like I can describe a baseball's motion by $F=ma$ without caring about its atoms, because I know all atoms are a subgroup and just do as the baseball does.
- Consider us as users of a computer with no awareness of CPU / electrons / atoms. We would evolutionarily find ways to use it to satisfy our needs - at our scale, no need to worry about intricacies like single pixels or GHz communication rates, we care about the picture on the screen and what buttons we can press. Still we can learn and indeed get very proficient: we learn macro rules, like pressing key 1 leads to effect 2. Collapsibility symmetry is in play but we can ignore it - it doesn't affect the truth of our world model (keyboard-level). Eventually we find more complicated key combinations and more complicated effects, and we might group them into say "commands" and "status / output lines". This is the grouping symmetry and we've actually gained exponential prowess beyond key-level models by dealing with commands, but we are further from the elementary operations level, and still our models remain true at each level. We might find some relations between commands and outputs, and call these invariances, and this would be another grouping. Only having access to the keys and the screen, would we ever be able to learn how the CPU works, and then how electrons work, and then how subatomic particles work, and then...? There seems to be no certainty / guarantee that this should be possible - we just have models that work well on multiple levels and no hint what is elementary. But from the symmetries we can see: the generalizations / groupings are always less elementary than constituents, and the collapsed chains are less elementary than more complete chains. The search is for the minimum variable parameter as that must lead to different results and allow highest variety of information in/out response testing, ie stuck in the realm of commands we would never see what happens if an invalid command is entered but this is easily done in the realm of keypresses.

Information is conserved. It is the ultimate conserved quantity. Conserved means: an isolated spatial volume can be set up and the system within will maintain its state unchanged over time until the isolation is

broken. It means the information can be localized by (x,y,z,t) and any changes are continuous (no teleportation). It means information cannot be modified and information flows can be separated into orthogonal contents that do not intersect. Information will explore all possible / allowed spatial locations. Information is conserved not by means of some global summation, but by the requirement for all information transfers to be bidirectional so it is conserved locally. Information can be spatially localized in the form of matter. Empty space contains the zero-state which itself also seeks to explore all possible / allowed spatial configurations and will readily interchange with matter (this happens during motion of matter). Extra localization of information in matter can create an "energy source" that operates by virtue of delocalizing this information and employing the resulting flux to do some computation / system evolution: thus any "energetic" matter must also be more massive (as it has a greater spatial density of information) which corresponds to mass-energy. The zero-state is a superconductor of matter, offering no resistance to propagation. It is not a superconductor of fields, as these dissipate by $1/r^2$. Fields are delocalized information that is in essence not spatially bound, thus fields are an ultimate information sink in an energy-dissipating system. Space is a permanently connected information exchange network. This gives the rigidity of 3 dimensions and constancy (ie I can always choose to move along some dimension). Information exchange occurs only by spatio-temporal proximity, and assuming a single time evolution, spatial proximity is the driver of exchange. ⁴ Information exchanged with the field *will* be carried to the rest of space. Matter, as spatially localized information, allows the possibility of directed information exchange / "pushing" without the delocalization incurred by the field - because the zero state is a superconductor for matter it is possible to move matter from one spatial location to another with no delocalization (this is momentum). Higher-level systems based on exchange of matter and matter-localized information are thus capable of forming one-time exchanges (initiated by whoever has sufficient information / energy and knowledge to send the matter on its way) which have to go through permanently-connected space but on an abstract level can themselves be seen as information links (temporary connections). Motion in space, and gravity, and e-fields, are conservative - by themselves they will not bring irreversible changes, only oscillatory behavior. It is only by virtue of delocalization processes that a system can evolve over time / change. So an object falling down has the same localized information and

⁴"Quantum tunneling" is to be seen as due to a special spatially-connected configuration of matter (seeing matter as bound information that continuously reconfigures itself along circular trajectories) that is not often achieved but when achieved provides a means of information exchange - when looking closely the information still goes from one place to another via a continuous path, there is no teleportation.

could bounce back up, but a hard landing will cause delocalization to occur and then we can see gravity as an "energy source", whereas on an information level it is just a property of matter that creates situations where information differences can be maintained over time by virtue of "potential energy". What gets delocalized in a matter collision is 2-fold: each object's momentum information gets delocalized into the other, leading eventually to equalization. In an elastic collision this can be set up so no delocalization occurs. Consider a battery: it has two sides, one with positive charge and one with negative, this is a form of matter-localized information in the form of binding energy of the electrons, and the charged battery is slightly heavier than uncharged due to this extra information in the same volume. Two sides are connected - ideally nothing can happen because the electrons are too high-energy: they will get delocalized (since *they* carry the extra information, not the "holes") to cover the extent of the circuit, but upon forming neutral compounds with the other side of the battery they have just enough energy to break apart again - a brief pulse of delocalization then no further energy extracted. Putting in a resistor or a motor changes the picture - now as electrons flow through they experience a delocalization of the bound-energy information between battery and load (as opposed to earlier, just battery). The load meanwhile takes that same information and delocalizes it further to the ultimate sink (fields). So there starts a flow of information into the field, and it is this which makes battery draining irreversible.

Taking information as an essentially spatio-temporal conserved quantity, we can make use of simplifying tactics to understand complex systems. The first view focuses on space: given a volume with a boundary, information in - information out = information stored; this applies independently to each type of information (at least among the 3 dimensions) as information is conserved: it cannot be changed by other information / modified; and this applies at *all* scales, whether the boundary surrounds an atom or a planet. It is useful for dealing with elementary flows like fields and individual particles, and can be used in a FEA fashion for simulation with many small volumes wired together. It allows a lack of knowledge of what exactly happens to the information inside the volume or how - just observations of external flows are adequate. It can even be applied to large systems like factories, again tracking the physical information content of energy and matter, but it is not well-suited for abstract information like ideas and money. The simplifying power comes from black-boxing (only know in/out not how) and combination (of many complicated processes inside volume to single in/out combination through external boundary) which are basically the same and come about because this approach is true at any volume - it is a spatial simplification. I can also connect any number of such volumes together and they will have to satisfy the same conditions,

so I can use modularization to some extent - though there is overlap here with the next method.

The second view focuses not on space but on information pathways - pipes, wires, money transactions, airline flights. Of course ultimately these pathways are in space, but realistically dealing with that much space is troublesome. In essence we draw a bounding surface around the pathway and say it doesn't dissipate / delocalize (or store?) information, then we treat this as a link in a system diagram that does not have to correspond to volumetric spatial coverage. Because there is no need to worry about space explicitly, this is well-suited for complex systems like circuits and the economy and social interactions, especially when the information is not an elementary physical construct (like discussion topics for social networks) - the spatial conservation laws always apply of course, but simulation at that level is not at all instructive - instead we employ the knowledge that all information is still information and simulate a network of links which may form a space far from 3D in nature as far as information exchanges / proximity are concerned, and furthermore unlike space also capable of changing its topology over time, and even changing dependent on information transfer itself.

One simplification the information flows model allows is tracing in/out without caring how this happens physically- but not just on a spatial level but on an abstract system level (ie money flows). Our understanding of physics is at this level, ie $F=ma$ is not elementary but rather the relation of one high-level learned pattern "force" to another, which end up being mathematically neat given specific ways of measurement of the two quantities (that ultimately are measuring the same elementary thing, which is why the equality holds). That $F=ma$ is consistent means it describes information, but as outlined in this simplification, information flows can be described at an abstract level by focusing on pathways instead of space. Another simplification is modularization: a certain unit can be said to handle information flows in a given way, then units can be chained together and another level of abstraction added such that the group can be represented as one unit. For instance bit operations through logic gates \rightarrow byte operations through adders, and here we are way above electron-level spatial information which really makes this possible in the first place.

So to review the progress so far:

- Information is conserved in space over time. In space, info in - info out = stored, no negative info.
- The above applies to any volume / spatial boundary, including boundaries containing matter, and energy-rich (heavier) matter, as well as fields.

- By applying spatial conservation at desired spatial scales we can simulate things of physical interest like FEA flows / turbulence (air/water), and electronics FEA - contiguous volumes transferring spatial-level information.
- Now we can apply conservation to yield two types of volumes: wires / connections and evolution systems. As well, sources / sinks / accumulators. These can be only somewhat spatially contiguous, the focus has shifted to information flows vs space. Can simulate big circuits, water networks, factories.
- Without the constraints of spatial connectivity, we can now allow modification of information pathways in real time. Then we can simulate money flows, idea spreading, social structures. Information has taken on an abstract form, all allowed by clever application of spatial conservation.

