## ORIGINAL RESEARCH



# **Correctness conditions for property nominalists**



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#### **Abstract**

Nominalists need some account of correctness for sentences committed to the existence of abstract objects. This paper proposes a new statement of such conditions specifically for properties. The account builds on an earlier proposal of mine, but avoids the counter-examples against the latter pointed out by Thomas Schindler, particularly, the sentence 'There are inexpressible properties'. I argue that the new proposal is independently motivated and more faithful to the spirit of the kind of error-theoretic nominalism that the original proposal was part of. Along the way, I also propose novel treatments of Arthur Pap's and W.V.O. Quine's notoriously hard-to-paraphrase sentences about abstracta.

**Keywords** Nominalism  $\cdot$  Properties  $\cdot$  Error theory  $\cdot$  Deflationism  $\cdot$  Ontology  $\cdot$  Second-order logic  $\cdot$  Predicate

Even nominalists about properties must agree that there is something right about 'Plato and Aristotle have some properties in common', as compared with 'Plato and Aristotle have no properties in common', even if the former is untrue. Similarly, nominalists about numbers must agree that there is something right about 2+2=4 and something wrong with 2+2=5. On the standard jargon, we say that the former sentences are *correct* while the latter are not. Giving adequate conditions of correctness that are acceptable to nominalists turns out to be no trivial matter, however (see Rayo (2007: 3.3) for an overview).

Thomas Schindler (2022) usefully surveys and discusses a range of theories about properties that are both deflationist and nominalist. He closes with two objections against my deflationist error-theoretic nominalism about properties (DEP) (Båve (2015)). The first objection targets precisely my proposed correctness conditions, and the second objection charges nominalist deflationists with being committed to taking an object's having a property to amount to its satisfying the corresponding predicate.

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**224** Page 2 of **??** Synthese (2023) 201:224

I will begin by presenting (DEP) more fully, as background for the coming discussion. I next respond to the two objections in turn. Briefly, the response to the first objection is that, while Schindler has indeed found a genuine counter-example, there is a modification of my original correctness conditions that avoids it, as well as being independently plausible. The response to the second objection is that it relies on a non-standard understanding of deflationism, which error-theoretic nominalists in particular have independent reason to reject.

Now, (DEP) is a deflationist theory in virtue two central characteristics. Firstly, it takes the *function* of 'property' to be merely expressive, which means that it merely serves the purpose of allowing the construction of sentences with inferential properties not had by any 'property'-free sentence (2015: §4). This is in contrast to saying, e.g., that the word serves the purpose of referring to properties. Secondly, it counts as deflationary because it takes the meaning of 'property' to be exhaustively accounted for by two simple schemata:

- (PA) N(F) is a property,
- (PA) N(F) is a property of  $a \Leftrightarrow F(a)$ ,

where 'N(F)' is a nominalization function from predicates to nominals, turning, e.g., 'is green' to 'being green', and so on (2015: §2). This is of course similar to the more familiar deflationary theory of truth, which takes the meaning of 'true' to be exhaustively accounted for by the truth-schema, 'the proposition that p is true iff p' (cf. Horwich (1998a)). The way in which these schemata "account for the meaning" of 'property' consists in the word having the understanding condition that one be disposed to accept their instances (see (2015: §1), and, for my preferred understanding of the disposition talk involved here, see Båve (2020)). An expression having a certain meaning thus consists in its having certain understanding conditions, and they are to the effect that one be disposed to accept certain sentences or inferences containing the expression. This makes those instances meaning-constitutive, or analytic. Moreover, I follow Paul Horwich (1998b, 2005: Ch. 2) in taking the meaning-constitutive sentences or inferences to be those whose ungrounded acceptance by speakers is *explanatorily* basic with respect to the overall use of the expression. Thus, any fact about speakers' acceptance of a sentence containing 'property' should be explicable merely on the basis of the fact that they are disposed to accept the instances of (PA) and (PR), in conjunction with facts that do not concern 'property'. The exceptions to this rule, which we will spend considerable time discussing below, pertain to so-called "predications of properties". Further, at least in this connection, 'explain' simply means derive, and Horwich gives several examples of the relevant kind of derivations.

