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The adventures of "ontology"

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Hilary Putnam observed in 2004:

"[W]hen Quine published a famous paper entitled 'On what there is' ... [he] single-handedly made Ontology a respectable subject." (Putnam 2004, 78–79)

Since this 1948 paper, of course, other philosophers such as Saul Kripke, David Lewis and David Armstrong have done significant work in rehabilitating ontology in the analytic philosophical tradition broadly speaking after the influence of various anti-metaphysical philosophical movements such as logical positivism. It is clear, however, that Quine's influence on the rehabilitation has been significant and not only because of "On What There Is" (Egerton 2021, section 1). Indeed, he has also had a decisive influence on the way "ontology" has been and is understood in mainstream analytic philosophy.

"On What There Is" presents metaphysics primarily as an ontology. In Quine's own words, "A curious thing about the ontological problem is its simplicity. It can be put in three Anglo-Saxon monosyllables: 'What is there?' (Quine 1948, 21)" Ontological problems are, according to Quine, questions about what is there or what exists (Egerton 2021, section 2)? At the same time, he gives "ontology" a slightly new meaning: the task of ontology is to account for the various entities we assume to exist when we take certain propositions to be true. The ontological commitments of the propositions we take to be true can be expressed, according to Quine, by regimenting them in the standard first-order predicate logic and by finding out

what the propositions bound by the existential quantifier are among the logical consequences of the propositions. We are committed to the existence of exactly those entities that we need in the universe of discourse for the truth of these existential quantifier-bound propositions. (Ibid.)

Indeed, the Quinean approach, perhaps most famously represented by Peter van Inwagen (2001), considers metaphysics as ontology that considers the concept of existence or being and questions about the existence of different kinds of entities such as abstract entities (Berto & Plebani 2015, 2). Since metaphysics in the Quinean approach is primarily ontology, metametaphysics in this approach is called “metaontology” (van Inwagen 2001; Berto & Plebani 2015, 2).

However, Quine was not the first 20th century philosopher to rehabilitate ontology as a legitimate field of philosophy. In post-World War I German philosophy, a renewed interest in ontology emerged after the influence of Neo-Kantianism had waned. In this paper I will make some observations on this philosophical movement, which a central figure in it, Nicolai Hartmann called “new ontology”, which I discuss in the second section. Before that, I shall review the history of “ontology” from the coinage of the term and its historical background to Quine's time, including Kant's influence on the “death blow” of ontology (although Kant himself called his transcendental idealism “ontology”), in the first section. I will recapitulate four historical conceptions of ontology and summarise my own view on the subject as a conclusion. All in all, I outline, in addition to the Quinean conception of ontology, five different senses of “ontology”, without claiming that these six senses constitute an all-encompassing list of the conceptions of ontology.

The origin and background of "ontology"

The first known systematic examination of the nature of metaphysics is contained in Aristotle's (384–322 BC) work, known for over 2000 years as *Metaphysics*. The term “metaphysics” is known to be a later ancient invention, not used by Aristotle himself. He refers to metaphysics as “the first science” or “the first philosophy” (*protê epistêmê, protê philosophia* in Greek) and “wisdom” (*sophia*), among other things (Politis 2004, 2). In *locus classicus*, at the beginning of the fourth book of *Metaphysics*, Aristotle says that the first science “investigates being *qua* being and what belongs to this [i.e. to being] in virtue of itself [*kath' hauto*, i.e. what belongs to being essentially].” (*Metaphysics* 4.1; translation in Politis 2004, 90). Metaphysics considers being (Greek *to on*, Latin *ens*) in so far as it is being: from the point of view that everything that is is. In metaphysics, the perspective to being is thus the most abstract and general possible, precisely in the sense that being has been separated from all other features except being and its essential features. According to the Aristotle scholar Vasilis Politis (2004, 2), Aristotle's most fundamental question in *Metaphysics* is, *what is it for something to be*, that is, what is being?

Aristotle's *Metaphysics* has a long and complicated history of interpretation. I will now make a few remarks on its development in the Middle Ages. The Islamic Golden Age philosopher Ibn Sīnā (Avicenna in Latin, c. 970–1037) articulated that, as a universal science, metaphysics considers *being common* to all beings from God to the creation (Goris & Aertsen 2019). In the Latin Middle Ages, he influenced the Dominican Thomas Aquinas, who argued that being in general (Latin: *ens commune*) is the subject matter of metaphysics. Hence metaphysics is a general science (Latin: *scientia communis*). (ibid) In a very similar vein, a little later, the Franciscan Duns Scotus, following Aristotle, held that metaphysics considers being *qua* being (Latin: *ens inquantum ens*) (Lamanna 2021).

