

Essay

# Is There an Environmental Principle of Causality?

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**Abstract:** This essay considers and reflects upon the principle of causality and its relation to the global environmental crisis. Parting from some of Immanuel Kant's views on causality and freedom as well as from Heidegger's reading of causality in Kant, it asks some questions about the role of human activity in the principle of causality, the relation between causality and freedom, and in what possible different way we could interpret causality and environment. The essay proposes that instead of trying to decide on the subject of who causes the environmental crisis, and on the subject capable to solve it, one must turn the intention of inquiry to the very principle of causality and consider the need to rethink this notion today.

**Keywords:** principle of causality; environment; Kant; freedom; apperception; end

Environment: a word that speaks not only of the milieu, but also of *l'environ*, which in French means that which is neighboring, that which is more or less. The environment is thus something uncertain and imprecise: it refers to something else, to a continuation or extension of some sort, to a threshold that is as near the body as something can be, but which is never directly known or felt by our senses. We cannot know nor feel the *environ* as we know or sense facts and actions, but we have some sort of vague intuition of it that makes us apprehend it. Is the environment as invisible as air or is the environment a way to speak of something like air? Is it materiality or only a concept of material sums? Is it an infinite continuation of what is around us or is it a totality of that which cannot be known, yet is known to be? With the global environmental crisis we are currently experiencing, it becomes clear that the continuation or "something else" to which it refers has become the object to be controlled as an end, at the same time as it has become that which can end precisely when being used and explored. The temporal aspect of the environment *towards* an end implies a causal relation that will be interrupted. That is, if the environment is "coming to an end", it is in the sense of an effect by a cause, the cause being human activity. Meaning, that human activity causes an interruption of nature, of the world. Indeed, when human activity produces a world used to reach ends, it ends up ending the world. It has been observed that human activity is a cause of the environmental crisis. What human beings produce, fabricate, and today live and cannot live without, are things that pollute, destroy, extinguish nature, and the environment. There is a causal relation, yes. However, the question that must be asked is that if human activity is the cause of the end of nature, to what extent can human activity save nature? Is it not the idea of human activity as a cause of the world which destroys it? Meaning, is it not the idea that the human being is the great subject of both production and destruction of the world that destroys nature and the world? Does this not extract from nature its force? On the other hand, to question the human subjectivity as a cause of the creation or destruction of the world, does it not mean to efface the human responsibility facing the environmental crisis? Is it only the human being that can save nature or to what point is it nature that can save the human being from his own destruction? The aporia or dilemma that emerge from these questions can perhaps find a solution if we attempt to question the principle of causality itself. If we must rethink philosophy to come to terms with this crisis of environment, the crisis



**Citation:** Sá Cavalcante Schuback, C. Is There an Environmental Principle of Causality? *Philosophies* 2022, 7, 9. <https://doi.org/10.3390/philosophies7010009>

Academic Editors: Michael Marder and Marcin J. Schroeder

Received: 3 December 2021

Accepted: 13 January 2022

Published: 21 January 2022

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of what is around us, we must also rethink its principles and categories philosophically. That is why I here propose an attempt to think over and reflect upon the basic philosophic principle of causality to see how our still anthropocentric view remains within a logic of causality that is not necessarily sustainable for the environmental crisis. Immanuel Kant lived for thinking about the principle of causality, which is the reason why my readings will mainly focus on Kant's writings in the *Critique of Pure Reason*, especially in terms of the third antinomy (regarding freedom), as well as Heidegger's comments on Kant's notion of causality. My intention is not to consider all literature ever written on environmental philosophy nor all that has commented on Kant and Heidegger. Rather, I wish to reflect upon the content of some aspects in these writings to show which direction the modern principle of causality could be rethought if we wish to understand the relation between human activity and the end of nature. I do not wish to state that there are "other" causes for the environmental crisis than human activity nor that human activity is not to be held as the main responsible. The problem rather lies in how we see causality as a principle in this matter.

