The World's Haecceity is the Dual of My Thrownness

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1 Introduction

We live in a contingent world, a world that could have been different. A common way to deal with this contingency is by positing the existence of all possibilities. This, however, doesn't get rid of the contingency – it merely moves it from the third-person view to the first-person view.

2 Haecceity

The haecceity of the world is its contingent thisness – the fact that is it what it is, even though it could have been different. One way to account for it is by **bloating**, i.e. postulating a total encapsulating the other options. Some examples of bloating:

- Albert Einstein and Hermann Minkowski extended the actual world to include the past and future by adding a time dimension.
- Hugh Everett III (1957) posited the existence of all possible outcomes of a quantum collapse in his many-worlds interpretation.
- David Kellogg Lewis (1986) posited the existence of all modally possible worlds, thereby removing the special status of our world relative to others.
- Many people have proposed a multiverse, for instance to explain the anthropic effect.
- Max Tegmark (2014) has proposed that all finitely-describable mathematical structures exist.

All these approaches have as their effect that the third-person contingency, the haecceity, of the total thus posited disappears. And as science can only deal with third-person information, superficially it may seem that all contingency has disappeared.

(As an aside, it may be remarked that this strategy potentially goes very far. Instead of finding an explanation for the lawfulness of our world, we may posit **total bloat**: that given enough worlds, there must be some where a seemingly lawful sequence like the one we experience occurs. It is just part of our address that we live in such a world. This, of course, means the end of induction[2].

In fact, total bloat would be the simplest proposal of all: all there is is an infinite amount of randomness. Any fully random sequence contains arbitrarily large subsequences of order, so any possible finite universe would be "out there". That is easier than accepting that all mathematical structures necessarily exist, or that fundamental laws exist that lead to orderly universes or multiverses.

Any theory proposing lesser forms of bloat has the burden of explaining why it stops before taking the ultimate step.)

3 Thrownness

I am placed in this world, in this place and time, with this mind and body, without having a choice about it. That is my existential given, and the place from where I must live my life. Martin Heidegger called this my *Geworfenheit*, my "thrownness". Though I see others, and can imagine myself, in different situations, I shall have to come to terms with me being what I am, and from there to become what I ought or want to be. I have no other option.

The characteristic features of my thrownness are inaccessible from the third-person perspective – and so to science. Consciousness, qualia, moral obligations, conscience, freedom, religious experience – all of those are subjective, and hidden from objective investigation. Yet subjectively they are the most important aspects of reality.

Of course *reports* of these subjective features, or *physical correlates* of them can be investigated scientifically, but not *as* phenomenal, *as* existential, me-related.

4 Duality

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2 All order being accidental, even our spatial and temporal intuitions almost certainly won't correspond to any actuality: it would be vanishingly unlikely that we are anything but Boltzmann brains. Why posit a seemingly orderly past and environment, if positing some false memories and perceptions will do the trick?

Max Tegmark has introduced the useful concept of our *address* in the multiverse: we are here, and not elsewhere. The more we bloat, the larger the multiverse, and the larger also our address. But that address is precisely the third-person representation of my thrownness – it describes what I am relative to what I could or might have been.

My thrownness is the very contingency that matters to me – and it still bears all the philosophical questions that apply to third-person contingency, only with a "me" pointer in them. "Why is[3] the world this way (of all the ways it could have been)?" merely becomes "Why do I have[4] this address (of all the addresses I could have had)?" - and that question becomes the more pressing, the longer the address. The question why I am privileged (healthy, wealthy, well-educated, ..) is not answered, but made the more pressing by learning there are many more people, of which the vast majority is not privileged.

The fact that with most other addresses I would not have been a rational, living, or even physical being is hardly an answer – it answers why *given the fact that I can ask this question* I am here, but that given is already part of the question itself. If a platoon of twenty sharp-shooters shoot at me from close range and I survive, I have all reason to be amazed, and the fact that if I hadn't survived I wouldn't have been there to be *not* amazed doesn't change that.[5]

Given the questionable meaning of "existence" when applied to worlds one cannot even in principle observe (and that is what bloating produces), the first-person question is the more important one, and what positing many worlds – whatever their factual status – does, is to move contingency from third-person to first-person, and thereby outside the scope of science. It does not eliminate it, but it helps bring the question of our thrownness into focus.

In the following two sections we give two examples of this duality: the fact that we exist as reasonable beings, and the fact the the universe is understandable for us.

5 Example 1: Our existence

So what difference does our thrownness make? The importance of being *me* is hard to describe, but we can approximate is by looking at a small set to which I belong: those able to discuss this. The execution squad example can help contrast the perspectives. Let n be some sufficiently large number.

5.1 Version 1 – Chance versus error

If a population of originally, say, more than 10^{3n} is reduced by mass execution (with a probability of 1 in 10^{2n} of survival[6]), with a 1 in 10^{n} chance of an error being made resulting in all the squads receiving blanks instead of bullets, then if I meet a survivor, Sue, I may rightly assume she was one of the 10^{3} lucky ones who survived the ordeal. The probability is negligible that she survived because of an error.