(DEP) is *nominalistic*, furthermore, because it asserts that nothing is a property. I thus follow the traditional, Quinean view that existence merely amounts to existential quantification. As I will use the notion of ontological commitment, accordingly, a claim ontologically commits you to Fs just in case that claim entails that something is an F. Finally, (DEP) is an *error theory* because it includes a "face value" analysis of the syntax and logical form of sentences containing 'property' (2015: 27f.). On a face-value analysis, expressions like 'the property of being white', which look like singular terms, are genuine singular terms. This claim, together with nominalism, entails that



Synthese (2023) 201:224 Page 3 of ?? **224** 

any sentence containing such a term is untrue; hence, error theory. Note, then, that on this account, there are sentences that are meaning-constitutive but untrue.

The face-value analysis stands in opposition to the analyses of "paraphrase nominalists", who take the surface structure of sentences containing such terms to be misleading, and who take these sentences rather to have the logical form of certain nominalistically acceptable sentences, which are their respective "paraphrases". For instance, 'Plato has some property' might be paraphrased as, ' $(\exists F)$  (F(Plato))'. It will be important to keep in mind for the coming discussion that while I agree with paraphrase nominalists that such "predicationally quantified" sentences are true and nominalistically acceptable, I do not take them to adequately paraphrase sentences containing property designators, since they are not synonymous and do not have the same logical form. As we will see, predicationally quantified sentences still play a crucial role in the account of correctness. (By calling this type of quantification "predicational", I mean merely that its variables occupy predicate positions.)

The part of (DEP) we will be focussing on mainly here is the account of correctness, i.e., the part that is supposed to tell such correct (yet untrue) sentences like 'Plato has some property' apart from incorrect ones like 'Plato has no properties'. The original proposal read,

(CC1) A sentence S containing 'property' is correct just in case (i) S can be validly inferred from true, nominalistic sentences plus (PA)+(PR) and (ii) every nominalistic sentence which can be validly inferred from S and (PA)+(PR) is true.

(CC1) contrasts with the proposal of Balaguer (2009), who instead takes a sentence to be correct just in case it would have been true if there were abstract objects. (CC1) is preferable, I argued, because Balaguer's condition entails that either there could be abstract objects that do not actually exist or there are non-vacuously true counterpossibles (2015: 49).

In Schindler's discussion, it is not exactly (CC1) above that is targeted, but rather a claim differing from (CC1) only in having (COMP) in place of (PA) + (PR), where (COMP) is the more familiar schema,

(COMP) An object a has the property of being F if and only if a is F.

For simplicity, however, I will stick to my original statement in what follows. This is harmless, since (COMP) can be derived from (PA) + (PR) plus non-'property'-involving claims. In fact, in my discussion of correctness, I mainly appealed to (COMP) (for the details on the relationships between (COMP) and (PA) + (PR), see (2015: 29–35)).

Here, now, is Schindler's first objection:

Although Båve's criterion works for a number of cases, it doesn't qualify, as being correct, certain sentences that do strike us as correct. For example, 'There are inexpressible properties' seems correct but isn't derivable from (COMP) by using existential generalisation, precisely because there are no instances of (COMP) for inexpressible properties. (Schindler (2022: 456))



**224** Page 4 of **??** Synthese (2023) 201:224

I believe Schindler is right about this counter-example, but that there is a modification of (CC1) that is fairly obvious, given my original account of "predications of properties" (2015: 40ff.), and which also fits better with my general correctness conditions of sentences entailing the existence of abstracta.

In preparation, we first need to look closer at "predications of properties", which are sentences in which a predicate is adjoined to a property-designator, as in, 'The property of being green is observable'. I claimed that predications of properties can in some cases be handled directly, by appeal to (COMP). This will be the case when there is an analytic connection between the relevant predicate and the word 'has', which occurs in (COMP) (2015: 40). Where such a connection is missing, there must be some separate principle giving the meaning of the relevant predication.

