difficult to account for the validity of many obviously valid inferences—such as, 'Any two mature, well-formed female spiders of the same species have the same anatomical features; *Hence*, An insect that has some of the same anatomical features as some mature, well-formed female spider has some of the same anatomical features as any mature, well-formed female spider of the same species.')

To recapitulate. The fifth thesis (the family of theses that I loosely call 'the fifth thesis') of the Quinean meta-ontology is a proposal about the way in which 'philosophical disputes about what there is' should be conducted. (We might call them his 'rules for conducting an ontological dispute'.) To wit:

> The parties to such a dispute should examine, or be willing in principle to examine, the ontological implications of *everything they want to affirm*.[53] And this examination should consist in various attempts to render the things they want to affirm into the quantifier-variable idiom (in sufficient depth that all the inferences they want to make from the things they want to affirm are logically valid). The 'ontological implications' of the things they affirm will be precisely the class of closed sentences starting with an existential-quantifier phrase (whose scope is the remainder of the sentence) that are logical consequences of the renderings into the quantifier-variable idiom of those things they want to affirm. Parties to the dispute who are unwilling to accept some ontological implication of a rendering of some thesis they have affirmed into the quantifier-variable idiom must find some other way of rendering that thesis into the quantifier-variable idiom (must find a paraphrase) that they are willing to accept and which does not have the unwanted implication.

If these 'rules' are not followed, then—so say those of us who are adherents of Quine's meta-ontology—it is almost certain that many untoward consequences of the disputed positions will be obscured by imprecision and wishful thinking.

[53] Quine assigns a special, central role to the affirmations of physical science in his discussions of ontological commitment. I would say that this was a consequence of certain of his epistemological commitments and not of his meta-ontology.

# 17

# Must Existence-Questions have Answers?[1]

STEPHEN YABLO

*Are you lost daddy I arsked tenderly.*
*Shut up he explained.*

Ring Lardner, *The Young Immigrants*[2]

## 1 Introduction

I suppose, to go by the analogy with ethics, that first-order or "normative" ontologists debate what really exists, while second-order or meta-ontologists ponder those first-order debates. This paper concerns itself with two meta-ontological questions, one theoretical and one practical. The practical question, for a given type of entity $X$, is:

FUTILITY: are debates about the existence of $X$s as futile and pointless as they can sometimes seem?

The theoretical question is:

VACUITY: is anything genuinely at issue in debates about the existence of $X$s? is there a fact of the matter to be right or wrong about?

FUTILITY and VACUITY are related in that one reason for a debate to be futile and pointless is that there is nothing at issue in that debate; and there being nothing at issue in a debate would tend to vindicate the feeling that the

[1] Thanks to Karen Bennett for responding very convincingly to an earlier version of this material at a symposium on 'Metaontology and Existence' at the 2004 meetings of the American Philosophical Association (APA). Thanks to Ted Sider, John Hawthorne, David Chalmers, David Papineau, Guy Rohrbaugh, and others in audiences at the 2004 Eastern APA, the 2005 Metametaphysics Conference at Australian National University, University College London, Syracuse University, and Auburn University. Eli Hirsch and Jonathan Schaffer gave extremely helpful written comments.

[2] I learned "'Shut up,' he explained" from Paul Boghossian Thanks to Amanda Hale for pointing out I had got Lardner's title wrong.

debate is futile and pointless. But they are also to some degree independent, since a non-vacuous debate can still be futile and pointless, due, say, to a lack of evidence either way, or the fact that some views are so comprehensively misguided that any criticism could be rejected as question-begging.

On the practical question, philosophers divide into two rough camps. One camp wants the debate about *X*s to continue, because they think it productive and take an interest in how it comes out. I will call this the first-order *ontologist*'s camp.[3] Reasons for interest in the debate may differ. Some ontologists are genuinely uncertain whether *X*s exist and are hoping for enlightenment on the matter. More common, though, are ontologists who "know" how the debate comes out. Those who expect a positive verdict will be called *platonists* and those expecting a negative verdict will be *nominalists*.[4]

That's the first camp, then: the ontologists, of whom some are platonists and others are nominalists. A second camp takes a more quizzical perspective. Quizzicalists, as I'll call them, find it hard to take (some? all?) ontological debate seriously and hold out little hope for a successful resolution. Their advice to the engaged ontologist is to disengage and find something useful to do. Of course, quizzicalists will try to wrap that advice in hopefully edifying commentary about the ontologist's predicament; they will point out features of the dialectical situation that the ontologist may be overlooking. The advice is still in effect to shut up. But the quizzicalist's line is not, "'Shut up,' he *demanded*," but, like the daddy in the Lardner dialogue, "'Shut up,' he *explained*."

## 2 Goals and Desiderata

This paper features four main characters: the ontologist O; two particularly opinionated types of ontologist, the platonist P and the nominalist N; and the quizzicalist Q. Q is the relatively neglected party here so we will let him speak first.

Q: I adore the first-order ontologist; it's a stage I've been through myself. But his wide-eyed innocence about existence is beginning to wear me down. Perhaps it's because beneath the questions I sense an undercurrent of reproach. "Ignore me if you like," he seems to be saying, "but then we'll just keep driving in circles." Like the daddy in the dialogue, I resent the reproach and see no need to pull over and ask for directions.

O: If it's the daddy you're identifying with, then let's not forget that the daddy is lost. He really *should* ask for directions; he just won't admit it. Could it be that you, Q, are similarly in denial? If some objects exist and others don't, that would seem to be a fact of supreme metaphysical importance. What possible defense could there be for ignoring it?

Q: This takes us from FUTILITY, the practical question, to VACUITY, the theoretical one. The best defense against the charge of ignoring a fact is to deny that there is a fact to ignore. Debates about the existence of numbers or ... (how to continue this list is an important question, to which we return) are just empty; there is nothing at issue in them.

