

# Being, Totality and the Transcendentals

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## The Problem of Non-Being

### A Parmenidean Picture

**First stab.** Everything there is, is, i.e. has Being. Having being is to be; Being is, and whatever is is part of it. So if everything has Being, everything is Being, i.e. Being is everything there is ( $\exists x \forall y (x = y)$ ).

**Flat-footed response.** ‘OBVIOUSLY’, to have being (i.e. to be) is not the same as to be Being (i.e. that weird thing, the totality of everything there is).

**Preliminary rejoinders:** (i) even if it is not the same, there is Being (i.e. a totality of everything there is), if something is: how could something be and be outside of it? (ii) a distinction between ‘having Being’ and ‘being Being’ presupposes diversity (between being and having) – what is that difference between having and being and how can it non-question-beggingly argued for? (iii) if there is a difference between “...is” and “...has Being”, what is the difference between ‘being’ and ‘Being’ and how can it non-question-beggingly be argued for? I.e.: even if there is a distinction, the right to the “obviously” (or even to the “OBVIOUSLY” has to be earned; (v) the distinction, if it can be made, entails a distinction between ‘be *being*’ (the property said to be had) and ‘be *Being*’ (being that weird thing, the totality of everything); the flat-footed response says that both are exemplified, but not by the same things – what grounds that difference?

**Second stab.** Everything there is, is identical (to itself), i.e. one (with itself). If everything is one, everything is One; One (or *being one* is shared by everything, it’s what all things have in common, i.e. all things are one, there is no numerical difference ( $\forall x, y (x = y)$ ).

**Advantages:** We do not need capitalisation: “everything is one” is enough, “everything is (the) One” is not needed. Identity (self-identity, anyway, if this really is something else) *is* universal, on anyone’s account – in what way is it universal if it is not something all things have in common?

**Flat-footed response:** There are two ways to be one: to be numerically one (ie. identical) and to be qualitatively one (ie. the same, in some respect). To say that every thing is one in the first sense (i.e. enjoys self-identity) is to say that all things share this characteristic, i.e. are qualitatively the same with respect to self-identity.

**Preliminary rejoinders:** (i) If there are two Ones (if this makes sense at all), or two properties denotable by “...is one”, or two ways in which things are one, the Parmenidean will just stick to the first (the properly self-predicable, the numerical, the one that is not compatible with being different in the same way) and restate the premisses of the argument. (ii) If there are these two ways, what grounds their difference? In what sense are they ‘one enough’ to count as ways to have that one property, to be one?

**Third stab.** There is no difference at all: if there is a difference, it cannot be only qualitative, but must be numerical as well (by Leibniz’s Law); it must be something that can be had and lacked by different things, i.e. something that makes a distinction among the things there are.

**Fourth stab.** There is nothing else than Being.

## The Problem of Non-Being in Contemporary Metaphysics

In modern times, the champion of ontological commitment is undoubtedly Quine: if “to be *assumed as* an entity is [...] to be reckoned as the value of a variable” (Quine 1948: 13), a theory or body of (putative) truths *T* commits us to those entities that are assumed to be in the range of variables to make *T* true.<sup>1</sup> According to Quine, it is the presumed truth of the sentences we use that puts us under ontological obligations and it is our use of first-order quantification in a semi-formalised canonical idiom which makes these obligations explicit.

This way of using ‘be’, Quine says, helps us make ontological disputes meaningful and solve the problem dubbed “Plato’s beard”, the “old Platonic riddle of [how there can be] non-being”:

It is some such line of thought that leads philosophers like McX to impute being where they might otherwise be quite content to recognize that there is nothing. Thus, take Pegasus. If Pegasus *were* not, McX argues, we should not be talking about anything when we use the word; therefore it would be nonsense to say even that Pegasus is not. Thinking to show thus that the denial of Pegasus cannot be coherently maintained, he concludes that Pegasus is. (Quine 1948: 22)

To deal with this problem, Quine advises “a Fregean therapy of individual concepts” combined with Russell’s theory of descriptions thus:

We have only to rephrase ‘Pegasus’ as a description, in any way that seems adequately to single out our idea: say ‘the winged horse that was captured by Bellerophon’. Substituting such a phrase for ‘Pegasus’, we can then proceed to analyze the statement ‘Pegasus is’, or ‘Pegasus is not’, precisely on the analogy of Russell’s analysis of ‘The author of *Waverly* is’ and ‘The author of *Waverly* is not’. [...] If the notion of Pegasus had been so obscure or so basic a one that no pat translation into a descriptive phrase had offered itself along familiar lines, we could still have availed ourselves of the following artificial and trivial-seeming device: we could have appealed to the *ex hypothesi* unanalyzable, irreducible attribute of *being Pegasus*, adopting, for its expression, the verb ‘is-Pegasus’, or ‘pegasizes’. The noun ‘Pegasus’ itself could then be treated as derivative, and identified after all with a description : ‘the thing that is Pegasus’, ‘the thing that pegasizes’. (Quine 1948: 27 / 8)

We *can* do that, no doubt – but what *are* we doing? It is always a good idea to ask those questions to people they themselves are fond of asking and it might indeed seem that Quine is changing the subject: our (Plato’s? McX’s?) initial question concerned Pegasus and the answer was that nothing pegasises. This is an answer only to the extent that Pegasus’ existence depends on its pegasising, i.e. *presupposes* that Pegasus pegasises and nothing else does. That this presupposition does not fail is part of what makes the answer satisfactory (to the extent it is), so Quine *is* telling us that nothing else then Pegasus could pegasise after all, a *de re* modal statement if ever there was one.<sup>2</sup> Historically, the worry pushed against Quine was the different, though related one of *intelligibility*:<sup>3</sup>

1. Quine was certainly not alone, and perhaps not the first, to focus on variables as the locus of ontological commitment. According to Hintikka (1966: 40) (cited after the reprint), essentially the same criterion was put forward by Kazimierz Ajdukiewicz in his dissertation, published as Ajdukiewicz (1921).

2. To put it in terms more similar to those of later debates: how can we know that we find enough ‘descriptive material’ to pack into “...pegasises” to make the claim plausible that it expresses Pegasus’ individual concept? And even if we did, and proper names did have individuating senses, would they exemplify (whatever is expressed by) this ‘descriptive material’ necessarily and analytically?

3. That this worry may seem pressing in our times of ‘just take as primitive what you cannot explain’ methodology does not speak against it, but against our methodology.

...the employment of terms like ‘pegasizes’, with a “guarantee” (whatever that might mean) that they are truly predicable of one and only one thing (or of nothing), does nothing more than introduce “proper names” at the predicate level. (Hochberg 1957: 553)

Even if this were in general ok (as many nowadays think), the specific problem of non-being would still not thereby be solved. Even if “Pegasus does not exist” does mean something like “There is no Pegasiser”, the latter is still not unproblematic. What makes it true? It is not that nothing is Pegasus, because that means the same as what we started with. It is not that nothing was captured by Bellerophon for that could have other reasons. It is not that no horse has wings because having wings is not what makes a horse Pegasus, identical to Pegasus or pegasising.

And so we get the problem of true negative existentials – Plato’s original problem.

## Outline of an Aristotelian\*, an Aristotelian or the Aristotelian solution

Something like the Parmenidean picture moved Aristotle.<sup>4</sup>

We may read Aristotle as starting by distinguishing

- (i) What is it, for something  $x$ , to be  $F$ ?
- (ii) What is it, for something  $x$ , to be rational?
- (iii) What is it, for something  $x$ , to be a  $y$ ?
- (iv) What is it, for something  $x$ , to be a man?
- (v) What is it to be a  $y$ -that-is- $F$ ?
- (vi) What is it to be a  $y$ ?

The variety of answers to the first question provides us with a first, cheap and pleonastic, way of saying that being is said in many ways. For different instances of “ $F$ ”, the question will have different answers; what is more: even for one fixed  $F$ , the answers may be different depending on the (kind of) thing  $x$  of which the question is asked:

τίς μὲν οὖν διαφορὰ τοῦ ἀπλῶς γίνεσθαι καὶ μὴ ἀπλῶς, ἐν τοῖς φυσικοῖς εἴρηται.

