


What is an Ontological Category?

PETER VAN INWAGEN

S NAMES OF DIVISIONS OF PHILOSOPHY GO, ‘ontology’ is a rather new word. Although it is older than that terminological parvenu ‘epistemology’, it is much newer than ‘metaphysics’ or ‘ethics’ or ‘logic’ — and, of course, it is much newer than ‘philosophy’. But the word is as hard to define as any of her elder sisters. Within analytical philosophy¹, one finds three understandings of the word ‘ontology’ — or, if you like, three conceptions of ontology².

One of them, the use of the word by Bergmann and his school, is that ontology is the study of the ontological structure of objects. For reasons that will become clear, I reject this conception of ontology. I reject it as provincial, as the identification of a kingdom with one of its provinces. (In my view — I defend this view in an essay that is a sort of companion piece to the present article³ — that province is uninhabited. But I do not reject the Bergmanian conception of ontology on that ground alone: I contend that it is a provincial conception even if objects do have ontological structures.)

¹ For a discussion of the existential–phenomenological conception of ontology, see my “Being, Existence, and Ontological Commitment,” in David J. Chalmers, David Manley, and Ryan Wasserman, eds., *Metametaphysics: New Essays on the Foundations of Ontology* (Oxford University Press, 2009), pp. 472–506. Republished as Chapter 3, in my *Existence. Essays in Ontology* (Cambridge University Press, 2014), pp. 87–115.

² This count — *three* conceptions of ontology — is problematical, owing to the fact that many analytical philosophers who have made important contributions to ontology (on anyone’s conception of ontology) have not given an explicit statement of what they take ontology to be. Perhaps I should say: Within analytical philosophy, one finds three *potential* or *implicit* or tacit understandings of ontology. (Cf. the remark about Quine in note 4 below.)

³ “Relational vs. Constituent Ontologies,” *Metaphysics*, ed. John Hawthorne and Jason Turner, *Philosophical Perspectives* 26 (Hoboken, NJ: Wiley–Blackwell, 2012), pp. 389–405. Chapter 10 in my *Existence. Essays in Ontology* (Cambridge University Press, 2014), pp. 202–220. A revised version of this paper (entitled “Against Ontological Structure”) will appear in a collection, edited by Gabrielle Galluzzo, of the papers presented at *The Problem of Universals in Contemporary Philosophy* conference (Pisa, 2010).

P. van Inwagen (✉)
University of Notre Dame, USA
e-mail: vaninwagen.1@nd.edu

Disputatio. Philosophical Research Bulletin
Vol. 10, No. 16, Mar. 2021, pp. 241–261
ISSN: 2254–0601 | [EN] | **ARTÍCULO**

There is, secondly, what I will call the “bare Quinean” conception of ontology. Quine has famously called the question ‘What is there?’ “the ontological question,” and one might incautiously infer from this label that he conceives of ontology as the attempt to answer the ontological question. But neither Quine nor anyone else would regard just any answer to the ontological question as the kind of answer a discipline called ontology might be expected to provide. Quine himself has observed that one correct answer to the ontological question is ‘Everything’ — and we certainly do not need to turn to any science or discipline to satisfy ourselves that that answer *is* correct. Another sort of correct answer might well be of the following form: a very long conjunction of existential quantifications on “low-level” predicates, a conjunction that would perhaps read in part ‘... and there are bananas and there are electron neutrinos and there are protein molecules and there are locomotives ... and there are colors and there are political parties and there are Abelian groups and there are non-linear third-order differential equations that are known to have solutions...’. (Perhaps its final conjunct would be: ‘and there is nothing else’.) If the only answers (other than answers that involve the “everything trick,” answers like ‘Everything’ and ‘Locomotives and everything else’) that can be given to the ontological question are those provided by the investigative techniques native to everyday life and the special sciences, then all answers to the ontological question may well be of that sort. But if there is a philosophical discipline called ontology, it will attempt to give an answer to the ontological question that is in some sense more general, more abstract, more systematic than a long conjunction of existential quantifications on low-level predicates. And the “bare Quinean” will agree with this statement: on the bare Quinean conception of ontology, ontology is the discipline whose business it is to provide an abstract or general or systematic answer to the ontological question — answers that are less abstract and more informative than ‘Everything’ and less informative and more abstract than “long list” answers. The bare Quinean will, however, be happy to regard the ideas expressed by the words ‘general’, ‘abstract’, and ‘systematic’ as entirely subjective. On the bare Quinean conception of ontology, it is the business of the practitioners of ontology to produce and defend answers to the ontological question that — as one might say — *strike* them and their peers as “general” and “abstract” and “systematic,” answers that it *seems appropriate* to them to apply those terms to. If, for example, I say that there are abstract objects or sets or temporal parts of persisting objects, the bare Quineans will almost certainly recognize this as an assertion of the kind that characterizes ontology. But if I say that there are bananas or protein molecules or solutions to Einstein’s field equations that are without physical interest, these assertions will almost certainly be seen by the bare

Quineans as having a place in ontology only as examples that illustrate some much more general existential thesis or as premises of some argument for some much more general existential thesis. And they will offer no account of what it is for an existential thesis to be “much more general” than these theses. They will indeed insist that it would be a mistake to try to provide such an account owing to the fact that those words are no more than expressions of the subjective reactions of various philosophers to the degree of generality exhibited by various existential theses.⁴

The third conception of ontology — it is the conception I favor — rests on the conviction that the notion of a “general” or “abstract” or “systematic” answer to the ontological question *can* be given an objective sense. The third conception rests on the conviction that there are *ontological categories* and that it is the business of ontology to provide answers to the ontological question in terms of a specification of the ontological categories. I will attempt to give an account of the concept on which this conception of ontology rests, the concept of an ontological category.