For the case of 'observable property', we have *independent reason* to treat it as idiomatic, i.e., as having a meaning not computable from its mode of combination plus the ordinary meanings of 'observable' and 'property' (in particular, the reason is independent of the nominalistic theory defended). And, indeed, 'observable property' does not seem to mean, 'property that can be observed'. If it did, then it would be controversial to say that there are observable properties at all. But, at least in the philosophical disciplines where this phrase is used (particularly, the Philosophy of Science), this is not controversial at all, and greenness is a standard example of an observable property. As practitioners in these fields might say, "When speaking of observable properties, we don't mean that they can *literally* be observed, the way we can observe birds and cars". Such denials of literality are a case in point.

When I say these sentences should be treated as idiomatic, I do not mean that their meaning contrasts radically from the literal meaning, as with 'kick the bucket', which is a standard example of an idiom. Expressions' meanings need not contrast thus radically in order to be idiomatic, at least not as I here use the expression 'idiomatic'. The important point is merely that the meaning of the phrase is not compositionally determined.

I proposed that the meaning of 'observable property' is given by a separate principle, namely, the equivalence schema,

(OPE) The property of being F is observable just in case, for some x, it can be observed whether F(x).

We can now appeal to (COMP)—which, recall, can be derived from (PA) + (PR)—in order to explain the acceptance facts regarding this particular kind of predication of properties. This derivation satisfies the general, Horwichian adequacy condition on meaning-hypotheses, to the effect that speakers' acceptance of the meaning-constitutive principles help explain the totality of acceptance facts about the target expression ('property', in this case).

For other predications of properties that cannot be interpreted by appeal to (COMP), other *auxiliary meaning-constitutive principles* (AMCs) must be appealed to. Some of these are equivalences, like (OPE), but there is no reason to think they must be. The modification of (CC1) I propose now simply adds all the AMCs to (PA) + (PR), as follows:

(CC2) A sentence S containing 'property' is correct just in case (i) S can be validly inferred from true, nominalistic sentences plus (PA)+(PR) and all of the



AMCs, and (ii) every nominalistic sentence which can be validly inferred from S plus (PA)+(PR) and all of the AMCs is true.

This revised statement of correctness conditions is more faithful to my general correctness conditions of sentences containing abstract singular terms than the original. Those conditions read:

(CCA) A sentence S containing abstract terms  $t_1, \ldots, t_n$ , is correct just in case (i) S can be inferred from true [nominalistic] sentences using the defining principles of  $t_1, \ldots, t_n$ , and (ii) only true sentences can be inferred from S using the defining principles of for  $t_1, \ldots, t_n$  (2015: 51).

The reason (CC2) is more faithful to (CCA) is that, on the above account of predications of properties, AMCs like (OPE) actually count as defining principles of 'property'. True, they are only meaning-constitutive for those occurrences of 'property' that exemplify the relevant "predication of properties". But Schindler's counter-example is precisely such a predication, and, in fact, we will see that there are more counter-examples to (CC1), and they, too, are predications of properties that are intuitively idiomatic.

Now, one could argue that (CC1) is actually adequate as it stands, on the grounds that it gives the right correctness conditions for sentences in which 'property' is used in its original, literal sense, which is not the case with Schindler's example sentence (and other examples we will encounter). That is a reasonable response as far as it goes. But it would be more satisfying if we could give correctness conditions for all the relevant occurrences of 'property', and this is what is achieved by (CC2). Or, to be more cautious, it gives the right correctness conditions for all occurrences where 'property' is used either in the philosophically relevant, original, literal sense, or in a sense derivative of that sense. The occurrences that are excluded are, e.g., those in which 'property' is used to denote something that is owned in the legal sense, like houses, cars, and other material objects, and other clearly irrelevant occurrences.

I argued that such additional AMCs as (OPE) must be appealed to in addition to (PA) + (PR) in order to account for the acceptance facts concerning various predications of properties, and, more generally, to account fo certain historical developments of the meaning of 'property' (see 2015: 41f.). But I failed to notice that a corresponding complication was necessary in the statement of correctness conditions. This is the important lesson from Schindler's counter-example. Guided by (CCA) plus the observation that AMCs like (OPE) are meaning-constitutive principles for (certain occurrences of) 'property', we see that (CC2) is a better statement of correctness conditions (at least if we want all the philosophically relevant occurrences to be covered). The fact that this revised statement of correctness conditions also gives the desired results, moreover, constitutes further support for (DEP) more generally.