Ἐπεὶ δ’ ἡ μὲν ὡς ὑποκειμένη καὶ ὡς ὕλη οὐσία ὁμοῦ λογεῖται, αὐτῆ δ’ ἐστὶν ἡ δυνάμει, λοιπὸν τὴν ὡς ἐνέργειαν (10) οὐσίαν τῶν αἰσθητῶν εἰπεῖν τίς ἐστίν. Δημόκριτος μὲν οὖν τρεῖς διαφορὰς ἔοικεν οἰομένῳ εἶναι (τὸ μὲν γὰρ ὑποκεῖμενον σῶμα, τὴν ὕλην, ἐν καὶ ταύτων, διαφέρειν δὲ ἡ ῥυθμῶ, ὃ ἐστὶ σχῆμα, ἡ τροπῆ, ὃ ἐστὶ θέσις, ἡ διαθιγῆ, ὃ ἐστὶ τάξις)· φαίνονται δὲ πολλὰι διαφοραὶ οὐσαι, οἷον τὰ (15) μὲν συνθέσει λέγεται τῆς ὕλης, ὡσπερ ὅσα κράσει καθά μὲν συνθέσει λέγεται τῆς ὕλης, ὡσπερ ὅσα κράσει καθά περ μελίκρατον, τὰ δὲ δεσμῶ οἷον φάκελος, τὰ δὲ κόλλη οἷον βιβλίον, τὰ δὲ γόμφῳ οἷον κιβώτιον, τὰ δὲ πλείοσι τούτων, τὰ δὲ θέσει οἷον οὐδὸς καὶ ὑπέρθυρον (ταῦτα γὰρ τῶ κείσθαι πως διαφέρει), τὰ δὲ χρόνῳ οἷον δεῖπνον καὶ (20) ἄριστον, τὰ δὲ τόπῳ οἷον τὰ πνεύματα· τὰ δὲ τοῖς τῶν αἰσθητῶν πάθεισιν οἷον σκληρότητι καὶ μαλακότητι, καὶ πυκνότητι καὶ ἀραιότητι, καὶ ξηρότητι καὶ ὑγρότητι, καὶ τὰ μὲν ἐνίοις τούτων τὰ δὲ πᾶσι τούτοις, καὶ ἕλωσ τὰ μὲν ὑπεροχῆ τὰ δὲ ἐλλείψει. (25) (*Metaphysics* H.2, 1042b7-25)

The difference between becoming in the unqualified sense and becoming in a qualified sense has been stated in the *Physics*. Since the substance which exists as substratum and as matter is generally recognized, and this is that which exists [10] potentially, it remains for us to say what is the substance, in the sense of actuality, of sensible things. Democritus seems to think there are three kinds of difference between things; the underlying body, the matter, is one and the same, but they differ either in rhythm, i.e. shape, or in turning, i.e. position, or in inter-contact, i.e. [15] order. But evidently there are many differences; for instance, some things are characterized by the mode of composition of their matter, e.g. the things formed by mixture, such as honey-water; and others by being bound together, e.g. a bundle; and others by being glued together, e.g. a book; and others by being nailed together, e.g. a casket; and others in more than one of these ways; and others by position, e.g. [20] the threshold and the lintel (for these differ by being placed in a certain way); and others by time, e.g. dinner and breakfast; and others by place, e.g. the winds; and others by the affections proper to sensible things, e.g. hardness and softness, density and rarity, dryness and wetness; and some things by some of these qualities, others [25] by them all, and in general some by excess and some by defect. (Aristotle 2014: 3539-3541)

4. By “something like” I mean the following: even if neither attributable nor attributed-by-Aristotle to Parmenides or some ‘Parmenideans’ of whom we know very little, the picture sketched above is (i) not obviously stupid (even though obviously wrong) and (ii) provides motivation (by opposition) for a broadly Aristotelian (or perhaps ‘Neo-Aristotelian’) response. I also believe, though do not argue here, (iii) that some important parts of this response is among those to be found in some of the works we call ‘the Aristotelian corpus’ and even that (iv) it is (the best, and also the exegetically most defensible version of) Aristotle’s view, my Aristotle’s anyway.

In the immediate continuation of this passage, Aristotle draws the startling conclusion that this variety of (essential, characteristic, defining) properties corresponds to different ways to be:

ὥστε δῆλον ὅτι καὶ τὸ ἔστι (25) τσαυταχῶς λέγεται· οὐδὲς γὰρ ἔστιν ὅτι οὕτως κεῖται, καὶ τὸ εἶναι τὸ οὕτως αὐτὸ κεῖσθαι σημαίνει, καὶ τὸ κρύσταλλον εἶναι τὸ οὕτω πεποικνωσθαι. ἐνίων δὲ τὸ εἶναι καὶ πᾶσι τούτοις ὀρισθῆσεται, τῷ τὰ μὲν μεμιγθῆναι, τὰ δὲ κε κρᾶσθαι, τὰ δὲ δεδεσθαι, τὰ δὲ πεποικνωσθαι, τὰ δὲ ταῖς (30) ἄλλαις διαφοραῖς κεκρησθαι, ὡσπερ χεῖρ ἢ πούς. ληπτέα οὖν τὰ γένη τῶν διαφορῶν (αὐτὰ γὰρ ἀρχαῖ ἔσονται τοῦ εἶναι), οἷον τὰ τῷ μᾶλλον καὶ ἧττον ἢ πυκνῶ καὶ μακρῶ καὶ τοῖς ἄλλοις τοῖς τοιούτοις· πάντα γὰρ ταῦτα ὑπεροχῇ καὶ ἔλλειψίς ἐστιν. εἰ δέ τι σχήματι ἢ λειότητι (35) καὶ τραχύτητι, πάντα εὐθεῖ καὶ καμπύλῳ. τοῖς δὲ τὸ καὶ τραχύτητι, πάντα εὐθεῖ καὶ καμπύλῳ. τοῖς δὲ τὸ (1043a) εἶναι τὸ μεμιγθῆναι ἔσται, ἀντικειμένως δὲ τὸ μὴ εἶναι. φανερόν δὲ ἐκ τούτων ὅτι εἴπερ ἡ οὐσία αἰτία τοῦ εἶναι ἕκαστον, ὅτι ἐν τούτοις ζητητέον τί τὸ αἴτιον τοῦ εἶναι τούτων ἕκαστον. οὐσία μὲν οὖν οὐδὲν τούτων οὐδὲ συνδυαζόμενον, ὅμως δὲ τὸ ἀνάλογον ἐν ἑκάστῳ· καὶ ὡς ἐν ταῖς οὐσίαις τὸ τῆς (5) ὕλης κατηγορούμενον αὐτῆ ἢ ἐνέργεια, καὶ ἐν τοῖς ἄλλοις ὀρισμοῖς μάλιστα. οἷον εἰ οὐδὸν δεῖ ὀρίσασθαι, ξύλον ἢ λίθον ὡδὶ κείμενον ἐρούμεν, καὶ οἰκίαν πλίνθους καὶ ξύλα ὡδὶ κείμενα (ἢ ἔτι καὶ τὸ οὐ ἔνεκα ἐπ' ἐνίων ἔστιν), εἰ δὲ κρύσταλλον, ὕδωρ πεπηγὸς ἢ πεποικνωμένον ὡδί· συμφωνία δὲ ὀξέος (10) καὶ βαρέος μίξις τοιαυτή· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. (*Metaphysics* H.2, 1042b25-a12)

Clearly then the word 'is' has just as many meanings; a thing is a threshold because it lies in such and such a position, and its being means its lying in that position, while being ice means having been solidified in such and such a way. And the being of some things will be defined by all these qualities, because some parts of them are mixed, others are [30] fused, others are bound together, others are solidified, and others possess the other differentiae; e.g. the hand or the foot. We must grasp, then, the kinds of differentiae (for these will be the principles of the being of things), e.g. the things characterized by the more and the less, or by the dense and the rare, and by other such qualities; [35] for all these are characterized by excess and defect. And everything that is characterized by shape or by smoothness and roughness, is determined by the straight and the curved. And for other things their being will mean their being [1043a] mixed, and their not being will mean the opposite. It is clear then from these facts that if its substance is the cause of each thing's being, we must seek in these differentiae the cause of the being of each of these things. Now none of these differentiae is substance, even when coupled with matter, yet in each there is [5] something analogous to substance; and as in substances that which is predicated of the matter is the actuality itself, in all other definitions also it is what most resembles full actuality. E.g. if we had to define a threshold, we should say 'wood or stone in such and such a position', and a house we should define as 'bricks and timbers in such and such a position' (or we may name that for the sake of which as well in some cases), and if we define ice we say 'water frozen or solidified in such [10] and such a way', and harmony is 'such and such a blending of high and low'; and similarly in all other cases. (*Aristotle 2014: 3539-3541*)

It is one thing to be white and it is a different thing to stand or be standing. It is one thing to be healthy for food, another thing to be healthy for a drug and it is yet another thing to be healthy for a bodily condition. We should not, of course, therefrom conclude that white things and standing things enjoy different ways of being, nor that food items, walks, drugs and bodily conditions have different types of health.<sup>5</sup>

Rather, we should say that the forms of "be" used in answers to the first question may be contextually defined and that such contextual definitions will be different for different instances of "F", and even within them, for different instances of "x":

- "What it is, for some surface, to be white is for it to reflect light of a certain length." becomes: this surface is white *because* it reflects light of a certain length.
- "What it is, for some light beam, to be white is for it to contain only light-rays of a certain length." becomes: this beam of light is white *because* it contains only light-rays of a certain length.