I

I begin with the idea of a natural class. One of the assumptions on which the third conception of ontology rests is that natural classes are real. By this I do not necessarily mean that there are objects or things⁵ called ‘natural classes’, for an ontologist (why is there no such word?) may well deny that there are classes of any description⁶. Indeed, anyone who did deny the existence of classes would *ipso*

⁴ I have not said that Quine or anyone else *is* a bare Quinean. I suspect, however, that Quine would at the very least find bare Quineanism an attractive formulation of the nature of ontology.

⁵ I use ‘object’ and ‘thing’ as count nouns of maximum generality: everything is an object and everything is a thing (‘every thing’ and ‘everything’ are synonyms); a thing/object is anything that can be the referent of a pronoun or the value of a variable. If I speak of certain things as “not real things” or “not really existing” or “not really there,” this is just a manner of speaking, for, of course, everything (every thing, every object) is a real thing, everything really exists, and there is nothing that is not really there. When, for example, I say (in the note that follows) that I am not seriously asserting that the “classes” that figure so prominently in this chapter really exist, this is just a way of saying (a) that I claim to be able to replace those of my sentences that exhibit apparent reference to and quantification over classes with paraphrases that would not exhibit even apparent reference to and quantification over classes, and (b) that making these replacements would have no material effect on the content of the positions I defend or the cogency of the arguments by which I defend them.

⁶ The “classes” that figure in this chapter are — or are if they really exist — much more like biological taxa than they are like sets. (But see note 14 below.) Like taxa, and unlike sets, they can change their

facto be engaged in ontology. What I mean by saying that there are natural classes is a consequence of the thesis that there are natural — non-conventional — lines of division among things. This assumption was famously rejected by Hobbes, and, following him, by Locke and the other empiricists. As Locke says (in the concluding passage of Chapter 3 of Book III of the *Essay*),

Recapitulation. — To conclude: This is that which in short I would say, viz., that all the great business of *genera* and *species*, and their essences, amounts to no more but this, that men making abstract ideas, and settling them in their minds, with names annexed to them, do thereby enable themselves to consider things, and discourse of them, as it were in bundles, for the easier and readier improvement and communication of their knowledge, which would advance but slowly, were their words and thoughts confined only to particulars.

I am not wholly convinced that what Locke says in this “recapitulation” is consistent with everything he says in the *Essay* (or even with everything he says in Chapter 3 of Book III), but, whether it will do as an unqualified statement of Locke’s views or not, it is a good statement of the point of view whose rejection is one of the assumptions on which the third conception of ontology rests. (From this point on, when I ascribe features to “ontology,” I shall be speaking from the point of view of the third conception — my own conception.) According to this anti-Lockean philosophy of classification, some sets, a minuscule proportion of them, correspond to real divisions among things: in each case, the real division between the things that are members of that set and those that are not⁷.

membership with the passage of time and the membership of a class in one possible world may not even overlap its membership in another. Like taxa, and unlike sets, moreover, they may have “borderline members” (see note 7 below). I am not, however, seriously asserting that there really are things that have the properties I have ascribed to classes. I issue this promissory note: I could — the result would be rather awkward, I concede — eliminate the apparent reference to and quantification over classes in the sequel by paraphrase. In my view, the only substantive philosophical issues raised by what I have said in terms of reference to “natural classes” are (a) whether there are real lines of division among things, and (b) whether, for some *x*s such that to distinguish the *x*s from the non-*x*s is to mark a real line of division among things, the *x*s are much — are radically, are vastly — more like one another than the non-*x*s are like one another.

⁷ Real lines of division need not be sharp lines of division. If one draws a “fuzzy” line around, say, the cats (if one divides the world into things that are determinately cats, things that are determinately non-cats, and things that are neither determinately cats nor determinately non-cats), that fuzzy line of division may nevertheless be a real, a nonconventional, fuzzy line of division. When I say that real lines of division “need not” be sharp lines, I mean that it is not my intention to rule the existence of fuzzy but real lines out of consideration on conceptual grounds: I contend that “Real lines must be sharp lines” should be regarded as a substantive philosophical thesis. I do, however, think it plausible to suppose that a line of division’s being “absolutely sharp” (and not accidentally so — not in the way in which the line between

If, therefore, there are natural classes, there are real lines of division among things. And if there are real lines of division among things, there are natural classes⁸. But the relation between the concepts “natural class” and “real line of division” is less straightforward than those two conditionals might suggest. For note that although a complete specification of the natural classes would provide a complete specification of the real lines of division among things, a complete specification of the real lines of division among things would not provide a complete specification of the natural classes. Or, at the very least, the proposition “A complete specification of the real lines of division among things would provide a complete specification of the natural classes” has some extremely implausible consequences. A simple example shows this. Suppose that the line that marks the division between horses and non-horses is one of those real lines of division among things. Does it follow that “horse” is a natural class? Before you answer that question, consider this question: does it follow that “non-horse” is a natural class? That “non-horse” is a natural class certainly seems to be a thesis that is, well, extremely implausible. But the boundary of that class marks a real division among things. At any rate, it does if the boundary of “horse” marks a real division among things, since the two classes have the same boundary. Any philosopher who is seeking a general principle that governs the relation between the concepts “real line of division” and “natural class” will almost certainly conclude that the proposition

If the boundary of a class marks a real line of division among things, then that class is a natural class

is an unsatisfactory candidate for that office, owing to the fact that it attributes “naturalness” to too many classes. The weaker principle:

short women and tall women would be absolutely sharp if, as a consequence of a vastly improbable sequence of genetic accidents, every woman of every era was either less than 150 cm tall or more than 180 cm tall) can be a good reason for supposing that line to be real and not merely conventional. If, for example, it is metaphysically impossible for there to be a borderline case of an electron, that fact seems to me to be a fact that could reasonably be adduced in support of the thesis that the boundary between electrons and non-electrons “carves nature at the joints.”

