Is Being a Primitive Term? Questions About the Meaning of Being

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HEIDEGGER AND THE QUESTION OF BEING

In the introduction to his 1927 *Being and Time*, Martin Heidegger famously claimed that the Western metaphysical tradition had forgotten the question of the meaning of *being* (*Seinsvergessenheit*). He argues that this neglect stems from an early shift in metaphysics—from the question of being to the question of substance (*ousia*), emphasizing categorical entities and things. Over time, this focus caused the concept of being to lose its depth and become vacuous. As a result, Hegel was able to claim in the *Science of Logic* that "[b]eing, the indeterminate determinate, is in fact nothing, and neither more nor less than nothing." (Hegel, 82). Due to this conceptual emptiness, Heidegger contends that the question of the meaning of being must be reformulated. To support this claim, Heidegger identifies three *prejudgments* (*Vorurteile*), as he calls them, that describe the classical account of being (Heidegger, 2-3). In what follows, I examine these prejudgments and explore Heidegger's question in relation to the mathematical concept of primitive terms as it emerges from his analysis.

The first prejudgment is that being is the most universal or extensive concept. The extension of a concept refers to the range of individuals it encompasses. As the concept of being includes all things, both in thought and reality, it surpasses every other concept in universality. For instance, in *Being and Essence*, the medieval theologian Thomas Aquinas states: "Everything can be said to be a being of which a [true] affirmative proposition can be formed, even if it posits nothing in reality" (Aquinas, c. 1).

As a result, nothing is more universal or extensive than being—except, perhaps, *nothingness* itself. Indeed, the concept of nothing refers to the negation of being, encompassing what is not. For every *x* within the class of being, *not-x*, as its negation, belongs to the class of not being. In this sense, the concepts of being and nothingness are coextensive, aligning with Hegel's earlier assertion that being and nothing are intimately related.

The second prejudgment is that being is indefinable. By a "definition" is meant a formula that describes the nature and essence of a thing. As Heidegger observes, *definitio fit per genus et differentiam*—a definition distinguishes a species or subclass by identifying its larger class or genus and its differentiating characteristic (Heidegger 2). For example, in classical philosophy, a human being is defined as a rational animal (*homo est animal rationalis*). Here, the term "human" is the species to be defined as "animal" is the genus, and *rational* is the differentiating term that sets humans apart from other animals within the genus.

As the most universal concept, being belongs to no higher class and therefore cannot be subsumed beneath another genus. Moreover, in the scholastic tradition, being is said to transcend all distinctions (the doctrine of transcendentals) because each thing is a being. Any attempt to differentiate being thus depends on the concept of being itself, resulting in a circularity of meaning. Consequently, the term being cannot be defined.

The *third* prejudice is that the concept of being is self-evident. In the most basic sense, this is perhaps the case. Consider the statement, "[t]he golden toad has ceased to be." By this is meant: The golden toad lacks being. The species no longer exists. In this sense, being refers to *existence*. Closer reflection, however, reveals that being refers not only to existence but also to *essence* in the sense of the nature this or that existent thing, viz., this planet, tree, person, and so on.[1] So does being refer to the nature of some one thing or to all things? If some one thing, then to be and to be-a-planet or to-be-a-tree must be without difference, which is obviously false. If all things, then, being will quite strangely refer to nothing at all.

The difficulty in claiming that the term 'being' is self-evident lies in the tension between the apparent understanding of the fact of existence versus the fact that whatever does exist is in each case a certain *kind* of thing. Heidegger notes that such tension reflects the influence of the traditional metaphysical account. The history of metaphysics has obscured the meaning of being due to long emphasis upon the "thingly" character of being. The result, as he puts it, is that the concept of being is "shrouded in darkness." (Heidegger 3)

Following these remarks, Heidegger undertakes the task of reformulating the question of the meaning of being through analysis of *being-there* or *Dasein*—that being, "which we ourselves in each case are." (Heidegger 6) Although these analyses are both compelling and have profoundly influenced 20th century continental thought, my focus here will not be on them. Instead, I examine Heidegger's dismissal of classical metaphysics based on the previously described preconceptions. I argue that

Heidegger overlooks a fundamental issue central to the question of the meaning of being.

PRIMITIVE TERMS IN GEOMETRY

Consider *The Elements* (*Stoicheia*) of Euclid. The work beings with several definitions, the first two of which are as follows:

> D1. A *point* is that which has no part.
> D2. A *line* is a breadthless length. (Euclid 153)

As is well-known, Euclid was a student of Plato's academy, as was Aristotle who predated him. Euclid was also likely aware of the nature and role of formal definitions (echoed in the works of Aristotle) as discussed previously. We might therefore wonder whether Euclid's definitions are definitions in this sense.

