

The Moral Status of Cerebral Organoids and Phenomenal Consciousness

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Abstract: Human cerebral organoids are biological organs that are cultured in laboratory dishes and can mimic the human brain. One of the main issues in this area has to do with the moral status of these creatures. Where is the moral status of cerebral organoids in the ethical hierarchy, and to what extent can researchers use them for their experiments? The discussion of the moral status of organoids is connected to the discussion of their consciousness. The main question of this article is whether phenomenal consciousness can guarantee the moral status of these beings or not? We will answer that mere phenomenal consciousness cannot determine the moral status of a being. In addition, conditions such as possessing a certain morally relevant characteristic, structural resemblance to the fetal brain, or being in the network of significant and appropriate relationships, which are cited as conditions for the moral status of cerebral organoids, have ultimately nothing more than considering phenomenal consciousness as a sufficient condition for having a moral status for a creature. Therefore, these conditions cannot be a good guide to determine an ethical framework for the use of cerebral organoids. Ultimately, the goal of this study is to show that the condition of having phenomenal consciousness cannot guarantee an efficient moral frame for human cerebral organoids, and that we need more than just phenomenal consciousness.

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Introduction: Brain organoids are described as a group of cells that organize themselves into structures similar to the human embryonic brain. Developments in the field of science have raised great hopes for a better understanding of the human brain, given deeper insights into mental disorders such as autism and schizophrenia, and raised great hopes for the treatment of diseases such as Alzheimer's and some genetic diseases. Organoids that model disease can be used for drug testing in place of animal studies and may better recapitulate the effects of the drugs in human patients. The whisper of making miniature brains in the laboratory quickly emerged moral, legal, and metaphysical challenges. These issues became more extended after researchers at the University of California, San Diego (Trujillo et al, 2019) in a paper evaluated the waves emitted from brain organoids as

similar to those emitted from the brain of an immature fetus.

One of the main issues in this area has to do with the moral status of these creatures. Where is the moral status of cerebral organoids in the moral hierarchy and where is the red line for researchers to use them in their experiments? The moral status of cerebral organoids means whether a feature or set of features can be attributed to them, as a result of which these creatures have rights that can then be said to be treated according to those rights. If we want to determine whether a creature has a minimal moral status or not, we must know whether that creature has interests or not. In fact, the characteristic that makes a creature have a special right is having subjective interests and consciousness. The main question now is whether subjective or phenomenal consciousness is sufficient to determine the moral status of a creature, or

whether we need something more.

Methodology: The method of this research is critical review. Theories related to determining the moral status of cerebral organoids in the literature are mentioned and then each of these views is examined critically. The most important condition for gaining a moral status for an entity is that A) it is necessary for the entity to have some kind of subjective interest that leads to having some kind of subjective experience. B) In addition, the creature must have, or B1) possess a certain morally relevant characteristic; B2) be part of a relationship of similarity or biological belonging. (to the human species); Or B3) be present in a network of appropriate communications such as recognition, care or respect. (Lavazza & Pizzetti, 2020, p. 14).

Findings: About case A), some researchers believe that mere phenomenological consciousness is not enough to attribute moral status to a creature. Actually, what is needed is the concept of consciousness in the sense of access consciousness and self-consciousness. It is the ability to desire and plan for the future that makes us take care of another person's life, and this ability is related to the availability of information and the content of consciousness, which is in relation to access consciousness. In addition, moral status is gradual. How can a phenomenal consciousness, which has Binary characteristics, be the basis for a gradual thing? In other words, phenomenal consciousness cannot determine the different degrees of the moral hierarchy. So, the only point that remains is to say that phenomenal consciousness is merely the enter gateway to a moral status.

About case B1), if a creature has a certain morally relevant characteristic, it must be considered to have certain rights. What is meant by morally relevant characteristic is something like dignity. Now, if we can attribute moral qualities such as dignity to the cerebral organoids, then we must give them a moral status and treat them according to the special rights they have. The main question here is how can some things be considered dignified and others not? Kriegel (2019, p. 514) argues that dignity is rooted in phenomenal consciousness. This condition shows that this condition, also does not have a point beyond the first condition of having a moral status, which emphasized on having a phenomenal consciousness. And, as we will say, the condition of phenomenal consciousness is not sufficient for a creature to take a moral status or to acquire a definite moral framework for researchers to use cerebral organoids.

About case B2), having a human origin and structural similarity does not necessarily make a human-like creature or even have a phenomenal consciousness. For example, a creature like a (philosophical) zombie that is physically quite similar to us but of no conscious experience. In the first place, we do not consider zombies to have a moral status, although they have a very similar brain and physical structure to us. So, if a creature has a human-like brain structure, it does not necessarily mean gaining a moral status.

About case B3), suppose an inanimate object is praised by a tribe like a wooden doll, this doll is both respected and cared for (like watching a sacred fire, not to be extinguished). The doll is in the circle of important human communication, now the question is, because this wooden doll is in the circle of important human communication, does it have a moral status? To answer this

question, our definition of moral status becomes important. If we consider moral status as something that a society of human beings give to something for any reason (including superstitions, false or right beliefs, etc.), then it should be considered as having a moral status. But if, we know the moral status in relation to consciousness, then an inanimate being has no moral status, even if it is in the realm of human communication.

Discussion and Conclusion:

One of the results of this paper is that phenomenal consciousness cannot provide us the conceptual and empirical tools necessary to determine an appropriate ethical framework. Because the existence of phenomenal consciousness can only be the starting point for determining the moral status of an entity, and it cannot speak of its status in the moral hierarchy, it is important to determine the existing status in the moral hierarchy to determine an

efficient moral framework. One suggestion, then, might be to look at how to discover the more complex possibilities of possible mental architecture of human cerebral organoids, rather than focusing on the relationship between phenomenal consciousness and moral status.

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