

Do we need an ethics of (trans-)planetary sustainability?

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Abstract. The politics of the United Nations aims at sustainable development, i.e., development that can continue with future generations. Andreas Losch has recently proposed to expand our current notion of sustainability to what he calls “planetary sustainability” and urged an ethics of planetary sustainability. This comment discusses these proposals. The proposed conceptual change is assessed drawing on desiderata suggested by Carnap. To the extent to which the current notion of sustainability has excluded consideration of outer space, we gain in simplicity. To the extent to which it has been unclear about this issue, we gain in exactness. The proposed concept is fruitful because it points to important considerations, in particular if there are extraterrestrial beings that share moral status with human beings. But this fruitfulness requires a clear deviation from the anthropocentric outlook of our current notion of sustainability, which produces costs according to the desideratum of similarity. As far as an ethics of sustainability is concerned, we certainly need to address ethical issues that arise in relation to outer space. However, the notion of planetary sustainability is not likely to figure prominently in related thoughts because the notion of sustainability is not a key concept in known ethical theories.

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Social media summary. The idea of planetary sustainability points to important moral concerns. But it is not very useful for a moral theory.

Humans increasingly explore and use outer space. In this context, many ethical questions arise, for instance: Are we free to use the resources from outer space? And how should we protect the interests of possible living beings that inhabit other

planets?

To address these questions, Andreas Losch (2019) has recently called for a new ethics. Borrowing a term that has before been used by NASA (2014), Losch calls it “ethics of planetary sustainability.” Here, “planetary” is supposed to underscore that the Earth is a planet embedded in outer space.

Do we need this notion and an ethics of planetary sustainability? In what follows, I will critically assess the concept of planetary sustainability and the idea of a related ethics. I assume that the term “planetary sustainability” is supposed to designate a concept that is different from the well-known notion of sustainability, even if it only extends the latter in some way (cf. Beisbart 2019 for an extended version of my argument).

1. The concept or notion of planetary sustainability combines the idea of sustainability with a broader perspective, which is called “planetary.” Sustainability is supposed to provide a condition on a development that is already assumed to be progressive. According to the definition proposed by the Brundtland Commission, a development is sustainable if it “meets the needs of the present without compromising the ability of future generations to meet their own needs.” (UNWCED, 1987) As is plain from this definition, sustainable development requires a long-term perspective. This accords with the meaning that “sustainable” has in everyday language, viz. “[a]ble to be maintained at a certain rate or level” (Oxford Dictionaries). In transnational politics, the idea of sustainable development has seen a success story. In 2015, the UN General Assembly set 17 sustainable development goals (SDGs, UN 2015). Losch’s proposal of an ethics of planetary sustainability is in this context; Losch has called for an 18th SDG, titled “Our space environment” (Losch 2018).

Although the most prominent definitions of sustainable development do not explicitly refer to humanity, it is clear from the context that they only cover human development. Other living beings are only taken into account to the degree to which they are important for human development. In this sense, the idea of global sustainability is anthropocentric. This may be part of the reason why the concept has been so successful.

Our planet figures prominently in the rhetoric of sustainability. For instance, the UN resolution that has set the SDGs calls itself “[...] a plan of action for people,

planet and prosperity.” (United Nations 2015, preamble) It is thus plausible to say that outer space is neglected under the current notion of sustainability, although this would not follow from the definitions strictly speaking. Alternatively, it may be said that the role of outer space in our thinking about sustainability is unclear.

2. It consequently seems appropriate to broaden, or to clarify, the notion of sustainability and to introduce a new concept, call it planetary sustainability, that replaces the old notion of sustainability. The new concept is supposed to take into account outer space. In particular, the effects that our activities have on outer space, and the effects that outer space can have on development should be considered (Losch 2019).

How good is this proposal to transform the notion of sustainability? To assess the proposed conceptual change, we can draw on desiderata that Carnap (1950) proposed for the introduction of new concepts, viz. exactness, simplicity, similarity and fruitfulness.

If the previous concept of sustainability was not clear about whether outer space should be considered, then the proposed notion of planetary sustainability promises gains in *exactness*.

By contrast, if the previous concept of sustainability has clearly excluded the consideration of outer space, then its replacement by the notion of planetary sustainability yields benefits in *simplicity*. The reason is that the definition of the previous concept of sustainability is more complicated because it needs a restriction to Earth – a restriction that can be dropped in a definition of planetary sustainability.

Hence, depending on whether the previous notion of sustainability was clear about outer space (or not), it is simpler (or more exact) than the previous one. Still, the potential gains do not seem very significant.

3. The other two desiderata listed by Carnap are more interesting in our case:

Carnap assumes that a replacement of a concept is the better, the more *similar* it is to the predecessor. In our case, similarity is a concern as follows: Since the previous notion of sustainability is well entrenched and has been successful at the level of politics, it is desirable that the new concept is as similar as possible to the previous one.