We have used: black-boxing for things we can't describe (electrons) or things we don't want to describe (heaters) on a fundamental level to still use in models; modularization for things we could describe (factories) but don't want to on a more abstract level (product flows); chaining as a result of causality allowing $A \rightarrow B \rightarrow C = A \rightarrow C$ so we don't have to know everything about info transfers and how exactly they work. These are not elementary distinctions, indeed I believe it is possible to combine all of these into one principle of "encompassing". This principle is something we can choose to use or not, the results will be the same but the ease of calculation / simulation will change dramatically because of the exponential improvement of combining multiple common information flows and treating them as one. Here is an illustrative example:

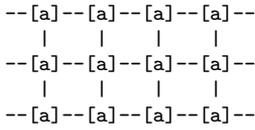
```
* - . - * - . - *
| / | \ | / | \ |
. - * - . - * - .
| \ | / | \ | / |
* - . - * - . - *
```

?? Fabric of space, elementary units exchange elementary information to define fields and particles

```
[ * - . ]
--[ | / | ]--    =    --[ atom ]--
[ . - * ]
```

Convert a piece of space that describes an atom into a black-box unit,

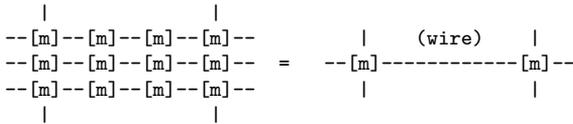
call this unit "atom". The unit follows conservation by in-out=stored



Atom units are connected in a network and exchange information between them, forming a crystal lattice or a solid material. This material can respond to external fields and perturbations.

```
--[ matter ]--
```

The above lattice follows conservation laws at its boundaries, in-out=stored, so we can again black-box and modularize to make a unit called "matter". Its response to external fields and perturbations is obtained by chaining the lengthy causal response of individual atoms, perhaps using some empirical procedures, so it can be calculated without knowing anything about the atoms.

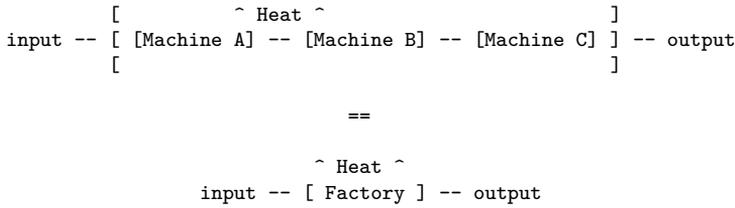


Collapse "empty space" around matter that does not contribute to information exchange of the quality of interest, and call the remaining 1D matter pathway a "wire". Elementary information -> flows like electron current.

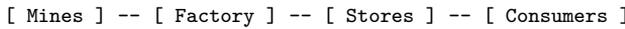
```
[Machine A] ----- [Machine B]
```

Decouple spatially, black box complex matter as a "machine" and have

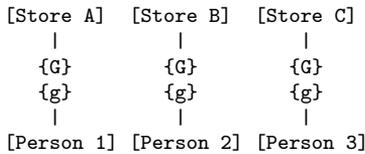
"wires" transfer information between these boxes.



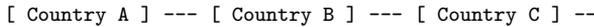
Black-box the machines and material transfers as a "factory" unit.



Abstract flows and processes, and make matter links vs spatial links.



Allow link modification and abstract flows (copied from earlier)



Abstract + causality compacting, get to "world economy"

The huge progress above from subatomic particles to world economy was allowed by the exponential increase in information-handling ability with each level of abstraction, by getting rid of net-zero lower level flows / features. The principle of abstracting preserves the information-conserving elementary law, so the upper levels are just as valid as the lower ones.

Money flows are "made up" or arbitrary, but we say they work and from the above discussion it is clear they work **because** they follow money conservation: in-out=store; this works (ie effective in the physical world) in turn **because** the physical world itself follows matter / energy conservation! The money system is made up but it will only be effective if it matches real world constraints, which is why it was made up to be this specific way. Non-idealities like money printing and currency devaluations can be included as abstract concepts but they take the model outside the realm of information conservation (of course, spatial level information is always conserved, but at the money level of abstraction we don't care about that, what I mean is that the abstract idea "money" is not conserved - and there is no need it should be, other than when it's not it becomes physically less useful for real world actions as then it turns from information (which carries real implications/effects) into arbitrary data (which is interesting but does not imply any specific physical results)). On a fundamental level this

also means our reality must be rigid and unchanging except by virtue of information ie all is conserved - otherwise everything non-conserved becomes irrelevant and all its effects / influences arbitrary which is not logically self-consistent. Also of interest, in any model we run, we end up using our space to represent model space and our time to represent model time. The simulation becomes part of our reality.

What are we to make of abstract information like ideas / concepts? These don't seem to be in any way elementary, yet there is a clear physical effect of knowledge in being able to initiate connections / optimize behavior / act within infinite couplings. Any macroscopic matter-based system can act in the way it's designed / wired to; as long as it follows information dissipation for time-forward evolution, the system can do an arbitrary variety of tasks based on both memory and external inputs. But it cannot make up information. That is, in the absence of an information input, the system can follow exactly one determined evolution path, one wholly based on already-known (internally stored) information - which is ultimately open / closed pathways or modifications of within-system connectivity. I can make a robot that (say) goes forward or turns based on some internal calculation - this can be very intricate like using a PRNG so it is hard for me to predict what it will do, but if I wanted to model all relevant features I could predict its one path of evolution. In the absence of an external coupling that would allow delocalization, or equivalently in the absence of any stored information that could be delocalized, the system becomes effectively isolated and its actions must take on a cyclical nature - this is the time-based reflection of a spatially stable / bound information store like matter. Subatomic particles themselves are like this: undergoing constant changes / evolution but these taking place in a cyclical manner that keeps them spatially bound and constant information-content-wise though with changing appearance. For something like the total thermal state of a macroscopic body, the cyclical nature will be true - though it is tempting to say that a thermal state will never be achieved again as there are so many possible configurations, the thermal motions **must** ultimately be cyclic and splitting them into stable (non-dissipative) phonons / modes within the object will make it easier to see the cyclic nature as a summation of multiple frequencies which can lead to complex long-cycle patterns of course (as a product of all the frequencies until there is a perfect repetition) but which nonetheless eventually repeat perfectly and indeed repeat effectively at even shorter timescales (ie very long period cycles will tend to be low amplitude, so we can average thermal motion over very short times relative to longest cycles and still get a useful notion of temperature / linear velocity). So, at a big enough scale, all isolated systems will behave linearly - the complicated cyclical motions will average out and all that would be left is some change that is directly proportional to number of cycles undergone which is directly proportional

to time passed - thus we get $x=v*t$ even for hot objects and oscillators and subatomic particles. (The deviations near the speed of light are because our clocks are also based on cyclically moving particles, so we compare two similarly moving linear systems and there is an intrinsic measurement limit reached) I could define a similar law for the robot above (assuming it has an infinite energy source to keep moving and turning), which is even easier to see if instead of turning it just goes forward/backward: any motion it does will be cyclical and the cycle may at its end leave the robot with a net forward movement or net backward or even just where it started. I could also put a thermal noise sensor on the robot to make these decisions, so even I find it difficult to predict its actual path and periodicity may be very long, but inevitably as long as it is properly isolated its course is set and linear on a long enough time scale. Any influence of external abstract (or physical) information then must be seen as a change from the "pre-determined" cyclical path to a new path, which the system itself could not have picked or gone down in the absence of such information - because it can only act on information it actually has. The latter does not mean the system can predict its own future in isolation - the thermal-noise robot is coupled to a very complex information state so neither I nor (likely) itself can actually tell what it will do - but whatever it is, it must and will happen in the absence of external inputs, which is another way to say the robot cannot escape its fate without inputs - even if it thinks long and hard about what it's doing, in isolation its actions could have been, in theory, predicted earlier and it cannot by itself change course onto another path without the necessary information. The scope and complexity of internal information store can be examined by tracking the cycle length of an *isolated* system - at what time scale does it become describable by linear relations? At what scale are repetitive and consistent patterns observed? By this metric the human brain isn't all that complex - put a person in an isolation room and within a few days their brain will take on cyclical, zombie-like oscillations. So it doesn't seem the brain is particularly coupled to something complex like thermal noise, and it would make sense for clear / consistent thinking that neurons would be designed specifically to avoid such coupling, like CPU transistors. The brain is a "meta-system" - its evolution is only possible because of information delocalization / energy release from food so it is not cyclical / stable in its own right (like an atom is) and as such it is free from spatial constraints that fundamental systems / units have to follow, ie it can choose its links / topology by means of matter connections. As it was designed to be decoupled / isolated from lots of influences (like temperature and e-fields for instance), its evolution will be determined by its abstract information content / complexity, and this abstract information can be internal (ie memory or processing like PRNG) or from external inputs - but the external information must pass