To put to rest some possible misunderstandings about this response, note that AMCs like (OPE) are *untrue*, according to error-theorists about properties, since they entail the existence of properties. Error-theorists thus do not assert them, but nevertheless takes them to be meaning-constitutive of some occurrences of 'property', namely, those that cannot be handled merely by recourse to (COMP). That an occurrence can be "handled" means that facts about speakers' acceptance of the relevant sentence can be explained merely by their acceptance of the meaning-constitutive principles plus



**224** Page 6 of **??** Synthese (2023) 201:224

acceptance-facts unrelated to 'property' (again, closely following Horwich). Now, for every predication of properties that cannot be handled merely by (COMP), a separate AMC must be appealed to.

An objection that it will be important to consider carefully here is that the present strategy is ad hoc, since new principles are appealed to for every new case that cannot be handled by (COMP). But, as I argued in my original article, this is precisely *not* ad hoc, since, in each of these cases, it is *independently plausible* that the relevant phrase is not compositionally determined by the ordinary meanings of the relevant words. This is what we found with 'observable property', discussed above, and we will see further cases below. The complexity of the account of correctness is thus justified by the observed complexity of our uses of 'property'.

It will be instructive to see how certain other classical examples can be treated by (CC2) and a suitable AMC, beginning with Arthur Pap's example, 'Red resembles orange more than it resembles blue' (1959). True, this example does not contain 'property', and so strictly falls outside the purview of our investigation, but we may instead consider the following, 'property'-involving variant:

(Pap2) The property of being red resembles the property of being orange more than it resembles the property of being blue.

Note that while Pap tried to devise sentences for which it is difficult to state nominalistic *paraphrases*, our aim is different. Given its face-value analysis, (DEP) denies the need for nominalistic paraphrases. Incidentally, however, some of the AMCs I proposed, like (OPE), and some of the ones I will propose below, do in fact provide necessarily equivalent sentences. So it might *look* like we are here after paraphrases, but, for the reasons explained, this is not so.

Now, I propose the following AMC for the relevant predication of properties, where the predicate dummies 'F' and 'G' may *only* be instantiated by colour predicates like 'blue':

(RPE) The property of being F resembles the property of being G to degree d iff things that are F colour-wise resemble things that are G to degree d.

This kind of proposal, considered as an attempt to state a nominalistic paraphrase, has been criticized on the grounds that the right-hand side of (RPE) commits us to colours. Even though we are not in the business of proposing paraphrases, we are equally committed to the right-hand sides of equivalences like (OPE) and (RPE) to be nominalistically acceptable. Thus, this worry is also a worry for us.

But it is easier than hitherto appreciated to argue that the right-hand side of (RPE) actually is nominalistically acceptable. For it seems quite possible to take 'x colourwise resembles y' to be a primitive that can be learnt through exposure to particular instances, and thus without treating sentences of this form as entailing the existence of colour properties. (RPE) can thus be seen as explaining speakers' understanding of this kind of predication along the lines of previously discussed AMCs, by treating it as equivalent with a property-nominalistic counterpart. The next, obvious step is to treat (Pap2) as saying simply that the degree to which the property of being red resembles the property of being orange is greater than the degree to which it resembles blue.



Synthese (2023) 201:224 Page 7 of ?? **224** 

Just as with 'colour-wise resemble', one might suspect that using the expression 'colour predicate'—or that using colour predicates themselves—commits us to properties. That the use of an expression commits you to Fs here means that any claim made using the expression entails that something is an F. But, surely, we all have to use the term "colour predicate"! We have to agree, e.g., that 'blue' is a colour predicate, whether we are nominalists or not. We all also have to accept some sentences containing colour predicates, e.g., 'The sky is blue'. Thus, if using the term "colour predicate"—or using colour predicates themselves—commits you to properties, then error-theoretic nominalism is thereby falsified. But, again, these commitment claims are unobvious and would have to be supported if there is to be a real objection here.

