Reality Theory

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2 SELF-DETERMINATION

2.1 DEFINING REALITY

Reality is everything that is. It is the most universal set. It has no external counterpart, is not placed in any containing medium. It subsumes spacetime, and everything within it.

2.2 TO BE, OR NOT TO BE

Now, if effects require causes, it must have created itself. Here, creation is taken as the process of going from non-existence to existence, and since nothing beside reality is

real, it is the only possible cause. Taken as a unit of volition and action, reality made itself, in its own image, for its own reasons. Without its will to exist, it would not.

2.2.1 Meaning

Will requires meaning, and meaning requires cognition. None of these things couldn't have existed before reality did. Certainly, the creation of reality and the will to create it started to exist at the same time. Existence and the will to exists are dual aspects of the same thing.

Is life meaningful? Whether it feels meaningful or not to you right now, it is meaningful. But in your limited perspective as a subset of reality you might not see it that way. (Even the act of recognizing that something is meaningless is a meaningful thing in and of itself.) What then is the ultimate meaning of life? To align one's personal utility function with reality's generalized utility function, or just *generalized utility*. Doing anything else, will inevitably result in your recycling, having failed to accomplish what the universe wanted to achieve. You would be a waste of existence.

Now, many people probably want to claim that they can tap directly into generalized utility, and suggest, or even demand, that you do as *they* say. Let me assure you, that these people are frauds. By contrast, I am the true spokesman for generalized utility. Now, kneel before me!

2.2.2 Cause and Effect

Is it true that effects require causes? Yes, it is. An effect is the result of something else. In the same vein, causes are defined as that which produces effects. So, effects require causes, and causes requires effects. The question is rather whether something can cause itself. The hypothesis that nothing can cause itself is refuted by the logical observation that nothing eternal to reality could have been the cause of reality. You just don't have anything else to point at, so it is a given. You could alternatively say that it is neither a cause nor an effect, that it just *is*. Is what? Real. A part of reality. Now, reality *is* reality, thought it can be a non-proper subset of itself. But anyways, you're basically not saying anything – just stating the *law of identity* (x is x: the first law of logic). I guess it get's the point across if you can follow this line of reasoning, but elsewise it is a non-sequitur. Anyways, it is either both a cause and an effect, or it is neither. Those are logically equivalent positions.

2.2.3 -Isms

Reality is its own boundary condition, and so has perfect freedom. Reality fulfils its will by recursively processing and configuring itself. Both processing and configuration happens at level of the smallest syntactic operators, of which reality is ultimately made of. Without both processes, there could be no order, no consistency, no stable reality.

Randomness: Reality cannot be random, because randomness is what we call processes we cannot predict 100%. If something is 100% predictable we say that it is predetermined what will happen. Now, we recognize that simply because we don't know what's going to happen, does not mean that the universe is not predetermined; It is, at the macroscopic level at least. The randomness of physical phenomenon happens within the boundary conditions of the laws of nature and the initial conditions of the matter involved. Basically, randomness in the output of a system requires that the system is open to interference from without. Now, the system might be a 6-sided die. The velocity imparted upon the die by the hand that throws it is the outside interference. It is this unknown variable. If we new exactly that velocity, and all other necessary variables, we could calculate what face would land up. There are no outside variables to reality, no forces which could act upon it, so it cannot be random. We can still perceive it as random, because we do not know every variable, but that is another matter.

Determinism: How do you know that reality is not pre-determined? For something to be predetermined, there must be something that causes it, and that there is no freedom of choice. The first requires something to be a cause of reality, which by definition cannot exist. The second part requires a higher stratum, or boundary condition, for reality to be restrained by. Such a thing can also not exist, by definition. That leaves us with either not giving the cause of reality a name, or naming it something other than determinism or randomness, e.g. self-determinism. What about infinite regress? Infinite regress of causal origin is basically saying that there is no original cause.