⁸ Or, to speak more carefully (see note 6 above), those who have no objection to affirming the existence of classes should grant that if there are real lines of division among things, then some classes are natural classes. And even nominalists who believe in real lines of division among things may find it *useful* to speak as if those lines marked the boundaries of natural classes. (Such nominalists will presumably be able to eliminate, at least in principle, apparent reference to and apparent quantification over classes from their discourse.)

For any class, if its boundary marks a real division among things, then either that class or its complement is a natural class — but not necessarily both⁹.

⁹ But what about the universal class? (Even those who are realists about classes will be well advised to treat the universal class as a virtual class — that is, to treat apparent reference to it as a mere matter of speaking.) Its complement is the other “extreme” class, the empty class. Our principle implies that if the boundary between the two extreme classes marks a real division among things, then either the universal class or the empty class is a natural class. The question whether the universal class is a natural class has been controversial — if, for no other reason, because one name of the universal class is (if Meinong will forgive me) “being,” and Aristotle’s denial that “being” is a category has been enormously influential. On the account of “ontological category” that I shall propose, the universal class will be a category if it is a natural class, and I do not want to give an account of “natural class” that will imply either the truth or the falsity of any widely held metaphysical position. If I wish to leave it an open question whether the universal class is a natural class, therefore, I must either deny that (or leave it an open question whether) the boundary between the universal class and the empty class marks a real division among things. (There is another formal possibility: to affirm that — or leave it an open question whether — the empty class is a natural class. But what does it even mean to say that the empty class is a natural class?) One simple way to deny that the boundary between the two extreme classes marks a real division among things is to deny that that boundary exists, to deny that either of them has a thing called a boundary — an intuitive enough stipulation, since it seems intuitive to say that a boundary can exist only if there are things on both sides of it. (A class, we might stipulate, has a boundary if and only if it is neither the universal class nor the empty class.) Or, alternatively, we could say that the two classes do have boundaries (that is, that they have a common boundary), but that their common boundary does not mark a real division among things; it fails to mark a real division among things because it marks no division, real or unreal, among things; it marks no division among things because a division among things can exist only if there are things on both sides of it. If the extreme classes have no boundaries or have boundaries that do not — have a common boundary that does not — mark a real division among things, then our principle is silent on the question whether the universal class is a natural class. Those who want to say that the universal class is a natural class — or that it is not — must defend their thesis on some ground that does not involve the properties of its boundary (perhaps on the ground of its “internal unity” or lack thereof). It will be observed that if the universal class either has no boundary or has a boundary that does not mark a real line of division among things, then this will be true of the empty class as well. Our principle therefore leaves it an open question whether the empty class is a natural class. In the body of this chapter, it will be assumed that the empty class is not a natural class. There are two ways in which this assumption could be defended. The first is this: as I subtly hinted earlier in this note, I don’t see much sense in the idea that the empty class is a natural class. But one might object to the thesis ‘The sentence “The empty class is a natural class” is meaningless’ on the ground that the question whether the empty class is a natural class is a question about the way in which a technical term is to be applied in an extreme case; and (the hypothetical objection continues) such questions are almost always “don’t care” questions, questions that are to be “answered” only by stipulations that need no defense but ‘It is useful so to stipulate’. (I might be directed to my own treatment of the question whether the universal class has a boundary for an example of such a stipulation.) If I were convinced by that reply, I might defend my assumption in another way, the second of the two ways that I mentioned: stipulating that the empty class is not a natural class will simplify some of my definitions and the statements of some of my theses.

is a much more reasonable candidate for this office; indeed, it is the only candidate that seems at all reasonable. But if the relation between “real line of division” and “natural class” is governed by no stronger principle than this, then, although “real line of division” can be defined in terms of “natural class,” “natural class” cannot be defined in terms of “real line of division.” If someone were to ask me, “If the common boundary of two complementary classes A and B marks a real division among things, how is one to determine which of these three things is the case:

A is a natural class and B is not;

B is a natural class and A is not; A and B are both natural classes?”,

I’m afraid I should not have any very informative answer. Any answer would presumably have to appeal to certain “internal” features of the two classes, to something having to do with the relations among their members. One possibility would be to appeal to the “internal unity,” or lack thereof, of each of the classes — that is, to facts about how closely its members resemble one another — objectively resemble one another. One might, for example, say

A class is a natural class only if its membership exhibits a high degree of internal unity. So if A exhibits a sufficient degree of internal unity to be a natural class and its complement B does not, then A is a natural class and B is not; if B exhibits a sufficient degree of internal unity to be a natural class and A does not, then B is a natural class and A is not; if A and B both exhibit a sufficient degree of internal unity to be natural classes, then A and B are both natural classes.

(A class “exhibits sufficient internal unity to be a natural class” if it exhibits all the internal unity that a class needs to exhibit to be a natural class. If there is such a feature of classes and it is widespread, then, presumably, many of the classes that have it are not natural classes — just as many women who have sufficient mathematical ability to be physicists are not physicists — for, presumably, the degree of internal unity of every nonempty subclass of a natural class A is at least as great as the degree of internal unity of A.) It does seem to me to be plausible to suppose that if the boundary between a class and its complement marks a real division among things, at least one of the two must exhibit sufficient internal unity for it to be called a natural class. This idea, the idea of “sufficient internal unity,” may be a clear enough idea for these suggestions and conjectures to be of philosophical interest or it may not. However that may be, it is evident that the concept “natural class” cannot be defined solely in terms the concept “real line

of division” (or at least this thesis is as evident as the thesis that it is not true by definition that the complement of every natural class is a natural class).¹⁰ A definition of “natural class” must also appeal to the concept of “sufficient internal unity,” or, at any rate, to *some* concept other than “real line of division.” One might in fact contend that, if we really *have* the concept “sufficient internal unity,” we could use it to define the concept “real line of division among things.” (Call a class that exhibits “sufficient internal unity” a *unity*. Call a unity a *plenary* unity if every class of which it is a proper subclass exhibits a significantly lower degree of internal unity than it does — even if that larger class is itself a unity. A “real line of division among things” may then be defined as a line of division that is the boundary of a plenary unity.) Why, then, have I assigned such a fundamental role to “real division” in my exposition of the concept “natural class”? Because, first, it seems to me that “real division” is a far easier idea to grasp than the idea “exhibits sufficient internal unity.” And because, secondly, in most interesting cases in which the boundary between two complementary classes marks a real division among things, it will be simply evident that — whatever internal unity may be — either one of them exhibits vastly more internal unity than the other or they both exhibit an approximately equal (and very high) degree of internal unity.