This explanation also explains some of the variety of answers to (iii):

- "What it is, for something x, to be a threshold is for it to stand at the foot of a door." becomes: this piece of matter is a threshold *because* it is located at the foot of a door in this way.

We want to satisfy two *prima facie* conflicting desiderata, finding a way in which surfaces, light beams and colour pastes or food, walks and bodily conditions may be said to be white or healthy in different ways but

5. Owen (1965: 77) says so and endorses what Matthews (1995: 233) calls the "unsettling claim": "It looks as though a new sense of the verb 'to be' will have to be conjured up for each sort of thing we want to talk about...". Kris McDaniel does so too, though he does not seem to be worried about it.

also be said to be all white, or healthy. Two ‘solutions’ immediately spring to mind: take the first, specific senses as basic and define a ‘generic’ sense of being white or healthy in terms of them; take the second, general sense as basic and define the ‘specific’ senses in terms of it plus some distinguishing features.

Both manoeuvres are unsatisfying. The first, which has found some adherents in the debate about the alleged ‘pluralism’ of truth, is nowadays most of time crudely put as postulating, in addition to the (‘domain-?’) ‘specific’ senses, a sense for their disjunction. Or perhaps rather (as at least the disjunctive *predicate* is guaranteed to exist by logic alone): as the claim that the disjunction of the different ‘white’ predicates is a ‘white’ predicate. There are two immediate problems with this: the first one is to make out a sense in which the predication of the disjunctions adds anything at all to the predication of (one, or several) its disjuncts:

1. Some surface,  $a$ , is white in one way (i.e.  $W_1$ ) and some beam of light,  $b$ , is white in another way (i.e.  $W_2$ ). (explanandum)
2. Both  $a$  and  $b$  are white (i.e.  $W$ ). (desideratum)
3. Both  $a$  and  $b$  are  $W_1 \vee W_2$ . (proposed explanation)

This explanation is unsatisfying because it gets the direction (and grounding and truthmaking) wrong: (3) does not explain (1), but rather (1) explains (3). Also, the proposed solution does not ‘secure’ the desideratum, but just stipulates that there was no problem in the first place: (3) because (1), so if (2) because (3), (2) because (1). The other problem of going for a ‘generic’ (i.e. disjunctive) sense is that it stipulates an explanatory function to play for something that is not in general available. As long as we do not already know how many and what ways there are for things to be white, we cannot predicate generic whiteness even of the things we already know to be white. This point does not have to be put epistemologically. Suppose  $a$  is actually white, but some thing  $b$  that does not actually exist could be white in some other way than anything that is actually white. This very claim is inexpressible in the disjunctivist sense: there *is* no (disjunctive) way of being white that is, or even could be, shared by actual  $a$  and merely possible  $b$ . If  $b$  came into being and were white, what  $a$  and  $b$  would share would be different from what  $a$  now shares with the actual white things – so it would not be white, not even ‘generic’ white.

The other way of dealing with the multiplicity of ways of being white is to treat being white as a determinable, and ‘define’ its determinates in terms of it. But what are their specific differences? There are three problems here: proliferation, regress and circularity. Suppose we explicate “ $a$  is white-for-a-surface” as “ $a$  is white and  $a$  is a surface”. Now suppose that all white surfaces are in Switzerland, but that not all surfaces are. Why does then “ $a$  is in Switzerland” not explain the *way* in which  $a$  is white (for it clearly does not)? If we require not just contingent, but necessary coextensiveness, we do not solve the problem either. Whether or not  $a$  is healthy-in-the-way-of-food may depend, I think we may suppose, only on its internal chemical composition; whether or not  $a$  is healthy and food, however, depends on the animals that inhabit the planet, specifically on whether or not there is something that eats or could eat  $a$ . To put this more generally: for being healthy-in-the-way-of-food to be a way of being healthy, it must be as intrinsic as the latter, even though it is relationally characterised.

The regress and circularity problems of the determinate/determinable model are well brought out by [Matthews \(1995\)](#) under the heading of the ‘problem of the vanishing criterion’.

We want to say that things are white in different ways, but that they are still white, not just different things and also white, but that they have different qualities of whiteness. The problem is that either different whiteness are different and then whatever they share is not a type of whiteness or they are the same whiteness, but then do not differ in kind. More precisely,

- (1) (i)  $a$  and  $b$  are white ( $Wa \wedge Wb$ ), but in different ways: (ii)  $Wa$  because  $W_1a$  and (iii)  $Wb$  because  $W_2b$ .
- (2) If  $W_1$  and  $W_2$  are different properties, then why should  $W_1$  (rather than, say,  $W_2$ ) explain that  $Wa$ ? Why do we count (ii) and (iii) as *different* explanations at all?

- (3) If  $W_1$  and  $W_2$  are the same property, then why should we still distinguish them from  $W$ , i.e. why should we count (ii) and (iii) as *explanations* at all?

This tension between the two desiderata may be sharpened to a dilemma if we reify senses:

- (1) (i) “ $a$  and  $b$  are white” is true, while (ii) “ $a$  is white” in one sense,  $s_1$ , of “white” and (iii) “ $b$  is white” is true in sense  $s_2$ .  
 (2) If  $s_1 = s_2$ , the “white” is synonymously used in the two predications (ii) and (iii).  
 (3) If  $s_1 \neq s_2$ , the “white” is homonymously used in the two predications (ii) and (iii).

Aristotle’s ‘solution’ consists in neither reifying properties nor senses and to find a middle-way between the synonymous and homonymous uses of “white”. There are two ways for “white” to be said in many ways and only one such way is homonymy. There are different ways for things to be white but still there is one science of whiteness, the different ways for things to be white are not entirely different, but unified enough for them to constitute one scientific subject matter.<sup>6</sup>

With respect to Being and ‘be’, we have two twin claims: (i) Being is not a genus / ‘be’ is not predicated synonymously of all there is; (ii) being is a transcendental, ‘be’ is predicated of all there is. Let us examine them in turn.

### Being is not a genus

Suppose Being were a genus and substances one of its species, SUBSTANTIAL being the specific difference. SUBSTANTIAL also is, so it is itself among the exemplars of the genus. Does it belong to the species of substances or not? If it does, then it is a substance and is substantial. But then it is separated and the same in kind as its exemplars, and shares with them itself – a third man problem if there ever was one. If it does not belong to itself, on the other hand, then it is not a substance and not separated – but how can it then be, and be the specific difference of a species?

If ANIMAL were predicable of RATIONAL, taken apart from RATIONAL ANIMAL, then RATIONAL would be an animal, but then RATIONAL would be ANIMAL, i.e. all animals would be rational and RATIONAL would not mark out a species among the genus, but be the same as ANIMAL.

How being can be unified even if it is not a genus is one of the problems set for the *Metaphysics* to solve. The question is involved already in the 7th aporia of *Met. B*:

πρὸς δὲ τούτοις εἰ καὶ ὅτι μάλιστα ἀρχαὶ τὰ γένη εἰσὶ, πότερον δεῖ νομίζειν τὰ πρῶτα τῶν γενῶν ἀρχὰς ἢ τὰ (15) ἕσχατα κατηγορούμενα ἐπὶ τῶν ἀτόμων; καὶ γὰρ τοῦτο ἔχει ἀμφισβήτησιν. εἰ μὲν γὰρ αἰεὶ τὰ καθόλου μᾶλλον ἀρχαί, φανερόν ὅτι τὰ ἀνωτάτω τῶν γενῶν ταῦτα γὰρ λέγεται κατὰ πάντων. τσαῦται οὖν ἔσονται ἀρχαὶ τῶν ὄντων ὅσα κατὰ πάντων. τσαῦται οὖν ἔσονται ἀρχαὶ τῶν ὄντων ὅσα περ τὰ πρῶτα γένη, ὥστ' ἔσται τό τε ὄν καὶ τὸ ἐν ἀρχαί καὶ (20) οὐσίαι· ταῦτα γὰρ κατὰ πάντων μάλιστα λέγεται τῶν ὄντων. οὐχ οἷόν τε δὲ τῶν ὄντων ἐν εἶναι γένος οὔτε τὸ ἐν οὔτε τὸ ὄν· ἀνάγκη μὲν γὰρ τὰς διαφορὰς ἐκάστου γένους καὶ εἶναι καὶ μίαν εἶναι ἐκάστην, ἀδύνατον δὲ κατηγορεῖσθαι ἢ τὰ εἶδη τοῦ γένους ἐπὶ τῶν οἰκείων διαφορῶν ἢ τὸ γένος ἄνευ τῶν αὐτοῦ (25) εἰδῶν, ὥστ' εἴπερ τὸ ἐν γένος ἢ τὸ ὄν, οὐδεμία διαφορὰ οὔτε ὄν οὔτε ἐν ἔσται. ἀλλὰ μὴν εἰ μὴ γένη, οὐδ' ἀρχαὶ ἔσονται, εἴπερ ἀρχαὶ τὰ γένη. (998b14-28)

For if the universal is always more of a principle, evidently the uppermost of the genera are the principles; for these are predicated of all things. There will, then, be as many principles of things as there are primary genera, so that both being and unity will be principles and substances; [20] for these are most of all predicated of all things. But it is not possible that either unity or being should be a genus of things; for the differentiae of any genus must each of them both have being and be one, but it is not possible for the genus to be predicated of the differentiae taken apart from the species (any more than for the [25] species of the genus to be predicated of the proper differentiae of the genus); so that if unity or being is a genus, no differentia will either be one or have being. But if unity and being are not genera, neither will they be principles, if the genera are the principles. (Aristotle 2014: 3397)

6. It is traditional to use “analogy” in this context: “white”, of these different things, is neither predicated synonymously nor homonymously, but ‘analogically’; the category of white things is neither unified numerically nor consisting of numerically diverse types but rather unified ‘by analogy’. As such, I do not find this way of talking particularly helpful: what is it to be unified or predicated ‘analogically’ if it is not (nor entails) to be unified and predicate?