O: How am I supposed to even make sense of that claim? I can make sense of there being no fact of the matter as to whether someone is short (Tom Cruise, say), because there's a story to be told about how this situation arises. "Short" is a vague predicate; vague predicates have borderline cases;[5] and Cruise is a borderline case. (He is taller than definitely short people and shorter than people who are definitely not short.) Of course there are various theories of what borderline-case-hood amounts to. Maybe "short" doesn't pick out any definite property; some candidates for the role of shortness Cruise has, others he lacks. Maybe it picks out different definite properties at different times or in different settings; he has some of these properties but not others. Maybe the word picks out the same definite property all the time, but it's a property that itself has borderline cases. These theories are different but they all allow us to point to Cruise's borderline-case-hood as the reason there is no fact of the matter as to whether he is short.

O (continuing): Suppose we now ask how there can fail to be a fact of the matter about, say, the existence of the empty set. To go by our discussion above, the explanation should be this: "exists" is a vague predicate and Ø is a borderline case. But it is harder to make sense of a borderline case of existence than of shortness. It helped us understand Cruise's borderline status to reflect that he was taller than definitely short people and shorter than people who were definitely non-short. Are we to suppose that Ø exists less than clearly existing items but more than clearly non-existent items? That is not an easy thing to suppose. On the one hand, there *are* no clearly non-existent items; to say that there is an item of a certain sort is to say that an item of that sort exists, and no non-existent items exist.[6] And on the other hand, if Ø is available for this sort of comparison at all, then it just simply exists, no maybe about it. You are welcome to look for another model, but I submit that it is incomprehensible how Ø or anything else could be without a determinate ontological status. One can't make sense of the notion that an existence question should be objectively unanswerable—unanswerable not just in the sense that we can't know the answer, but in the sense that there is no answer to know.

[3] Sometimes omitting the "first-order" on the theory that meta-ontology is not a branch of ontology.

[4] Consider this stipulative. The terms "platonist" and "nominalist" are often reserved just for the case where the *X*s are abstract objects, and that is the case I have mainly in mind too. But it will be useful later on to apply the terms more broadly, to disputants about the existence of (non-abstract items like) Lewisian worlds and arbitrary mereological sums.

[5] Not always; but enough for present rhetorical purposes.

[6] See (Azzouni 2004) and (Hofweber 2005, 256–83) for the view that quantification has less to do with existence than is commonly thought.

Q. The challenge is to explain why ontological mootness is not irremediably incoherent. I suppose I will have to do as you suggest and look for another model—an alternative to the borderline case model. Of course, it is one thing to show how ontological mootness could work in principle, another to show how it works in actual fact. I take you to be charging me with the former task. A model will eventually be suggested, but I will not be arguing that it is correct, only that it gives a way of making sense of the ontological mootness hypothesis. It is meant to illustrate the *kind* of work that needs to be done if we are ever to graduate from the wide-eyed wonderment stage of our ontological development.

O. That is a modest goal indeed. It won't bother you if the model is completely far-fetched?

Q. I said I won't be arguing that the model is correct. But it shouldn't be obviously incorrect either. There are two opposite dangers to be avoided: casting our net too wide, and not casting it widely enough. The model should not pull the rug out from under *all* existence-questions, because many such questions would seem to make perfect sense.

> Desideratum 1: Where there is plausibly a fact of the matter about the existence of entities of type *Z*, the model should leave that fact in place.

Insofar as the answer to "Does the planet Vulcan exist?" is plausibly NO, and the answer to "Does the planet Earth exist?" is plausibly YES, we should take care that our model does not apply to planets, nor (I would tentatively suggest) to other common-sense macro-objects. Neither though should the model clearly *not* apply to existence-questions of a type apt to arouse quizzicalist suspicions.

> Desideratum 2: If there is a type of entity *Y* whose ontological status is apt to seem moot, there should be the potential at least for bringing the model to bear on *Y*s.

Insofar as the ontological status of sets, say, or possible worlds, or random mereological sums, is apt to appear moot, our model should have the potential to vindicate that appearance. Putting these goals together, we want to show how there could fail to be a fact of the matter about whether *X*s exist, where the explanation *doesn't* generalize to questions about *Z*s, and *might or might not* generalize to questions about *Y*s.

## 3 Ontology Recapitulates Philology

O. Let's first remind ourselves how the debate goes that you are alleging is empty. I have a sense your doubts reflect an overambitious idea of what it means for a thing to exist. Listen for a bit to my friend the platonist.



P. Ontology has been evolving, Q; we platonists, at least, are not as naïve as you think. Time was when ontological issues, about the existence of, say, *numbers*, were considered prior to linguistic issues, about the semantics of terms purporting to *refer* to numbers. This led to ridiculous skeptical worries about numbers' existence that no amount of referential-seeming behavior on the terms' part could fully allay. Those days are gone. We have no use for

> the possibility of some sort of independent, language-unblinkered inspection of the contents of the world, of which the outcome might be to reveal that there was indeed nothing there capable of serving as the referents of... numerical singular terms (Wright 1983: 13–14).

Contributing in a systematic, distinctive way to the truth-values of its containing sentences is all there is to a term's referring. Numerical and set-theoretic terms do this, so they refer, so numbers and sets exist. End of story.

N. I couldn't help overhearing. "The terms contribute, so they refer, so the objects exist: end of story." That will come as news to Scotland Yard. The view there is that Sherlock Holmes doesn't in fact exist, the truth-value-affecting powers of "his" name notwithstanding.[7] Astronomers will be interested to learn that there is a tenth planet, due to the distinctive effects of "Vulcan" in contexts like "... is supposed to be closer to the sun than Mercury".

P. I grant that we experience statements "about Holmes" and "about Vulcan" as true/false. But there might be various reasons for this. If indeed the terms are non-referring, then the statements are true only in a certain story or pretense or myth—not in real life. If you insist they *are* true in real life, then I reply that Holmes and Vulcan must exist after all, not of course with the properties they are represented as having in story (pretense, myth), but as special sorts of abstract artefact: "fictional character," "failed posit."[8] The point is that you are really walking a fine line here. What you would need to make the objection work is a term that, one, has nothing make-believy about it; two, does not refer in anyone's book; and three, nevertheless makes a distinctive semantic contribution.