Note that in this case, it is independently plausible that the relevant predication should not be taken as compositionally determined by the ordinary meanings of the relevant words. It is not literally the *properties* that resemble each other, it is the objects that resemble each other to different degrees (in a certain respect) depending on which colour properties they have. As we have been reading the relevant sentence, we are fairly certain that it is true, but we could not be so certain if it is interpreted as literally concerning the similarities of the properties themselves, since we are simply at a loss as far as similarities between properties (literally speaking) is concerned. Thus, we can again resist the charge that the overall account is ad hoc, since this case seems on independent grounds to be idiomatic.

Of course, the right-hand side of (RPE) commits us to another kind of abstract object, namely, numbers. Ultimately, the most promising kind of treatment of Pap's example, which avoids both properties and numbers, will be one that avoids the appeal to degrees altogether, and rather treats the comparative more directly. To wit, one could take, 'x colourwise resembles y more than it colourwise resembles z' as learnable in direct exposure to particulars. Such a treatment would presumably also be more psychologically realistic than one that takes speakers to understand these comparatives in terms of degrees of resemblance. Making a substantiated case for such a solution must await another occasion, however. For present purposes, where we consider only properties rather than abstracta in general, (RPE) is sufficient.

A final worry about this treatment must be addressed: even if the claims I made about (Pap2) are right, corresponding claims about Pap's original example sentence might be wrong. For instance, one might argue that whereas we cannot, indeed, easily see what it is for colour *properties* literally to be similar, this is just not so for colours. This objection may well be correct. But that would merely mean that 'the property of being red' does not work like 'the colour red', and this is not a worry for our treatment of (Pap2). What it shows is merely that (Pap2) is not a faithful rendering of Pap's original sentence.

Indeed, 'the colour red' does seem to differ in several ways from 'the property of being red'. (To see this, try replacing one with the other in various constructions.) Perhaps, in the end, colours aren't abstracta at all, but rather "scattered concrete particulars". One could argue that such objects *can* literally resemble each other, and thus that nominalists should respond to Pap's original example by taking it to be true yet ontologically innocent (since colours are concrete). But we are now far off course, and I will be content to note that, however things may be with colours, our treatment of



**224** Page 8 of **??** Synthese (2023) 201:224

(Pap2) stands. Given (RPE) and (CC2), it comes out as correct, as it should. Further, it is independently plausible that the relevant predication of properties is idiomatic.

A similar treatment is available for Quine's example sentence, 'Some species are cross-fertile' (1948: 13). Here, we must again reformulate:

(Quine2) Some animal properties are cross-fertile,

where 'animal property' is interpreted as hypernymous to 'the property of being a dog', and so on. We now need an AMC for this new predication of properties, which we can take to be,

(SPE) The animal property of being F and the animal property of being G are crossfertile iff there is an F that can have (not necessarily fertile) offspring with some G.

An alternative interpretation takes the right-hand side here rather to be that every fertile F can have offspring with every fertile G, but this complication need not distract us. Now, since some donkeys can have offspring with some horses, it follows, by simple reasoning from (CC2) and (SPE) that (Quine2) is correct. No complicated paraphrase is needed (like the one proposed by van Inwagen (2014: 81f.)). It is also very plausible that the predication of cross-fertility here is not to be taken literally. The extent to which (SPE) helps with Quine's original example, which has 'species' instead of 'property' depends in part on how similar the two expressions are. In particular, it depends on whether there is something analogous to (COMP) for 'species', on the lines of, 'x belongs to the F-species iff z is an F', where 'F' is instantiated by 'dog', etc. But we may leave this matter unresolved, since our focus is on (Quine2).

Let us now see how (CC2) fares with Schindler's example sentence involving the predication, 'inexpressible property'. As the relevant AMC, I propose the following biconditional:

(IPE) The property of being F is expressible just in case, for some x, it is possible to express (say/assert) that F(x).