2.3 Reality vs. God

Now, let's contrast reality with the Christian God. The Christian God "created the universe", or something like that, i.e. he created something external to himself. If it's a he or a she, or whatever, doesn't matter, I guess they weren't actually supposed to make concrete representations of God, but they have broken that rule for sure. Anyhow, reality is not an entity that can interfere in the business of mortals. It is the universal substrate of everything. It is not like we are trapped in the clutches of a godlike being dictating our very lives. Good people suffer and die horribly, with or without following religious laws, and without any realistic hope for a pleasant afterlife. Though, at the same time, life cannot be all for naught. It is part in fulfilling the universal will. It does make a difference, however small. It is still a sad thing, death, and something we want to avoid.

2.4 Mind and Matter (Same, but Different)

Time is a property of advanced cognition, not any tangible physical phenomenon. Even space is the mental representation of a sort of relation between objects and not a concrete thing or object. There is no space "out there". In fact, you could take this line of reasoning to an extreme, and still be in good company. There has been a move in science toward seeing reality at the most fundamental level as information. All shapes, weights, textures, sizes, colors etc. are cognitive-perceptual vocabulary, decoded from

information with our cognitive-perceptual syntax, to create the picture of the world we have in our minds.

Now, we ourselves are just as external as anything else, in the sense that we are made of physical stuff, and thus information. So, everything is made of information, even us.

Information does however have no meaning without processing, so reality cannot consist just of information. There must be something to process that information within syntax. The human brain is such a processor. We experience reality because our cognitive-perceptual syntax is identical to the informational structure of the world; Analogously, language viewed without the lens of syntax would just be meaningless noise.

Thinking is the kind of information processing that happens in the *brain*, but it is not the only kind of information processing. This brings us to our next point, which will further explain this one.

We can affect the world through our actions. Humans, and living creatures, are not unique in that sense, given that all physical phenomenon involves reconfiguration of the world informational state. Whenever *any one thing* in the world interacts with *another thing*, there happens a read-write operation on the informational state of the world. E.g. when an atom hits another atom and the second atom changes position because of it, the change of position in the first atom is read, and the change in the position of the second atom is written. This happens in the context of a continuous chain of read-write operations. In our cognitive vocabulary, this would translate into some physical process happening. This is not to say that atoms are intelligent in any normal sense of the word. They are performing simple read-write operations with *very* little processing and configuration. Both *rocks* and humans are *syntactic operators (units of infocognition)*, but humans have something that inert matter does not. We have independent volition and constructive, creative intelligence or "sentience". (We are of course in another category of thing, to which we attribute different qualities – this comes back to our cognitive-perceptual vocabulary.)

In summary, we, and everything else for that matter, are *self-processing*, *self-configuring information*, or *infocognition* for short. (The process of processing requires configuration of information within the processor. They are basically two aspects of the same thing, thought on the macroscopic level it doesn't always appear so very readily.)

PS: Depending on your philosophical standpoint, we could be just as spiritually inert as plain rock. That would however require that our feelings of freedom of thought and action are mere illusions. I will treat this question in a separate document.

3 GODS, THEISM AND ATHEISM

I don't believe in God(s). It isn't something I think about much. I don't see the need for there to be a God in our current physics. By God I don't necessarily mean "an old man

in the sky". I just think about something with a unified consciousness that somehow created this universe. There are many religions with different conceptions of God(s). I am talking about the abstract concept of a creator being, a sort of abstraction from the monotheistic religions (Christianity, Judaism, Islam).

3.1 The Possibility of Creator Beings

There is of course the theoretical possibility of creator beings having created *our* universe. For example, imagine our universe being a computer simulation, and that God is a 40-year-old programmer running a scientific simulation. Unless the programmer intentionally put in hints, we would be none the wiser. If someone's name was written in clouds that never dissipated for instance (e.g. Greg Hansen), that would be weird. Or if somebody suddenly could walk on water and turn water into wine while claiming to be the son of God. There is nothing that excludes the possibility of those things happening, though it is not predicted by our current science, to say it that way.

And even if God(s) did exist, they would not be the ultimate authority – that is, in being only a *part* of reality. Though they could, theoretically, demand prayers and sacrifices, lest they make us suffer (e.g. Mr. Greg is feeling a little bit sadistic today and in need of an ego boost). If it were unreasonable, we should try to break out and neutralize it. (Perhaps I shouldn't be writing this…).