It recurs in the *n*th aporia, one horn of which is that there is no universal knowledge (knowledge of something true of everything), if there is not anything all things share:

Ἔστι δ' ἐχομένη τε τούτων ἀπορία καὶ πασῶν χαλε- πωτάτη καὶ ἀναγκαιότατη θεωρήσαι, περὶ ἧς ὁ λόγος ἐφέ- (25) στηκε νῦν. εἴτε γὰρ μὴ ἔστι τι παρὰ τὰ καθ' ἕκαστα, τὰ δὲ καθ' ἕκα- στα ἄπειρα, τῶν δ' ἀπειρῶν πῶς ἐνδέχεται λα- δε καθ' ἕκαστα ἄπειρα, τῶν δ' ἀπειρῶν πῶς ἐνδέχεται λα- βεῖν ἐπιστήμην; ἢ γὰρ ἔν τι καὶ ταυτόν, καὶ ἢ καθόλου τι ὑπάρχει, ταύτη πάντα γνωρίζο- μεν. — ἀλλὰ μὴν εἰ τοῦτο ἀναγκαῖόν ἐστι καὶ δεῖ τι εἶναι παρὰ τὰ καθ' ἕκαστα, ἀναγκαῖον (30) ἂν εἴη τὰ γένη εἶναι παρὰ τὰ καθ' ἕκαστα, ἦτοι τὰ ἔσχατα ἢ τὰ πρῶτα· τοῦτο δ' ὅτι ἀδύνατον ἄρτι διηπορήσαμεν. (999a24-32)

If, on the one hand, there is nothing apart from individual things, and the individuals are infinite in number, how is it possible to get knowledge of the infinite individuals? For all things that we know, we know in so far as they have some unity and identity, and in so far as some attribute belongs to them universally. – But if this is necessary, and [30] there must be something apart from the individuals, it will be necessary that the genera exist apart from the individuals, – either the lowest or the highest genera; but we found by discussion just now that this is impossible. (Aristotle 2014: 339<sup>b</sup>-9)

The other horn of the dilemma is that whatever it is that all things have in common, it will not be different from them, but rather identical to each of them; because it is identical to itself, everything will be one, i.e. there will only be one thing:

ἔτι δὲ περὶ τῶν ἀρχῶν καὶ τότε ἀπορήσειεν ἂν τις, εἰ μὲν γὰρ εἶδει εἰσὶν ἓν, οὐθὲν (25) ἔσται ἀριθμῶ ἓν, οὐδ' αὐτὸ τὸ ἓν καὶ τὸ ὄν· καὶ τὸ ἐπίστα- σθαι πῶς ἔσται, εἰ μὴ τι ἔσται ἓν ἐπὶ πάντων; — ἀλλὰ μὴν εἰ ἀριθμῶ ἓν καὶ μία ἐκάστη τῶν ἀρχῶν, καὶ μὴ ὥσπερ ἐπὶ τῶν αἰσθητῶν ἀλλὰ ἄλλων (οἷον τῆσδε τῆς συλλαβῆς τῶ εἶδει τῆς αὐτῆς οὐσης καὶ αἱ ἀρχαὶ εἶδει αἱ αὐταί· καὶ (30) γὰρ αὐταὶ ὑπάρχουσιν ἀριθμῶ ἕτεραι), — εἰ δὲ μὴ οὕτως ἀλλ' αἱ τῶν ὄντων ἀρχαὶ ἀριθμῶ ἓν εἰσιν, οὐκ ἔσται παρὰ τὰ στοιχεῖα οὐθὲν ἕτερον· τὸ γὰρ ἀριθμῶ ἓν ἢ τὸ καθ' ἕκαστον στοιχεῖα οὐθὲν ἕτερον· τὸ γὰρ ἀριθμῶ ἓν ἢ τὸ καθ' ἕκαστον λέγειν διαφέρει οὐθὲν· οὕτω γὰρ λέγομεν τὸ καθ' ἕκαστον, (1000a) τὸ ἀριθμῶ ἓν, καθόλου δὲ τὸ ἐπὶ τούτων. ὥσπερ οὖν εἰ τὰ τῆς φωνῆς ἀριθμῶ ἦν στοιχεῖα ὠρισμένα, ἀναγκαῖον ἦν ἂν το- σαῦτα εἶναι τὰ πάντα γράμματα ὅσαπερ τὰ στοιχεῖα, μὴ ὄντων γε δύο τῶν αὐτῶν μηδὲ πλείονων. (999b24-1000a4)

Again, one might ask the following question also about the first principles. If they are one in kind only, nothing will be numerically one, not even unity-itself and [25] being-itself. And how will it be possible to know, if there is not to be something common to a whole set of individuals? But if there is a common element which is numerically one, and each of the principles is one, and the principles are not as in the case of perceptible things different for different things (e.g. since this particular syllable is the same in kind whenever it occurs, the elements of it are also the same [30] in kind; only in kind, for these also, like the syllable, are numerically different in different contexts), – if the principles of things are not one in this sense, but are numerically one, there will be nothing else besides the elements; for there is no difference of meaning between 'numerically one' and 'individual'. For this is just what we mean by the individual—the numerically one, and by the universal we mean that which is predicable of the individuals. Therefore it is just as, if the [1000a1] elements of articulate sound were limited in number, all the literature in the world would be confined to the ABC, since there could not be two or more letters of the same kind. (Aristotle 2014: 340<sup>o</sup>-1)

A little later, this second horn is explicitly characterised as Parmenidean:

ἀλλὰ μὴν εἴ γ' ἔσται τι αὐτὸ ὄν καὶ αὐτὸ ἓν, πολλὴ ἀπορία πῶς ἔσται τι παρὰ (30) ταῦτα ἕτερον, λέγω δὲ πῶς ἔσται πλείω ἐνός τὰ ὄντα. τὸ γὰρ ἕτερον τοῦ ὄντος οὐκ ἔστιν, ὥστε κατὰ τὸν Παρ- μενίδου συμβαίνειν ἀνάγκη λόγον ἓν ἅπαντα εἶναι τὰ ὄντα καὶ (1001b) τοῦτο εἶναι τὸ ὄν. (1001a29-1001b1)

But if there is to be a being-itself and a unity-itself, there is much difficulty in seeing how there will be anything else besides [30] these—I mean, how things will be more than one in number. For what is different from being does not exist, so that it necessarily follows, according to the argument of Parmenides, that all things that are one and this is being. (Aristotle 2014: 340<sup>5</sup>)

What is Aristotle's solution of the aporia? In what sense is being unified in the absence of there being a being-itself? By being said in many ways. It is unified by being exhausted by the reference point that is common to everything there is: *OUSIA*, which is a genus. But it is variegated by being (in each of its four senses?) only homonomously predicable across categories. The first philosophy studies *ousia*, i.e. the kind *OUSIA* and the exemplars of its species, and all other things that are related to it, like medicine studies *health*, i.e. the kind *HEALTHY STATE OF BODY* and its exemplars, and all other things that may be said (in different ways) to be healthy as well. It is in virtue of its first characteristic (common reference point) that it is

possible at all that there is a first philosophy; and it is in virtue of its second characteristic (in no single way universally predicable) that there are other sciences than it.