N. Well, I seem to remember that there is one expression whose philosophical *raison d'être* has been to serve as an example of a "serious" term with no real-world correlate. I mean of course "the King of France."[9]

P. You're joking, right? "The KoF" makes a distinctive semantic contribution? Not according to Russell or Strawson, it doesn't. The one maintains that sentences containing an empty description are one and all false.[10] The other thinks the question of truth or falsity does not even arise for such a sentence. They agree that

[7] (Divers and Miller 1995, 127–39).

[8] (Kripke's 1973 Locke Lectures)(Salmon 1998, 277–319)(Thomasson 1999).

[9] This is to construe "term" broadly, as befits the Fregean platonist context of the discussion.

[10] Strictly speaking, this applies only to empty descriptions in primary position; I will treat the restriction as tacit.

substituting one empty description for another leaves truth-status unchanged, as does changing the predicative context in which the description occurs. They agree that the truth-status of an empty-description sentence (where, in Russell's case, the description gets wide scope) is fixed by the fact that it contains an empty description.

*N.* Yes, well, they may agree, but are they right? Strawson came to have doubts about this, because of examples like the following:

> Suppose ... that I am trying to sell something and say to a prospective purchaser, *The lodger next door has offered me twice that sum*, when there is no lodger next door and I know this. It would seem perfectly correct for the prospective purchaser to reply *That's false*, and to give as his reason that there was no lodger next door. And it would indeed be a lame defense for me to say, *Well, it's not actually false, because, you see, since there's no such person, the question of truth and falsity doesn't arise* (Strawson 1954: 216–31, at 225).

To the extent that "The lodger next door has offered me twice that sum" strikes us as false, empty-description sentences are not all alike.

*P.* Come on. "That's false" is just a way of calling the landlord deceitful. Give me an example without the moralistic distractions. Give me an example with "the King of France."

*N.* I will try. Strawson is right that we are reluctant to take a stand on

(1) The KoF is bald.

But we feel no such hesitation with

(2) The KoF is sitting in that chair (pointing).

(2) is, at the very least, *a great deal less satisfactory* than (1). We are also not much put off by

(3) The KoF has never worn these pajamas.

(3) is a great deal *more* satisfactory than "The KoF is bald." I would go so far as to say that (2) strikes us immediately as *something very like false*, and (3) strikes us as *something very like true*. Perhaps we don't want to insist that (1)–(3) differ in truth-value properly so called; Strawson certainly didn't. Still, we need to mark these differences somehow; so let us say that (2) *counts* as false, (3) *counts* as true.

*P.* Hmmm. That's interesting as a parlor trick. But it doesn't change my view about numerical terms. I think I will just concede to you that a term like "the King of France" can in limited ways affect a sentence's felt truth-value. This doesn't bother me since any influence here is quirky and unsystematic—as we can see from the fact (noted by Strawson) that although (1) *normally* strikes us as unevaluable, as a response to "What bald notables are there?" it seems false. "The KoF" may be slightly semantically influential, but its influence falls far short of what we get from numerical terms like "the number of planets."



## 4 Counting as False

*N.* How quirky and unsystematic the contribution is remains to be seen. It is just not obvious at this point what is involved in a sentence's counting as false, or true, or neither. I say we try to figure it out. There are two ways to conceive the task, depending on whether we think "The A is B" is undefined in the absence of an A, or false. It will be simpler to take a Strawsonian line. The question then becomes, Why would a sentence $\varphi$ that is undefined due to presupposition failure nevertheless strike us as false? An answer suggests itself almost immediately. $\varphi$ might entail *another* sentence $\psi$ whose (weaker) presuppositions are satisfied, allowing it to be genuinely true or false; and this other sentence $\psi$ might be genuinely false. Small wonder if a sentence entailing a falsehood strikes us as false itself. "The KoF is sitting in this chair" counts as false because it entails that *someone* is sitting in the chair, when we can see that the chair is empty.

*P.* Hold on. If "The KoF is sitting in this chair" counts as false by virtue of entailing that the chair is occupied, shouldn't "The KoF is bald" *also* count as false, by virtue of entailing that France has a king?

*N.* Ah, but "The KoF is bald" does *not* entail that France has a king, when entailment is properly understood. It can't be regular old implication for just the reason you give: every KoF-sentence would count as false by virtue of having a false presupposition. That was not the idea! To entail a falsehood, $\varphi$ must imply a false $\psi$ *whose falsity does not merely reflect the fact that* $\varphi$*'s presupposition* $\pi$ *is false.* $\varphi$ counts as false just when there is a falsehood among its $\pi$*-free* implications. "The KoF is bald" does imply that France has a king, but that France has a king is not $\pi$-free; it is not free of the presupposition that France has a unique king.

*P.* Free in what sense, exactly?

*N.* $\psi$ is $\pi$-free if it is false for reasons independent of $\pi$—for reasons that could still have obtained even had $\pi$ been true. If by a falsity-maker for $\psi$ we mean a truth-maker for its negation, $\psi$ is $\pi$-free iff its falsity-makers are always compatible with $\pi$.[11]

[11] What is it for something to be the reason why $\varphi$ is true in a world? Truth-makers for our purposes can be true propositions—so in one sense of the word, 'facts'—implying the proposition that $\varphi$, and thus guaranteeing that $\varphi$ is true. But which $\varphi$-implying fact is (facts are) to play the role of its truth-maker(s)? I take the word "maker" here to indicate that we are interested in a fact that in some sense *brings it about* that S is true. And so I look for inspiration to another kind of bringing about, viz. causation. There are two desiderata that have to be traded off against one another when we try to pick an event's cause out from among the various antecedents that are in the circumstances sufficient for it.