through the "filters" of the brain - which in turn were designed to decouple from complex and questionably useful-to-survival stores like overall brightness / optometry or constant / unchanging features - what we notice is what passes the evolutionary-useful-pattern filters so we can focus on what matters: contrasts and edges and motion and sudden / sharp noises and animal-like noises and shapes. In the absence of these inputs, we could thus call the brain isolated - even though physically it has many spatial connections to the rest of the world on an atom level, the brain network creates a "degree of freedom" in evolution which can be abstractly isolated in this way when no inputs pass the filters. As an isolated system, the brain will then do just as above - become cyclical and on a long enough scale linear in its operation. External information, even like 3D light scenes and environmental sounds, but also like language and ideas and concepts, all serve to couple to the brain and thus affect its course of evolution which then becomes highly non-linear and non-cyclical, gaining significant complexity from the continuous external inputs and interactions. A difficulty is that as the brain is not a fundamental system, it is much harder to predict its response - depending on its internal state it may ignore external inputs, or act on them in a way that is wholly unintended. It may forget (physically this implies overwriting or explicit ignoring or chemical inability to access) information learned earlier, or it may "create" information by applying algorithms to already-stored information (ie composing music, writing a book) (what happens here is energy-information such as stored in food gets upscaled to abstract-information like music (with plenty of dissipation along the way), total information is conserved, the creation is only apparent). So abstract information like ideas is not conserved, nor does it follow in-out = store, nor does it have an inevitable / predictable effect on brain evolution even in the case it is accepted and not ignored / forgotten. We can look at elementary information / energy transfers and all will be conserved, but brains operate so far above this level that it is a regular occurrence that concepts can be interconverted into heat (forgotten or not processed, lost at filter level - audio comes in to ear and energy is readily dissipated, whether or not it affects further brain activity makes no difference to local energy conservation - since infinitely coupled flows don't see each other), or vice versa that what could have been heat gets captured into mental constructs. It is impractical to predict brain function at the fundamental / conservation scale, so we must rely instead on probabilities and averages and guesses when discussing abstract information flows. A conclusion that remains in this, is that complex actions (ones unlikely to be found by random exploration) spread mostly through abstract information exchange (though originally had to be created by internal processes - again this is beyond our theoretical practical abilities) so studying the tracing of such actions (including words / phrases / names, but also things

like social behaviors and choice of food and where to look for jobs) will help build an abstract info flow model - once again recognizing that only the person knowing the information can initiate action, but the would-be recipient of information might well ignore or miss it: only the teacher is capable of teaching, but teaching does not mean that students will learn anything - whether they do and what they do depends on their brain states which might only be modeled on average / probabilistically. There might be ways to "guarantee" learning like using loud / catchy sounds / things hard to ignore, presenting information that is in line with the listener's goals so he is likely to remember it, or even schooling ie forced listening for many hours a day with a change of topic allowed only upon successful testing of memory but still there is no guarantee that an individual will respond to learning in a specific way - only a likelihood based on the individual's brain state and previous memories / knowledge. Combined with repeated conditioning of response, like in parenting and schooling and cultural / societal expectations, this becomes more viable.

I was thinking more about space - how can an object move through space? There are issues if space is quantized and there are issues if space is continuous. What about something in between, a fractal? I argued earlier that a fractal is not a good choice as it has no intrinsic scale while my experience seems like it has a definite scale and atoms are different from planets and galaxies. Yet contemplating the possibility for a bit, as I wrote that at a big enough scale every system becomes linear / cyclic, what if I zoomed out until the universe itself was a single "unit"? On those ridiculous time/space scales, what would the universe look like in terms of information input / output? Could it not look like some subatomic particle? Could it be that my experience of the moment actually occurs at all levels and defines each stage of the fractal space equivalently and in a cosmic consistency? Could it be that reality is a fractal feeling-sculpture? And if so, what does that mean for my experience? I wrote in *Deterministic World* that the reason I feel as myself is because whenever the matter of my brain gets processed by the universal computer I have access to all my memories and thus realize that I am me. I don't feel as other people because other people's brains, when they are processed, feel as themselves - the whole idea of me feeling like someone else implies the potential ability of having both my memories and another person's body / life, and the two are not a physically allowed combination. This explains the feeling - decoupling from other systems in space. What about in time? I already claimed that the me of today is actually a different being / consciousness than the me of past or me of future. But then can I treat these time-alternative versions of me the same way I treated other people above - ie they all exist but I only feel as myself in this specific moment because this is the only moment in which I have the necessary memories to do so? I cannot feel past or future

me, just like I cannot feel other people, and yet I can interact with them. Is there a reason to treat time differently from space?

I will attempt to again outline some different information systems to further improve the concepts presented above. I will operate on the basis that 3D space is real and time is a snapshot (not an axis).

- Fundamental level: this is physically conserved information, mass-energy, that defines basic physical entities. Each unit always has connectivity to its neighbors. Case 1: information appears directionless - each unit that receives information will radiate it to all neighbors. Because information must be conserved it cannot just lose directionality however, only appear so. What this means in principle is that the "zero" level is not just an absence of information but is itself information that can be radiated, and the apparent loss of directionality of a "positive" quantity is due to directional motion of the "zero" quantity. This is Huygens' principle and applies to all fields. This further implies that even zero-level fields carry non-zero mass-energy. Spatial delocalization is inevitable in this situation - even a laser will delocalize based on aperture size, which we would call "diffraction" in other words lack of complete spatial direction data. Information cannot be stored or slowed below c . Case 2: information can be wrapped on itself - then it becomes spatially localized and can maintain its directionality in free space, now it is possible to have directional transfer of information without delocalization such as with a projectile. This can be used for elementary particles and their interactions with fields.
- FEA level: this information is more abstract but still physically conserved, like atoms or mass or energy. Each unit is still connected to all its neighbors. Case 3: information can be spatially localized, stored, or transferred directionally. This can be used for turbulence simulations, flows, mechanics FEA. Case 4: information can be localized but also interacts with the delocalized field. This can be used for electronics FEA, chemical MD and DFT simulations, reactive and thermal flows.
- Wires level: groups of units are defined to be wires. Now units do not have to be spatially adjacent as in FEA but can be abstracted by their operation. Wire connections are taken to be permanently available, and due to the "warping" of 3D space by wires, interactions with the dissipative field have to be averaged and flows must be of localized matter, and also the units at the abstracted level can interact outside the constraints of 3D space (such as 3 orthogonal information transfer directions - can have more or fewer wires instead). Wires

are defined as: a bounded contiguous region of space such that information of interest cannot flow out through the boundary surface, does not change within the bounded volume, and is not (effectively) stored. Case 5: information flows between units along wires. This can be used for circuit analysis, piping and plumbing, factory lines, chemical processes, transportation networks.

- Link level: information does not need to flow through wires. Information is already abstract-level matter but now connections are not permanent or always available, and to get to a destination the sender must know the path. Links are thus established / broken as needed. This can be used for: money flows, goods in the economy, internet and cellular / wireless networks.
- Abstract level: the information considered here is not fundamental and thus need not be physically conserved but is rather the arrangement of matter or fields that will affect the evolution of a receiving energy-dissipating system. Not only are the links temporary and require sender's knowledge to establish, there is no guarantee of some effect on the receiver. To make practical applications possible, responses are thus averaged. Energy dissipation (as heat) occurs all along the line and is what allows this variety of responses. This can be used for: spread of ideas, social networks, political movements, group learning, geo-socio-political modeling.

Whatever happens to information must be specified by connectivity between units (if on fundamental level, this is the 3D space) and how units choose to exchange information. These exchanges must also follow information conservation, ie can't have "Maxwell's demon" unit - if it lasts indefinitely (like subatomic particles or field-carrying space units) the matter in which it exchanges information must not be energy-dissipative or concentrating. In all this, a unit is free to choose what it is able to with the information it has. It can only do as it knows. This is why a transistor works, why valves and dams work - it is enough to locally (around a 4π boundary surface) keep the information from knowing of possible spread-out states to keep it from flowing. Lack of knowledge is key because knowledge specifies one path out of infinitely many while without knowledge one only has infinitely many possibilities which is not useful to guide evolution, because possibilities aren't real, they're just things we are capable of thinking about but they never actually exist for us to be able to verify their reality. There is no way to overpower a lack of knowledge - like you can't pull on a vacuum - there's nothing there! So without knowledge - it shows up as lack of guidance, lack of input, not knowing what you don't know - so you have no choice but to do as you already know but perhaps missing out on

more optimal evolution paths. This works all the way through to abstract systems like brain operation and social networks and is what the infinite couplings of earlier actually are: in an infinite coupling the two flows never interact, both only see self + valve's reaction to self. The valve controls whether the one flow is able to spread its gradient information to the rest of the system or the information stops right at the valve. If it stops at the valve, the "lack of knowledge" in the rest of the system keeps it from dissipating energy. Electrons don't have much of a memory (a little bit, seen in inductance / inertia), they just decide their actions based on what their neighbors say (and people aren't all too different).