We may, if needed, add relativizations to variable languages to both flanks here, i.e., the phrase, 'in L'. (IPE) follows the recipe for formulating AMCs in which the relevant predicate, just as in (OPE), is defined in terms of a verb taking a 'that'-clause as complement. Thus, where (OPE) had 'observe that', we here have 'express (say/assert) that'. Now, the relevant true, nominalistic sentence can be taken to be the following existential predicational quantification:

(IP)  $(\exists F)$  (not: for some x, it is possible to express (say/assert) that F(x)).

In order to show that the original example sentence is correct, we now only need to show that it can be validly inferred from (IPE) and (IP) ((COMP) is not needed):

- (1)  $(\exists F)$  (not: the property of being F is expressible). (From (IP) and (IPE)).
- (2)  $(\exists F)$  (the property of being F is inexpressible). (From (1)).
- (3) There are inexpressible properties. (From (2)).

Although this derivation is informal, it seems clear that each step is necessarily truthpreserving. For that reason, I will not discuss how to formulate general inference rules



Synthese (2023) 201:224 Page 9 of ?? **224** 

that the steps instantiate, relative which we could take them to be formally valid. It is enough for present purposes to assume that there are such rules.

How do we know that (IP) is true, though? Well, (IP) can be motivated on the kind of inductive grounds Schindler rehearses on p. 4. The Platonistic way of formulating these grounds is: since there are properties our ancestors could not express, there probably are properties we cannot express. The grounds for (IP) are just the nominalistic rephrasing of this reasoning:  $(\exists F)(\exists x)(\text{Our ancestors could not express/say that } F(x)$ , so, probably:  $(\exists F)(\exists x)(\text{we cannot express/say that } F(x))$ ). One may of course question this inductive argument, but that is neither here nor there, since if that argument fails, we would have no reason to think 'There are inexpressible properties' is correct in the first place.

For completeness, we also need to argue that the relevant predication of properties here is idiomatic. I believe this becomes plausible as we consider that 'express', in ordinary English, is mainly used to denote a relation to mental entities, like emotions, beliefs, thoughts, etc. This gives some *prima facie* support for the view that, when used alongside 'property', 'express' takes on a different (though derivative) meaning, i.e., that it is idiomatic.

It may be objected, along famous Fregean lines, that *thoughts*, at least in one important sense, are not mental entities, and they are nevertheless said to be *expressed*. But, firstly, on the most developed account of the nature of the expressing relation, that of Wayne Davis (2003: Ch. 3), thoughts/propositions are crucially taken to be precisely mental entities, namely, mental event types. This is also true of propositions as conceived of by Scott Soames (2010, 2015) and Peter Hanks (2011, 2015), who argue that propositions, *pace* Frege, can only intelligibly be construed as mental entities (act types).

Secondly, when ordinary speakers speak of expressing thoughts, it is plausible that *they* only have in mind the expression of thoughts, conceived of as mental. Thirdly, if philosophers can speak meaningfully of expressing thoughts, conceived of as nonmental, then that usage is plausibly taken to be idiomatic, too. Note, then, that we are not committed to the strong view that thoughts are always (in all senses of the word) mental entities, but only to the claim that, if 'thoughts' in the phrase 'express thoughts' can be read as denoting something sense non-mental, then the phrase is idiomatic.

Leaving these rather abstract, philosophical considerations, and returning (as far as we can) to lay reactions to the phrase 'express a property', I think it is rather clear that it is not readily interpretable on the basis of the ordinary meanings of the words 'express' and 'property'. Rather, it requires some theoretical reasoning, which may or may not result in a stable interpretation. This may be obscured by the fact that we may seem to acquire a very clear grip on this notion if we learn that we are to accept every instance of the schema, 'the predicate "F" expresses the property of being F'. But if the phrase 'express a property' is now taken as defined by this schema, it has arguably acquired a new sense, for no such schema can reasonably be claimed to give the meaning of 'express' when used to say that an emotion or belief is expressed. I conclude that 'express a property' is plausibly taken as idiomatic, and thus that the ad hoc complaint has been duly put to rest for this case.