One is *proportionality*: the cause shouldn't contain too many extra details in whose absence you'd still have an event sufficient for the effect. Getting hit by a bus is a better candidate for cause of death than getting hit by a red bus (an example of Williamson's). Proportionality cannot be pursued at all costs though, or we will wind up with disjunctive causes whose disjuncts correspond to all possible ways for the effect to come about: getting hit by a bus or a car or a plane or having a piano or safe fall on your head or etc. The other desideratum, then, is *naturalness*: given a choice

*P.* Examples, please—preferably not involving the King of France this time.

*N.* Right. Remember, the claim is that $\varphi$ counts as false iff it has false implications, where the falsity is for $\pi$-compatible reasons. Consider

(4) Both of Bush's wives are Jewish.

This presupposes that Bush has two wives, but that can't be the reason it strikes us as false. It strikes us as false because it implies, for example, that all of Bush's wives are Jewish, and this is false for a $\pi$-compatible reason, viz. that Laura is a Bush wife and Laura is not Jewish. The implication is $\pi$-free because for Laura to be a non-Jewish Bush wife is fully compatible with Bush having another wife off to the side, making $\pi$ true. "Both of Bush's wives are Jewish" counts as false by virtue of $\pi$-free implying that among Bush's wives one finds only Jews.[12]

## 5 Counting as True

*P.* OK, but more interesting is the case where a sentence whose presuppositions fail nevertheless strikes us as *true*. Let me guess: $\varphi$ counts as true iff its negation counts as false.

*N.* Not quite. The problem is that nothing so far rules out a sentence and its negation *both* counting as false; and if any such cases occur, the proposed account

between two otherwise qualified candidates for the role of cause, we prefer the less disjunctive one. These desiderata pull against each other because the less disjunctive a prior event becomes, the more it contains "extra" details, in whose absence it would still have been sufficient. But some tradeoffs are better than others, and what we look for in a cause is a prior event that effects the best tradeoff available: you cannot make it more proportional except at the cost of a whole lot of disjunctiveness, and you cannot make it less disjunctive without making it a whole lot less proportional.

With truth-makers, too, the first desideratum is *proportionality*: one wants a proposition that doesn't contain extra details in whose absence you'd still have a proposition implying that $\varphi$. So, "Someone is sleeping" is not made true by the fact that Zina is sleeping *fitfully*; the fitfulness is irrelevant, the fact that Zina is sleeping is enough. The second desideratum is *naturalness*: one wants a proposition that is not unnecessarily disjunctive. "Someone is sleeping" is made true by the fact that Zina is sleeping, not the fact that Zina is sleeping or Vanessa is sleeping or Ruth is sleeping or etc. A truth-maker for sentence $\varphi$ is a $\varphi$-implier that effects a better tradeoff between proportionality and naturalness than relevant competitors.

[12] "Shouldn't 'The king of France is bald' count as false, by virtue of implying 'France has a bald king'?" The answer is that "France has a bald king" is not $\pi$-free; it is made false by the $\pi$-incompatible fact that France has no king. "Who's to say the falsity-maker isn't France's lack of a *bald* king? France's lacking a bald king is fully $\pi$-compatible." France's lack of a bald king does not effect the best tradeoff between proportionality and naturalness. The baldness is an unnecessary complication; one can strike it and still be left with a fact—France's lack of a king—implying the falsity of "France has a bald king." France's lack of a king is also the more natural (because less disjunctive) of the two; there are more ways for France to be without a bald king than without a king. The falsity of "France has a bald king" is better blamed on France's lack of a king than its lack of a bald king.



will lead us to count $\varphi$ true and false at the same time. Such cases do seem to occur.

(5) The author of *Principia Mathematica* was bald

counts as false by virtue of implying the $\pi$-free falsehood "All *PM* authors were bald." (One of *Principia Mathematica*'s two authors was Bertrand Russell, who had a full head of hair late into his life). (5)'s Strawsonian negation

(~5) The author of *Principia Mathematica* was non-bald

counts as false for a similar reason. It $\pi$-free implies that all *PM* authors were non-bald, which is refuted by Alfred North Whitehead's (white) head. If (~5)'s counting as false conferred on (5) the property of counting as true, then (5) would count as true and as false at the same time. Clearly, though, that is not how (5) strikes us. This suggests that for $\varphi$ to count as true it is required that $\sim\varphi$ counts as false *while $\varphi$ itself does not count as false*. $\varphi$ counts as true iff its negation implies $\pi$-free falsehoods, *while $\varphi$'s $\pi$-free implications are one and all true.*

*P.* And $\varphi$ counts as gappy iff it counts neither as true nor as false?

*N.* That's right. Take (1) = "The KoF is bald." (1) doesn't count as false because although it has false implications, e.g., "Some French king is bald," they are not $\pi$-free; they are false for reasons that require $\pi$ too to be false. Its $\pi$-free implications, for instance, "All French kings are bald," are all true. The argument that its negation (~1) doesn't count as false is similar. (~1)'s implication that *some French king fails to be bald* is false, but not $\pi$-free, while its implication that *all French kings fail to be bald* is $\pi$-free but not false. That (~1) does not count as false means that (1)—already seen not to count as false—does not count as true either. So it counts as gappy.

*N* (continuing): $\varphi$ counts as gappy iff its $\pi$-free implications are all true and the same holds of its negation. This makes good intuitive sense; a sentence so tainted by its association with $\pi$ that there is nothing left for it and its negation to disagree about when $\pi$ is stripped away is not making an evaluable claim. When $\varphi$ makes no claim as a result of $\pi$'s failure, we say its presupposition *fails catastrophically*. This is the case where, as Strawson puts it, "the whole assertive enterprise is wrecked" by $\pi$'s falsity. It is the other, non-catastrophic, sort of presupposition failure that I am concerned to emphasize today.

## 6 Nominalistic Ramifications(?)

*P.* Emphasize away. I am still not clear what the bearing of non-catastrophic presupposition failure is supposed to be on the issues that divide us.

*N.* Haven't we already discussed this? *You* said you believed in numbers because of the truth-value-affecting powers of numerical terms. *I* said that the power of affecting

truth-value is not reserved to referring terms, witness "Holmes" and "Vulcan." *You* said that to the extent these terms affect truth-value, they refer; to the extent that they do not refer, they affect only truth-value-in-the-story. *You* demanded an example of a semantically influential term with nothing make-believey about it, and which *clearly* fails to refer. *I* gave you one: "the King of France."