Consider a store / shop as a unit that is self-sufficient. What it does in essence is handle two flows: money and goods. Both are conserved, but in the process some money is accumulated by the store, and this accumulation is required for a store to remain stable in the economy, similar to how entropy generation / heat is required for a thermodynamic cycle to remain stable. From the point of view of a store owner, there is no need to be concerned with larger patterns: goods come in, and they go out, money goes out and then more comes in. Who buys what, and why, doesn't affect the general operating scheme. At this level the store can be seen as a money source.

```

{                               ^ profit                               }
{ money out <---<--- [ Store ] <---<--- money in }
{ goods in --->---> [ ] --->---> goods out } All flows within boundary
{                               } are conserved
    
```

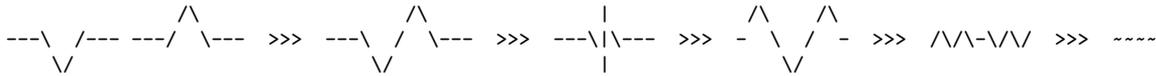
In other words, a customer pays for the goods and then pays extra that is just money transferred to the store. The store doesn't care where the customer comes from, so from its point of view it just generates net money. In a bigger picture of course there isn't a net source at this level as the generated money has been transferred from the consumer / his employer / the government "printing press".

Consider analyzing Bell's inequality type experiment: a polarizer can be seen as a unit which, given photon parameters, decides what type of photon will be emitted / where. The parameter is information but need not be linearly related to probability of emission - as long as the integral is 100% and any splits are 50/50 the parameter is possible. The allowed parameter aspect and how the polarizer makes a choice can be tested in simple polarizer arrangements - ie 0deg followed by 90deg gives 0% transmission and overall a cos(theta) distribution - this constrains both parameter and operation in some way. Then apply this to entangled photons and see if there is any local interaction way to get observed correlation levels. The point of this approach is to see if it is possible to apply information conservation without knowledge of the underlying nature of information - only its observed experimental effects - without making assumptions like linearity because this

is a model decision and not necessarily universal truth. Hopefully this will also show what is a minimal required information exchange (and between whom) to observe the correlation effects, regardless of the specifics of photon and polarizer and detector operation (inasmuch as such is possible). In other words, describe all experimental data purely by what is observed (no notion of photons in flight necessary - ie apply electricity at this end and get detections at the other end) and then from this *deduce* what photons are and how they behave, given that information conservation applies.

Another consideration here is the general applicability of minimal information: consider that I get energy in the form of food and the calories therein could potentially have a lot of complexity, but as it is, my food does not determine my actions, rather the food gets converted to "chemical energy" which can then be dissipated as a function of my sensory inputs and independent of its history - this means information exchanges must be minimal in terms of dependence on past states: only the current state is important, and the available dissipation mechanisms become indifferent to past states - a system's complexity is a real-time metric. Another way to look at this is as different levels of complexity, because complexity inasmuch as it is defined by information is conserved in quantity and quality / nature. So the complex chemical makeup of food is not lost but contributes to the very specific (but not important to conscious me) thermal oscillations of my body, while only some small subset of that energy is capable of contributing to my experience. Even here, I see history-independence. I am led to ask: what is fundamental? Whatever fundamental information is, assuming it functions at the smallest spatial scales, it must have adequate potential complexity / dimensionality to represent eventually anything I can observe: all subatomic particles and all their interactions. But maybe just a field of numbers or even finitely many symbols will suffice - there is a vagueness here because complexity can be split between complex information following simple rules or simple information following complex rules, same as I can split between storage space + compression algorithm time/space complexity to store the same information. Ultimately the real world I wish to describe is the same, so this observed complexity needs to be handled by the combination of information+algorithm and how to get from here to what the nature of these things is, I do not yet know. Perhaps an elementary view of information is as a quantity of some feature - the total volume-integral quantity cannot change and the nature of the feature cannot change, but it may be transferred in space (over time). Can the information itself determine how it will be treated? The lack of an absolute reference (axial or spatial) for an individual unit and the resulting + observed relativity of spatial interactions leads me to believe the answer is no. Information in its most basic form can only spread equivalently outwards as it undergoes undifferentiated exchange at each unit (Huygens' principle) - not random

but rather indifferent to directionality leading to a time-averaged preference for the most probable (most spatially spread) states. As the exchange between units happens at a constant speed-of-time, the outward spherical propagation of information happens at the speed-of-light even though it may appear as diffusion: the difference is the amount of information at one unit doesn't affect how fast or how far that unit will exchange with its neighbors, namely as above the "zero state" is just as amenable to exchange as non-zero. However the resulting spatial spread will have an effect of field reduction by $1/r^2$, thus further supporting the idea of $1/r^2$ "static" (DC) fields as actually maintained by continuous emission by particles (outlined in Deterministic World), due to particles themselves being made up of some clever spatial arrangement where continuous information exchange between units results in a looped / oscillatory pattern rather than dissipation. Consider the fields around an electron + positron collision: as this shows how the "static" fields aren't all that static



Consider again that I can store information identically as lots of storage space + trivial extraction algorithm, or as little storage space + complex extraction algorithm. Since this information is based ultimately on physical information also, I expect features of computer science / real computer implementations will also apply and elucidate features of fundamental information. Look at memory structures as localized / stable information loops (some of the first memory structures, such as delay-line memory, make this clear on a macroscopic scale), and an extraction algorithm as an evolving / dissipating information loop - changing content in time vs in space. The algorithm must, eventually, execute the same number of loops as the output information - considering each "output write" instruction as another part of a loop. If the permitted scope of information, given some alphabet like 1 and 0, is truly random, then no compression can be achieved on average. Any net compression thus must come from initial expected limited / constrained / rule-based uses of the alphabet, for instance a text file only uses a subset of the 255 possible byte values for each character, so it is amenable to "compression" like base64, but really there is no compression here - just a removal of previously introduced inefficiencies (which supply data on the nature of the communication itself - this must then be re-introduced by the receiver by using prior information). Any time it is possible to predict some information the compression algorithm appears to compress the data, but the predictable stuff makes for exactly 1 possibility, so to represent any greater variety of options there must be use of unpredictable information, and this *cannot* be compressed. There is no compression, only

an exchange of pre-shared knowledge. Say a computer sends information to another. The CPU operation, the network protocols + hardware, all the connections and electronics and power supplies enabling this are taken as shared prior knowledge - and this is ultimately physical level information. It must be known and expected beforehand by both parties otherwise no useful communication can take place. This shared knowledge can also include an expected "compression algorithm" that handles communication data. Given a long-time (not instant) transmission of information from A to B, a compression algorithm must at some point either put out less data than it gets or put out more data than it gets. Information is not generated in these cases - rather predictabilities based on the shared knowledge either get removed or get added back in - byte level information can be "cloned" while still conserving fundamental information by applying dissipation to an existing loop structure multiple times - this is how the shared knowledge gets spread as well. Computer memory from the view of information theory is an interesting mechanism. It is desirable to be able to store any potential-unpredictable-pattern, but this is not enough - if it were I could just couple it to a thermal noise generator and get loads of unpredictable data. As in the case of highest-entropy communication, it is desirable to have unpredictability of the next piece of message while having full predictability / expectation that it originated from the sender and has not been altered. Thus computer (and human) memory / processing systems are specifically designed to be decoupled from thermal and other complexity, so they have a "clean slate" in which to operate - memory data is inaccessible except by a working computer. It doesn't have to be this way - memory could be "crappy" and easily modifiable by thermal fluctuations or light or any other complex effects and there is certainly plenty of fundamental information to achieve effectively unpredictable and indefinitely numerous alterations, which would in general be intractable to model realistically except by dealing with averages.⁵ But because memory is designed to be independent of such couplings to huge information stores like thermal bath, we have a huge theoretical simplification for modeling in that we can treat byte-level information as information in its own right, without needing to think much of fundamental information that makes it all possible, because the vast majority of it has been excluded from possible interactions. The total amount of computer memory is conserved - because it is defined by physical spatial structures which is fundamental information (FI). So the number of bytes available for storage is constant, but bytes themselves are not conserved - I can store 000 or 111 and there is no requirement for number of 1s or 0s to be constant - the underlying requirement of FI being its quantity *and* quality are conserved, byte level information (BI) is different in this

⁵What we see, for instance, in brittle fracture.

regard. Of course this difference is an appearance that comes from viewing the memory as a system that is absolute / independent from the world - in reality the 0s and 1s are conserved, by virtue of energy dissipation in memory transitions. This is done by designing memory such that energy inputs can select between evolution along path 0 or path 1, both of which are equally plausible⁶ for the energy to take (satisfying conservation of energy / momentum) but where the 0 path leads to memory storing 0, and 1 leads to storing 1. Dissipation is necessary because without it is like trying to stop on a frictionless surface - oscillations just keep going and no state can be locked in (perhaps by clever timing / Maxwell's demon, but this in turn only possible by storing timing information in dissipation-based memory at some level). So with the transition 1→0 or 0→1, the FI is conserved by either taking a bit of the external input or contributing a bit to the external (heat) output. But from the point of view of BI, which only looks at 1s and 0s and ignores atomic / electronic / thermal motions, the 1s and 0s are not conserved. The conservation which applies to them is more abstract and less easy to trace back to FI but still quite real: it is based on patterns, what one might call "macro" or human-level information. Because the memory was designed to be decoupled from the rest of the world except other digital systems (which are similarly decoupled) all that memory contains must be some algorithm / function of other memory contents - patterns can be duplicated but no new patterns can enter memory except through purposeful coupling with the rest of the world. The entirety of digital storage is thus an informational "safe space" which has been filled at root solely by human-directed bits and pieces of the physical world. This is because processors are also decoupled and in the absence of external inputs (like keypresses or audio in) can only act on memory as guided by other memory. Unlike FI such a closed system does not have to be oscillatory: because BI is not conserved, a processor left to operate on some finite memory could well be set up to reach a definite final state, though it could also be made to alter the memory cyclically (this is to say, in any case some final state will be reached, but it is not necessary that it be traceable back to its start or even algorithmically reaching its start, because it is possible for information to be *lost* in overwriting BI but it is not possible for information to be *gained* by reverse-writing BI so the only thing that can happen is algorithmic reduction in complexity of patterns in memory - an increase just means one didn't care what was there before; as long as there