II

Are there any natural classes? Well, it seems plausible to suppose so. The class or set of electrons is a plausible candidate for the office “natural class” — as plausible a candidate as there could be, in my view. (The boundary between electrons and non-electrons is certainly a plausible candidate for the office “boundary that marks a real division among things,” and it seems evident that the class of electrons exhibits vastly more internal unity than the class of non-electrons: any two electrons resemble each other — *objectively* resemble each other — far more closely than any electron resembles any non-electron, and all but a minuscule

¹⁰ It may even be that one class, the universal class, is a natural class that does *not* have a boundary that marks a real division among things. Naomi the nominalist, for example, may believe that, since everything is a concrete particular and, that, since concrete particulars are all, metaphysically speaking, much the same sort of thing, the universal class exhibits (or would exhibit but for the nonexistence of classes: Naomi is availing herself of the terminological convenience offered to nominalists in note 8 above) sufficient internal unity to count as a natural class; and Naomi may also have been convinced by the argument of note 9 above that the universal class either has no boundary or has a boundary that does not mark a real division among things.

proportion of pairs of non-electrons are vastly more different from each other than are any two electrons.) The class of horses (members of the species *Equus caballus*) would be a rather more controversial but still reasonably plausible example.

Whether there are natural classes or not, it is one of the assumptions of ontology that there are. (If there are no natural classes, ontology is like astrology: a science that rests on a false assumption.) It is, moreover, one of the assumptions of ontology that, although some pairs of natural classes may have non-empty intersections otherwise than by one's being a subclass of the other, there are nested sequences of natural classes — sequences ordered by the subclass relation. The class of electrons, class of set of leptons, and the class of fermions provide a plausible example of such a sequence. The class of horses, the class of mammals, and the class of chordates would (again) be a rather more controversial but still reasonably plausible example.

One could, however, affirm the existence of natural classes and of nested sequences of natural classes without involving oneself in ontology — or, indeed, in philosophy. Suppose, for example, that Alice maintains that the largest natural classes are the class of bosons and the class of fermions and that every natural class is a subclass of one of these two nonoverlapping classes. (She apparently believes that the union of those two classes — the class of elementary particles — exhibits insufficient internal unity to count as a natural class.) And suppose that she also maintains that (in some sense) only a very small proportion of the things that there are are bosons or fermions. We might, for example, imagine that she supposes that, for any x s, a unique fusion or mereological sum of the x s exists, and that among those sums are to be found atoms and molecules and cats and locomotives and galaxies and any other composite things there happen to be. (And, of course, Alice believes that almost all the sums are convoluted gerrymanders that are — considered individually — far too convoluted and gerrymandered to be possible objects of human thought.) The class of cats, Alice contends, is not a natural class: the vague and imperfect boundary we have drawn around the cats is a mere product of convention and fails to reflect a real division among things, unlike the boundary around the bosons — which we have not drawn but discovered. And what goes for cats goes for locomotives and galaxies and all the rest. (Of course most classes of sums are cognitively inaccessible to us, but, says Alice, the boundaries of those inaccessible classes can no more be supposed to mark real lines of division among things than can the boundaries of the accessible classes.) And, of course, she maintains that the class of things that are neither bosons nor fermions is, as one might say, radically deficient in internal unity and is therefore not a natural class. (It is the class of composite

things — but, Alice maintains, that common feature of its members does not confer upon it a degree of internal unity sufficient for it to be a natural class.)

If Alice is right, ontology is, again, like astrology: ontology fails to be a science because it rests on a false assumption.¹¹ For one of the assumptions on which ontology rests is this: that membership in the natural classes is not restricted to any such minuscule proportion of the things that there are as Alice supposes it to be.

It is an assumption of ontology that there are natural classes whose membership comprises a really significant proportion of the things that there are. I am acutely aware that the idea of a class whose membership comprises a really significant proportion of the things that there are is an idea that it is hard to give any precise sense to. But it does not seem to me to be an obviously meaningless or entirely vacuous idea. Take our friend Alice. In her view there are certainly a lot more things — even a lot more concrete things — than there are things that are members of some natural class. If, for example, there are 10×80 bosons and fermions, then there are, abstractions aside, $2 \times (10 \times 80) - 1$ things: there are 10×80 things that belong to some natural class and $((2 \times (10 \times 80) - 1) - 10 \times 80)$ things that belong to no natural class, and the latter