It would be hard to deny that the human being is a cause of the global environmental crisis. As a free and autonomous being, the human produces things that pollute nature. As such, the human being is a cause for the current critical state of the world. This implies that the human being is either or both the destructor and savior of the world. If he has the power to destroy it, he may have the power to "fix it". The principle at hand is the one of causality which is, however, the one of a relation that goes towards an interruption. It is, in this sense, a relation constituting the world as a dynamic of causalities, that is, of relations of direction. There is, nevertheless, a gap of what is considered causality between scientists and philosophers. For scientists, it is a law that can only be assessed through experience. Philosophers, on the other hand, appeal to an *a priori*, since the fundamental principle of causality cannot be grounded in experience yet is the condition of the possibility of experience of nature as such. According to Heidegger, both claims are considered correct while none of them possesses sufficient clarity and radicalism to see the crucial problem ([1] p. 104). Following Heidegger, to define causality is to show

"...the possible ways in which its *presence* can be established. But what causality is must already be clear prior to ascertaining its presence or non-presence. (...) This is the question physics forgets to ask, but which is decided by philosophy all too quickly. It is true that, in order to ascertain causality in this or that instance, one must already know what one understands by causality, and one must possess this knowledge prior to all experiential ascertaining. But what this *a priori* is, how it is possible, and why it is necessary – this is not decided (...)" ([1] p. 104)

Heidegger means that when philosophers assume causality as a principle and a law to explain what is present in the world, they are also assuming the presence of causality in the world. According to him, being entirely immersed in a world of experience dominated by science and hence by a vision of the world defined by causality, we forget to question the presence of causality and why causality is taken as a fact. That is, we forget to ask how it is possible that, in order to explain facts, causality is taken as a fact. This insight by Heidegger should be taken as a starting point for the problematization of the principle of causality here attempted.

In modernity, the principle of causality began to be considered as a relation that was subjectivized. This is because the causality of things was not held in the things, but in our associations and comprehension of things as having causal relations. As David Hume suggested, when we affirm that "the vibration of this string is the cause of this particular sound [...] [w]e either mean *that this vibration is followed by this sound, and that all similar vibrations have been followed by similar sounds: Or, that this vibration is followed by this sound, and that upon the appearance of one the mind anticipates the senses, and forms immediately an idea of the other.* We may consider the relation of cause and effect in either of these two lights; but beyond these, we have no idea of it" ([2] VII, part 2). For him, it is a question of subjective perspectives parting from the experience of succession in time. We can infer

that if vibration is followed by a sound, all similar vibrations can be followed by similar sounds, or we can anticipate that this might happen. Whereas to make a rule out of this causal relation, as for instance “all vibrations are followed by sounds” or “the fire always burns the wood”, is to go beyond the particular subjective experience and make a universal and necessary objective law out of it. To go beyond the realm of particular experiences means to introduce the realm of possibility into the world. Thereby, the world becomes a dynamic of possible relations, where possibility must be worked for and acted upon to happen. When the realm of possibility is introduced for the sake of formulating a universal law of causality, the relation between cause and effect can no longer be thought of only in terms of a temporal succession. This is what Kant saw and explained as following:

“Thus the relation of appearances (as possible perceptions) in accordance with which the existence of that which succeeds (what happens) is determined in time necessarily and in accordance with a rule by something that precedes it, consequently the relation of cause to effect, is the condition of the objective validity of our empirical judgments with regard to the series of perceptions, thus of their empirical truth, and therefore of experience. Hence the principle of the causal relation in the sequence of appearances is valid for all objects of experience (under the conditions of succession), since it is itself the ground of the possibility of such an experience. (...) the principle of causal connection among appearances is, in our formula, limited to the succession of them, although in the use of this principle it turns out that it also applies to their accompaniment, and cause and effect can be simultaneous.” ([3] p. 312; A202/B248)