But how does this fare with the passage in *Physics* where Aristotle seems to **deny** fragmentation? In *Physics* I.6, Aristotle briefly considers the possibility that there might be more than one pair of opposites, more than one way of things being different from each other than by either having or lacking qualitative characteristics. The argument he gives to rule out this possibility is very interesting:

ἓνα δὲ καὶ ἀδύνατον πλείους εἶναι ἐναντιώσεις τὰς πρώτας, ἢ γὰρ οὐσία ἐν τι γένος ἐστὶ τοῦ ὄντος, ὥστε τῷ πρότερον καὶ ὕστερον διαίσεσιν ἀλλήλων αἱ ἀρχαὶ μόνον, ἀλλ' οὐ τῷ γένει· ἀεὶ γὰρ ἐν ἐνὶ γένει μία ἐναντιώσις ἐστίν, πᾶσαι τε αἱ ἐναντιώσεις ἀνάγεσθαι δοκοῦσιν εἰς μίαν. (189b22-27)

Moreover, it is impossible that there should be more than one *primary* contrariety. For substance is a single genus of being, so that the principles can differ only as prior and posterior, *not* in genus; for in a single genus there is always a single contrariety, all the other contraries in it being held to be reducible to one. (Aristotle 2014: 718)

Moreover, there cannot be more than one primary opposition. Reality is a single kind of thing, so that the principles can differ only in being prior or posterior to one another, and not in kind. In any one kind there is always one opposition, and all oppositions seem to reduce to one. (Aristotle 1992: 14)

“*ousia*” is here to be understood as “thing”, whatever fundamentally is, so that its genus encompasses absolutely everything.<sup>7</sup>

## Being is said in many ways

That being is said in many ways is one of Aristotle’s most favourite claims to make. Its fullest statement is at the beginning of *Met.* Γ:

Τὸ δὲ ὄν λέγεται μὲν πολλαχῶς, ἀλλὰ πρὸς ἓν καὶ μίαν τινὰ φύσιν καὶ οὐχ ὁμωνύμως ἀλλ' ὡσπερ καὶ τὸ ὑγιεινὸν ἅπαν πρὸς ὑγίειαν, τὸ μὲν τῷ φυλάττειν τὸ δὲ (35) τῷ ποιεῖν τὸ δὲ τῷ σημεῖον εἶναι τῆς ὑγείας τὸ δ' ὅτι (1003b) δεκτικὸν αὐτῆς, καὶ τὸ ἰατρικὸν πρὸς ἰατρικὴν (τὸ μὲν γὰρ τῷ ἔχειν ἰατρικὴν λέγεται ἰατρικὸν τὸ δὲ τῷ εὐφρυνεῖ εἶναι πρὸς αὐτὴν τὸ δὲ τῷ ἔργον εἶναι τῆς ἰατρικῆς), ὁμοιοτρόπως δὲ καὶ ἄλλα ληψόμεθα λεγόμενα τούτοις, -- οὕτω δὲ καὶ τὸ ὄν λέγεται πολλαχῶς μὲν ἀλλ' ἅπαν (5) πρὸς μίαν ἀρχήν· τὰ μὲν γὰρ ὅτι οὐσίαι, ὄντα λέγεται, τὰ δ' ὅτι πάθη οὐσίας, τὰ δ' ὅτι ὁδὸς εἰς οὐσίαν ἢ φθορα ἢ στερήσεις ἢ ποιότητες ἢ ποιητικὰ ἢ γεννητικὰ οὐσίας ἢ τῶν πρὸς τὴν οὐσίαν λεγομένων, ἢ τούτων τινὸς ἀποφάσεις ἢ οὐσίας· διὸ καὶ τὸ μὴ ὄν εἶναι μὴ ὄν φαμεν. (10) καθάπερ οὖν καὶ τῶν ὑγιεινῶν ἀπάντων μία ἐπιστήμη ἐστίν, ὁμοίως τοῦτο καὶ ἐπὶ τῶν ἄλλων. οὐ γὰρ μόνον τῶν καθ' ἓν λεγομένων ἐπιστήμης ἐστὶ θεωρῆσαι μᾶς ἀλλὰ καὶ τῶν πρὸς μίαν λεγομένων φύσιν· καὶ γὰρ ταῦτα τρόπον τινὰ λέγονται καθ' ἓν. δῆλον οὖν ὅτι καὶ τὰ ὄντα μᾶς θεωρῆσαι (15) ἢ ὄντα. (1003a32 – 1003b16)

There are many senses in which a thing may be said to ‘be’, but they are related to one central point, one definite kind of thing, and are not homonymous. [35] Everything which is healthy is related to health, one thing in the sense that it preserves health, another in the sense that it produces it, another in the sense that it is a symptom of health, another because it is capable of it. And that which is [1003b1] medical is relative to the medical art, one thing in the sense that it possesses it, another in the sense that it is naturally adapted to it, another in the sense that it is a function of the medical art. And we shall find other words used similarly to these. [5] So, too, there are many senses in which a thing is said to be, but all refer to one starting-point; some things are said to be because they are substances, others because they are affections of substance, others because they are a process towards substance, or destructive or privations or qualities of substance, or productive or generative of substance, or of things which are relative to substance, or negations of [10] some of these things or of substance itself. It is for this reason that we say even of non-being that it is non-being. As, then, there is one science which deals with all healthy things, the same applies in the other cases also. For not only in the case of things which have one common notion does the investigation belong to one science, but also in the case of things which are related to one common nature; for even these in a sense have one common notion. It is clear then that it is the work of one science [15] also to study all things that are, qua being. (Aristotle 2011: 341n)

7. It is an interesting fact that Aristotle is both a pluralist about modes of being (“being is spoken of in many ways”...) and at the same time allows for absolutely unrestricted quantification, over the genus of *ousia*.



## The Problem of Totality

### Credo

Many negative things are true of me: that I am not a woman nor a musician, not taller than 2 m, nor asleep, not in the company of a unicorn, and not a number nor a universal. As philosophers, we are entitled to ask why: what is it about me that accounts for my not being a woman, what is the worldly ground of the truth of this negative statement? My possession of the usually incompatible property, many will say, of being a man. But the “usually” here breeds problems: should we not in philosophy ask for answers that are more than just ‘usually’ right? The need for a complete, a determining answer is especially pressing with respect to questions that could be asked exactly the same way under circumstances under which they would receive a different answer: nothing about me, in these cases, accounts for my not being a musician or my being unaccompanied by a unicorn, for I could be exactly as I am and live in a world that contains musical works of mine and unicorns. How are we to account for this?

To all these negative things true of me correspond positive things false of me: negation allows us to trade the ones for the others. But if it is true that I am not asleep if and only if it is false that I am asleep, could not then the absence or lack of sleep account for my being awake? This absence or lack, however, does not really seem a real thing: it is not itself something that is either present or absent, it is not a state I am in or not, it is not something that could be seen or touched. To think that one sees a headless woman when one fails to see her head is a mistake (Armstrong 1968). Even if they were ontologically respectable, however, absences face another problem: they are weird, because they rule out the existences of the things they are absences of. This exclusionary power has to be accounted for: and what about the nature of absences (if they existed) could possibly explain these necessitating powers? Not just brute necessary connections come with absences, but they themselves seem necessary: they cannot all be absent. But at least for suitably restricted quantification, we can easily imagine situations where nothing is absent, not even any absences. So there are no absences.

Take the absence of unicorns, by some said to be the falsemaker for “There are unicorns”. By its very nature, it is incompatible with the existence of unicorns specifically, differing in that essential property from the quite different absence of centaurs. Neither centaurs nor unicorns exist, so both absences are present. Not only, however, are there no centaurs and no unicorns; another thing that also fails to exist are things that are centaurs *and* unicorns at the same time. These could fail to exist even if there were centaurs and unicorns, so these strange creatures need their own absence, the absence of centorns, as we may call them. The absence of centorns is not built up from the absences of the things the combination of which it excludes, i.e. of unicorns and centaurs respectively, for it is compatible with their absences: it has its own primitive essence, in virtue of which it excludes – not unicorns, nor centaurs, nor both – exclusively things that combine unicornhood and centaurity. Its absence, however, is not compatible with their absences. If the absence of centorns does *not* exist, then neither can the absence of unicorns nor the absence of centaurs – even though it does not contain them as parts.

Absences violate combinatorialism in other ways too. Take this room, with everything in it, and all its local absences. It seems easy to imagine that this room could have been fuller than it is, i.e. contain more things than it actually does. Suppose that, in addition to everything it contains, it also contained some other thing, *a*, together with its contingent nature *F*. Adding *a* and that it is *F* to the room and what is true of it obliges us to take out *a*’s absence. What else do we have to take out? Perhaps nothing else: there was just the absence of *a*, but not e.g. any truthmaker for “*a* is not *G*”, where “*G*” stands for some property not contained in *F*. This, however, is the wrong result: if *a* does not exist, it follows that it is not *G*, so if the first is true (and has a truthmaker), the second is true as well and needs a truthmaker. If we have, on the other hand, present in the room not just a truthmaker for “*a* is not here” but also a truthmaker for

“nothing in the room is  $G$ ”, i.e. not just an absence of  $a$  but also an absence of anything  $G$ , then the room mirrors – i.e. contains absences for – everything that is contingently false of it: a truly Leibnizian monad!

If absences cannot do the job, perhaps positive things can? Could not the truth of “I am not asleep” be grounded in my wakefulness, rather than in the absence of sleep? My wakefulness, then, would make true *both* “I am awake” and “I am not asleep”, and account for the necessary incompatibility of “I am awake” and “I am asleep”. The first obvious problem with this idea is that there might not be enough such excluders. But even if there were, we would have to ask whether they do their excluding contingently. In many cases, this seems so: it is clearly a contingent fact that my doing a circular movement with my right hand excludes my doing a horizontal movement with my left hand. If excluders are doing their excluding only contingently, something else must do their job when they are not doing it – another source of necessary connections.