Crucially, (IP) involves second-order quantification. I have argued that such quantification is nominalistically acceptable and that sentences like (IP) are true (further arguments for its ontological innocence are found in Boolos (1975), Williamson



**224** Page 10 of ?? Synthese (2023) 201:224

(2003), and Rayo and Yablo (2007)). Of course, Quine (1970: 64–68) and others disagree, and so could deflationist nominalists, but that would be a very different argument from Schindler's. Schindler does argue against using both first-order quantification over properties *and* higher-order quantification. But, firstly, the reason for this is merely that they serve the same (expressive) purpose, so that one will be otiose in the presence of the other. This is thus merely a kind of simplicity consideration. Secondly, even if we take that simplicity consideration to be conclusive, it would not affect error-theorists. For they will *not* use both first-order quantification over properties and higher-order quantification, since they reject the former altogether. It is for this reason that they resort to higher-order quantifiers: to afford the relevant expressive power without the ontological commitment to properties.

Note also that the assumption that certain predicationally quantified sentences are true is not only needed in order to deem correct certain "predications of properties", like 'There are inexpressible properties'. Consider this example: 'There is a property Plato has such that no one knows that he has that property'. This sentence does not involve a "predication of properties", and it is surely correct. But it seems we can only show it to satisfy the correctness conditions of (CC2) if we assume that the corresponding predicationally quantified sentence is true, i.e., ' $(\exists F)$  (F(Plato)) and no one knows that F(Plato))'. The assumption that there are true predicationally quantified sentences is thus necessary independently of predications of properties. Hence, it is not an ad hoc assumption needed to respond to Schindler's argument (indeed, I explicitly made this assumption in the original paper).

In this connection, it may be worth noting that the nominalistic claim, 'There are no properties' is not correct. It is also deemed incorrect by both (CC1) and (CC2) since any true, nominalistic, atomic sentence, in conjunction with (COMP), entails 'There are properties'. Together with obvious further assumptions, it follows that 'There are no properties' is not correct. But this should come as no surprise and is not, of course, a problem for nominalists.

Although I think Schindler's objection against (CC1) is correct, I think he misdiagnoses the situation. He says that the sentence 'There are inexpressible properties' "seems correct but isn't derivable from (COMP) by using existential generalisation, precisely because there are no instances of (COMP) for inexpressible properties" (2022: 456, my emphasis).

But the problem does not essentially concern 'inexpressible property', but rather predications of properties in general. For (CC1) also gives the wrong result for 'There are observable properties'. We need something like (OPE) to derive this sentence from the relevant, true predicational quantification, i.e., ' $(\exists F)$  (for some x, it can be observed whether F(x))'. Inexpressibility thus raises no special problem. It is rather predications of properties that require separate AMCs that constitute counter-examples to (CC1).

As against my claim that 'inexpressible property' is merely one of several counterexamples against (CC1), one may argue that predicational quantification must be interpreted *substitutionally*, i.e., so that the meaning of these quantifiers is given by such clauses as, (roughly).

 $(\exists F) (...F...)$ ' is true iff there is a predicate 'G' such that '...G...' is true.



Synthese (2023) 201:224 Page 11 of ?? **224** 

Against this claim, however, we can point precisely to sentences like (IP). If (IP) can be true in some sense, then that sense cannot be captured by the simple substitutional kind of truth condition stated above.

It has in any case been argued that the substitutional interpretation is not the only option. One could instead take all higher-order quantification to be primitive, as proposed by Timothy Williamson (2003), or one can take it to be fully interpreted by the relevant inference rules, as I originally proposed (2015: 54)—see also Stewart Shapiro (2001: §2.2).

I believe that Schindler's misdiagnosis may be explained by what he says in the second paragraph of the quoted passage, which also constitutes his second objection. He says,

My second worry is more substantial. According to deflationists, saying that a has the property of being F essentially amounts to saying that a falls under the concept  $\langle F \rangle$  or that a satisfies the predicate 'F'. And statements of the latter form shouldn't be treated in an error-theoretic manner. (2022: 456)

As Schindler points out, an error-theorist must reject this amounting-to claim, lest they be committed to saying that all satisfaction claims be untrue.