*N* (continuing): The look on your face tells me that you are still confused. Let me spell it out for you. If the untruth of a *concrete* existence presupposition is compatible with a sentence's properly striking us as true or false, why not also the untruth of an *abstract* existence presupposition? I suggest that:

(6) The number of planets is odd

strikes us as true for the same sort of reason as "The King of France sits in this chair" strikes us as false.[13]

*P*. You seem to have forgotten the ground rules. I asked for an example of a non-referring term that influences *truth*-value. Sentences containing "the King of France" may *count* as true or false, but that is not the same as *being* true or false.

*N*. It is *almost* the same, though. Here is why. Our notion of $\pi$-free implication bears affinities to a distinction that linguists make between what is *presupposed* in an utterance and what is *asserted* or *alleged* or *at issue*. If I say that both of my children play soccer, this presupposes that I have two children, and asserts that my children, whatever their number, play soccer. Let me now propose a

BRIDGE PRINCIPLE: $\varphi$'s assertive (allegational, at-issue) content is the sum total of its $\pi$-free implications; equivalently $\psi$ is part of $\varphi$'s asserted (...) content iff $\psi$ is a $\pi$-free implication of $\varphi$.[14]

The reason having a false *$\pi$-free* implication makes $\varphi$ count as false is that something false is *asserted*. Recall that $\varphi$ makes a claim iff at least one of $\varphi$, $\sim\varphi$ counts as false; let's now add that *the claim $\varphi$ makes* when this condition is met is its assertive content. Then the above explanations of counting as true (false, gappy) boils down to this:

(C) $\varphi$ counts as true (false) iff $\varphi$ makes a true (false) claim. $\varphi$ counts as gappy iff it makes no claim.

Now let me reply to your charge that counting as true (false) is one thing, being true (false) is another. The charge is correct but it ignores that $\varphi$'s *counting* as true (false) goes with the *genuine* truth (falsity) of the claim $\varphi$ makes. That a KoF-sentence's counting as true (false) is not the same as its being true (false) doesn't matter, for it *is* the same as

[13] Assuming for sentimental reasons that Pluto is still a planet.

[14] The principle would need to be complicated to deal with cases where presupposed content is repeated in an assertive mode, as it is sometimes held that knowledge attributions presuppose and assert their complements. I will ignore this complication here, though it is important for the understanding of existence claims. "That little green man exists" arguably presupposes the man's existence in the course of asserting his existence.



the truth (falsity) of the expressed claim. Empty terms affect the *genuine* truth-value of what is claimed, and that is enough.

*N* (continuing): Where does this leave us? Sentences like (2) and (3) show that existential presupposition failure is no bar to a sentence's striking us as true or false—indeed to its *properly* striking us as true or false, since it seems only proper to evaluate a sentence on the basis of what it asserts, as against what it assumes as background. But then the failure of the existential presupposition in

(6) The number of planets is odd

is no bar to (6)'s properly striking us as true—indeed to its *being* true in the sense that what it asserts is true. To repeat my suggestion above, NoP-sentences ("number of planet"-sentences) are true (false) in the same way as and to the same extent that KoF-sentences like (2) and (3) are true (false).

*P*: So you say, but you have to admit that the cases look disanalogous. I grant you that

(i) *positive* empty-description sentences like "The KoF is sitting in this chair" are apt to strike us as *false*.

I grant you that

(ii) *negative* empty-description sentences like "The KoF will never wear these pajamas" are apt to strike us as *true*.

I will even grant you that

(iii) positive *overfull*-description sentences like "The author of *Principia Mathematica* was good at math" are apt to strike us as *true*.

But we have not seen any examples of

(iv) *positive empty*-description sentences (of the same form as (6) "The number of planets is odd") that strike us as *true*.[15]

And that is what we will need if we are to use the King of France (KoF) as a model for the number of planets (NoP). For it hardly needs saying that positive sentences about the number of planets quite *often* strike us as true.

*P* (continuing): Before I'll accept that positive number-presupposing sentences like (6) can count as true in the absence of numbers, you will have to give me an example of a positive French-king-presupposing sentence that counts as true in the absence of French kings. On the face of it, there do not seem to be any. "The KoF is bald" counts as gappy, "The KoF is sitting in this chair" counts as false; but where are the positive predicates such that "The KoF is P" counts as true?

*N*. I think you are misunderstanding my argument—or maybe I misrepresented it. You seem to think I am offering an argument by analogy: numerical terms make the

[15] The few examples that come to mind are conceptual truths about French kings as such, or else intentional ascriptions with "the KoF" appearing in an opaque position.

same sort of contribution as "the King of France"; the latter doesn't refer; so the former don't (or needn't) refer either.

*N* (continuing): But that is not the argument at all. "The King of France" was brought in not as a model for "the number of planets," but to motivate a certain theory of non-catastrophic presupposition failure: the theory stated above. The argument that (6) still counts as true in the absence of numbers is not that that's what you'd expect based on the analogy with (2) and (3), it's that the theory assigns

(7) There is exactly one planet or there are exactly three planets or there are exactly five planets or etc. ...

to (6) as its assertive content;[16] and since (7) clearly depends for its truth just on how many planets there are, whether (6) counts as true depends just on how many planets there are.

## 7 Platonistic Ramifications(?)

*P*. Say you're right that (6) still counts for us as true whether numbers exist or not. That doesn't show numbers do *not* exist. The most it shows is that (6)'s counting as true *leaves it open* whether numbers exist.