¹¹ But does Alice not have an ontology? Have we not in fact stated her ontology (at least insofar as it involves concrete things): ‘There are bosons and fermions and their fusions and nothing else?’ These strike me as purely verbal questions. Let us distinguish two senses, a strong and a weak, in which a person may have an ontology. One’s ontology in the strong sense is one’s answer to the ontological question — ‘What is there?’ — provided that that answer consists in a specification of the ontological categories. One’s ontology in the weak sense is one’s answer to the ontological question (one’s “highly abstract but not too highly abstract” answer) if that answer does not consist in a specification of the ontological categories. Alice, then, has an ontology in the weak sense (for surely her answer to the ontological question is “highly abstract but not too highly abstract”?; I may not know how to define it, but I know it when I see it) but not in the strong sense. Ontology the discipline is that part of philosophy the ultimate goal of whose practitioners is to formulate and defend an ontology in the strong sense: if one has (only) a weak-sense ontology, then, however one came to have it, one did not come to have it by being a practitioner of ontology-the-discipline. Or such is my position. It is certainly not the only possible position one might take on the meanings of ‘ontology’ (count noun) and ‘ontology’ (mass term) and the relation between them. For example, an adherent of the “Bare Quinean” conception of ontology mentioned in the text might well respond to the distinction I have made by saying something along these lines: “Only weak-sense ontologies, as you call them, are possible. ‘Strong-sense’ ontologies and ‘ontological categories’ are a metaphysician’s pipe dream. And if strong-sense ontologies are impossible, why waste a potentially useful word like ‘ontology’ (the mass term) by using it as the name for a pseudo-discipline devoted to generating them? Let us rather use the word this way: let us say that ‘ontology’ is the part of philosophy that seeks to discover the ontological commitments of our everyday and our scientific discourse — commitments that are, to be sure, expressed by in very general terms (‘set’, ‘region of space-time’, ‘persisting physical body’) but which can be investigated without reference to the question whether, e.g., ‘sets’, ‘regions of space-time’, and ‘temporal parts’ refer to ‘ontological categories.’”

number is *inconceivably* larger than the former. (The ratio of the latter to the former can be described this way. Think of the number that is expressed by a ‘1’ followed by seventy–nine zeros. The ratio of the number of things that belong to no natural class to the number of things that belong to some natural class is a number that can be expressed by a ‘1’ followed by — approximately — three times *that many* zeros.) Or if the number of bosons and fermions is denumerably infinite, then the number of (concrete) things that belong to no natural class is indenumerably infinite.

There are various ways in which there might be natural classes whose membership comprised “a really significant proportion of the things that there are.” Let us call such a class “large”:

x is a large natural class =_{df} x is a natural class whose membership comprises a really significant proportion of the things that there are.

Suppose, for example, that the universal class is a natural class. Then there is certainly a large natural class — for the membership of any nonempty class is certainly a “significant proportion” of itself.

Or suppose that, although the class of all things, the universal class, is not a natural class, it is the union of a small number of natural classes. (A “small” number would be a number like 2 or 6 or 19. And what do I mean by ‘a number like’? You may well ask. But if you want a definition of ‘small number’, I offer the following. A number n is small in just this case: if a class is the union of n subclasses, the membership of at least one of them must comprise a really significant proportion of the membership of that class.)

We now introduce the notion of a “high” natural class:

x is a high natural class =_{df} x is a natural class that is a proper subclass of no natural class.¹²

¹² In the sequel, I am going to assume that if there are natural classes at all, there are high natural classes. That is, I am going to assume that it is false that every natural class is a proper subclass of some natural class. I am, in fact, going to make an even stronger assumption than this: that every natural class is a subclass of some high natural class. (Suppose there are high natural classes. Consider the set N of all their natural subclasses. There may be natural classes that are not members of N . That is, ‘Every natural class is a member of N ’ does not follow from ‘There are high natural classes.’) And I am going to assume that these things are the case even if the universal class is not a natural class and there are infinitely many things that belong to some natural class or other.

Note that it is not a consequence of these two definitions that every high natural class is a large natural class. If, for example, Alice is right about what there is, the class of bosons and the class of fermions are high natural classes that are not large — for, as we have seen, if Alice is right about what there is, there are no large natural classes at all. It is, however, easy to imagine a case in which, although there *are* some large natural classes, there are high natural classes that are not themselves large. Suppose, for example, (i) that everything is either a substance or (exclusive) an attribute, (ii) that “substance” and “attribute” are both natural classes, (iii) that every natural class is a subclass of one or the other (thus, the universal class is not a natural class), and (iv) that there are finitely many substances and too many attributes to be numbered even by a transfinite number. It follows that “substance” is a high natural class, despite the fact that only an insignificant proportion of the things that there are are substances.

We may now define “ontological category.” Let us say, first, that a natural class x is a *primary* ontological category just in the case that

- there are large natural classes
- x is a high class.

Consider for example the case presented in the previous paragraph. In that case, “substance” and “attribute” are high natural classes and are the only high natural classes. And there are large natural classes — the class of attributes if no other. (Any other large natural classes would be subclasses of “attribute.”) According to this ontology, then, “substance” and “attribute” are the primary ontological categories — that is, they are primary ontological categories and are the only primary ontological categories.¹³

The primary ontological categories are the highest links in the great chains of classification — the great chains of non-arbitrary classification, of not-merely-a-matter-of-convention classification.¹⁴ But remember that the highest links in

¹³ Note that the definition does not rule out overlapping primary ontological categories. And one might without too much difficulty imagine an ontology with overlapping primary categories. Suppose, for example, that Phoebe maintains that “abstract” and “concrete” are the primary ontological categories. She may consistently go on to maintain that the proposition that Socrates was a philosopher is abstract (in virtue of being a proposition) *and* concrete (in virtue of having a certain concrete object, Socrates, as an ontological constituent).

¹⁴ It is an interesting question whether there might be “categorially homeless objects,” things that belong to no ontological category. If we assume that everything belongs to some ontological category, it follows that, if our “classes” are real things, then classes differ from both sets — given the Fundierungsaxiom — and biological taxa in that they may be “transitive members” of themselves (members of themselves,

the great chains of classification are primary ontological categories only if primary ontological categories exist — just as the highest buildings are skyscrapers only if skyscrapers exist. If our friend Alice is right about what natural classes there are, the highest natural classes are not primary ontological categories. Her world corresponds, in the analogy, to a world in which the highest buildings are three stories high: highest buildings but no skyscrapers.