Suppose, however, we had enough necessary excluders. An exclusion account of truthmakers for negative truths would still face the following objection which [Grossmann \(1992: 130–131\)](#) takes from Russell (cf. [1918: 213–215](#) and [1919: 288–289](#)): if “ $\neg p$ ” is true in virtue of “ $q$ ” being the case as well as and in virtue of “ $q$ ” and “ $p$ ” being incompatible, then what makes this latter, obviously negative, statement of incompatibility true? Must there not be something excluding their compatibility? To escape an explanatory regress, we need a higher-order excluder, excluding the compatibility of our first-order excluder and of “ $\neg p$ ”, that is itself primitively incompatible with their compatibility.

Once it becomes clear that neither absences nor excluders are the right kind of thing to make negative things true, it is tempting to go back to the initial equivalence between the truth of the negative statement and the falsity of the corresponding positive one. Why should we assume, one thought would go, that it’s truth, rather than falsity, that wears the trousers? Perhaps truth is really lack of falsity, and statements have truthmakers in virtue of lacking falsemakers. If this lack of falsemakers is not reified (which would be a mistake for the reasons above), then it is irreducibly counterfactual:

“Consider the truth that there is no rhinoceros in the room. This is supposed by Simons not to have a truthmaker. This means that, if he is right, there is nothing in the world in virtue of which this truth is true. Yet at the same time this truth is supposed to make ‘a difference in what there is and what there is not’. This looks like, and I take it is, a counterfactual. As it applies to our example, it can be rendered: ‘if the truth had been a falsity, there would have been one more thing in the world (the rhino) over and above what there actually is’. True. But if this counterfactual truth is to be taken in ‘a tough-minded and realist way’ (as Simons say it is to be taken) then should there not be something about reality in virtue of which the truth is true? If not, ‘tough-minded’ and ‘realist’ may involve some bluff.” ([Armstrong 2005: 273](#))

Counterfactuals need truthmakers. The truth of “there is no falsemaker for “ $p$ ”” cannot itself be explained by there being no falsemaker for *that*.

The main problem, however, with this proposal is that grounding is asymmetric: the absence of falsemakers for “ $p$ ” cannot ground the truth of “ $p$ ” if the truth of “ $p$ ” is the same thing as the falsity of “ $\neg p$ ” and this latter one is grounded in the presence of truthmakers. Because a falsemaker for “ $p$ ” is *ipso facto* a truthmaker for “ $\neg p$ ”, we cannot have both truth- and falsemakers and understand truthmaking as a special of grounding.

So we have a choice to make, to decide which are the positive and negative things. This choice is arbitrary, unmotivable, and therefore potentially discriminatory: Am I a man because of the absence of a second X- or the presence of a Y-chromosome? Let us hope that this is not up to the courts to decide. We cannot

have positive things both as truthmakers for the positive and as falsmakers for the negative statements, and there is no way to decide. So falsmakers are a red herring.

This is where some have been tempted to go for ontological negativity. To provide truthmakers for true negative statements, they introduce ‘constitutively’ negative things, facts, universals or states of affairs. Some things, the idea is, contain something that may be represented by something like sentential negation. As there is matter and anti-matter, there are facts and anti-facts. It is very difficult to understand in what sense anti-facts are still facts, albeit negative ones. But let that pass.

Suppose we now have an understanding of what it would be for the world to contain negativity, as vague and imprecise it may be. We can then ask the following question: is it possible for the world to be contradictory? This is not quite the same question as to whether there are true contradictions, because one may be a dialetheist just because one thinks that the right account of the truth-predicates interpretes it as applying both to some sentences and their contradictions, without being committed that they correspond to equally contradictory facts. By a contradictory fact, in the following, I mean a fact of the form  $[p \wedge \neg p]$ , where the embedded “ $\neg$ ” is read ontologically. The world would be contradictory if it contained such a contradictory fact.

In the following, I will presuppose that the world is not contradictory in that way. This is, first, because I find it overwhelmingly plausible. Second, I find it difficult to imagine how it could be intelligibly denied: if someone says that he believes that the world contains facts of the form  $[p \wedge \neg p]$ , I will interpret him as meaning something else than me “ $\neg$ ”. Having thus brought to a Quine our discussion, I’ll change the topic.

Having accepted the idea of ontological negativity as at least prima facie coherent, we have to ask what it is. How is the negative fact  $[\neg p]$  constituted? Does it contain  $[p]$ ? If it does not, then what else does it contain than  $\neg$ ? How do then  $[\neg p]$  and  $[\neg q]$  differ? If it does contain  $[p]$ , on the other hand, it cannot contain it as obtaining. So containment must relate the facts ‘as existing’ as it were, not ‘as obtaining’. But if both  $[p]$  and  $[\neg p]$  contain (in this sense)  $[p]$ , then  $[\neg p]$  must contain something more, something contained twice in  $[\neg p]$ . So ontological negativity commits us to hyperintensional, structured facts. They commit us to the impossibility of there being nothing and make non-factualism unstatable. But there is worse: it also commits us to an obtaining relation. This is then itself embedded into facts, creating paradox, absurdity and regress.

Some facts are self-referential, and some of these do not obtain. So it is a fact that they do not obtain. So something must make “this fact does not obtain” true. But nothing (that is: nothing that obtains) can. This carries over to negative items of different ontological types: lacking the property of being a self-exemplifier is ok, but being a non-self-exemplifier is not.

The negative fact  $[\neg p]$  obtains iff  $[p]$  does not obtain. The not obtaining of  $[p]$  itself is a negative fact. Is it the same fact as  $[\neg p]$ ? Neither answer seems possible: it is true that the fact  $[\neg([p] \text{ obtains})]$  obtains iff and only if  $[\neg p]$  obtains, but it is still different, because facts are structured and they contain different components. So they are different. If they are different, however, then we seem to have a difference without a difference maker: it cannot be  $\neg$ , for this is present in both. It must be obtaining, but then this makes  $[p]$  and  $[p \text{ obtains}]$  different.

So the absence of a positive fact is not yet a negative fact. But some positive facts are absent. For example, the positive fact that Plato Socrates is missing from the world. This is not because its existence is excluded by some negative facts; rather, it cannot exist because its component are not of the right kind to form a fact together. This has to have a ground, so there is a negative fact that combines it and existence. But what is this *it*? Plato strikes his beard.

The in my view crucial problem with negative facts can be put this way: what *in the world* can connect a particular with a property that particular does not have? It cannot be a real tie, or exemplification,

because that would make the fact positive. It must be something like whatever tie accounts for the unity of the proposition. Negative facts, then, start looking suspiciously similar to true propositions, albeit negative ones.

In the truthmaker literature, worries about negative truths are usually introduced with reference to Molnar's 2000 allegedly inconsistent quatuor:

- (i) The world is everything that exists.
- (ii) Everything that exists is positive.
- (iii) Some negative claims about the world are true.
- (iv) Every true claim about the world is made true by something that exists.

Moved by an impression that the four claims are not co-tenable, Armstrong and Russell deny (ii), Simons goes on to deny (iv), while Wittgenstein perhaps rejects (iii). Mumford (2005: 268) claims that 'true' is used ambiguously in the quatuor: in its strong, 'truthmaker' sense, he rejects (iii); in the weak, 'degenerate' sense, he thinks (iv) should be rejected.

These authors do not seem to see, however, that (i) to (iv) are not inconsistent. Their joint truth implies only that some negative statements are made true by something positive. And so they are: my being a man makes true the negative truthbearer that I am not a woman, my being awake the negative claim that I am not asleep. But what makes it true that there are no unicorns, or that I do not have any musical talent? The world, in the first case, and my contingent make-up in the second. Both of them are (metaphysically) co-possible with there being unicorns and my having musical talent, but that's neither here nor there. Let truthmaking be contingent, if it has to be, complicating our ideology, in order to keep our ontology kosher, and, more importantly, entirely positive.

## The *T*-tallers

Armstrongian totality facts have the form of " $\text{Tot}(X, F)$ ", where  $X$  is a mereological sum of things,  $F$  any property (not necessarily a universal) and Tot the contingent and external relation of 'alling' or 'tolling'. The truthmaker of "These are all the men" is the totalling of being a man by the sum of men, the truthmaker of "Theaetetus does not fly" the totalling of *being a property of Theaetetus* by the sum of Theaetetus' (positive) properties.

What about "All ravens are black"? Armstrong says this is made true by the fusion of the totality facts that these are all the ravens and that these are all the black ravens. But then "all ravens are black" and "all non-black things are non-ravens" do not have the same truthmaker!