*P* (continuing): The question we should be asking is: Is there anything special about the way numerical terms influence felt truth-value to suggest either that they do refer, or that they don't? It seems to me that the abundance of positive truths like (6)[17] now becomes relevant again. If a concrete term's emptiness manifests in a shortage of positive truths, why wouldn't an abstract term's emptiness manifest itself the same way? Numerical terms figure in plenty of positive truths, however. Related to this, a concrete term's emptiness manifests itself in an abundance of truth-value gaps; Strawson's theory would never have got off the ground if KoF-sentences did not frequently strike us as unevaluable. NoP-sentences hardly ever strike us this way. Numerical terms exert a much stronger semantic influence than the empty terms we know best: empty concrete terms. Come to think of it, they are about as semantically influential as referring concrete terms. These observations about pattern of influence suggest that numerical terms refer.

*N*. I grant you that empty concrete terms figure in few intuitive truths, and many intuitive gaps. The contrast with numerical terms could not be more striking. But

[16] (6) clearly implies (7). The implication is $\pi$-free because a falsity-maker for (7) would be a fact to the effect that there are so and so any planets, and facts about planets cannot conflict with (6)'s presuposition that there are numbers. So (7) is part at least of (6)'s assertive content. I can't rule out that (6) has other $\pi$-free implications, making for a stronger assertive content, but if so I don't know what they would be.

[17] I am using "truths" now not for true sentences but sentences making true claims. Likewise "falsehoods." "Gaps" are sentences making no claim.



there are two possible explanations of this contrast: one is that numerical terms are not empty; another is that *the emptiness of a numerical term is much less of a drain on its semantic influence than the emptiness of a concrete term*.

*N* (continuing): The second explanation seems more plausible. A King of France, if there was one, would be an original source of information of the type that would make KoF-sentences true; our presumptions about what a French king would have to be like are far too weak to take up the slack in his absence. Numbers if they existed would *not* be an original source of information of the type that would make numerical sentences true. Our presumptions about how numbers if they existed would relate to other things *are* in this case enough to up the slack. Indeed, that would seem to be what distinguishes concrete terms from abstract: it holds of concrete terms but not abstract that whether the term refers makes a large difference to which of its containing sentences count as true and false.

*P*. I might even concede to you that numerical terms' effect on the distribution of truth-values doesn't *require* them to refer. But you haven't convinced me that they don't refer anyway, non-obligatorily as it were. It may not be the only way to make sense of their semantic impact, but it's certainly the most natural.

*N*. And I concede to you that numerical terms' effect on the distribution of truth-values doesn't pattern with that of empty concrete terms. Still, you haven't convinced me that this is evidence of non-emptiness as opposed to abstractness. The semantic powers of an abstract term are exhausted by what the referent is *supposed* to be like and that remains in place whether the referent is there or not.

## 8 Quizzicalistic Ramifications(?)

*Q*. I find these concessions suggestive. Let me restate them in different terms. A mechanism is fail-safe, according to my dictionary, if the surrounding system is "capable of compensating automatically and safely for its failure." Existential presupposition is a mechanism in the larger machinery of assertion and fact stating—a mechanism that is liable to fail. The failure of *concrete* existential presuppositions is often (although, we have seen, not invariably) catastrophic; if I describe the F as G, and there turn out not to be any Fs, then the assertive enterprise is often, as Strawson says, "wrecked." The failure of *abstract* existential presuppositions is generally *non*-catastrophic, however. (6) still makes a claim about how many planets there are even if there are not any numbers—a claim that is part and perhaps all of the one that would have been made had there been numbers.[18] *Abstract presuppositions are to that extent a fail-safe mechanism*

[18] "Part" if we suppose, as I generally do not in this paper, that we scale $\varphi$'s full content back to its $\pi$-free content only on condition that $\pi$ is false.

*within the larger machinery of assertion*. It is not that the mechanism can't fail, but that the failures don't *matter*, as the machinery of assertion "compensates automatically and safely" when they occur.

Q (continuing): Now, suppose the platonist is right that whether a term (an abstract term, anyway) refers is entirely a function of the term's sentence-level semantic effects—its effects on what is claimed and on whether the sentence counts as true, false, or gappy.[19] And suppose the presupposition that it *does* refer is fail-safe: the term's sentence-level semantic effects are the same whether it refers or not. If the one factor that is available to determine whether numerical terms refer takes the same value whether they refer or not, then that factor is powerless to settle whether numerical terms refer. By hypothesis, though, semantic influence *is* the only determining factor; if it fails to settle whether numerical terms refer, then nothing settles it, and the matter is objectively unsettled.

O. You keep on talking about numerical *terms*. But the issue between us isn't a metalinguistic one; it concerns the numbers themselves. Let it be that there is no fact of the matter as to whether numerical terms refer. There could still be a fact of the matter as to the existence of numbers.

Q. Could there really? In practice, the issues are very hard to tell apart. Ask yourself what it would be like to think that although 2 determinately existed, it was indeterminate whether "2" referred. One would have to think that "2" did not determinately refer to 2. (How could it be indeterminate whether "2" referred, if there determinately existed a thing that was determinately its referent?) This idea of 2 determinately existing but eluding semantic capture by "2" is hard to make sense of. Again, what would it be like to think that although 2 determinately failed to exist, it was indeterminate whether "2" referred? One would have to think that there was something other than 2 such that "2" did not determinately fail to refer to this other thing. (How could it be indeterminate whether "2" referred, if its one candidate referent determinately failed to exist?)

Q (continuing): The issue of whether numbers exist is hardly to be distinguished from the issue of whether numerical terms refer; if the one is objectively unsettled, as we have said, then the other is objectively unsettled too. This is how there can fail to be a fact of the matter about numbers' existence.

O. You said that you were going to offer a *model*. So far, all I am seeing is an example.

Q. Suppose that our interest in *X*s stems mainly from the role *X*-expressions play in sentences of a certain type: *X*-sentences, let's call them.[20] Suppose that *X*s are presupposed by *X*-sentences and that the presupposition is fail-safe in the following sense: if $\varphi$ is an *X*-sentence, then $\varphi$'s assertive content is the same, and has the same truth value, whether *X*s exist or not. Then there is nothing to determine whether

[19] Terminology is confusing here, because for a term to refer to so and so does not immediately imply that it refers simpliciter. To say that a term $t$ refers is to make an existential claim to the effect that it has a referent. To say that $t$ refers to so and so is to say that its referent is so and so on the assumption that it refers.