Kant means that for a causal relation to happen, something else must be introduced as an action because the causality itself is the simultaneity of cause and effect. Considering that the cause is its effect, the main aspect of causality is not temporality, that is, the anteriority of the cause in relation to its consequential effect. The most important aspect is that to see the cause, there must be a third party. In order to see the cause *to* its effect, there must be a third party acting in this simultaneity. For Hume, the third party was the human observing natural phenomena. For Kant, Hume’s answer is not adequate since action is not limited to the human. There is action in nature too, even if no work is produced in nature. Nature does make things insofar as it puts new entities into the world. In §81 of the *Critique of the Power of Judgement*, Kant gives a name for nature’s “production”, which he actually calls *eduction* and not production, a term that comes from evolution theory ([4] p. 291, 5: 423). In nature, there is a continuous action of matter, which claims that every natural cause must have begun to act because “[t]here is no such thing as a sudden occurrence which breaks out from prior nothingness” ([1] p. 138). For him, “action signifies the relation of the subject of causality to its effect” ([3] p. 313; A205/B251).

For a natural cause to be, it must have begun to act. Moreover, for this beginning to begin, without becoming redundant and infinitely regressive, it must begin by itself. Meaning that there is a freedom to act implied in nature. However, we are not speaking of a free act in nature as an action which gives origin. For Kant, there is a distinction between freedom to act (nature) and free actions (human freedom). Free acts are those that give origin to facts. Matter acts but does not originate. In his comments to Kant, Heidegger explains this in that a human, as an ethical person, is an “original effecting, i.e., it does not arise from some other origin but is itself an ‘origin’”. *The general concept of causality thus enters into the definition of freedom*. Thus we grasp ever more clearly the *general ontological horizon in which Kant situates the problem of freedom, just insofar as freedom is a kind of causality*” ([1] p. 138). What Heidegger’s readings let us reflect upon is that although Kant makes this distinction between freedom to act in nature and free acts in human beings, he also says that the human being has nature’s action within him. The human being is thus the place in which the actions of nature and of freedom interact. Heidegger observed that Kant’s fundamental insight into the finitude of humans is connected to humans being the touching-point in which two kinds of causality, causality in nature and causality by freedom, interact<sup>1</sup>. However, the most central aspect in this discussion is how causality in nature relates to

causality by freedom. It is precisely in the relation between the two causalities where the question of the human appears. For Kant, the human being is a locus of complication. What is the human being? A body that comes from nature or a free soul that is autonomous from nature, who can begin something for himself or create something of his own that did not exist before in nature? Modern sciences showed that the world's reality is not as we perceive it with our senses, although the only access to it are the senses. The human being is nature because he has sensibility, but it is precisely his sensibility that makes the human being act independently from nature, *because* sensibility is natural and necessary. As nature and freedom, as body and soul, the human being brings these two causalities, the causality in nature and the causality by freedom, together into a threshold: he apprehends himself as both an intelligible and sensible phenomenon when apprehending the sensible. It is in this way of finitude that the human being knows himself apperceptively, when he apprehends *that* he is, not what he is, and not even who he is:

“The human being is one of the appearances in the world of sense, and to that extent also one of the natural causes whose causality must stand under empirical laws. As such he must accordingly also have an empirical character, just like all other natural things. We notice it through powers and faculties which it expresses in its effects. In the case of lifeless nature and nature having merely animal life, we find no ground for thinking of any faculty which is other than sensibly conditioned. Yet the human being, who is otherwise acquainted with the whole of nature solely through sense, knows himself also through pure apperception, and indeed in actions and inner determinations which cannot be accounted at all among impressions of sense; he obviously is in one part phenomenon, but in another part, namely in regard to certain faculties, he is a merely intelligible object, because the actions of this object cannot at all be ascribed to the receptivity of sensibility.” ([3] p. 540; A547/B575)

In this passage, Kant affirms that it is *because* of its part of nature, of sensibility, it is intelligible and hence beyond nature. It is because the human being is the touching-point between a causality in nature and a causality by freedom.