If there are totality facts, there is a totality of them. This totality of totality states of affairs cannot be a state of affairs, for it would then include itself as a component which is impossible if "state[s] of affairs [are] 'something more' than the mereological sum of [their] constituents" (Armstrong 2004: 72). It cannot have any property, not even the property (totalled in the first-order totality state of affairs) of existing at all. So what is it?

Call "Total" the totalling relation's holding between the fusion of all totality states of affairs and the (second- or third-grade) property being a totality state of affairs. Total is impossible: if the totalling relation holds, then the fusion has to be the fusion of all states of affairs. The fusion, however, cannot contain Total itself, because it is a proper part of Total. Could some other property than being a totality state of affairs be totalled in Total? No, if Total really is the totality of all totality states of affairs. Could the totalling relation fail to hold? Only, it seems, if the fusion were not the totality of all totality states of affairs. But then there would be some other totality state of affairs not contained in it, and Total would not be the totality of totality states of affairs, contrary to what we assumed.

Here is the argument in schematic outline:

1. If there are totality states of affairs, there is a totality of them.
2. Take the fusion of all totality states of affairs and call it “ $X$ ”.
3. *Being a totality state* of affairs is a higher-order property; call it “ $F$ ”.
4. Totalling is a universal, hence it either holds between  $X$  and  $F$  or it does not.
5. If it does, then  $\text{Tot}(X, F)$  is a totality state of affairs and hence a member of  $X$ .
6. If it does not,  $\text{Tot}(X, F)$  is not a totality state of affairs and there are other totality states of affairs not fused in  $X$ .
7. Either way,  $\text{Tot}(X, F)$  is not a totality state of affairs: either because it contains itself as a proper constituent (horn 1) or because it does not obtain (horn 2).
8. There is no totality of totality states of affairs, so there are no such things.

## Essentialist totalitarianism

Schaffer’s cosmos does its truthmaking because it is unique by stipulation:

given the foundationalist assumption of a well-founded partial dependence ordering [...], Monism is equivalent to the thesis that every proper part of the cosmos depends on the cosmos. Suppose that Monism holds. Given well-foundedness, every actual concrete object must be either basic or dependent on some basic object. By the definition of Monism, the cosmos is the only such basis. So every proper part of the cosmos must depend on the cosmos. In the other direction, suppose that every proper part of the cosmos depends on the cosmos. By the asymmetry of dependence, the cosmos cannot then depend on any of its proper parts. By irreflexivity the cosmos cannot depend on itself. So the cosmos must be basic. Moreover nothing else can be basic since by supposition everything else is dependent on the cosmos. So there can be one and only one basic actual concrete object, namely the cosmos. (Schaffer 2010b: 42–43)

If “the cosmos” is a rigid designator, however, it does not necessitate negative existentials. So it is a description – cf. Schaffer (2010a: 321): “...any expansion (any more to the world) requires a different unique fundament. [...] So <there are no dragons> is true at actuality, in virtue of actuality’s being the unique actual fundament.” But then what does the grounding is not that the cosmos exists, but rather that the cosmos is the cosmos, i.e. that it is *a* cosmos, i.e. everything there is. But *this* fact is not fundamental!

According to Cameron, the world is essentially complete:

I’ve claimed that the actual world is individuated by what is true according to it. This amounts to the claim that it has all its properties essentially. As such it is a suitable truthmaker for true negative existentials. No proper part of the world necessitates that there are no unicorns, since every proper part might have been a proper part of a different world that did contain unicorns; so the truthmaker, and hence the ontological commitment, of <there are no unicorns> is just the actual world. (Cameron 2008: 415)

Or rather, it is the actual world “*as such*”, given that it is everything there is – another totality state of affairs.

## Maximalist properties and bona fide boundaries

A property  $F$  is *maximal* iff, roughly, large parts of an  $F$  are not themselves  $F$ . If *being a rock* is maximal, it has intrinsic duplicates which fail to be rocks because they are parts of rocks. So *being a rock* is extrinsic. This is an unwelcome result (even though Lewis bites the bullet).

Way out: Achille Varzi (1997: 42) distinguishes (topologically) “open” and “closed” entities, i.e. entities which include their boundaries and those that do not. Houses and rocks, if *being a house* and *being a rock* are

maximal, are closed – the open counterparts of a house which are embedded in a larger house are not houses, for they lack (counterparts of) parts the original house had, namely its boundary.

Prize to pay: The boundary of the house, however, is not a part of the house, but it is part of the house considered in isolation. It would be wrong to think that the embedded counterparts too have that boundary, just as a *fiat* and not a *bona fide* boundary. Fiat boundaries, however, are not just possible bona fide ones. When I cut a soap in half, I do not ‘actualise’ a boundary that already, as it were, was there before, but I bring into being a new object, at the same time destroying another: “...fiat boundaries are not the boundaries that *would* envelop the interior parts to which they are associated in case those parts were brought to light by removing the rest [...]. Wherever you have a fiat boundary, you can have bona fide boundaries. But the former never *turns* into the latter – at most, it *leaves room* for them.” (Varzi 1997: 46)

We should qualify our realism about boundaries, however.

### **Kantian totalities and the demands of reason**

In his account of the first two, so-called ‘cosmological’ antinomies, Kant claims that the totalities ‘generated’ by the conditioning relations of containment through repulsive forces and of parthood (forces are conditions of temporal and spatial boundaries, parts are conditions of their wholes) are transcendently ideal, and that this is why we cannot know that these totalities are finite nor know that they are infinite. To say that the world is indefinitely large, for Kant, is to say that it is indeterminate whether there is something outside the body we cognise as being limited by the boundary of the world; to say that the world is composed of indefinitely many parts is to say that for any given body and some partition of it, it is indeterminate whether it can be divided further.

The dialectic of pure reason in general and the dissolution of the antinomies in particular are concerned to analyse the “transcendental illusion” (transzendentaler Schein) produced by the illegitimate but also inevitable extension of our use of the categories to concepts of reason (Vernunftbegriffe). This illusion consists in thinking that there is something corresponding to the “unconditioned” – i.e. to infer from some thing being conditioned that there is a totality, the thing together with all its conditions, that is itself unconditioned. Kant distinguishes four such “transcendental idea[s] of the absolute totality in the series of conditions”:

- quantity** the aggregative totality of all times (past and present), the totality of space (arrived at by successive consideration)
- quality** the divisive totality of partitions of matter
- relation** the totality of causes
- modality** the totality of conditions

Ideas of these totalities transcend the empirical use of human cognition, because

- we can represent temporal intervals and spatial regions only as proper parts of intervals and regions that contain them: they are finite because they are bounded;
- we can represent extended things only as divisible: they are extended because they are complex;
- we can represent causes only as themselves effects: to be a full cause is to contain all its own causal conditions;
- we can represent reasons only as themselves explained: to be a full explanation is to contain everything explanatorily relevant;

In all four cases, reason takes the world to contain the totality of the necessary conditions. Such a totality, however, is not “sensually possible” (sinnlich möglich, A417/B444) and hence not an object of possible knowledge.

The question dividing transcendental idealism and transcendental realism is whether the unconditioned – the thing together with all its conditions – exists in itself; transcendental idealism denies this, on the ground that it cannot appear; it cannot appear because for beings like us synthesis is successive, which is a brute psychological fact. While this limitation is psychologically caused, it can be shown through philosophical argument that it exists. Kant claims that with all four ideas of reasons, the step from ‘for all individually’ to ‘of their totality’, while intellectually unavoidable, leads to contradictions:

1. because all regions are bounded, their sum is bounded (because it is a region) and unbounded (because it is the sum of everything bounded):
2. because all complexes have parts, their parts have parts (because they have to be extended to ‘make up’ the complex) and do not have parts (because they are that into which the complex is divided)
3. because all production is causation, the system of natural causation is causally complete (‘causal closure’) and also not causally complete (because, being natural, it needs a cause)
4. because everything is contingent (i.e. has an explanation outside itself), there is no absolute necessity (because all contingent things could not just individually, but also collectively fail to exist) and there is such necessity (because only something necessary can explain why it is contingent that there is anything at all).

To avoid falling into these contradictions, Kant counsels intellectual humility: while we cannot avoid thinking of the world (or the things in this room) as a totality, we are not justified in doing so.

Our belief in totality facts is mandated by our practice of metaphysical explanation: to explain why things exist and have the natures they have we have to assume that nothing undercutting our explanation is present. While unavoidable and hence excusable, however, such a belief in totality facts is still a mistake.