At the end of the first chapter of the sixth book of Aristotle's *Metaphysics*, he famously says that the first philosophy is theology because it deals with the highest or divine things: the separate, eternal and immutable substance, or primary being (Greek: *ousia*), if there is such a thing (1026a, 15–33). Aristotle defends his position in Book 12. Knowing this well, however, Ibn Sīnā distinguished metaphysics as a universal science of the common being from theology, even though, according to him, in so far as metaphysics is the study of the first principle, the ground of being, it is theology (Lizzini 2021). This separation of universal metaphysics from theology was followed in different ways by many Latin philosophers of the Middle Ages: as a universal or general science, metaphysics considers God only in so far as He is a being (Goris & Aertsen 2019). The culmination of this distinction is the late 16th century articulation by the Jesuit Francisco Suárez of natural or rational theology as a special science, or more precisely as a special part of metaphysics, because natural theology studies a special being: God (Darge 2014, Lamanna 2014; 2021).

The concept of being seems to apply to everything that is. Such a concept was called *transcendental* by many medieval philosophers from the 13th century onwards, because such a concept transcends even the differences between the categories of being and the distinction between infinite and finite being (Goris & Aertsen 2019). They thought that the concept of being is transcendental because it applies to all beings regardless of their category (there were different views on how it applies) (ibid.). Every being is a being regardless of its category. The concept of being is transcategorical. Similarly, both infinite and finite entities are beings (ibid.). Scotus, for example, influentially called metaphysics a transcendental science (Latin: *scientia transcendens*) because it considers transcendentals (ibid.).

Among others, Scotus argued that, as concepts, transcendentals are primitive, that is, impossible to define, because of their generality. They are therefore, in this sense, the first objects of the understanding. The primacy of metaphysics as a science thus takes on a new character: it is the first science because it is about the first objects of the understanding. Aristotle had thought that the primacy of the first philosophy comes rather from the study of the first principle, that is to say, of the primary being. (Goris & Aertsen 2019.)

Nonetheless, this caused instability in the conception of metaphysics. On the one hand, metaphysics considered being as being and not, for example, just the

concept of being. On the other hand, it was a transcendental science, concerned with the first objects of understanding: what is intelligible in the most comprehensive sense. However, the intelligible does not seem to be limited to being, since we can also understand non-beings, such as possibly fictional objects (e.g., centaurs) and privations such as hunger. The conception of metaphysics as a transcendental science thus had a pull to be extended to the "supertranscendentals", which transcend even the transcendentals (Goris & Aertsen 2019). It is precisely "intelligible" (Latin: *intelligibilis, cogitable*) that is a possible supertranscendental, as is "something" (Latin: *aliquid*) (ibid.). For example, a centaur is intelligible and something, even though there are no centaurs. One can therefore speak of the supertranscendental conception of metaphysics, according to which metaphysics is the study of the intelligible and thus transcends transcendentals and being (ibid.).

In the late 1500s, Suárez saw himself as having resolved the tension described above by arguing that metaphysics investigates the *real being* that is independent of understanding or thought, which encompasses both God and creation (Lamanna 2021). It does not, for example, study beings of reason (Latin: *entia rationis*), which are intelligible but not real (ibid.) Metaphysics is a real science (Latin: *scientia realis*) (Lamanna 2014). "Being", "something" and "thing" (Latin: *res*) are synonyms (ibid.)

The tension, however, resulted in competing conceptions of metaphysics in the German Calvinist philosophy of the early 17th century, which was deeply influenced by Suárez. It was within this philosophical development that the term "ontology" was coined, as far as we know (Lamanna 2014). Its introducer, Jakob Lorhard (1561–1609), along with Clemens Timpler (1563/4–1624) and Johannes Clauberg (1622–1665) in particular, represented a supertranscendental metaphysical approach. According to Timpler's 1604 textbook on metaphysics, the concept of the intelligible subsumes to the contradictory concepts of something and nothing (Latin: *nihil*) (ibid.) According to him, therefore, we can understand nothing; it is a signified thing. Timpler classifies the concepts of being and essence under the heading of "something", more precisely "positive something" (Smith 2022).