Having defined ‘primary ontological category’, we may proceed to define ‘secondary ontological category’, ‘tertiary ontological category’, and so on, by repeated applications of essentially the same device. We say that x is a *natural subclass* of y if x is a subclass of y and x is a natural class. We say that x is a *large subclass* of y if x is a subclass of y and x comprises a significant proportion of the members of y . We say that x is a *high subclass* of y if x is a natural proper subclass of y and is a proper subclass of no natural proper subclass of y . Then, a natural class x is a *secondary ontological category* if

There is a primary ontological category y such that

- y has large natural proper subclasses
- x is a high subclass of y .

And so for tertiary ontological category, quaternary ontological category, and so on.

And, finally, an *ontological category* (simpliciter) is a class that, for some n , is an n -ary ontological category.¹⁵

members of some of their members, etc.). Suppose, for example, that there are two primary categories, A and B. If categories (which are classes) are real things, and if everything belongs to some category, then A belongs either to itself or to B, and B belongs either to itself or to A. It follows that there is a class that belongs either to itself or to one of its members. And it does seem plausible to suppose that some categories, if categories are real things, must be members of themselves. Consider, for example, an ontology according to which abstract objects constitute an ontological category. This category, if it is a real thing, must be an abstract object, and if it is an ontological category, all abstract objects must belong to it. (Any ontological category to which some abstract objects do not belong is not the category “abstract object.” It is therefore impossible for the category “abstract object,” if it really exists, to be a categorially homeless object.) If, therefore, “abstract object” is an ontological category and categories are real things and are abstract objects, then some classes are members of themselves.

¹⁵ This definition allows other kinds of categorical overlap than the kind discussed in note 13 above. For suppose that A and B are natural classes, that everything belongs either to A or to B, and that neither is a proper subclass of any natural class. Then A and B are primary ontological categories. (Since everything belongs either to A or to B, at least one of them must be a large class.) A case of this kind was considered in note 13 above; nothing we have said implies that A and B do not overlap. Suppose, however, that A and B do not overlap and that C is a high natural subclass of A and that D is a high natural subclass of

One might wonder whether this account of “ontological category” has the consequence that this concept is “entirely subjective” — and thus wonder whether the account of ontology that I am proposing in the end reduces to the “bare Quinean” conception of ontology. It is certainly true that the account depends essentially on certain *vague* terms. (For example, ‘the membership of x comprises a significant proportion of the membership of y ’.) I would contend, however, that the vague is not the same as the subjective. For example, ‘delicious’ is a subjective term, in contrast to ‘edible’ and ‘nutritious’, which are merely vague. I would also point out that there can be perfectly clear cases of objects that fall under vague terms, and that this account, when applied to a particular metaphysic may yield determinate answers to the question, ‘What, according to that metaphysic, are the ontological categories?’ It may be obvious, for example, that according to Albert’s metaphysic, there are no secondary ontological categories, since all his primary categories have infinitely many members and all other natural classes have only finitely many members — which entails that none of Albert’s primary categories have large natural subclasses.

Assuming that the “subjectivity” worry has been adequately answered, is the above account of “ontological category” satisfactory? I am inclined to think that this account is incomplete I am inclined to think that there should be a further condition on what an “ontological category” is, a modal condition. I think this because what I have so far said allows ontological categories to be rather fragile, modally speaking, much more fragile than I’m comfortable with their being. One kind of example that makes me uneasy is this: it is consistent with this account that the natural class “dog” (let’s assume that this *is* a natural class) turn out to be, oh, let’s say, a 23-ary ontological category. And this result seems wrong to me — and not because I have anything against either dogs or allowing the science of biology to have implications for ontology. It seems wrong to me because the fact that there *is* such a natural class as “dog” is — no doubt — radically contingent. Very small changes in the world of a hundred million years ago — changes local to the surface of the earth — would have resulted in there never having been any such class. And it seems evident to me that a satisfactory account of “ontological

B. Suppose further that the union of C and D is a natural class that is a proper subclass of no natural class. Then $C \cup D$ is a primary ontological category that overlaps the primary categories A and B. Suppose further that both A and B have large natural proper subclasses: either C or its complement comprises a significant proportion of the membership of A; either D or its complement comprises a significant proportion of the membership of B. And suppose that at least one of C and D is a large subclass of $C \cup D$. Then C and D are secondary ontological categories “twice over”: C, for example, is a high natural subclass of both the primary category A and the primary category $C \cup D$ (both of which have large natural proper subclasses).

III

Let us now return to the concept of ontology. Ontology, as I see ontology, rests on the following assumption: there *are* ontological categories. We may, in fact, define ontology as the discipline whose business is to specify the ontological categories. Remember that the empty set or class is not to count as a natural class, and it is therefore true by definition that all ontological categories are non-empty. To specify the ontological categories is therefore to make an existential statement — even if one regards the categories themselves as virtual classes and thus as not really “there.” If for example, one says that “substance” is an ontological category, this statement implies that there are substances. The goal of ontology is to provide an answer to the ontological question in the form of a specification of the ontological categories.¹⁶

It is a commonplace that the word ‘ontology’ is used both as a mass term and a count noun. When it is used as a mass term, it denotes a certain discipline, a certain subfield of philosophy or of metaphysics — just that discipline that I have been attempting to give an account of. When it is used as a count noun, it is used to refer to certain philosophically interesting answers to the ontological question. If my account of ontology is right, *an* ontology is *a* specification of the ontological categories or of some of the higher ones.¹⁷

¹⁶ Or of some of the higher ones. An ontology might, for example, specify “substance” and “attribute” as the primary ontological categories and mention parenthetically that “attribute” has all manner of natural subclasses that satisfy the definition of ‘n-ary ontological subcategory of “attribute”’, and decline to specify any of them — on the ground, say, that specifying them would not have any consequences that were of much metaphysical interest.