⁶This is the basis of infinite couplings: the transistor / valve presents equally plausible paths of evolution with no available method for particles to alter their paths. They can push back, but this pushing will be along designated energy-dissipation channels and not in ways that alter the evolution paths. Transistors wired so as to allow the particles to alter their own path, to have "free will" as it were, result in computation loops and qualia experience.

is overwriting of unknown data / irreversible overwrite, there must be a net reduction in pattern (unpredictable) content). On the other hand from the FI view, any pattern / arrangement is as unlikely as any other, so it is only us who care about tracking such things. FI is indifferent to what is stored in memory and whether we call it predictable / pattern, it only requires that delocalization occur for any changes of memory in forward time. The reason for the claimed pattern conservation is that computers were designed to consistently act based solely on memory contents and memory contents to be modified solely by computer actions, forming a closed system with finite repertoire of patterns.

This can be applied more generally as saying an isolated system can only act based on what it knows and is thus fully predictable / emulatable. Being embedded in a larger information / heat context, this system's repertoire of actions is constant or decreasing - complexity seems to be an appropriate term here - the complexity of an abstract system like byte-level processing must either stay constant or decrease given the system is properly isolated. A computer with some memory can be kept running and will modify the memory in a predictable way - either maintaining complexity meaning ultimately cyclic operation (with the cycle period being a measure of complexity) or reducing complexity by dissipating byte states as heat. But then there is a question of original cause - where does any complexity originate? The same can be applied to human systems like language and learned behaviors in general: how did animals learn group cooperation, how did the first humans learn hunting and social dynamics / hierarchies and bow drills and stone tools and planning ahead? Without knowing the pattern you cannot check for its presence - the basic infinite coupling - but then how did we learn any patterns at all? How did we learn *to learn* new patterns? It is tempting to say any new complexity would be from random / chance occurrences that happen to remain stable over time, that is evolution. Complexity as defined above can be clarified: the number of distinct states that an isolated system can take on; this will consist of unstable complexity which are states experienced only once along a progression and stable complexity which are states experienced cyclically / indefinitely in a long-time isolated system. Unstable complexity is first to be radiated (as heat) leaving behind the stable (in an atom, stable on scales we typically deal with is its mass, and unstable is kinetic energy). A system thus defined cannot increase its own complexity, so the only way for it to increase is by coupling to another / external system, ie relaxing its isolation and allowing outside influence. The keys on a computer make a difference to the computer but can be pressed independent of the computer's state - new complexity is surprising / unexpected from computer's point of view. Taking both systems as a larger system, complexity still cannot increase so where does it come from now? Evolution answers this as every possibility

that can (is logically able to) happen will happen as soon as it can, and then some of those possibilities will contribute to observed complexity increase of any subset of the universe as a function of forward time; the effect of coupling to "the external world" vs isolating lies in logically permitting or forbidding such possibilities to arise in the system of interest.

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Complexity

Complexity as defined earlier should be evaluated more closely. A computer could be set up with a counter that wraps around at some value N , and just by varying N I can adjust complexity (number of potential states). Similarly, a computer stuck in an idle 0-complexity state can be changed to some very complicated state by the press of a button, or a mechanical "pinball" computer (can be seen at MIT) can get stuck (0-complexity) and a slight push of a ball allows it to resume operation in a complex state. So complexity, as an abstract concept is not conserved and furthermore dependent on what we consider a system and a state. What this also suggests is that "latent complexity" ie the complexity of a system stuck in a loop, like the energy available in mass, cannot be "extracted" so all loop-stuck systems can be seen as equivalently zero available complexity and all potential complexity, just like particles are looped information and change cyclically but their mass does not make them more outwardly energetic. Should the counter example, where changing one number can greatly affect system complexity, be considered a "real" change of complexity? I think this is acceptable, especially as a number might be not as a simple counter but some limit on a more complex algorithm such that changin this number causes a non-linear increase in number of available states (eg Ackermann function). On the other hand, a very involved algorithm that changes lots of memory but only has a few unique states should be seen as low complexity, because lots of memory can be reduced to a small symbolic representation and if this alphabet is small then the system remains low complexity by the definition and this makes logical sense. The typical use of "complexity" as applied to memory is that big memory content / entropy = more complex than small / uniform / homogeneous memory, but again all memory contents are as unlikely as any other (except thermal and potential-energy effects ie higher energy will eventually entropically degrade so there is a real physical difference). A CPU is on the one hand

more complex than a rock, or so it seems, but on the other hand the rock is more complex, because the CPU can be described by patterns whereas the rock is more entropically diverse. Rocks and CPUs are just particular arrangements of spatially localized information (matter), that have their different uses, but both have complexity 0 in a thermal equilibrium (dead) state. What about (eg) thermal motion of vacancies - does this constitute an ongoing change of states and thus complexity? Yes, if the vacancy locations are defined as states (and this makes all real systems that are not isolated on an atomic scale tremendously complex - and rightfully so, this complexity being the ultimate entropic sink ie most potential states to explore). No, if the vacancies do not affect what we define as states - as in computer memory, which is specifically designed to **not** be affected by such things. What about atomic scale particles / matter - the underlying information keeps changing cyclically and maybe in a complex manner. Are particles complex? Yes, if I care about possible changes in particle properties, eg electron level transitions, nuclear / radioactive decay. No if I only care about matter as a whole and treat it as a "dead" entity. I can treat it as unchanging because the changes that occur are cyclical or not affecting what I measure to a big extent (electrons and vacancy motion respectively). Complexity as an abstract concept is dependent on what we call system and state, not absolute. ¹ Its derivation from FI laws applies to the extent that our notions of system / state correspond to FI qualities. Consider a computer with lots of memory which contains lots of data / programs but the computer is stuck in a 1-statement wait routine / loop. Intuitively this seems "complex" but really from the point of view of the routine the rest of memory doesn't exist / doesn't matter so complexity is low. When I press a key to break out of the wait loop and program execution continues onto some rich evolution using the rest of the memory, complexity changes - but so does the nature of the program, specifically the memory that **matters** to it. A wait routine / counter can output lots of stuff into memory, but all this stuff will be the same and will never be read by the routine or affect it, so complexity remains low. A routine can also read lots of stuff, but as long as it doesn't have a lasting effect there is no change in complexity - this would be an instrument that gets a measurement then prints it out- it gains complexity in reading then loses it in writing, the state of the system changing but only because of external couplings thus the isolated complexity remains zero. The memory that matters to complexity is memory that will affect future routine operation. Memory can be seen as a time message to the future. Memory that the routine writes and that it will later read does not contribute to complexity

¹Complexity is a **dynamic** concept, not applying to unchanging / equilibrated systems. At a single instance of time only one state of the system can be seen, so seeing multiple states and when they repeat makes complexity a dynamic concept.

- it is a connection between past routine and future routine but all the same routine. An increase in complexity comes when the routine acts on memory that it did not write / could not have predicted / was unexpected. The keypress to exit out of the wait loop above is an example - purportedly the keypress changes a memory bit which allows the loop to exit, but the loop itself doesn't set the bit and only reads it - this bit being a source of external complexity. Complexity loss comes when a routine writes memory without regards to what was there previously and without knowledge of what was there, and then using this memory for future operation - thus replacing an unpredictable source with a known one. Such things are always accompanied by energy dissipation as heat / friction / inelastic collision, since this is required to "lose" any previously stored data without it having a back-effect on the clean storage of known data. ² What to make of processed information, information that is based on a time-message (in memory) from the past but then modified and sent on to the future? Is anything conserved? It seems that whenever energy is dissipated (partial information exchange) the matter configuration of the dissipating objects changes. In a computer system like a CPU or brain, these changes are designed to be modifications to reversible / reusable structures like RAM / register bytes or neural links. Any changes beyond this must be seen as not useful and in fact detrimental as they destroy the capability of the system to operate further. It seems also that nature at large doesn't have any instances of truly sustainable (photons in / photons out) systems - not even plants or animals on earth nor stars nor moons, all must keep changing just at different relative rates. So whether anything can be conserved in a byte-level information modification again depends on what we call a system and how we differentiate its states.