Two years later, in 1606, Lorhard introduced the term "ontology" in his Latin work *Ogdoas Scholastica continens Diagraphen Typicam artium: Grammatices (Latinæ, Graecæ), Logices, Rhetorices, Astronomices, Ethices, Physices, Metaphysices, seu Ontologiae* (Eight Books of Scholastics [...]), which is effectively a repetition of Timpler's textbook (Lamanna 2014). "Ontology" comes from the Greek genitive form of "to be" (*to on*) "ontos" and "logos". "By "ontology" Lorhard designated the entire metaphysics, as we can see from the title of the work: *Metaphysices, seu [or] Ontologiae*". Clauberg follows this usage in his 1647 work *Elementa philosophiae sive ontosophia*, according to which metaphysics, or ontosophy or ontology, deals primarily with the intelligible (*ens cogitable*), secondarily with something or nothing, and only thirdly with what is (*ens*) (Bardout 2002).

Lorhard's colleague at the University of Marburg in Hesse-Kassel and Timpler's philosophical rival Rudolf Göckel (1547–1628) adopted the "ontology" in 1613 but understood it differently. According to Göckel, ontology is the universal part of

metaphysics, the first philosophy to consider being universally and as transcendental (Lamanna 2014). The special part of metaphysics, or "metaphysics", studies God and spirits and is thus divided into theology and angelology (ibid.). Göckel is therefore close to Suárez and rejects the supertranscendental conception of metaphysics.

The influence of these German-speaking Calvinists in the Protestant world is evidenced by the popular 1728 English-language encyclopaedia *Cyclopaedia* by Ephraim Chambers (c. 1680–1740) with the entry "ENS" (Chambers 1728, 315). Like Timpler, Lorhard and Clauberg, Chambers says that "ens" in the most general sense applies to everything that can be understood. In a slightly more specific sense, "ens" is anything that is or exists: an entity. Its opposite is the non-existent. Chambers, like Clauberg, uses the term "ens positivum" for an entity. In the proper sense, however, "ens" applies to a real being to which real attributes belong. (Ibid.) Here again we see the influence of Suárez. As regards "ontology", Chambers says that it is a doctrine or science about being (*ens*) in general, abstractly speaking (Chambers 1728, 663). Metaphysics is ontology or ontosophy in the abstract: a doctrine of being *qua* being (Chambers 1728, 543). Chambers identifies ontology and metaphysics. However, what Chambers says about being (*ens*) must be applied to ontology and metaphysics. Ontology, in his view, can therefore also be supertranscendental. Chambers tries to cover the different conceptions of ontology and metaphysics in the style of a good encyclopedist.

Göckel's terminological solutions, on the other hand, proved influential in 17th-century German Protestant philosophy. According to the Latin works of Lutheran Christian Wolff, written while he was a professor at Marburg, ontology, or first philosophy, is the science of entities in general in so far as they are entities, of being as being and its general predicates (Wolff 2022/1730, §1 and 1963/1728, §73). In his German-language *Logic* he calls ontology the "Grund-Wissenschaft" (Wolff 1770/1713, §14). Add to this the study of the corporeal world in general and of spirits, that is, created souls, angels and God, and, according to Wolff, the subject of metaphysics is obtained. Metaphysics thus consists of ontology, rational cosmology, psychology and theology. To his, in the German-language *Metaphysics* (1719), Wolff also includes with empirical psychology: the soul a posteriori. Metaphysics thus also considers such topics as the general structure, foundation, causality and purpose of the corporeal world, the nature of the soul, its faculties, its relation to the body and immortality, freedom of the will, and the nature, faculties and creation of God.

According to Wolff's influential conceptualization, metaphysics divides into ontology, rational cosmology, psychology and natural theology (Wolff 1963/1728, §99). Even though Wolff does not ever use these exact terms from the 17th century (Micraelius 1661, 770), it has long been common to say that ontology is general metaphysics (Latin: *metaphysica generalis*) and rational cosmology, psychology and natural theology are special metaphysics (Latin: *metaphysica specialis*) in his view. The historical roots of the distinction between general and special metaphysics can be found especially in Suarez, who considered natural theology to be a special part

of metaphysics, separated from the general part of metaphysics, the study of the real being as being, as was seen above.