Turning to the first definition (D1), two features can be identified. First, it is negative. Euclid does not tell us for example, what a point is an elementary part of a line, which would presume a prior definition of a line. Instead, he specifies that a point is without any part (*hou meros outhen*). By analogy, one might say, "a human being is not a reptile." Although something is conveyed about human beings in this statement, it is nonetheless insufficient as a definition. Second, the definition relies on another undefined notion: the concept of a part. What is a part? A part, we might say, is a portion or piece of a whole. What is a whole? A whole is just a composition of parts. These two notions are circular in sense. As noted, a proper definition requires at least two defining terms: a higher class or genus and difference. To say that "a point is not a part" is to provide neither. Instead, Euclid's definition merely describes the concept of a point negatively, by excluding it from the class of things that possess parts.

Of course, Euclid's work was written over two millennia ago, which might lead one to suspect that mathematicians have long since resolved this issue. In some respects, this is true—but not in the way one might expect. A surface scan, for example, of "definitions" of the concept of a point from various online sources and elementary textbooks reveals:

> A point is a location represented by a dot. (Anonymous)
>
> A point is an exact, specific, idealized location (in space). (Ohmer 34-35)
>
> A point is the common part of two intersecting lines. (Allendoerfer, et al. 4)

As can be seen, none of these statements account sufficiently convey what we mean by a *point*. On the contrary, they merely affirm what we already understand when we refer to the term.

Recognizing these difficulties, indeed, the impossibility of defining such basic notions as point and line, geometricians concluded that the attempt to provide definitions for such and similar basic terms is both futile and unnecessary. Today, both in modern treatments as well as many elementary textbooks on geometry, such terms are merely presumed and left undefined. For example, in his 1901 work *Foundations of Geometry*, the renowned mathematician David Hilbert begins his modern axiomatization of geometry with the concepts of point and line, as well as incidence, betweenness, and congruence. (Hilbert) None of these terms are defined, but only stated and associated with particular sets of symbols. Hilbert then proceeds to develop geometry on this basis. Alternatively, modern textbooks often introduce the subject of geometry with the statement: "Terms such as *point*, *line*, and *plane* are classified as undefined because they do not fit into any set or category that has been previously determined." (Alexander, et al. 22)

But why abandon the attempt to define such terms? At least two reasons can be given. The first was the discovery that mathematics could be formalized (within limits) on logical grounds. In this context, the rules of logic are sufficient to safeguard mathematical reasoning, both in its foundations and in its demonstrations, regardless of the types of definitions that mathematicians provide. Second, even if such terms as *point* and *line* are undefinable, their meaning is sufficiently understood by anyone familiar with the language in which they are expressed. The only other alternative would be to visually depict their sense, as in:

> A point is … [some kind of visual illustration].
>
> A line is … [some kind of visual illustration].
>
> And so on.

Using such depictions or illustrations coupled perhaps with visual proofs, some sense of the terms could potentially be conveyed.[2] However, it should be evident that unless one already understands what a point or line is, any visual illustration will ultimately fail to convey its meaning. Similarly, Euclid's initial definitions may be seen as nothing more than verbal illustrations. They do not explain what a point or a line is but serve only to indicate the meaning of the object, as if to say, "Look! This is a point."

Two results follow from this analysis. First, certain fundamental concepts exist at the foundation to geometry (and other disciplines) such as point, line, plane, betweenness, and so on. Today geometers presume the sense of these concepts to be well-understood. They are consequently assumed without definition. In mathematical terms, such and similar notions are called *undefined* or *primitive terms*. Regardless of the label, they form a fundamental part of the bedrock and foundation of modern mathematics. As renowned logician Alfred Tarski notes, "When we set out to construct a given discipline,

we distinguish, first, a certain small group of expressions of this discipline that seem to us to be immediately understandable; we call the expressions of this group PRIMITIVE TERMS or UNDEFINED TERMS, and we employ them without explaining their meanings." (Tarski 110)

Second, historically speaking, the existence of primitive terms is held to be epistemologically necessary. As is well-known, both Plato and Aristotle recognized the necessity of prior knowledge or first principles (*archai*) at foundation to inquiry. We see this foundation in Plato's constant appeal in the *Meno*, the *Phaedo*, the *Republic*, etc., to intelligible ideas as principles of both knowledge and reality. So too in the *Posterior Analytics* Aristotle affirms that "[a]ll instruction given or received by way of argument proceeds from pre-existent knowledge." (Aristotle, An. Pr., 71a1) The need for first principles is also reiterated in the *Metaphysics*, the *Nicomachean Ethics*, and other works.[3]

Other thinkers support these early views. For example, in the 17th century the philosopher, scientist, and mathematician G.W.F. Leibniz, provided what amounted to "proof" of the existence of primitive terms as a necessary foundation for knowledge, with the following statement:

> Whatever is thought by us is either conceived through itself, or involves the concept of another. Whatever is involved in the concept of another is again either conceived through itself or involves the concept of another; and so on. So one must either proceed to infinity, or all thoughts are resolved into those which are conceived through themselves. If nothing is conceived through itself, nothing will be conceived at all. For what is conceived only through others will be conceived in so far as those others are conceived, and so on; so that we may only be said to conceive something in actuality when we arrive at those things which are conceived through themselves. (Lodge, et al. 178)