[20] I assume from here on that the line taken above about numerical definite descriptions can be extended to numerals, numerical quantifiers, and the like.



the *X*-expressions in *X*-sentences refer, and to that extent, nothing to determine whether *X*s exist.

O. That tells me when (in your view) ontological mootness arises, but not how it is possible in the first place. How does your model address the *mystery* I was complaining about it in the first section?

Q. Well, how does the vagueness of "short" remove the mystery of there being no fact of the matter as to whether Tom Cruise is short? I take it the explanation goes something like this. Vagueness is semantic underspecification. Gather together all the factors that are supposed to determine the extension of "short"; you will find that they constrain the extension but do not succeed in determining it completely. The extension of "short" is to that extent unsettled; and for the extension to be unsettled is no different from its being unsettled who is short.

Q (continuing): The explanation of how it can be unsettled whether there are *X*s is broadly similar, especially in the use it makes of semantic underspecification. The factors that are supposed to determine which expressions refer do not always succeed in doing this. They constrain which expressions refer but they not determine it completely; they do not determine whether expressions refer which have the same sentence-level effects regardless. Since there is by hypothesis nothing else to determine whether these expressions refer, there is no fact of the matter either way. For there to be no fact of the matter whether *X*-expressions refer is the same as there being no fact of the matter whether *X*s exist.

O. There is still the mystery of why a language should contain expressions whose referential status it is content to leave undetermined.

Q. Let me try a just-so story out on you. I start from the fact that presuppositions are not on the whole advanced as true. It makes sense, then, that the mechanisms driving semantic evaluation would try their best to bleach presuppositional content out and focus on $\pi$-free implications, or what I have called assertive content; assertive contents should ideally evaluate the same whether $\pi$ is true or not. Most terms, however, and certainly most concrete terms, will not submit to this treatment; as we saw with "the King of France," they by and large enable the expression of interesting (in particular, true) claims only if they refer. BUT: *terms could evolve that play into the presupposition-discounting mechanism*, engendering the same claims, with the same truth-values, regardless. I suggest that numerical terms, and abstract terms more generally, are like this. They evolved to influence what is said by virtue of non-referential properties only—by virtue of the kind of thing they are *supposed* to pick out. Ontological mootness is a natural if unintended by-product.

## 9 Extent of the Phenomenon

O: It sounds like you are saying that it is when *X*s are or would be abstract that there is no fact of the matter about their existence.

Q: Not really there is no fact of the matter about the existence of *X*s when the presupposition that they exist is *fail-safe* in the sense discussed. I agree, though that it is generally with abstract objects—numbers, sets, truth-values, shapes, sizes, amounts, and so on—that this happens.

O: That is excellent news. It means that as long as I restrict my attention to *concrete* objects, you will have no ground for complaint. That should still leave me with plenty to do; I can worry myself about Lewisian possible worlds, the equator, the twentieth century, and the mereological sum of my one pair of dress pants with its matching jacket.

Q: I might still complain. Take "The mereological sum of my pants and jacket is at the cleaner's." Stripped of the presupposition that my pants and jacket have a mereological sum, this says that my pants and jacket are at the cleaners.[21] The assertive content is the same whether the mereological sum exists or not, and its truth-value is the same, too. If this pattern continues, then the existential presupposition is fail-safe, and there is no fact of the matter as to whether my pants and jacket have a mereological sum.

O: You said earlier that your model aspires to pull the rug out from under some ontological questions, but not all. It's beginning to sound like you want it to pull the rug out from under "philosophical" existence questions, but not "ordinary" ones about commonsense objects like, I suppose, pants.

Q: Go on.

O: Well, it seems to me the model applies just as well to pants as to sums of pants and jackets. Take "I have a pair of pants at the cleaner's," or to avoid the complexities of ownership, "There is a pair of pants at the cleaner's." Stripped of the presupposition that the microparticles in pants have a mereological sum, this says that pantishly arranged microparticles are at the cleaner's. The assertive content is the same whether the pants exist as a further entity or not, and its truth-value is the same too. Apparently there is (going by your criterion) no fact of the matter as to whether pants exist either.

Q: You say "There is a pair of pants at the cleaner's" has "Pantishly arranged microparticles are at the cleaner's" as its assertive content. That is just not so on my view. Remember, $\varphi$'s assertive content is made up of its $\pi$-free *implications*. Implications (I could have made this clearer) are statements whose truth follows *analytically* from the truth of their impliers. The microparticle-statement figures in the assertive content of the pants-statement only if it is analytically implied by the pants-statement. But the pants-statement does not analytically imply there *are* such

[21] I take it that "The mereological sum of x and y is at the cleaner's" ($\varphi$) implies "x and y are at the cleaner's" ($\psi$) and presupposes "x and y have a mereological sum x+y" ($\pi$). $\psi$ is $\pi$-free to the extent that falsity-makers for "x and y are at the cleaner's" speak only to x and y's locations and do not conflict with x and y having a mereological sum. So $\psi$ is at least part of $\varphi$'s assertive content. I can't rule out $\varphi$'s having additional $\pi$-free implications, making for a stronger assertive content, but I don't know what they would be.



things as microparticles, let alone that there are pantishly arranged microparticles at the cleaner's. I deny, then, that "There is a pair of pants at the cleaner's" has an assertive content that concerns just microparticles. There being no fact of the matter about mereological sums does not preclude a fact of the matter about regular macro-objects.

O: I concede that the pants-statement does not imply anything about microparticles. But it does have *some* sub-pant implications; it implies, for instance, that there are pant-legs at the cleaners.[22] Perhaps "There are pants at the cleaner's" has an assertive content to do with pant-legs! Won't that assertive content be the same, and retain the same truth-value, whether pants exist or not?