¹⁷ One possible “version” of the metaphysical position called “austere nominalism” raises a problem for my account of ontology. This is the version I have in mind: there are only concrete particulars; there are no high natural classes: neither “concrete particular” nor any other class whose membership comprises a significant proportion of the things that there are is a natural class. (That is to say, according to the proponents of this variety of nominalism, “concrete particular” is a metaphysical or ontological *concept*, but the things that fall under this concept — this *radically abstract* concept — are so various in their natures that they do not constitute the membership of a natural class.) This version of austere nominalism seems clearly to be “an ontology” — and not a mere “weak sense” ontology — but it implies that there are no ontological categories. And perhaps there are other metaphysical positions that raise essentially the same problem for my account of ontology: metaphysical positions that provide abstract and general answers to “the ontological question” in terms of metaphysical or ontological concepts so abstract that the objects that any of them apply to are too various to constitute a natural class. Whether this is so is a matter that deserves further study.

I will give two brief examples of this account of ontology “at work.” I will show how it fares when it is applied to two very different ontologies.

My first example is the ontology I myself favor. According to this ontology, the Favored Ontology, there are two primary categories, substance and relation. (Unless the universal class is a natural class, in which case it is the primary category, and substance and relation are the two secondary categories. I have no firm opinion about whether the universal class — I suppose the best name for it would be “being” if it is thought of as a category — is a natural class and therefore a category.)

In addition to “proper” relations (dyadic relations, triadic relations, and so on, and “variably polyadic” relations: relations like those expressed by ‘are integers between and’ and ‘are fellows of the same college’) the category “relation” subsumes propositions (0-adic relations) and attributes (monadic relations).

I might have given many other names to the categories I have chosen to call “substance” and “relation.” I might have used any of the names, “concrete thing,” “causal (or etiological) thing,” “individual (thing),” and “particular (thing)” instead of “substance.”¹⁸ I might have used any of the names, “abstract thing,” “an etiological thing,” “assertible,” and “universal” instead of “relation.” But it is not my position that, for example, ‘substance’ and ‘individual’ are synonymous. Although I say that all substances are individual things and all individual things are substances, I regard this as a substantive thesis, a proposition that requires a philosophical defense. And the same goes for any pair of terms from the first list and any pair of terms from the second list. I contend only that the extensions of the members of each such pair are the same.

My second example is the Meinongian ontology.¹⁹ The universal class, the class of “objects” or the realm of *Sosein*, divides into the two ontological categories the concrete and the abstract (I don’t mean to imply that those two terms are actually used by Meinongians). The category “the concrete” divides into the two

¹⁸ As I said in note 5, I use ‘thing’ as the most general count noun: everything is a thing; ‘every thing’ and ‘everything’ are synonyms; a “thing” is anything that can be the referent of a pronoun or the value of a variable.

¹⁹ Meinongians may object to my use of the phrases ‘the Meinongian ontology’ and ‘ontological category’ in my description of their position — since, of course, ‘τό ὄν’ means ‘being’. They may insist that providing an answer to the question, ‘What is there?’ is only one small part of their project. Well, let them find their own terminology. This is mine. The Meinongian ontology stands in instructive opposition to the Favored Ontology, owing to the fact that, unlike the Favored Ontology, it comprises categories that “properly overlap” — that is, pairs of categories that overlap without either’s being a subcategory of the other.

categories “the existent” and “the (concrete but) nonexistent,” and the category “the abstract” divides into the two categories “the subsistent” and “the (abstract but) nonsubsistent.” The union of the existent and the subsistent is itself an ontological category, the category of *Sein*, and the complement of that category is a category, the category *Nichtsein*²⁰. If *Sosein* is not a natural class, then the abstract, the concrete, *Sein*, and *Nichtsein* are primary categories and the categories that pertain to existence and subsistence are secondary categories. Each of them is, in fact, a secondary category “twice over,” for the reason displayed as an abstract possibility in note 15; for example, “the existent” is a subcategory both of the primary category “the concrete” and the primary category *Sein*.

Let me now say something to connect the definition of ontology I have given with an ancient and important definition of ontology. The definition I am thinking of derives from one of Aristotle’s definitions of ‘first philosophy’ in *Metaphysics*: ontology is the science whose subject matter is τό ὄν ἢ ὄν or of being as such or being *qua* being. In my view, this Aristotelian definition of ontology is, if not entirely satisfactory, not wholly wrong either. I would defend this position as follows. The universal class, the class of all things, is either the class of all beings — the class whose membership is just exactly the things that there are —, or else it is the class that comprises both all beings *and* all non-beings. (Or, as a Meinongian might prefer to say, the universal class, the “realm” of *Sosein*, comprises two non-overlapping realms, the realm of being and the realm of non-being.) In the former case, being is what is common to the members of all ontological categories, and, if there is something common to all the ontological categories, it seems plausible to say that a science or discipline whose business is to specify the ontological categories should have as one of its first orders of business to say what this “something” is. In the latter case, being and non-being are the two of the highest ontological categories (perhaps *Sosein* is the highest category) and, if there is such a category as non-being, the task of explaining what being is and the task of explaining what non-being is can be divorced from each other only by an act of severe abstraction: if those tasks are in any sense “two,” they must nevertheless be seen as two sub-tasks of one task. If I reject the Aristotelian definition of ontology, it is not because I deny that the question ‘What is being?’ is one of the questions that ontology must answer. I reject it because I deny that it is the primary ontological question, the question that defines the business of ontology.

²⁰ Assuming that “the concrete,” “the abstract,” “the existent,” “the subsistent,” “the nonexistent,” “the nonsubsistent,” *Sein*, and *Nichtsein* are all natural classes.

I will close by saying something to connect the account of ontology I have proposed in the present chapter with what I have said about ontology in the past. In earlier discussions of ontology, I've said that ontology divides into meta-ontology and ontology proper.²¹ Ontology proper, I said, is the investigation of what there is, and meta-ontology addresses the two questions, 'What does "there is" mean?' and 'What methods should be employed in the investigation of what there is?' But in this article I have defined ontology as the discipline that attempts to specify the ontological categories. Does this definition not identify ontology (ontology *simpliciter*) with "ontology proper"?