The common theme is that inquiry must start somewhere. Unless there are certain undefined and self-evident starting points, attempts to define terms will proceed either circularly (defining A in terms of B and B in terms of A) or else result in subsequent terms being defined by prior and still more prior terms, and so on, leading to an infinite regress of definitions. Consequently, no foundation for knowledge would be possible.[4]

RETHINKING THE QUESTION

As previously discussed, Heidegger argues that the question of the meaning of being has been forgotten, largely due to the history of Western metaphysics. But what if Heidegger's question of the meaning of being is misguided? Following Aristotle's formulation in *Metaphysics* IV, a view supported by Heidegger, what we seek to understand is not only being but more specifically, *being as being*.[5] Although the question of the meaning of being is worked into the question of being, the addition "as being" nonetheless shifts focus away from questions of meaningfulness to the more fundamental problem of providing an explanation or account of the "why" of being. Following the ancients, specifically Aristotle, we seek to identify the principles (*archai*) and causes (*aitiai*) of being. As with geometry, such starting points may also constitute primitive elements (*stoicheia*) of inquiry. In this context, the proper starting point and question of metaphysics (or ontology) is not simply the question of what being means, but more properly, what constitute the primitive terms, definitions, and basic axioms of metaphysics.

A comparison between the treatment of primitive terms in mathematics and Heidegger's three prejudices raises the question of whether the concept of *being* functions as a primitive term, much like the concepts of *point* and *line* in geometry. Points and lines are undefinable and self-evident terms. Similarly, although being is undefinable, we do intuitively grasp the basic concept of what it means to be in the sense of existence. The primary distinction lies in extension: being is the most universal concept, encompassing all things, while points and lines are limited to a specific class of things. This difference highlights the unique subject matter of metaphysics compared to geometry, mathematics, and other fields of inquiry.

It is worth noting that the concept of Dasein functions very much as a primitive term in Heidegger's *Being and Time*. First, Heidegger claims that each of us possesses an inherent, naive sense of what it means to be, which he associates with Dasein.[6] Second, he denies that a definition of Dasein can be given, as doing so would imply that it possesses a "thingly" character.[7] Third, on the basis of Dasein, other concepts such as concern, temporality, readiness-at-hand, present-at-hand, and other central concepts are grounded (or perhaps we might say—defined).[8] In effect, Heidegger's account of the meaning of being bears an analogy to the axiomatic method used in geometry.

Yet Heidegger overlooks this point. He assumes that the meaning of being has been obscured in classical metaphysics and that the path to its successful retrieval is to ground inquiry in a different principle (Dasein). He consequently overlooks the question: *Is being a primitive term*? Had he considered this question, then perhaps his account would have taken a quite distinct direction.

The main point is that although the question of the meaning of being warrants serious consideration before engaging in metaphysical discourse, it is a mistake to

dismiss the classical analysis solely on the grounds that it concludes with a basic and indefinable concept. The classical tradition has long recognized the unique status of being as the most universal and foundational concept, transcending all categories and distinctions. This understanding underscores the difficulty, if not the impossibility, of defining being in terms of anything more fundamental. If being is indeed a primitive term, then the question of its meaning is, by nature, a pseudoquestion—one that arises not from a genuine gap in understanding but from a misunderstanding of the role being plays in thought and language. Such a recognition does not necessarily diminish the importance of Heidegger's contributions, as his exploration of *Dasein* and the historical forgetting of being provides valuable insights into the lived experience of human existence. However, it does suggest that the search for a "definition" or "meaning" of being may be misguided, and that efforts should instead focus on clarifying its role as a primitive and self-evident foundation for metaphysical inquiry. In this sense, Heidegger's critique and the classical approach need not be seen as mutually exclusive but as complementary perspectives that together enrich our understanding of *being*.

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ENDNOTES

1. For more on the distinction between essence, existence, and the focal sense of being (originating in Aristotle), as this relates to Heidegger's thought, see, Knasas (1994).
2. A visual proof is an intuitive demonstration of a geometrical theorem through the use of a visual picture or diagram. For examples, see Nelsen (1993).
3. For more on this, see, Lees (1935): 113-124.
4. We see the use of primitive terms not only in mathematics, but also in any discipline for which a formal axiomatics (akin to that found in Euclid's elements) is used. For examples in other sciences, see Dacosta & Sant'Anna (2001) and Hempel (1945). 7-17. For a general discussion of the role of primitive terms and the axiomatic method, see Carnap (1958).
5. Heidegger states, "What is *asked about* in the question to be elaborated is Being, that which determines being as beings, that in terms of which beings have always been understood no matter how they are discussed" (2010, 46).
6. For more on Heidegger's notion of the priority of the meaning of being, see Gorner (2007) and Mulhall (2005).
7. As Gorner notes: "Heidegger says that we cannot define the essence of Dasein by specifying its 'what'. Its essence lies rather in the fact that 'it has its being to be and has it as its own'." Gorner (2007), 24.
8. For more on the structural relations between these terms including a critique Heidegger's attempt to ground these in a focal sense, see Dika (2020).