Wolff's disciple Alexander Gottlieb Baumgarten followed his teacher in the division of metaphysics into "ontology, cosmology, psychology, and natural theology." (Baumgarten 2013/1757, §2) Metaphysics is the science of the first principles of human cognition (Baumgarten 2013/1757, §1). Indeed, the first principles of cognition are to be the more general predicates, which already Aristotle speaks of as the essential features of being: "ONTOLOGY (ontosophia, metaphysics (cf. §1), universal metaphysics, architectonics, first philosophy) is the science of the more general predicates of a being." (Baumgarten 2013/1757, §4) The more general predicates of being are the first principles of human cognition (Baumgarten 2013/1757, §5). Of these, "the universal predicates [...] are in each and every single thing [*singulis*]" (Baumgarten 2013/1757, §6). For example, each of us is *one being* and *something*.

Wolff and Baumgarten are known to have had a profound influence on Kant. Kant lectured nearly fifty times on Baumgarten's *Metaphysics* over four decades. They also had a profound influence on Kant's understanding of metaphysics and ontology as fields of philosophy, although Kant is highly critical of Wolff's and Baumgarten's first-order metaphysics. In Kant's critical period, metaphysics and ontology must be understood in the context of his transcendental philosophy, which considers the necessary presuppositions of things like metaphysics and possible experience.

At the end of the *Critique of Pure Reason* (1781; 1786), in the *architectonic of pure reason*, Kant further divided metaphysics into ontology, rational cosmology, psychology and theology, alongside "rational physics" (CPR, A 847; B 875).¹ However, Kant understood metaphysics and ontology in a new way. In both, the type of cognition (German: *Erkenntnis*) is a priori: independent of experience (CPR, A 841 and 845; B 869 and 873). For Kant, metaphysics is a system of all *a priori cognition*, e.g., the categories of the understanding, and no longer the science of being and its determinations (CPR, A 841; B 869). Kant also performs a "Copernican turn" in the conception of metaphysics. Metaphysical judgments must be synthetic and a priori (Kant 1997, §4). In the *Prolegomena* (1783) Kant sums up as follows: metaphysics "is therefore cognition *a priori*, or from pure understanding and pure reason." (Kant 1997, §1)

This explains why, for Kant, metaphysics is both speculative and practical use of reason a priori, or "*metaphysics of nature*" and "*metaphysics of morals*" (German: *Metaphysik der Sitten*) (CPR, A 841; B 869). Metaphysics of nature, or metaphysics in the narrow sense, "considers everything as it is (not that which ought to be)" (CPR, A 845; B 873). The metaphysics of nature is divided in two. One is *ontology*, which Kant identifies with his transcendental philosophy: in Kant's technical parlance, ontology considers "a system of all concepts and principles that are related to objects [German: *Gegenstand*] in general" (CPR, A 845; B 873). By "objects in general" Kant means here objects which can be given but which are not assumed to be given (*ibid.*). Ontology

¹ Kant 2013 is cited by "CPR", followed standardly by page numbers in the A and B editions.

is concerned especially with the concepts and principles that are related to objects that may be given in experience, such as everyday objects (e.g., stones and stumps), in particular the categories of the understanding.

Instead, the sum total of objects given to the senses or otherwise is, for Kant, "nature", which is the subject matter of the second part of the metaphysics of nature. Kant also divides it into two parts. If it is a set of objects given to the senses, that is to say, immanent, it is considered "*a priori*" by "rational physiology" (CPR, B 874; A 846). Rational physiology is divided into "rational physics" and "rational psychology" according to whether the object is "**corporeal**" (bodies), or "**thinking nature**" (souls) (ibid.).

Kant sums up his conception of metaphysics as follows: "Accordingly, the entire system of metaphysics consists of four main parts, **i. Ontology. 2. Rational Physiology** [Physics and Psychology]. **3. Rational Cosmology. 4. Rational Theology.**" (CPR, B874; A 846)

According to Kant, ontology, if it is a science, does not go beyond the limits of the understanding but remains within them. On the other hand, it is clearly not limited to being, since it is concerned in particular with the concepts and principles of the understanding. In this respect, Kant's conception of ontology could be characterized as supertranscendental perhaps, although it is conditioned by the forms of sensibility and categories of the understanding, unlike, for example, Timmer's. It is more accurate to say, thus, that Kant's conception of metaphysics and ontology is transcendental in his terms, which is clearly different from Scotus' view of metaphysics as a transcendental science and from Wolff's and Baumgarten's conceptions of ontology. Baumgarten's more general predicates such as *being one* understood as transcendental by Scotus are transformed in Kant's transcendental philosophy into the concepts of possible given objects such as empirical objects as the object of study of ontology. Whereas many scholastics thought of metaphysics as the study of being as a being and its essential attributes, Kant's ontology is essentially concerned with possible empirical objects and their constitutive concepts and principles, especially categories of the understanding. The *Transcendental Aesthetic* and *Analytic* parts of the *Critique of Pure Reason* thus consider ontology in Kant's terms.