Yet how does the causality of freedom relate to the causality of nature, that is, in terms of necessity? There is no causal relation between freedom and nature, but they are two different causalities that occur in something that is without any condition. Causality implies a cause of an effect, yes, but cause is also an effect. For a cause to be a cause, it must in itself happen as an effect. What gives the condition for it is, however, that which has no condition. Only there, in the unconditional, can the cause happen as an effect. Discussing the distinction between the causality of freedom and the causality of nature, Kant remarked the following: the causality of nature implies an infinite regression that is too big for our finite understanding. The cause is an effect of a cause of an effect, and so on. On the other hand, the causality of freedom produces infinite totalities that are too small for our understanding. The effect or production of effect is thus factual. What is produced by freedom, might be facts that so to shut up the “why” or “what” and bring all questioning to an end. By producing facts, there are no further questions, but only statements of what “ought” to be:

“Now that this reason has causality, or that we can at least represent something of the sort in it, is clear from the imperatives that we propose as rules to our powers of execution in everything practical. The ought expresses a species of necessity and a connection with grounds which does not occur anywhere else in the whole of nature. In nature the understanding can cognize only what exists, or has been, or will be. It is impossible that something in it ought to be other than what, in all these time-relations, it in fact is; indeed, the ought, if one has merely the course of nature before one's eyes, has no significance whatever. We cannot ask at all what ought to happen in nature, any more than we can ask what properties a

circle ought to have; but we must rather ask what happens in nature, or what properties the circle has.” ([3] pp. 540–541; KrV A548/B576)

Precisely because nature does not have a necessity of choice, an “ought”, it incites us to question. It is thereby in not having a natural “ought” that our human “ought”, which in a way defines our finitude, appears: it is nature that frees us and makes us autonomous. Our finitude searches for the infinite, that is, nature makes us search for an “ought” since it does not have it. We can thus see how Kant, the philosopher of morals, is in fact appealing to nature when appealing to morality and freedom. Since nature gives us something to think about, it gives us a desire to question whereas morals and freedom give us a stop-sign, an effectivization of answers, where no search, no inquiry is needed. This is the dichotomy between nature and freedom which continues the dichotomy between body and soul.

The apperception *that* the human is, *that* the human exists, as sensible and intelligible, is what makes him independent and can thus search how he *ought* to act. The “ought” is thus what distinguishes freedom from nature. Whereas nature implies a *must*, a necessity, freedom implies an *ought*, a choice, a necessary possibility. The necessity that exists in the ought and its connection to a “cause” does not appear in nature, because its necessity and cause have to do with that which has not happened yet. It is a possible action making of causality a sketched-out concept *because* causality has not yet happened:

“Now this “ought” expresses a possible action, the ground of which is nothing other than a mere concept, whereas the ground of a merely natural action must always be an appearance. Now of course the action must be possible under natural conditions if the ought is directed to it; but these natural conditions do not concern the determination of the power of choice itself, but only its effect and result in appearance. However many natural grounds or sensible stimuli there may be that impel me to will, they cannot produce the ought but only a willing that is yet far from necessary but rather always conditioned, over against which the ought that reason pronounces sets a measure and goal, indeed, a prohibition and authorization. (...) [R]eason (...) with complete spontaneity (...) makes its own order according to ideas, to which it fits the empirical conditions and according to which it even declares actions to be necessary that yet have not occurred and perhaps will not occur, nevertheless presupposing of all such actions that reason could have causality in relation to them; for without that, it would not expect its ideas to have effects in experience.” ([3] pp. 540–541; A548/B576)

Meaning, there may be an impetus that makes me want something, but my wish or desire does not make me do something as an “ought”. If I need to eat something, I get up to find something to eat, but this necessity or wish does not make me feel that I ought to take a bite. Causality does not really explain the passage that goes from a will to an ought that well. There is something that is needed for this passage to take place. The same goes when it comes to “saving” or “destroying” nature. Something that makes the passage from wanting to save or destroy nature to a moral obligation of saving and destroying nature, which includes the necessary possibility, is missing. Perhaps it is precisely here that the principle of causality does not suffice, since it is a principle that gives the human being a position of interference, either as a destructor or as a savior, which easily can become both a destructor *and* a savior at the same time. It is a position of power that causality gives the human being *because* it subjectivizes the human. The problem is that if it is the causality of freedom that creates the facts of the world, and thus ends the questioning of the world of facts, then the apperception *that* the human being is, renders the human as a fact. Meaning, the human being himself is the end of and to his own questions. The difficulty in this thought lies in the difficulty to think the interaction of these two causalities, by freedom and of nature, as the apprehension of the human being’s finitude. A finitude that lies in being at once a necessary freedom and a free necessity in such a way that we perhaps should rather speak of a be-causality.