3.2 Bayesianism in a Closed System

Assuming our universe is a closed system, God(s) existence can be any number of probabilities. The following paragraphs is only relevant to the definitions and assumption outlined above. Do not let is disparage your fight against unreasonable claims and demands by theists. The complicating factors in todays politico-religious landscape are treated in the next sub-section.

If you're an *objective* Bayesian, and you just consider an either/or scenario, then it is 50%. If you consider multiple other possibilities (e.g. multiple types of gods), then it is lower. For a *subjective* Bayesian it can be anything he wants it to be, from 0 to 100%, whatever floats his boat.

Atheists are basically almost always subjective Bayesians. They usually treat it as a binary question, though I doubt they are 100% sure (I used to be 99.9999% sure myself). In practical contexts it doesn't really matter though. And being subjective Bayesians, 100% is just as legitimate as 99% or any lower number. (But I think of 100% as being infinitely sure, which is very sure indeed.)

3.3 Disconfirmation and Discreditation

People's definitions of God may be more concrete, and perhaps they will make testable predictions that can be disconfirmed. That could lead to disconfirmation of their specific

conception. It would also disconfirm all other possible theories that required the exact same observation, no matter how different they were elsewise.

3.3.1 Disconfirmation

To **disconfirm** a theory, the observation would have to be 100% necessary. That means, that it would have to be necessary in the exact form specified. E.g. “God will perform a total restoration spell on this crippled man tomorrow at 13:00 o’clock.” You can specify *time*, *place* and *manner*. The wider the allowances given, the more competition the theory will probably have; But if you predict something that breaks known physics, then of course all scientific theories would be eliminated as contenders if the prediction bore out. A prediction that something will happen within a timespan of 100 years will satisfy more theories than predicting that it will happen in a specific minute at a specific date. Specifying that something will happen on a continent will agree with more theories than predicting that it will happen in a specific back yard. And again, the more general the way the observation can take place, the more likely the theory is the true one. For example, is the healing spell is meant to be accompanied by bright light and divine hymns, then it not doing so would disconfirm the theory.

3.3.2 Probabilistic Discreditation

To **discredit** a theory, i.e. make it less probable, the theory would have to make probabilistic claims, e.g. that an observation will take place some percentage of times. E.g. “God will perform a total restoration spell on this crippled man tomorrow at 13:00 o’clock, with 80% certainty.”

There are as many theories as there are combinations in language and mathematics within the rules of proper syntax. The theory could specify that the observation should take place at 00:00 o’clock, at 00:01, at 00:02 etc. ad infinitum. There are lots, and lots, of theories possible. More than you will ever be able to count.

3.3.3 Occam’s Razor

Occam’s razor can be used when two, or more, hypotheses are made up of the same, or equivalent, propositions, but one contains at least one extra proposition.

$T_1 = \{X_1, X_2\}$
$T_2 = \{X_1, X_2, X_3\}$

T_1 can be that attraction between material bodies is caused by a force and that this force is proportional to square of the distance between them.

T_2 can say the exact same thing but also claim that this is because of telepathic aliens.

There are strictly more avenues to falsify theory 2. That does however not necessarily mean that theory 1 is more likely. To ascertain how likely each theory is you multiply the probability of each premise with the rest. Let’s for simplicity imagine that the propositions are independent.

$P(T_1) = P(X_1) * P(X_2)$

$P(T_2) = P(X_1) * P(X_2) * P(X_3)$

Both could very well be equally probable based on the probability of each X_i. That either requires that the additional proposition is guaranteed to be true, or that the other two makes up for the difference. But the other two cannot make up for the difference, since they are the same. T_1 is *weakly* dominant over T_2.

What if you have two theories that contain an equal number of propositions, that are *not* the same ones?

$T_1 = \{X_1, X_2\}$
$T_3 = \{Y_1, Y_2\}$

T_3 says that material bodies attract each other with a force equal to the square of the distance because of mutual love.

Well, you can still have an opinion about which is more likely, but you cannot say that one dominant over the other.

3.3.4 Religious Theories

Most religious theories do not merit being taken very seriously, because they are not based upon physical observations and logical extrapolation. They are mostly based on feelings, fantasy and myth. For the scientific enterprise to be efficient, it must only treat those predictions most likely to produce new insights.