The return of ontology in early 20th century German philosophy

Regardless of Kant's own views, under the influence of his criticism of metaphysics and ontology before him, especially that of Wolff and Baumgarten, metaphysics and ontology, as legitimate fields of philosophy, suffered a serious setback. However, alongside many other currents such as Neo-Kantianism, positivism and pessimism, 19th-century German scholarship also experienced an Aristotelian renaissance, partly caused by the strong development of classical philology (Hartung, King & Rapp 2019). One of its prominent representatives was Franz Brentano (1838–1917),

whose 1862 dissertation dealt with the many meanings of being in Aristotle (Brentano 1975). Brentano was a fierce opponent of Kant's philosophy, who took his influences from the empiricist philosophical tradition, from John Stuart Mill through Hume and the Scholastics to Aristotle himself. He rehabilitated the traditional Aristotelian conception of metaphysics as the study of being as being and its categories as distinct from the categories of the understanding in Kant (Albertazzi 2016). Brentano was a popular and influential teacher at the universities of Würzburg and Vienna. His influence was thus both through publications and, in particular, through teaching.

According to Edmund Husserl (1859–1938), a student of Brentano and the founder of phenomenology, metaphysics asks, what is there? (Hartimo 2019) Ontology, on the other hand, is, according to Husserl, a more general field of study, because ontology considers the a priori essences of possible objects in themselves (German: *Objekt an sich*) (ibid.). Objects in themselves are any things (German: *Ding*) that can be the bearers of predicates applicable to them (Moran & Cohen 2012, 228, 317). Essences are, for Husserl, necessary features for the conception of an object (Belt 2021). Ontology is thus, for Husserl, the study of the essences of objects that may appear meaningfully to us. Since actual objects are also possible, ontology is also concerned with their essences.

In this respect, however, Husserl's main new opening is the introduction of *formal ontology* as a branch of ontology and its separation from material or regional ontologies. He understands formal ontology as the study of the ontological categories of possible objects in themselves (Hartimo 2019). Since the set of these categories is thus universally applicable to possible objects in themselves, formality in this context means universal applicability across the domains of possible objects in themselves (Hakkarainen & Keinänen 2023, 9). Formality, in scholastic terms, is transcendental. In contrast, when one considers only some restricted domain of possible objects in themselves, one is, according to Husserl, doing a regional or material ontology such as the ontology of mind (Moran & Cohen 2012, 278). A formal ontology is a top-level ontology, under which each regional or material ontology is subsumed. Husserl's notion of a regional ontology comes close to more traditional notion of a special metaphysics.

Among Husserl's students, at least Edith Stein, who combined phenomenology with Thomism in the 1920s and 1930s, and the realist phenomenologists Hedwig Conrad-Martius (1888–1966) and Roman Ingarden did ontology. In 1935, the Baltic German philosopher Nicolai Hartmann (1882–1950) saw that ontology had made a comeback in philosophy, especially after the First World War, when the grip of Neo-Kantianism had loosened in Germany. He spoke of a “new ontology”, to which he included, alongside himself, Heidegger, Stein, Conrad-Martius, the German theologian and philosopher Günter Jacoby (1881–1969), and the philosophical anthropologist Max Scheler (1874–1928) (Hartmann 2019/1935, 3). According to Hartmann, however, the new ontology had been more of a programmatic declaration than an actual philosophical project (ibid.). He considered himself to have realised it with his own ontological system, which he set out in *Ontology: Laying the Foundations*

(*Zur Grundlegung der Ontologie*, 1935), *Possibility and Actuality* (*Möglichkeit und Wirklichkeit*, 1938), *Der Aufbau der realen Welt* (1940) and *Philosophie der Natur* (1950). It is therefore important to understand that philosophy from the 1920s to 1940s was not in this respect simply the anti-metaphysics of the logical positivists. A rehabilitation of ontology took place in German philosophy, which played a very important role, before Quine, although Quine's rehabilitation has had a more lasting impact so far.