Q: Here I have to remind you of a distinction that I have been neglecting of late. $\varphi$'s assertive content is the sum $\alpha(\varphi)$ of its $\pi$-free implications. $\alpha(\varphi)$ does not count as "the claim $\varphi$ makes," though, unless it conflicts with $\alpha(\sim\varphi)$; at least one is false. The problem with (1) = "The King of France is bald" is not that it lacks an assertive content; it's that no claim is made since $\alpha(1)$ and $\alpha(\sim 1)$ are both true. For $\pi$ to be fail-safe, it's not enough that *X*-statements $\varphi$ have the same assertive contents, with the same truth-values, whether $\pi$ holds or not; they have to make the same *claims*, with the same truth-values.

O: How does that bear on the issue of pants?

Q: Let $\varphi$ = "There are pants at the cleaner's." $\alpha(\varphi)$ is the sum total of what "There are pants at the cleaner's" implies about how matters stand pants aside. $\alpha(\varphi)$ counts as a claim $\varphi$ makes only if it conflicts with $\alpha(\sim\varphi)$ = the sum total of what "There are *not* pants at the cleaner's" implies about how matters stand pants aside. $\varphi$ makes a pants-free claim, in other words, only if "There are pants at the cleaner's" and "There are not pants at the cleaner's" have conflicting analytic implications for what goes on at lower levels of reality. What would they be? I am willing to grant that "There are pants at the cleaner's" analytically implies that there are pant-legs at the cleaner's. But this doesn't get us a $\pi$-free *claim* unless "There are *not* pants at the cleaner's" analytically implies that there are *not* pant-legs at the cleaner's. And there is clearly no such implication. One way for there to be no pants at the cleaners is for there to be no pant-legs there. Another way is for the pant-legs there to be unmatched and unattached.

Q (continuing): You are of course welcome to argue that there is more to $\alpha(\varphi)$ and $\alpha(\sim\varphi)$ than I have acknowledged, and that $\varphi$ and $\sim\varphi$ really do have conflicting analytic implications for the sub-pants order of things. That indeed seems like a good thing to try to argue. Myself, I doubt conflicting pants-free implications can be found. But I've been wrong before.

O. I have a better idea now where the debate is going; let's talk more tomorrow. Until then, explain one last time how we tell on your view when an existence-question is

[22] Thanks here to Eli Hirsch.

moot. I know the formula: "Are there *Xs*?" is moot iff the presupposition of *Xs* is fail-safe. But tell me again how the formula is to be understood.

Q. "Are there *Xs*?" is moot iff hypotheses $\varphi$ that presuppose *Xs*[23] are systematically equivalent (modulo $\pi$) to hypotheses $\alpha(\varphi)$ about how matters stand *Xs* aside.[24]

Q (continuing): You get the stated equivalence with sets, numbers, sizes, shapes, amounts, chances, possible worlds, and mereological sums. ("The amount of water in this pond exceeds the amount of water in that one" is equivalent modulo $\pi$ to "There is more water in this pond than in that one." "There is a possible world where pigs fly" is equivalent modulo $\pi$ to "It is possible for pigs to fly.") The model predicts, then, that it should strike us as moot whether sets, numbers, sizes, etc. really exist—or at least as mooter whether they exist than whether "regular" things like dogs and motorcars exist. "Regular" things are distinguished by the fact that statements about them are not systematically equivalent, modulo the assumption of their existence, to statements about anything else.

## References


Azzouni, J. 2004. *Deflating Existential Consequence: A Case for Nominalism*. Oxford: Oxford University Press.

Burgess, J. and G. Rosen. 1997. *A Subject With No Object*. Oxford: Clarendon Press.

Divers, J. and A. Miller. 1995. "Minimalism and the Unbearable Lightness of Being", *Philosophical Papers* 24, 2: 127–39.

von Fintel, Kai. 2004. "Would You Believe It? The King of France Is Back! (Presuppositions and Truth-Value Intuitions)," in *Descriptions and Beyond*, ed. Reimer, M. and A. Bezuidenhout. Oxford: Clarendon Press: 315–41.

Frege, G., P. Geach, and M. Black. 1960. *Translations from the Philosophical Writings of Gottlob Frege*. Oxford: Basil Blackwell.

Hofweber, T. 2005. "A Puzzle about Ontology", *Noûs* 39, 2: 256–83.

Salmon, N. 1998. "Nonexistence", *Noûs* 32, 3: 277–319.

Strawson, P. F. 1954. "A Reply to Mr. Sellars", *Philosophical Review* 63, 2: 216–31.


[23] A bit more carefully: when we look at the hypotheses that lead us to take *Xs* seriously in the first place, we find that (i) they presuppose the existence of *Xs* rather than asserting it, and (ii) they are systematically equivalent (modulo $\pi$) to hypotheses $\alpha(\varphi)$ about how matters stand *Xs* aside. If we agree with Frege that "it is applicability alone which elevates arithmetic from a game to the rank of a science" (*Grundgesetze*, vol. II, sec. 91, p. 187 in Geach and Black, 1960), $\varphi$ would in the case of numbers be a hypothesis of applied arithmetic rather than pure. (I am *not* assuming that $\alpha(\varphi)$ is straightforwardly expressible in English; we know it, in many cases, only as what $\varphi$ adds to $\pi$.)

[24] "Systematically" in the sense that logical/conceptual relations are preserved. $\varphi$ is inconsistent with $\sim\varphi$, for example, so $\alpha(\varphi)$ should be inconsistent with $\alpha(\sim\varphi)$. This is the requirement Q. is pressing in the main text, when he asks how $\alpha$(There are pants at the cleaner's) conflicts with $\alpha$(There are no pants at the cleaner's).




Thomasson, A. L. 1999. *Fiction and Metaphysics*. Cambridge: Cambridge Un Press.

Wright, C. J. G. 1983. *Frege's Conception of Numbers as Objects*. Aberdeen: Ab University Press.

Yablo, S. 2006. "Non-catastrophic presupposition failure." In J. J. Thoms A. Byrne (eds.) *Content and Modality: Themes from the Philosophy of Robert St* Oxford: Oxford University Press.