## NOTAS E DISCUSSÕES NOTES AND DISCUSSIONS

## A NOTE ON HUEMER'S CLAIM TO IMMORTALITY

## INGE-BERT TÄLJEDAL

Umeå University, Umeå, SWEDEN inge-bert.taljedal@umu.se

Abstract. According to Huemer (2019), existence is evidence of immortality, provided past time is infinite. The argument is based on, inter alia, an alleged contradiction between the fact of one's existence now and its improbability. I suggest that Huemer's argument is flawed in equating the infinitesimally small with its limit value, and in assuming a philosophically significant difference between the a priori probability of the occurrence of a unique incarnation and that of anyone among an infinite number.

**Keywords:** Existence • immortality • infinitesimals • infinity • probability • recurrence.

'Zero' means nothing. However, it is necessary to keep in mind the conceptual difference between zero-1, meaning literally nothing, and zero-2, approximating some arbitrarily small x. The fact that zero-1 can be the limit value of zero-2,  $\lim_{n\to\infty}\frac{1}{n}=0$ , does not always justify the identification of zero-2 with its limit. It is also important to distinguish the concept of a priori probability from that of a posteriori probability. Not making these conceptual distinctions can result in remarkable conclusions.

This is exemplified by Huemer's (2019) claim that "existence is evidence of immortality". Assuming that time is infinite in the past and future directions, an important part of the argument for the claim is essentially as follows:

- 1) In the future, there will be an infinite number of persons that are arbitrarily similar to you in any desired respects. (From Poincaré's recurrence theorem.)
- 2) These persons together constitute you, provided the ontology of human being does not forbid multiple occurrences of one and the same being.
- 3) Given that the past is infinite, any theory which forbids your multiple occurrence throughout time will also imply that your present existence is a zeroprobability event.



658 Notes and Discussions

4) You exist now. Therefore, the probability of your existence now is not zero. *Intermediate conclusion*: Any theory which forbids your multiple occurrence throughout time is wrong. (From 3 and 4.)

*Overall conclusion*: You will be repeatedly incarnated *ad infinitum*. (From 2 and the intermediate conclusion).

Setting aside other points for possible discussion in Huemer's paper, the overall conclusion is flawed because the intermediate conclusion does not hold. "Not zero" in 4) means "not zero-1". So, for the intermediate conclusion to be sound, "zero-probability event" in 3) must mean zero-1-probability event, which is equivalent to nonexistence. Then, constituting the gist of Huemer's argument, 3) amounts to a *reductio ad absurdum* in that its consequent is self-contradictory: your present existence is nonexistence.

Equating a zero-probability event in 3) with a zero-1-probability event testifies to an erroneous understanding of the seemingly paradoxical probability of one's own existence. On the one hand, one's own existence is undeniable and hence has unity probability. On the other, the a priori probability of one's existence in any specified finite time span throughout eternity tends to zero. It is as if the a posteriori certainty of one's existence is arbitrarily diluted by being spread out over time, if viewed *sub specie aeternetatis*. A priori, i.e. disregarding one's knowledge of one's existence now, the statistical probability of one's existence during the present century is as small as that during any other century, Thus, a priori, the probability of one's existence now is arbitrarily close to zero-1, i.e. it is zero-2.

Although infinitesimals and derivatives are properly operated with in abstract mathematics, the transition from an arbitrarily small zero-2 to zero-1 is not a consistent move in matters of real existence. If it were, we would be forced to conclude that nothing exists that does not exist forever. This is so, because the a priori probability of finding anything at all within any finite time span, however long, tends to zero-1 in consequence of the infinitesimally small ratio between an amount of finite time and infinity. An ontology that presupposes that everything exists forever or, alternatively, that nothing exists, is hardly convincing.

The a posteriori unity probability of one's present existence does not contradict the infinitesimally small a priori probability of one's existence in the present century, year, month, or day. There being no such contradiction, the intermediate conclusion is spurious.

Even if, for the sake of argument, one erroneously accepts that *zero-2* is identical to *zero-1*, Huemer's conclusion does not follow, as the apparent paradox between a priori and a posteriori probabilities of existence is not eliminated by assuming that there are infinitely many incarnations of one and the same person. In the alleged proof, the only measure of probability that has a rigidly defined value is that of one's

Notas e Discussões 659

existence now. It is fixed by empirical observation and requires no mathematical deliberation. If, in a Cartesian vein, one cannot deny that one exists, the probability of one's own existence now has to be taken as unity. In contrast, permitting an infinite number of incarnations of one and the same person does not justify the inference that the a priori probability of any such incarnation is unity. Unless the individual is taken to be a continuous, not gappy, space-time worm throughout eternity, i.e. truly to exist always and forever, the a priori probability of its existence in any finite time span is undefined. Unlike the a posteriori probability it cannot be fixed, because the whole of infinite time is larger than the infinite time occupied by any gappy worm. Assigning a certain value to the ratio between those infinities would seem a dogmatic arbitrary move that does not justify the rejection of ontologies that forbid multiple occurrences of one and the same human person throughout eternity.

## References

Huemer, M. 2019. Existence is evidence of immortality. *Noûs*, online 23 April, https://doi.org/10.1111/nous.12295

Principia 24(3): 657-659 (2020).