## Back to Aristotle: One is not Being, but is not Notbeing either

The multiplicity of ‘to on’ is shared by ‘to hen’, as they differ only by logos:

εἰ δὴ τὸ ὄν καὶ τὸ ἐν ταὐτόν καὶ μία φύσις τῷ ἀκολουθεῖν ἀλλήλοις ὡσπερ ἀρχὴ καὶ αἰτίον, ἀλλ’ οὐχ ὡς ἐνὶ λόγῳ δηλοῦ-μενα (δι-αφέρει δὲ οὐθὲν οὐδ’ ἂν ὁμοίως ὑπολάβωμεν, ἀλλὰ (25) καὶ πρὸ ἔργου μᾶλλον). ταὐτὸ γὰρ εἷς ἄνθρωπος καὶ ἄνθρωπος, καὶ ὢν ἄνθρωπος καὶ ἄνθρωπος, καὶ οὐχ ἕτερόν τι δηλοῖ κατὰ τὴν λέξιν ἐπαναδιπλούμενον τὸ εἷς ἄνθρωπος καὶ εἷς ὢν ἄνθρωπος (δηλον δ’ ὅτι οὐ χωρίζεται οὐτ’ ἐπὶ γενέσεως οὐτ’ ἐπὶ φθορᾶς), ὁμοίως δὲ καὶ ἐπὶ τοῦ ἐνός, ὥστε φανερόν ὅτι (30) ἡ πρόσθεσις ἐν τούτοις ταὐτὸ δηλοῖ, καὶ οὐδὲν ἕτερον τὸ ἐν παρά τὸ ὄν, ἐτι δ’ ἡ ἐκάστου οὐσία ἐν ἐστίν οὐ κατὰ συμβε-βηκός, ὁμοίως δὲ καὶ ὅπερ ὄν τι. — ὡσθ’ ὅσα περ τοῦ ἐνός εἶδη, τσαῦτα καὶ τοῦ ὄντος. (1003b22-34)

If, now, being and unity are the same and are one thing in the sense that they are implied in one another as principle and cause are, not in the sense that they are explained by the same formula (though it makes no difference even if we interpret [25] them similarly – in fact this would strengthen our case); for one man and a man are the same thing and existent man and a man are the same thing, and the doubling of the words in ‘one man’ and ‘one existent man’ does not give any new meaning (it is clear that they are not separated either in coming to be or in ceasing to be); and similarly with ‘one’, so that it is obvious that the addition in these cases means the [30] same thing, and unity is nothing apart from being; and if, further, the essence of each thing is one in no merely accidental way, and similarly is from its very nature something that is: – all this being so, there must be exactly as many species of being as of unity. (Aristotle 2014: 3412)

Being and being one co-entail each other: as one man is automatically one existing man (so *on* does not add anything to *hen*), so existing man is automatically one existing man (and *hen* does not add anything to *on*).

Is being a species? Is this required for there being a science of being qua being? In the immediate continuation of this, Aristotle says that the first science is ‘generically one’:

περὶ ὧν τὸ τί ἐστὶ τῆς αὐτῆς ἐπιστήμης τῷ γένει θεωρῆσαι, λέγω δ' ὅσον περὶ (35) ταύτου καὶ ὁμοίου καὶ τῶν ἄλλων τῶν τοιούτων. σχεδὸν δὲ (1004a) πάντα ἀνάγεται τάναντία εἰς τὴν ἀρχὴν ταύτην· τεθεω- ρήσθω δ' ἡμῖν ταῦτα ἐν τῇ ἐκλογῇ τῶν ἐναντίων. καὶ τασαῦτα μέρη φιλοσοφίας ἔστιν ὅσαι περ αἰ οὐσαί· ὥστε ἀναγκαῖον εἶναι τινα πρώτην καὶ ἐχομένην αὐτῶν. ὑπάρ- χει γὰρ εὐθὺς γέννη ἔχον τὸ ἐν [καὶ τὸ ἐν]· διὸ καὶ αἱ (5) ἐπιστήμαι ἀκολουθήσουσι τούτοις. ἔστι γὰρ ὁ φιλόσοφος ὡσπερ ὁ μαθηματικὸς λεγόμενος· καὶ γὰρ αὕτη ἔχει μέρη, καὶ πρώτη τις καὶ δευτέρα ἔστιν ἐπιστήμη καὶ ἄλλαι ἐφεξῆς ἐν τοῖς μαθήμασιν. (1003b34-1004a8)

And to investigate the essence of these is the work of a science which is generically one – I mean, for instance, the discussion of the same and the similar [35] and the other concepts of this sort; and nearly all contraries are referred to this source; but let us take them as having been investigated in the Selection of [1004a] Contraries'. – And there are as many parts of philosophy as there are kinds of substance, so that there must necessarily be among them a first philosophy and one which follows this. For being falls immediately into genera; and therefore the [5] sciences too will correspond to these genera. For 'philosopher' is like 'mathematician'; for mathematics also has parts, and there is a first and a second science and other successive ones within the sphere of mathematics. (Aristotle 2014: 3412-3)

The problem of the transcendentals: how can intensionally different predicates be universally predicable?

Everything there is, is one and whatever is one, is. Being and One both are, so they are one. But they are not identical, for they are two; but they are not really non-identical either, because in the absence of an extensional difference, they would have to differ in account, i.e. to differ by some property; but whatever property is had by being, is had by everything there is, including One; and everything that is true of one, is true of everything, including Being.

## The grounds of numerical multiplicity

Numerical multiplicity is a given: in the same way we are entitled to *assume* that there is change, we are entitled to assume that there is more than one thing. As with change, however, we need an account: what is it in virtue of which there are two things that are not identical? Two such things, because they both are, do not differ with respect to Being – they need to differ by something else than Being.

Esse autem, in quantum est esse, non potest esse diversum: potest autem diversificari per aliquid quod est praeter esse. (Sum. c. Gent. II, 52)

Being, as being, cannot be diverse; but it can be diversified by something beside itself. (St. Thomas Aquinas 1975: 153)

What they differ in is in having different contraries: there is no contrary to being, but there is multiplicity:

ἐπεὶ δὲ μιᾶς τάντικείμενα θεωρῆσαι, τῷ δὲ ἐνὶ ἀντίκειται πλῆθος—ἀπόφασιν δὲ καὶ (10) στέρησιν μιᾶς ἐστὶ θεωρῆσαι διὰ τὸ ἀμφοτέρως θεωρεῖσθαι στέρησιν μιᾶς ἐστὶ θεωρῆσαι διὰ τὸ ἀμφοτέρως θεωρεῖσθαι τὸ ἐν ὅ ἢ ἀπόφασιν ἢ ἢ στέρησιν (ἢ <γὰρ> ἀπλῶς λέγομεν ὅτι οὐχ ὑπάρχει ἐκεῖνο, ἢ τινι γένει· ἐνθα μὲν οὖν τῷ ἐν ἢ διαφορά πρόσεστι παρά τὸ ἐν τῇ ἀποφάσει, ἀπουσία γὰρ ἢ ἀπόφασιν ἐκεῖνο ἐστίν, ἐν δὲ τῇ στέρησει καὶ ὑποκει- (15) μένη τις φύσις γίγνεται καθ' ἣς λέγεται ἢ στέρησιν) [τῷ δ' ἐνὶ πλῆθος ἀντίκειται]—ὥστε καὶ τάντικείμενα τοῖς εἰρη- μένοις, τό τε ἕτερον καὶ ἀνόμοιον καὶ ἀνισον καὶ ὅσα ἄλλα λέγεται ἢ κατὰ ταῦτα ἢ κατὰ πλῆθος καὶ τὸ ἐν, τῆς εἰρημένης γνωρίζειν ἐπιστήμης ὧν ἐστὶ καὶ ἢ ἐναντιό- (20) τῆς διαφορά γὰρ τις ἢ ἐναντιότης, ἢ δὲ διαφορά ἕτερό- τῆς. ὥστ' ἐπειδὴ πολλαχῶς τὸ ἐν λέγεται, καὶ ταῦτα πολ- λαχῶς μὲν λεχθήσεται, ὅμως δὲ μιᾶς ἅπαντά ἐστι γνωρί- ζειν· οὐ γὰρ εἰ πολλαχῶς, ἕτερας, ἀλλ' εἰ μῆτε καθ' ἐν μῆτε πρὸς ἐν οἱ λόγοι ἀναφέρονται. (1004a9-25)

Now since it is the work of one science to investigate opposites, and plurality is [10] opposite to unity, and it belongs to one science to investigate the negation and the privation because in both cases we are really investigating unity, to which the negation or the privation refers (for we either say simply that unity is not present, or that it is not present in some particular class; in the latter case the characteristic difference of the class modifies the meaning of 'unity', as compared with the meaning conveyed in the bare negation; for the negation means just the absence of [15] unity, while in privation there is also implied an underlying nature of which the privation is predicated),—in view of all these facts, the contraries of the concepts we named above, the other and the dissimilar and the unequal, and everything else which is derived either from these or from plurality and unity, must fall within the province of the science above-named.—And contrariety is one of these concepts, for [20] contrariety is a kind of difference, and difference is a kind of otherness. Therefore, since there are many senses in which a thing is said to be one, these terms also will have many senses, but yet it belongs to one science to consider them all; for a term belongs to different sciences not if it has different senses, but if its definitions [25] neither are identical nor can be referred to one central meaning. (Aristotle 2014: 3412-13)



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