The interaction between the two causalities, of freedom and of nature, is crucial, because it is how nature has a sort of freedom and freedom a sort of nature. It is, however, dangerous to speak of nature as something with freedom and of freedom as something natural. If the causality of freedom has to do, as Kant assumes, with the freedom to a self-beginning and hence that nature can start over by itself in the sense that it could save itself from our destruction of nature, this would de-responsibilize the human in such a way that we would be facing a negationism that says that nature is not being destroyed by us. On the other hand, to make nature dependent on the human being would make the human being quite omnipotent. Either nature is made a subject or the human being is the subject: both options are equally problematic since the logic of subject-object is never broken within the principle of causality. To say that the human being destroys nature or that nature will save itself imply causality as a natural phenomenon, as if its anterior-consequential logic was obvious. We can learn, however, from Kant that cause is an effect, that cause and effect are simultaneous, or to daringly put it as one concept, it is a “causeeffect”. Kant gives the example of a room that is heated whereas the outside of the room is much cooler. The cause for this is that there is a fire in the room that heats it up. However, the cause and the effect are given simultaneously, at the same time, and not in a temporal succession ([3] p. 312; A202/B248). What we can draw from this is that this relation is not a relation between two phenomena, but a twofold movement of the human being *in* the world together with the world *in* the human, the relation of freedom *in* nature together with nature *in* freedom. It is a twofold movement happening one inside of the other, a form of being-within that may change or at least challenge the way we look at causality.

The human being, by becoming a fact that he is the cause of the world’s destruction, also makes him stop asking what the cause is. All that happens is suddenly a mere effect, and the questioning of to what point causal reason is that which explains the world’s occurrences stops. Causality is taken as a given rule. It might be important to remember that the Kantian causality of freedom is not opposed to nature’s causality connected to a capacity of self-beginning. Rather, both of these causalities are conjoint in a so-called cosmological freedom. This conjunction might produce a new question to what is happening that does not go through the pretension of being *the* cause of destruction nor of salvation. What must be questioned is the fact that the destruction of nature is a series of effects and causes that regress to *a* cause that is the human being. Causality itself should be questioned, for us to think the different causes and effects in this plurality of causal series. It is an attempt to exercise thinking, to see how changing the view of effects as facts might make us question beyond the facts, not what the cause is, but *how* things are caused, how things, and the human being for that matter, are being-within the causal relation. Perhaps this is how we can find a different position or even posture of responsibility to relate and being-within the global environmental crisis in which we already are in. Should we then speak of an environmental principle of causality?

Causality, in general, is a fundamentally ambiguous concept. As such, however, it is a principle of direction that works conceptually like an *environ*, a more or less, an around, that are different directions of movements. The environmental crisis that we are experiencing is not only a crisis of nature, but it is a crisis that calls for the end of the world, as an end of the end, an end to an end: it is a crisis of direction. If humans have produced this crisis of direction, it is as if humans have themselves broken not only the telos of nature, but also their own telos. Breaking these two ends, means breaking with the world’s end, to produce an end *to* the world. The meeting of freedom and nature is not only the meeting in the human, but it is a meeting of the world with itself. It would be wrong of us to assume that freedom and nature meet in the human and that the world is constituted because of the human. No, this type of thinking is the crisis of environment. Freedom and nature meet in the world, and as cosmological freedom, the world is always a place of *more or less*, of an *environ*, the world is *around* and it is *coming* to terms with itself. Cosmological freedom is, in a sense, the environment. Human activity and the “end” as such are generally considered as natural phenomena, meaning that they cannot be known but they can be observed. Here,

it is not meant to doubt the contribution of human activity to the environmental crisis by pollution, excess of production, exploitation of human and natural resources, etc., but rather to question the subject of causality to its effect as a subjectivization of the human being or nature. If we speak of nature as having free acts, we subjectivize nature and suddenly we are too close to the type of opinion that the environment would still be in this crisis, regardless of our pollution, due to its cyclical character. If we, on the other hand, speak of the human ethical freedom to act, we put ourselves in the position of savior or destructor. Either way, the subjectivization and moralization of causality seem to turn everything into information, facts, and effects, generating a crisis of direction and of ends in all its senses.