The similarity between planetary sustainability and sustainability, as regarded previously, depends on how exactly the former is understood. The most crucial question in this respect is how we should deal with possible extraterrestrial beings

that share key characteristics of human beings, e.g., the ability to act rationally. This is a substantial moral question with two possible answers: a. they deserve moral status, i.e., they count as sources of underivative value or as subjects of moral rights. b. they do not have moral status. The first answer seems clearly more defensible on moral grounds, although it is still a matter of discussion what precisely the features are that give a being moral status. The question then is whether we free the previous notion of sustainability from its anthropocentric outlook (which would also mean that it becomes simpler) or stick with the former, anthropocentric assumptions. If we choose the former option, then the new concept will be very dissimilar to the previous one; by contrast, it will be very similar to the previous one if we stick with anthropocentrism.ⁱ

To be sure, it is unlikely that we will soon have to deal with extraterrestrial beings who can act rationally etc. (Losch, n. d.). But even the epistemic possibility of such beings – i.e., the fact our knowledge does not exclude their existence – or the potential of extraterrestrial beings to become rational matters for ethics. The reason is that risks and potentials are in general morally relevant.

Turn now to *fruitfulness*: For Carnap, a concept is more fruitful than another if it allows for more generalizations. The notion of planetary sustainability is undoubtedly fruitful because it broadens our perspective and points to considerations that matter from a moral point of view. For example, it forces us to regard space debris as a profound problem because an ever-increasing amount of such debris does not allow future generations the use of outer space. This argument assumes that outer space and materials that are found there are just like any other resources and that they deserve the same treatment as do other resources. Since this assumption is plausible, we can conclude that the notion of planetary sustainability is fruitful in the sense that it allows for generalizations about all sorts of resources.

There is a second dimension in which generalization may be discussed, viz. regarding possible extraterrestrial beings. As indicated above, it is plausible to assume that our moral status generalizes to them if they share relevant characteristics with us. If this is correct, then we can generalize about all (kinds of) beings that share certain characteristics. The notion of planetary sustainability is likely to support this way of generalizing and thus to be fruitful if it is not conceived in an anthropocentric manner anymore.

Consequently fruitfulness and similarity pull to some extent in opposite

ⁱ . The argument can be generalized to a gradable notion of moral status. Note also that the moral status of extraterrestrial beings is compatible with the idea that we may sometimes give priority to our fellow humans.

directions, when we deliberate on what precisely planetary sustainability is supposed to be: We keep closer to our previous notion of sustainability if we stick with the anthropocentric outlook implied by a significant amount of reasoning about sustainability; while our notion will be more fruitful, if we give up the anthropocentric outlook. This dilemma casts doubt on the claim that replacing the previous notion of sustainability by that of planetary sustainability is recommendable.

4. What about *an ethics* of planetary sustainability? Undoubtedly we need to think about moral questions that arise concerning outer space. We can address these questions in “space ethics” (see Williamson 2003 for this term). We only need an ethics of planetary sustainability if this sustainability is pivotal in space ethics.

There are two reasons to doubt that this condition will be met: First, the notion of sustainability does not figure prominently in well-known moral theories and our moral thinking. While terms such as “rights,” “well-being,” “justice” are key terms in theorizing within normative ethics, “sustainability” is not. For instance, Darwall’s (1998) introduction to ethics doesn't use the term (see Beckerman 1994 for a critical view on the notion). This does not imply that concerns of sustainability are alien to moral theories. The preservation of humanity is a serious concern for them (e.g., Jonas 1976/84). The supply of future generations with resources is discussed under the label “intergenerational justice” (see, e.g., Meyer 2016). As far as outer space (or planetary sustainability) is concerned, prominent moral theories have the resources to take it into account, without any explicit appeal to planetary sustainability. For example, utilitarianism takes into account everything that has a causal bearing on human well-being; likewise, many utilitarians are willing to expand the circle (to use a 1981 title of Singer’s), if they find that some kinds of beings deserve moral status as we do. One likely reason why the notion of sustainability does not arise in many ethical theories is that talk of sustainable development puts the cart before the horse: sustainability is conceptualized as potential characteristic of progressive development; but indeed the concern that humankind is preserved is more fundamental (Jonas 1976/84).

Second, an ethics that puts global sustainability at the center cannot deal with certain questions that arise in relation to outer space. Consider, for instance, the following questions: How valuable is knowledge about other planets? Should some planets be preserved in their current state for purely aesthetic reasons? Such questions are not naturally discussed using the notion of planetary sustainability. The reason is that development may be progressive and sustainable independently of whether we

preserve planets in their current state for aesthetic reasons.

5. Clearly, outer space should be taken into account in our moral deliberation. But it is unlikely that the notion of (planetary) sustainability will be a key term in normative ethics. As far as the notion of sustainability is concerned, there are some reasons to replace it by the concept of planetary sustainability: To the extent to which the previous notion was unclear about outer space, a clarification is an advantage. To the extent to which the previous notion has excluded considerations that pertain to outer space, the proposed concept is simpler than the previous one. In either case, the proposed notion is fruitful because it points to important considerations and because it supports generalizations about all kinds of beings with moral status. However, to some extent, the benefits of fruitfulness arise only if we free the previous notion of sustainability from its anthropocentric presuppositions. This leads to a significant departure from our previous thinking about sustainability and may thus become problematic for continuing the success story of the concept of “sustainability.”

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