As a thought experiment in complexity, consider a simple counter pro-

²This is ignored in "quantum computing" so the outputs are only statistically valid, and useful only to the degree they correspond to a classical-like bias of the measurement.

gram with 3 lines:

```
1 i=0
2 i=i+1
3 goto 2
```

The time progression of code and memory states will appear as

	code line	memory i
t=0	>1 2 3	?
t=1	1 >2 3	0 } here an unknown value i=? changes to a known i=0, } memory-level complexity is lost } also line 1 of the code will never be reached again, } state-level complexity is lost
t=2	1 2 >3	1 } here previously known memory is overwritten based on } previously known (no new data) } complexity is unchanged (given this is reversible, } otherwise there is a decrease)
t=3	1 >2 3	1
t=4	1 2 >3	2 } again no change in complexity
t=5	1 >2 3	2
t=6	1 2 >3	3

Another case is a 2 line program that reads an external input:

```
1 i=(read input)
2 goto 1
```

	code line	memory i
t=0	>1 2	?
t=1	1 >2	x1 } an unknown value is replaced by unknown value: } no change in complexity
t=2	>1 2	x1
t=3	1 >2	x2 } same as above, no change in complexity
t=4	>1 2	x2

So even though this program keeps reading new values, complexity doesn't increase. This is because the value that was read makes *no difference* to the code - the code will never change state based on the read value, so the complexity becomes a mere copy of the external input - changing in step with it but having no intrinsic complexity effect on the actual program / computer. The program is capable of matching external complexity as above or reducing it, for instance $i=(\text{input} \bmod 2)$. Merely processing an external value like $i=(\text{input} + 1)$ is also inadequate: the content of i , while processed, still makes no difference to the program's operation and complexity as one unknown value is replaced by another. Consider a 5 line

program to which input is "meaningful":

```

1 c=0
2 i=(read input)
3 if i=0 execute 4, else do nothing at 4
4 c=c+1
5 goto 2
    
```

	code line	memory i c
t=0	>1 2 3 4 5	? ?
t=1	1 >2 3 4 5	? 0 } reduction in memory and state complexity
t=2	1 2 >3 4 5	x1 0 } same complexity since x1 is unknown
t=3	1 2 3 >4 5	x1 0+(x1=?0) } known 0 is overwritten by unknown } influence of x1 = increase in } complexity } this is a branching point: cannot } backtrack, not reversible. } reversible = same complexity, } irreversible forward = reduction, } backward = increase.
t=4	1 2 3 4 >5	x1 0+(x1=?0)
t=5	1 >2 3 4 5	x1 0+(x1=?0)
t=6	1 2 >3 4 5	x2 0+(x1=?0) } unknown replaced by unknown, } no change in complexity
t=7	1 2 3 >4 5	x2 0+(x1=?0)+(x2=?0) } here from the view of t=0 } an unknown is overwritten } by unknown } thus complexity remains } *same* - it increases only } once at t=3, not indefinitely } This holds taking any t as } an origin of "known" data.

Complexity shows up as barriers in simulation: divergent code paths where it is unclear what to do next. In time-forward this represents complexity increase, in time-reverse this is complexity loss. As a simple case:

```

1 i=0          -vs-          1 i=(read input)
2 i=(read input)          2 i=0

t=0  >1 2 ?          >1 2 ?
t=1  1 >2 0          1 >2 x1(*)
t=2  1 2> x1(*)      1 2> 0
    
```

At the point represented (*) I don't know how to proceed in time-forward simulation without an externally supplied value of x1. Internal complexity will increase if I can reverse this (ie I know what i was previously from analyzing the code) and will stay the same if I cannot - this is the difference between case 1 and case 2.

Now reverse the time:

```

t=2  1 2> x1          1 2> 0
t=1  1 >2 0          1 >2 x1(*)
t=0  >1 2 ?(*)      >1 2 ?(*)
    
```

At the point (*) I do not know how to proceed in time-reverse simulation without external knowledge of ? or x1, which has unfortunately

been dissipated as heat. Internal complexity will increase (=decrease in t-forward) if I can reverse this (ie know what i will be next) and stay the same if I cannot, as in case 1 vs 2. Combine the two:

t=0	>1	2	?		>1	2	?
			(-)				(same)
t=1	1	>2	0		1	>2	x1
			(+)				(-)
t=2	1	>2	x1		1	>2	0
net dS=			(0)				(-1)

The distinction with dS being lower in case 2 (meaning a reduction in complexity) is logical as case 1 begins and ends with one unknown value while case 2 has instead replaced it with a known value.

To try and arrive at an elementary / fundamental understanding of physics it is necessary to describe experimental results in the least model-dependent / most broadly-applicable way. Consider a CPU - if I describe it in terms of electron motions now I have to specify all the wire paths, whereas if I work on the byte level I can use block diagrams, or on a program level I can use programming languages - the situation is the same, in some ways the high-level descriptions have more power and are more readily applied, but a low-level understanding leads to an explanation of precisely how the high-level stuff works, which does not go the other way,³ so low-level knowledge is useful and intellectually interesting / fulfilling. How do we know a model is likely to be right / true? One test is a consistent explanation of observed experiments - all past ones including ones without a good explanation. Another test is in proposing new experiments which lead to more practical control over the world. Wide applicability and self-consistency are key. But the more fundamental a theory is, the more specific world inputs it requires which poses a problem for unification - because to be truly unified the theory has to include all the specifics of this world as inherent. Still we can get a start by not placing too much faith in the solidity of labels like "electron" or "proton" - track human-observable experimental results, define abstract unobservable entities only once their existence is clearly verified and necessary. Interpret the notion "x-rays" as an identifier for "the phenomenon observed near specific materials called radioactive" and not as an object or label of an object with some solid physical presence. Maybe "x-rays" are actually caused by very complicated multi-step physical interactions on a fundamental level and only appear as simple waves to us because this is so easy to fit into the actor-action mind frame rather than track just start conditions and end conditions because

³Really, low -> high also takes lots of assumptions so each level of knowledge has to be discovered separately.

the brain can't handle processing too many of such unresolved correspondences without inventing actors (like "x-rays" or "protons" or "electrons") which take actions to bring about the end state - a fancier version of the epic tale. This is not to say this doesn't work - it certainly does - but rather that the assumption that we implicitly make that (say) x-rays are fundamental entities is unjustified so every higher-level explanation on top of that may be accurate but gets no closer to an underlying mechanism - only the explanation-less comparison of many different experiments written in as basic language as possible (ie no "magnets", no "temperature", no "diffusion", no "photomultiplier", no "x-ray tube", no "battery", but rather specific information arrangement in space or whatever other means ends up being accurate + effective) will allow the sorting out of the nature of fundamental processes (as a basic example, that light and x-rays are both e-field oscillations - this cannot be learned from treating light and x-rays as individual entities but by comparing experimental results and seeing that similarities and differences can be explained by assuming the e-field model). What would be a basic language that is still powerful enough to describe real experiments? What would be the focus of this language - inherently spatial (atoms or subatomic particles or ...) or something else? Spatial seems inelegant because there is way too much space to describe efficiently and space seems to be infinitely divisible anyway - I think this language should be of some logical relational foundation.

With this "more basic" view, I might come with a notion of moving particle appearing different from stationary in a snapshot: the thing called "Bremsstrahlung radiation" is actually an electron viewed from a moving reference frame. That is, use information conservation requirement to re-define what is considered elementary (like the notion of "electron" or "energy") to something that must *be* elementary in a logical sense, even if it does not appear simple / easily distinguished as an "entity" by our human intuitive models. And the use of rulers to measure motion / acceleration compared to clocks or light path as showing that rulers (matter) are actually bound light (because the two are comparable so have the same elementary units so have same underlying structure), similarly the ability of our qualia to be defined by the external world shows that the rest of the world is also defined by qualia in some sense (otherwise how could the two interact? there would be no reference for comparison).