This is somehow told by Giacomo Leopardi in a short story entitled *Dialogue between nature and an Icelander*, an Icelander who travelled the world, fleeing Nature, arrives in Africa only to meet Nature in person. The Icelander tells her how much he has fled Nature because there is too much suffering in Nature, a suffering from which he took refuge in solitude, only to find that without any enjoyment he had not escaped suffering at all. He thus asks Nature

“I am well aware you did not make the world for the service of men. It were easier to believe that you made it expressly as a place of torment for them. But tell me: why am I here at all? Did I ask to come into the world? Or am I here unnaturally, contrary to your will?”

to which Nature replies that

“The life of the world is a perpetual cycle of production and destruction, so combined that the one works for the good of the other. By their joint operation the universe is preserved. If either ceased, the world would dissolve. Therefore, if suffering were removed from the earth, its own existence would be endangered”

While the Icelander continues to question Nature, by asking “for whose pleasure and service is this wretched life of the world maintained, by the suffering and death of all the beings which compose it?”, that is, by asking “why” in the direction to a “who”, two hungry lions appear and devour the Icelander. Through their conquest they gain strength to survive the rest of that day. However, Leopardi tells us that there are people that dispute this:

“They affirm that a violent wind having arisen, the unfortunate Icelander was blown to the ground, and soon overwhelmed beneath a magnificent mausoleum of sand. Here his corpse was remarkably preserved, and in process of time he was transformed into a fine mummy. Subsequently, some travellers discovered the body, and carried it off as a specimen, ultimately depositing it in one of the museums of Europe”. ([5] pp. 185–200)

In Leopardi’s tale, we are confronted with the alternatives of human action either being devoured by nature or nature being dissolved by human action and its residues generating an inanimate way for humans to remain alive. If Kant would have read Leopardi, perhaps he would have said that this conflict is a bit more complicated since the human being is animate, as nature and sensibility, as well as he is inanimate (neither lives nor dies) in terms of history. If history is understood as the marks of the human’s presence in nature, marks that do not and cannot disappear today (as ecological footprints show us), then the human being turns out to be something inanimate, that is, that which neither lives nor dies within nature that he himself ruins. This is the problem when dealing with the environment philosophically today: to what point can we read our history into the *environ*? Furthermore, how do we not deal with history factually, so that we can continue to question it for the sake of the environment without being superficial? The problem seems to be, as indicated before, the subjectivization and moralization of causality, since it is thus that life and death become a mere history of facts and effects that need no further inquiry. It might be that the problem lies in not accepting that the principle of causality that still could be discussed from the environmental crisis should no longer be thought of as a direction from A to B, from nature to the human being or the human being to nature, or even from

animate to inanimate or the other way around. At stake is a crisis of direction and ends, which challenges us to think causality rather as a more or less, as an approximation, as an *environ*. Maybe this could allow us to see that causality is not a matter of cause and effect, but of being within different dimensions, of being-within another kind of freedom that Kant called cosmological, where causes, effects, “causeeffects” happen. Should we not try to see what a cosmological freedom could mean to the environmental crisis and what the environment could mean to the crisis? Could there thus be an environmental principle of causality? Perhaps this approximative more or less or *environ* way of questioning, which I have tried to do here, can give us a key to some sort of insight which may—or not—change the direction of our still modern thinking.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Notes

- <sup>1</sup> The most important discussions on Kant’s view on finitude were presented by Heidegger in his book *Kant and the problem of metaphysics*. This book should be, in my opinion, connected to a reading of Heidegger’s discussion of these two causalities in the volume *The Essence of Human Freedom: an introduction to philosophy*.

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