
About infinity

Kai Froeb

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bad infinity:

Hegel defines “bad infinity” the one in which the operation to overcome finiteness always remains the same, repeated (“ $n+1$ ”) and never comes to its destination (its end - here: reaching infinity).

The term “bad infinity”, like we see it in mathematics in an “endless” line or the endless row of numbers is mentioned here as a contrast to better understand what Hegel in the following means when he speaks of infinity, in the sense of the below represented good, true, qualitative, “philosophical” Infinity.

In a first approximation we could imagine bad infinity as an infinite line, true infinity as a circle (as the circle has its limiting border in itself).

true infinity:

Problem definition:

A “true” (= corresponding to its concept, self-determining) infinity, would be one that is not negatively affected by finiteness.

Something finite is something that has an end, a limit, something limited. If we say “infinity”, there is an “in” (a Latin prefix meaning “not”) in infinity, so a negation. So it has no end/limit.

According to Aristotle, we define terms by mentioning a “higher”/“upper” term in the hierarchy of terms (e.g. furniture) and then delimit within this field what sets the matter apart from the others that are related to it (e.g. a chair a furniture used for sitting) - See the concept tutorial¹.

But how to do this with the infinite? By definition it is unlimited, so it has no limit, so it has nothing higher above it.

On the other hand, it is in its name, after all, defined by the finite differentiated. But if one had to imagine that the Finite on the one side, Infinity on the other side, then there would be something beyond the finite and infinite. (A meta-infinity so to speak. And can one then not above this meta-infinity another meta-infinity construct, etc.? This is the idea that is used in mathematics: still a higher meta-level and one above it - only another way to create “bad infinity” on a new level).

Moreover, an infinity, which itself is limited by something else (here by the finite) is limited, insofar as it is itself limited, so it is not infinite in that sense, but itself finite (this is the same argument after the turned to the other side).

Which leads us to the question: what is the relationship between the finite and the infinity in such a way that the paradox(es) mentioned do not arise?

(if this question is new to you, it might be worthwhile for you in order to participate in this to stop reading here for the time being and read on before to try to solve the paradox for once for yourself. Because the solution, when reading it, might seem obvious, so you may only appreciate it when you tried yourself).

¹ [concept-tutorial.htm](#)

the solution:

The answer is given, with a little thought about the above paradoxes, through simple logical analysis:

- there must be nothing that stands next to infinity on the same level, as otherwise that would be a limit/end and therefore it would not be true infinity
- accordingly, there must be nothing that stands above infinity, otherwise that something above would be the infinite
- the Finite must also not simply be the same as the Infinite, as they are not seen as same, rather opposite

Then logically the only solution that remains is that the finite must therefore be contained in infinity, or, to put it another way, that the infinite includes everything finite. (One can see this from the perspective of the finiteness in such a way that the finite has therefore at part at infinity, is part of infinity).

This infinity is therefore self-determining and has its own difference (particularities) in itself. It is therefore not the “abstract” infinity of an “infinite” set containing finite elements, but more the infinite concept containing its particularities.

In religious language, it is not an abstract God that is just above and beyond all and where all differences disappear.

Consequences:

This is a core concept of Hegelian philosophy, so it is very important to understand it correctly.

e.g. follows from this:

the infinite is the whole, the true is the whole Insofar as this whole no longer contains anything else beside/beyond itself but contains all, it also corresponds to the most comprehensive concept of truth². So also in this sense: the whole is the truth, the Truth is the whole.

the infinite is the absolute The same could be said about the Absolute. In my understanding of Hegel’s terminology, “absolute” is used by him in the sense of not being restricted by anything else. So in that regard, the “absolute” and the (true, qualitatively) infinite are one.

Concept of God Further, this true whole, absolute, infinite naturally corresponds also the traditional concept of God in so far as God is understood as the being that is above all, so including all (and insofar also compatible in that regard to Spinoza’s God).

² [truth.htm](#)

So “God” is not in a beyond, and does not only appears where the other explanations fail (“I do not need this hypothesis”), so that it is a refuge due to the progress of the sciences, where the place of God beyond sciences is being pushed further and further back to the beginning of the world or even further further ahead (or nowhere else).

Instead “God” is in the explanations we find in the world; nothing different (God, as the order of the world is not beyond world, but **in** the world).

general structure:

Hegel works out a structure in his analysis of infinity, in which the “higher” in each case “overlaps” or contains the “lower” (it “sublates”³ the lower). Or, from the perspective of the “lower”: a structure in which the lower is contained (“sublated”) in the higher.

consequences for the possibility of a constructive critique

From this point of view I consider it a characteristic of a superior theory, sublating inferior ones, that it contains what is right / worth preserving in the other theories (not necessarily the theories themselves).

As long as, on the other hand, not all arguments of the other theory are abolished, i.e. the other theory has a right to confront itself, the new theory is still one-sided to that extent / sense and can be further perfected.

³ [sublation.htm](#)