I would expand on this notion of a ruler as bound light in the context of energy conservation. I saw a question posed online - would it be possible to start a fire using moonlight with only optics? It would be possible, which could be proven using photon energy conservation, but this is not the angle I want to emphasize here. Rather, consider that it is certainly possible to make a photovoltaic-panel powered electric circuit that could generate a high temperature electric arc (if only a small one), and such a device could

be made to operate solely on real-time input from the moon's light, ie it is at root a passive object like a lens, only a very complicated type of lens. The question, in limiting consideration to optics, specifies that the desired system would be thermodynamically reversible - like a lens or a mirror is - and not cause "non-linear" effects like downconversion or upconversion. In this sense a typical photovoltaic setup to do this is not strictly reversible - but technologies to do this reversibly could be imagined as a thought experiment. To be sure, the lens and mirror are not strictly reversible either, so they also are to be seen in the same manner as the PV device. A reversible energy process means the device is a perfect conductor for the energy flow within it - the energy can flow through it in either direction depending on entropy (dissipation / number of states) gradients. But once again we run into an issue because all physics processes are reversible, so we see this notion of reversibility being restricted to some devices but not others is actually a human-usefulness construct. Rather, consider that a nearly-reversible PV device can be constructed, similar to how a nearly-reversible lens or mirror can be constructed. Specifically I want to emphasize the fact that the PV + electronics then achieve the same thing as the lens and the two are physically equivalent in their energy handling. The PV device, while it looks nothing like a lens to us, is actually a lens from the viewpoint of the light, and this in turn because atoms that make the lens or the PV are actually bound light - bound in a similar manner in both cases from a certain perspective. Because such a PV device could be constructed and will physically work, the ability to do the same thing using lenses and mirrors must follow as a logical corollary. As it turns out, a light spreading from a point source - into many states (dissipation), one might say irreversibly, can be focused back to a point with a lens, and so when the lens is properly placed a "reversal" of dissipation occurs - the light concentrates to a small spot, ideally as small as it started. Here an entropy-raising spreading into space has been countered, which seems to be overlooked in how nonchalantly lenses are treated. But then we have lost the one distinguishing feature we relied on to tell apart linear (reversible) and non-linear (irreversible / dissipating) processes, because what so-called reversible processes do at root includes dissipation followed by its clever reversal to an original state - they do not avoid dissipation, they merely counter it when it occurs. So consider a realistic PV - it may dissipate IR energy but at the same time create a spark that is hotter than the sun's surface - downconversion and upconversion respectively, happening together so as to increase entropy thus allow directional energy flow. It is tempting to call this distinctly a nonlinear process, as the photon spectra change dramatically, but this is only because our view of reversibility is limited. We do not call spatial spreading of light nonlinear because a simple lens reverses it; but the spectral spreading of photon energies in the PV device is of a similar nature

- there could be created a solid-state device that would undo the spectral spreading, if we are clever enough to make one (consider spectral broadening and its inverse pulse compression as used to generate high intensity ultrashort laser pulses). Energy spreading of the blackbody spectrum is a similar process to spatial spreading, and indeed to all state-spreading. There must always be dissipation (in forward-time) and energy will flow down all dissipation gradients - all that reversible devices like lenses do is block off certain venues of dissipation by making them logically impossible, and the result is that we get spatially controllable paths of dissipation which we can arrange to our liking. Pipes and tubes do a similar thing but with bound light in the form of matter - dissipation is allowed but only along one direction (and it does end up, mostly, reversible). As in spatial spreading, it is impossible to focus below an original size, except by forming a large shadow region outside a desired spot, so in energy spectral spreading it is impossible to get a net hotter spectrum emission, except by emitting a large cold-spectrum that gets dissipated as waste heat. The spreading processes are the same, although one is called linear / conservative while the other is nonlinear / dissipative, because all of these systems involve the interactions of free and bound light and space and energy spreading, and thus whatever is achievable in one can also be achieved by the other. An energy separating (dissipating) device can be seen in a similar manner as a prism - starting from a broad spectrum energy input (AC mains voltage) it produces some special splitting (like x-rays + heat IR rays), and just as in prism splitting and filtering, the high frequencies cannot be "amplified" but can be "distilled", so in an energy separation device the higher-quality (lower number of states / entropy) a desired output energy, the less of it will be found in the input, necessitating the dissipation of most of the input as wasted (not useful) heat. It's always possible to do better, up to the reversibility (and perfect conservation within the system - conservation always occurs and is responsible for the independence of different spectral lines in the prism - separability is necessary for conservation and is true even in processes called dissipative) limit - old inefficient laser tubes can be replaced by high efficiency laser diodes, this is a matter of designing a "better lens" to conduct the flow of energy in the desired direction. In this upgrade, the laser diode both puts out a much higher useful power and a much lower unwanted waste heat - it thus seems to offer a double advantage for our practical uses, but what this means is that the increase in useful output comes *from* what was before called wasted heat - now the "waste" is handled more carefully with a better "lens" device. Dissipative or "active" devices (like PV panel or x-ray tube) are in physical terms the same as linear "passive" devices like lenses or prisms - the difference in interpretation and physical treatment comes from linguistic rather than physical concerns, thus both devices should be seen as equally passive, avoiding the

actor-action worldview to a greater extent.

Reading the introduction of [Pragmatics of Human Communication] I saw the phrase "this science is in its infancy - it has not yet found its language". This led me to wonder - is a specific language actually the whole extent of a science? Once it is well understood how to describe a situation - for instance as atoms and electrons, or as variables and matrices - is that the extent of the whole purpose of the science? I wrote earlier that a model relates external reality to symbols, and prescribes rules for symbolic manipulation, and relates new symbols back to reality - all with the human goal of achieving some outcome we desire. By this metric our qualia constitute the symbolic construction of the intuitive world model. What of concepts like electron, a part of the symbolic construction of the established language of physics? I could just as well name it anything else, the name doesn't matter. What matters is how this thing, whatever it's called, interacts with other things (atoms, fields, detectors) whatever they're called. Yet we never see any of these interactions either. Just like there is no such entity as "x" in $x=y$ - the equation relating x and y is significant while "x" and "y" are just symbols that are meant to be distinguishable by the reader - there is no such entity as an "electron" or "atom", only complex chains of relations of input and output or start/end conditions - this is important to keep in mind because the default intuitive way of treating explanations as a literal actor/action representation leads us astray to think of electrons as little balls and atoms as different size little balls which all bounce around each other - while it is extremely tempting to say they really exist because we see them (by virtue of their interaction with... other atoms / electrons) we actually can't definitively claim that these entities are elementary - on the contrary it seems that symmetric relations are elementary and perhaps this is the language that information conservation should be based on. Any language that would describe these relations must generate a theory which can describe its own creation / origins - the theory is self-consistent which then can be reduced to some minimal set of axioms. The language should explain how it is possible to represent something in equivalent terms as a more complex system - complexification - which gets from the starting point (big bang) to observed variety / spatial extents of today. The language of this model should apply to the model to describe it in its own terms: there is mathematics and meta-mathematics (the mathematical foundation describing mathematics) and meta-meta-mathematics, but with this theory all meta theories are the same. The language is in itself the way, given any pattern / system / language, to describe its "meta-" properties. When applied to itself it yields itself. When applied to defined systems like math or economics or physics, it describes higher level patterns - this description is still information-conserving but not elementary because it is not fully

self consistent ie it is attainable from the original axioms by application of the language not to itself as a whole but to some discrete parts defining eg math. In this language an atom is defined not as a solid piece of matter but as a given set of symmetry/asymmetry relations - the atoms is likely rather simple - the plethora of complex responses are observed in experiments because experiments themselves are complex (like a transistor in a CPU - its isolated operation is simpler than its coupled interactions, and for observing atoms there is always significant coupling required). For example I use electrons to describe an SEM operation, and the typical view is of the electrons as balls. I seek to shift this view to the notion of "electron" meaning a very specific pattern / set of physical interrelations, which are seen together so often that it has become convenient to refer to it by one word. The SEM itself is a complex instrument - sample texture, detector bias, lens magnetic fields, filament temperature, vacuum level, all affect the image seen on the screen. But this cannot be taken to apply to the behavior of the electron - the electron should refer to the smallest set of relations which is applied to the existing complexity in the SEM to recast it in some way. The effect of say the accelerating voltage on the electron in this picture exists because of the specific column construction that enables this relation (by virtue of other relations ie this atom is above that one). If I imagine describing this electron using a general language, it would be described without any names of fields or particles or waves or constants, it would be described as an abstract set of relations in a similar way something like $S(1,2)$ defines a particular metric space by topology without any reference to specific dimensions - the dimensions are supplied by the rest of the world during an experiment, the relations remain always true. The language describing the electron might be the same language describing a macroscopic magnet or a charged balloon - all systems that recreate analogous behavior (which means are of equal complexity and type / degeneracy) are described in analogous language - again the supplying of real-world terms like electron or balloon or magnet are up to the modeler to add on top of a fundamental model unlike the intuitive physics approach where the terms "electron" form an essential feature of the model thus strictly limiting model scope.

Schematically:

```

Conventional model
{ [Electron] + [Experimental complexity] +
  [Language / descriptive complexity] }
  -> Follows electron equations, is used to interpret
      and explain experiments

Proposed model
{ [System] }
  -> Follows fundamental (abstract logical conservation)
      equations
{ [System] + [Experimental complexity] }
  -> Follows observed experimental measurements and trends
{ [System] + [Language / descriptive complexity] }
  -> Forms actor-action expressions of an intuitive
      model like "electron" "magnet" "balloon"

```

There is thus a separation between the abstract non-human-centric physical system and the human-centric words/ phrases/ math/ operations chosen to describe it for our intuitive understanding, which the conventional model convolves together in an unjustified manner. The system must be defined in terms of relations - what is an elementary way to define relations? This would be a key starting point in the proposed language.