But this "amounting to" claim does not follow on any of the standard definitions of deflationism. It does not follow, for instance, from the two claims that both I and Schindler take to be essential to deflationism, about property talk as serving merely an expressive purpose, or about the centrality of schemata like (COMP) or (PA) + (PR). Schindler holds that the amounting-to claim follows, given plausible further assumptions, from the claim that properties are mere "shadows of predicates", which he claims to be central to deflationists (e.g., in the abstract of his paper). But, aside from being obscure, this is a non-standard understanding of deflationism. A deflationist about properties might as well take the notion of property that is encapsulated in our language to be a realist one, on which the existence and nature of properties is not in any way dependent on any facts about predicates or any other facts about language. Indeed, deflationists about truth like Paul Horwich expressly deny that his view entails any kind of language-dependence claim concerning truth. Similarly, Quine, who makes the strong deflationist claim that, "To call the sentence true, we are calling snow white", would surely not want to accept any general dependence of truth-facts on languagefacts, lest he commit himself to an extreme, global language-dependence claim, to the effect that, for any p, whether p depends on our language. So at least to the extent that deflationism about properties is to be analogous to these deflationist views about truth, it must not be associated with the idea of properties as "shadows of predicates" (which may in any case be thought too metaphorical to shed much light on the issue).

There also seems to be reason to think the amounting-to is incompatible with the combination of deflationism with nominalism, however exactly "nominalism" is to be understood. For if one accepts this combination, one will have to adopt the same kind of "anti-realist" view of satisfaction-claims as one has of claims to the effect that some object has some property, whatever the relevant "anti-realist" view may be, exactly. But a nominalist should presumably not have *any* kind of anti-realist view of sentences saying that some object satisfies some predicate, since such sentences are typically thought to consist of entirely nominalistically acceptable vocabulary. At the



**224** Page 12 of ?? Synthese (2023) 201:224

very least, there is a *prima facie* tension here that must be resolved. Better than trying to resolve this tension, however, would be to simply reject the "amounting to" claim and opt for a more standard definition of deflationism about properties.

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## **Declarations**

**Conflict of interest** There are no conflicts of interest in regard to the article.

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## References

Balaguer, M. (2009). Fictionalism, Theft, and the Story of Mathematics. *Philosophia Mathematica*, 17, 131–162.

Båve, A. (2015). A deflationist error theory of properties. *Dialectica*, 69, 23–59.

Båve, A. (2020). Semantic dispositionalism without exceptions. *Philosophical Studies*, 177, 1751–1771.

Boolos, G. (1975). On second order logic. Journal of Philosophy, 72, 509-527.

Davis, W. (2003). Meaning, Expression, and Thought. CUP.

Hanks, P. (2011). Structured propositions as types. Mind, 120, 11–52.

Hanks, P. (2015). Propositional content. OUP.

Horwich, P. (1998a). Truth (2nd ed.). Oxford University Press.

Horwich, P. (1998b). Meaning. Oxford University Press.

Horwich, P. (2005). Reflections on Meaning. Oxford University Press.

Pap, A. (1959). Nominalism, Empiricism and Universals-I. Philosophical Quarterly, 9, 330-340.

Quine, W. V. O. (1948). On what there is. In M. A. Cambridge (Ed.), A logical point of view (pp. 1–19). Harvard University Press.

Quine, W. V. O. (1970). Philosophy of logic. Prentice-Hall.

Rayo, A. (2007). Ontological commitment. Philosophical Compass, 2, 428–444.

Rayo, A., & Yablo, S. (2007). Nominalism through de-nominalization. *Noûs*, 35, 74–92.

Schindler, T. (2022). Deflationary theories of properties and their ontology. Australasian Journal of Philosophy, 100, 443–458.

Shapiro, S. (2001). Classical Logic II: Higher-Order Logic. In L. Goble (Ed.), Blackwell Companion to Philosophical Logic (pp. 33–54). Blackwell.

Soames, S. (2010). What is meaning? Princeton University Press.

Soames, S. (2015). Rethinking Language, Mind, and Meaning. Princeton.

van Inwagen, P. (2014). Existence. Cambridge University Press.

Williamson, T. (2003). Everything. Philosophical Perspectives, 17, 415–465.

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