My earlier characterization of ontology and the present characterization can be reconciled if we adopt a sufficiently liberal understanding of 'specify the ontological categories': to specify the ontological categories is not merely to set out a list of categories; specifying the ontological categories also involves explaining the concept of an ontological category and describing the relations between the categories and attempting to answer any philosophical questions that may arise in the course of doing this. One of these philosophical questions will be the question of the nature of being — which is essentially the question, 'What is it for a category — or, more generally, a class — to be nonempty?' (So, at any rate, we anti-Meinongians say. So, at any rate, we anti-Meinongians in the Kant-Frege-Russell-Quine tradition say. I leave it to the Meinongians to explain in their own terms what it is for a class or category to be nonempty.) We may say then that "ontology proper" is the attempt to set out a satisfactory list of ontological categories; everything else in ontology belongs to meta-ontology.²²

²¹ See, for example, "Meta-ontology," *Erkenntnis* 48 (1998): 233–250; reprinted in *Ontology, Identity, and Modality: Essays in Metaphysics* (Cambridge University Press, 2001).

²² I have given one example of an ontology. I will give a second, the ontology I myself favor. According to this ontology, there are two primary categories, substance and relation. (Unless the universal class is a natural class, in which case it is the primary category, and substance and relation are the two secondary categories. I have no firm opinion about whether the universal class — I suppose the best name for it would be "being" if it is thought of as a category — is a natural class and therefore a category. The category "relation" subsumes propositions (0-*adic* relations) and attributes (monadic relations). The category "substance" goes by two other names, "concrete thing" and "individual (thing)." Similarly, the category "relation" is also called "abstract thing" and "universal." It is not my position that that, e.g., 'substance' and 'individual' are synonymous. Although I say that all substances are individual things and all individual things are substances, I regard this as a substantive thesis, one of the component propositions of my ontology that requires a philosophical defense. And the same goes for the pairs 'substance' and 'concrete thing', 'concrete thing' and 'particular', 'relation' and 'abstract thing', 'abstract thing' and 'universal', and 'universal' and 'relation'. I contend only that the extensions of each pair are the same.

REFERENCIAS

- VAN INWAGEN, Peter (1998). "Meta-ontology." *Erkenntnis* 48: 233–250.
- VAN INWAGEN, Peter (2009). "Being, Existence, and Ontological Commitment." In *Metametaphysics: New Essays on the Foundations of Ontology*, edited by David J. Chalmers, David Manley and Ryan Wasserman. New York: Oxford University Press, pp. 472–506
- VAN INWAGEN, Peter (2010). *Ontology, Identity, and Modality: Essays in Metaphysics*. New York: Cambridge University Press.
- VAN INWAGEN, Peter (2012). "Relational vs. Constituent Ontologies." In *Metaphysics*, edited by John Hawthorne and Jason Turner (Philosophical Perspectives 26). Hoboken, NJ: Wiley–Blackwell, pp. 389–405
- VAN INWAGEN, Peter (2014). *Existence. Essays in Ontology*. New York: Cambridge University Press.

**What is an Ontological Category?**

In this article, I examine the concept of a natural class and propose a definition of "ontological category" in terms of that concept. Let's say a class is "large" if its membership comprises a significant proportion of the things which are there. Let's say a class is "high" if it is not a proper subclass of any natural class. Then a natural class is a primary ontological category if and only if (a) there are large natural classes, and (b) it is a high class. (Secondary, tertiary, etc., ontological categories are defined by an extension of this definition). I defend the definition, consider various ways in which it might be modified, and apply it to the problem of constructing a taxonomy of ontologies.

Keywords: Ontology · Category · Natural Class · Taxonomy.

¿Qué es una categoría ontológica?

En este artículo, examino el concepto de clase natural y propongo una definición de «categoría ontológica» en términos de ese concepto. Digamos que una clase es «grande» si su membresía comprende una proporción significativa de las cosas que están allí. Digamos que una clase es «alta» si no es una subclase adecuada de ninguna clase natural. Entonces, una clase natural es una categoría ontológica primaria si y solo si (a) hay grandes clases naturales y (b) es una clase alta. (Las categorías ontológicas secundarias, terciarias, etc. se definen mediante una extensión de esta definición). Defiendo la definición, considero varias formas de modificarla y la aplico al problema de construir una taxonomía de ontologías.

Palabras Clave: Ontología · Clase natural · Categoría · Taxonomía.

PETER VAN INWAGEN is the John Cardinal O'Hara Professor of Philosophy, Emeritus, at the University of Notre Dame, USA. Ph.D. in Philosophy from the University of Rochester. While he works in a wide variety of areas of philosophy, much of his work has been in metaphysics, the philosophy of action, and the philosophy of religion. He was elected a member of the American Academy of Arts & Sciences in 2005. He is author of the *Thinking about Free Will* (Cambridge: Cambridge University Press. 2017); *Existence: Essays in Ontology* (Cambridge: Cambridge

University Press. 2014); *The Problem of Evil* (Oxford: Oxford University Press. 2006), or *Ontology, Identity, and Modality: Essays in Metaphysics* (Cambridge: Cambridge University Press. 2002).

INFORMACIÓN DE CONTACTO | CONTACT INFORMATION: Department of Philosophy, University of Notre Dame. 100 Malloy Hall, Notre Dame, IN 46556 USA. e-mail (✉): vaninwagen.1@nd.edu.

HISTORIA DEL ARTÍCULO | ARTICLE HISTORY

Received: 6–January–2021; Accepted: 19–March–2021; Published Online: 30–March–2021

COMO CITAR ESTE ARTÍCULO | HOW TO CITE THIS ARTICLE

van Inwagen, Peter (2021). «What is an Ontological Category?». *Disputatio. Philosophical Research Bulletin* 10, no. 16: pp. 241–261.

© Studia Humanitatis – Universidad de Salamanca 2021