Hartmann was not a phenomenologist and certainly not a philosopher of existence, although he has also been read as a philosophical anthropologist (Peterson 2019). Nevertheless, a certain kind of phenomenology has its place in his philosophical method, although he was quite critical of Husserl (*ibid.*). Hartmann considers phenomenology to be the systematic collection of relevant evidence. It is the first stage of philosophical inquiry (*ibid.*). Ontology is understood traditionally by Hartmann as the study of being as being and the categories of being (Hartmann 2019/1935, 7 and 51). Metaphysics Hartmann understands as a set consisting of specific metaphysics: cosmology, rational psychology and theology (Peterson 2019).

His important insight is an understanding of the fundamental question of ontology (*Grundfrage* in German), although he is influenced by Aristotle and Hegel (Hartmann 2019/1935, 51). The fundamental question of ontology is, what is being itself (German: *das Sein selbst*)? (Hartmann 2019/1935, 54) By being itself, Hartmann means that being is in no way conditioned to the conscious subject. It is not assumed, for example, that being depends or does not depend on the subject (Hartmann 2019/1935, 57). Hartmann criticises Martin Heidegger for relativising the question of being to the human subject through the concept of the meaning of being (German: *der Sinn des Seins*) (Hartmann 2019/1935, 55–57). According to Hartmann, the starting point of ontology is neutral in relation to the distinction between idealism and realism (Hartmann 2019/1935, 51–52). However, ontological research can only proceed through the phenomenology of beings towards the study of being itself and its categories (Hartmann 2019/1935, 58–60).

Conclusion: six conceptions of ontology

On the basis of this brief historical overview, we can discern, in addition to the Quinean conception of ontology, four earlier conceptions of what ontology is. (1) Lorhard, who coined the term "ontology", represented a supertranscendental conception of ontology as the study of the intelligible. It is not limited to the study of being as being, since not everything that can be understood is a being in his view. (2) In contrast, Göckel thought that ontology is the study of being in general. His conception, then, is really that ontology is the science of Aristotle's being as being and of the essential features of being, conceived by Avicenna and Aquinas as the study of the common or general being of God and creation. They are all united by the fact that they are.

In the early 18th century, Wolff explicitly distinguished ontology, or general metaphysics, from specific metaphysics that investigate some more limited domain of being: bodies (cosmology), souls (rational psychology), or God (natural theology). (3) Kant opposed Wolff when he argued in his transcendental philosophy that ontology concerns a system of concepts and principles referring to objects in general, in particular the categories of the understanding that partly constitute empirical objects. Kant's conception of ontology thus has certain affinities with the supertranscendental conception (1).

(4) In the early phenomenological tradition, its founder Husserl saw ontology as the study of the essential structures of objects in themselves as appearing meaningfully to us. In other words, ontological research is concerned with the essence of any object that can be appear to us meaningfully. This phenomenological conception of ontology has obvious connections with Kant's conception of ontology, especially if interpreted within the framework of transcendental idealism. It was followed by Husserl's pupils Stein and Ingarden, the latter of whom, however, did not accept transcendental idealism. Immediately after Husserl, the critical realist Hartmann returned to the view of ontology as a general metaphysics concerning being as being and its categories.

(5) In *Formal Ontology*, I and Markku Keinänen have defended a view that extends the Quinean conception of ontology with considerations of grounding and fundamentality (Hakkarainen & Keinänen 2023, 57–58). According to us, ontology does not only investigate existence questions, but also possible hierarchies of grounding and fundamentality of entities (ibid.). For example, the classical question of the possible primary being, or in modern terms, metaphysically fundamental being, is in our view an ontological question (Hakkarainen & Keinänen 2023, 57).

It is also essential, we argue, that the very ontological problem settings presuppose something about formal ontology and general metaphysics, which we separate from ontology (Hakkarainen & Keinänen 2023, 59–62). Formal ontology considers categories of being by analysing them through ontological forms (Hakkarainen & Keinänen 2023, 58). For example, the forms of being of a substance can be considered as follows: ontologically independent individual entity, persistent bearer of properties. We cannot even pose the ontological question of the existence or fundamentality of substances without presupposing something about what it is to be a substance if there are substances. At the same time, we have to assume something about what it is to exist. For example, is existence the same as being? What is their relation to their opposites? Does existence modify or is it uniform? These are, according to us, the questions of general metaphysics that are presupposed by ontological and formal ontological questions and answers (Hakkarainen 2023, 138). In our view, general metaphysics is what, for example, Göckel proposed ontology to be. Our argument for our view can be summarized by saying that our view delineates the objects of study of metaphysics in a unifying manner (for more details, Hakkarainen & Keinänen 2023, 58–62).

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