To progress in understanding systems / space / self in information terms it will be necessary to devise a language which is in essence "empty" in that it carries no external baggage of words or concepts, and in that its symbols are implicitly / intrinsically zero-sum totality (there is no such concept as writing something unphysical or illogical - anything that can be written with these symbols is true by virtue of how the language is structured). Each symbol stands on its own as satisfying conservation so non-conserving systems are not just meaningless but cannot even be written. It could be argued that the world we see is in itself the simplest such language, but surely more rudimentary but still useful models ought to exist - we see their obvious usefulness in the sciences only in the language of words and math the statements made don't stand on their own - they require a human interpreter with special experience to apply them to a real world case, thus masking similarities between the various scientific fields. This language must define a space's boundaries, or a system's links, and as outlined above I think it is worthwhile to consider such definitions as not only links but a source of "solid"/base information as well - what we call solid or base is after all our own construct and not some feature of reality (something is felt as "solid" or "immovable" when logical conservation and exclusion prevent that something from being anything other than what it currently is, imbuing it with a sort of permanence). Then the only way I can truthfully apply this language is to use it to describe the links between my actions and my qualia / senses, because that is actually all I can know of the world - no matter what scientific instruments I use it all comes back

to my senses and my physical actions. This language always has to describe a whole system (cannot look at a cut-off subset - again this can't even be written in such a way as to show one half but not the other), and the system should be able to see itself from within ie the boundary structure cannot be arbitrarily written / imposed by a "creator" physicist but rather it has to be something that is meaningful to the system, an intrinsic effect. For instance I can represent totality by [] and splitting in half by [[]] but this is arbitrary - why a line down the middle and why the brackets for totality? Whatever the language ends up looking like, its message must be free of arbitrariness, the representation of a half-split system must be intrinsically demonstrative of precisely this property and nothing else. The arbitrariness in the form of specific concepts gets applied later by the experimenter as appropriate to describe some situation - an atom or an economy or a planet.

Viewing a computer in this way, we see links between past information inputs and present information outputs, mediated by the processor to connect across space and time in some desired manner.⁴ Boundaries are implemented throughout the process to keep the computing space constrained to achieve the goal of the program. Digital circuitry works by, at each step, amplifying (positive feedback into upper limit) data and thus decaying noise, making an exponential barrier that keeps the nothingness of calculation separate from the nothingness of the thermal bath of the "material" that holds / surrounds it. By this view, digital is an analog system operating at its clipping boundaries while analog is a digital system operating within its uncertainty region. Looking at a bigger picture of the electric grid, the computer is also bounded so as to be largely independent of the grid - it only knows the grid is on or off, and with a back-up power supply connected it is completely uncoupled. Once again this happens by an amplification of signal against a boundary and the decay of noise / undesirable influence, much as optical absorption / transmission in a light filter. Here the filter is implemented by the buck converter in the computer power supply - it keeps the voltage at the CPU a nice constant despite fluctuations on the grid. It is operated for negative feedback on voltage input (higher voltage → lower current) and negative feedback on voltage output (lower voltage → higher current) so both sides get decoupled from each other. This limits the scope of the linkage that is generated in C space to represent this system: the CPU forms a spatially bounded link that doesn't include the grid, the grid forms a spatially bounded link that doesn't include the CPU. The two interact of course, but the interaction

⁴With the view that the link *is* the self, this means that my qualia experience actually links together multiple moments in time - logical as neuroscience shows long-time pulses in the brain leading to what is felt as one experience. Again C space is timeless and apparently our experience can transcend time. Memory and simulation are our real organs for linking to the past and future.

appears to each as a different "not-me" entity in "my" world, just as boundaries of a similar nature between me and other people lead to me seeing them as "others" and not being able to feel what they feel.

The basic language of above cannot use specific words to describe phenomena, there is just one essential requirement: the identification of and time-evolution of boundaries. What is split by the boundaries is some essential quality, qualia experience. Out of the void of no experience at all (which does not exist by definition as no one will be able to experience it from outside or from within) there might arise a dual split, say + and -. ⁵ I don't see why higher-order splits would not be allowed. If a 2-way split is represented by a line | a 3-way split can be represented by a Y shape. There is an essential difference between repeated 2-way and 3-way splits: + vs * in that the first is reduced to zero by sequential combining of horizontal then vertical lines, while the second is reduced by combining the three sections together at once. ⁶ Number theory based on sets of sets is like the repeated 2-way split case above. The only way any split can stay stable (again there is no notion of time in this model - time is an emergent feeling for someone bounded by a particular complex set of qualia splits / boundaries, stability here means a high number of states compared to a totality of states) is by repeated splitting of the already split parts, such that recombination cannot take place, creating a greater variety of more specific but less intense experiences. Indeed it would be much easier to claim that my experience is characteristic of such a splitting process, not the 3D world at large - my experience is relatively easy to describe and it is conceivable that I "create" the 3D world around me but actually exist as a qualia bounded / split entity evolution (this is another type of relativity - I have no absolute metric by which to tell whether I am "me" or some combination of "external influences"). "I" experience all split areas of all possible logical splitting alternatives, in all time and space and even outside our 3D observable space (if such a thing can be logical).

There are a number of empirical mental constructs to classify and describe some situation: an online posts lists "the five types of professors", a personality test results in "the 16 personality types", an organization is seen as three levels with director / managers / employees. In determining

⁵How can "I" as a universal being, experience everything when all that exists is myself? I must segment my experience and have one part witness the rest as it were, being aware only of itself and others as just representations, because awareness of both others and oneself reduces the possibility of qualia experience uniqueness / specificity. Like in a mixed system, the highest number of states involve a variety of constituents while homogeneous constituents are highly unlikely. I am split off from the totality (which is zero-sum thus no net experience) so I can only exist *because* the world exists, and is as specific as I actually find it in my experience.

⁶Perhaps a 4 way split like + is equivalent to 3 2-way splits which would mean prime numbers are a player in this qualia splitting process.

whether this is worth believing, my first question is: why 5 categories, and why along the specific lines that have been drawn? Indeed there is a lot of freedom in a theory that can accurately describe the world: I could say there are two groups or five, and I could come up with rules and principles which differentiate the groups and accurately explain their interactions - this is instructive for seeing the world in a new way but it must be kept in mind that some of the conclusions of the theory will be reflective of the chosen axioms of the theory rather than of the real world. So if I claim there are groups A and B, then later find myself making a list of A traits and B traits, I should not be surprised that there is a neat split - the theory itself requires it, but this does not mean the split is a truth of the world. The only hope for establishing a truth is by proving totality - that the theory encompasses all possible cases - ie all degrees of freedom are accounted for, and this ends up being a feature that can be checked without experiment (purely analytically) and this enables confident extrapolation into real world conditions. When a totality has been proven it is a cause for memorization as this is an elementary truth of the universe, directly traceable to the universal axioms / big bang. If I claim there are two groups, there might still be 3 or 4 or 5... even if in all experimental results I see a clear split in 2, I cannot rule out that 3 is not yet possible - the only way to get around this is to prove through logical exclusion that exactly 2, no more and no less, groups are possible given the way logic applies to a self-consistent language. Then I will have found a totality, and can trust my theory as a solid building block in a world model. What this will end up doing is make my theory information-conserving, like square matrices, so I end up seeing just what I put in (which is what I wanted to examine, after all) and not artefacts of the theory itself. This is the same thing done in scientific instruments: with the SEM example above, the microscope is set up such that ideally the pixels on the screen depend solely on the properties of the sample and not on the way the machine is wired / programmed, the instrument becomes invisible and the sample takes the spotlight - ideally the goal is to experience the sample wholly just as it is - but the instrument has to introduce biases like magnification and depth of field and these biases are chosen to be desirable ones for the property of the sample to be studied. I can find an artefact in an SEM image most readily by trying different samples and seeing what changes and what stays the same (given that I am capable of forming and memorizing sufficiently complex patterns to keep track of this; features that are too complex for my pattern abilities will not be acknowledged), for instance if there is EM lens warp or asymmetry, I will see it as a consistent feature with any sample / in any location / at any time and thus assume it originates from the machine - an ideal lens magnifies and does nothing else so it will have no discernible properties other than magnification - all other variation would

be traceable to the samples. Fixing warped images makes the lens into a single-variable (and thus totally enumerated / known) system which becomes invisible from my view and I look only at the sample. Similarly, if I apply a physics theory to different situations, any similarities I will find are properties of the theory itself and not those defining reality (there is an argument here that the sole representation of reality is itself); an ideal physical theory would be invisible in its workings and just present the results as qualia I experience: again reality itself. But like magnification, it is useful to have controlled biases in the theory to understand things I cannot intuitively grasp, however we are then tasked with the challenge of proving that the theory embodies a totality / is a "rigid" description of the world - this can only be done in a language of "theory of theories" (then theory of theory of theories...) and leads to a recursive runaway unless the language is "empty" as argued above - if such a language can be found then it must by its nature be a true representation of physics.