For her, however, the situation is quite different. Given that she survived at all, the chance that this was *not* because of an error is negligible. So the third-person perspective is very different from the first-person perspective. The reason for the difference is the difference in information[7] resulting from a selection effect – the reason why it is unremarkable if *someone* won the lottery, but amazing if *I* did. If I win the annual global lottery, which gives me a lifetime membership to the Lottery Winners' Club, I should not be amazed to find that everyone there has won the annual global lottery – but I still should be rightly amazed that *I* did.

The reason is easy to see when we replace the guns by paintball guns. Sue is rightly amazed that she hasn't been marked. If I meet a random person, who happens to be unmarked, I should be as amazed. If, however, I am specifically led to one of the unmarked players, I rightly am unimpressed that she is unmarked. The fact that the unlucky ones are removed from the pool makes no difference for the lucky ones – it merely distorts the view for the outsider, the so-called *Observer Selection Effect*.

5.2 Version 2 – Chance versus zombies

Now suppose that the population consisted mostly of zombies, and precisely those were executed. Then Sue would not be amazed that she survived. For one thing, she knew beforehand she was not a zombie. And if there are two possible scenarios: survival by chance, and zombie removal, with a one in 10^{n} *a priori*

3 Or "did God make", and so on.
4 Or "did God give me", and so on.
5 Since writing this I learned that Weisberg (2005) analysed this situation already correctly. Wenmackers (2017) makes the connection between first-person and third-person perspectives.
6 In all the examples, the options are binary – here either "instant annihilation" or "unhurt survival".
7 Compare the Monty Hall problem: if Monty opens a door and happens to reveal a goat, then switching is neutral. If we know he *always* opens a goat-hiding door, then switching doubles our chances.

chance of the latter being true, she would be justified in believing the zombie scenario, but not in the chance scenario.

5.3 Version 3 – Chance versus potential zombies

Now imagine the execution happens before or at the moment a fetus acquired consciousness. Nothing changes there, even though there no longer is a "beforehand" in which Sue knew she was not a zombie. She is still has an epistemic obligation to believe the zombie scenario (in which those who would become zombies were removed from the pool).

5.4 Version 4 – Chance versus soul assignment

Now imagine there is no execution, but instead a lottery to come into existence – either the chance scenario, or one where a set of "souls" (what distinguishes a conscious person from a zombie) is distributed 1:1 to those who indeed come into existence, still with the same probabilities. Here again, Sue has the epistemic obligation to believe in the latter scenario. She may rightly be amazed to be allocated *this particular* body, of course, if her body has some special property (say – being especially athletic) that makes it stand out.

5.5 Actual contingency

Our actual situation has much in common with the firing squad experiments. Even foregoing bloating, each of us only exists because since the dawn of life, time and again our ancestors (including individual spermatozoids and ovules) survived and managed to procreate. That unlikelihood dwarfs any firing squad survival unlikelihood, and constitutes a strong argument against any account that makes the existence of my consciousness as unlikely as the existence of my body. So any theories that ground consciousness in the body would be ruled out that way. And bloating merely strengthens that argument.

Any theory that is closer to the soul assignment scenario, if it is not *a priori* nearly as unlikely as my existence, is to be preferred.

5.6 The anthropic error

The weak anthropic principle states that the fact that we exist, are intelligent, and so on, and inhabit an environment allowing that, is fully explained by the fact that otherwise we wouldn't have been in the position to be amazed. The error is clear now: the principle mixes up third-person and first-person perspectives. The fact that in an environment conducive to intelligent life I encounter intelligent life is not amazing, nor is the fact that if we encounter intelligent life, it will be in an environment allowing it. So, given that I am intelligent life, the fact that I inhabit the right kind of environment is unamazing – but the very fact that I *am* intelligent life still demands an explanation.

The weak anthropic principle is like saying: "*Of course* I won the lottery – given that my ticket contained the winning digits, there is nothing amazing about that!". Obviously, the amazing bit is in the very fact that is taken as a given.

6 Example 2: The learnable universe

This universe is not only exceedingly regular, but also learnable.

- Mathematical chaos potentially lurks around the corner everywhere, yet there are enough non-chaotic phenomena to allow us to derive laws – in fact, chaos itself was only discovered long after the simple relationships were.
- We live in a pocket of simplicity - our speeds are low enough that these motions can be described with Newton's laws, allowing progress until Einstein's complications could be derived, and we are large enough that quantum complications don't interfere with world discovery.
- We have a rather empty solar system, in which interference is small enough for observers to derive the laws of motion. The night sky is both clear and dark enough for observations (unlike in many other potential locations of this universe, let alone in many universes in a multiverse). Our moon is large enough to show its gravity (in the tides).
- Both our planet and the universe itself are large enough to allow the idea of Euclidean geometry, from which then the more complex non-flat geometries could be developed.
- It seems that the laws governing the universe are relatively simple – simple enough for us to grasp in their essence once we find them. With many kinds of multiverses this is improbable, because the

number of simple law systems is finite, but the number of ever more complicated ones is infinite, so mediocrity would predict a very complicated universe (and one without simple approximations). It would seem likely that more complex rules would tend to allow more complex structures of the kind that could go with rational minds.

This too is part of our thrownness, and needs the more explanation the larger the multiverse space. Here too, if there is some selection process that has a more than vanishingly small *a priori* probability of being the case, we have the epistemic obligation to believe that it is actual, than that we ended up in this learnable universe by chance.

7 References

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