# The Copredication Argument

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## Abstarct

The standard view of truth-conditional semantics is that it is world-involving in the sense that a theory that specifies truth conditions *eo ipso* is a theory that specifies the way the world must be if the target sentences are to be true. It would appear to follow that the semantic properties of expressions, such as nominals, specify the very worldly objects that make true or false the sentences that host the nominals. Chomsky and others have raised a fundamental complaint against this thought: perfectly quotidian nominals, such as *London* or *book*, may occur copredicatively as a single argument of categorically mismatched predicates, which prima facie preclude a coherent uniform construal of the nominal argument. The argument has hitherto been presented via examples that challenge the standard view. My aim here is to present the argument explicitly, defend it against some likely counterclaims, and resolve what might appear to be a decisive consideration against the conclusion of the argument, *viz.*, if nominals as copredicatively occurring do not contribute uniform worldly entities, then how can the copredicative constructions be counted as true?

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### 1: Introduction

The standard view of truth-conditional semantics is that it is world-involving in the sense that a theory that specifies truth conditions *eo ipso* is a theory that specifies the way the world must be if the target sentences are to be true. It would appear to follow that the semantic properties of expressions, such as nominals, specify the very worldly objects that make true or false the sentences that host the nominals. McGilvray (1998), Chomsky (2000), Pietroski (2003, 2005), Collins (2009, 2011), and others have raised a fundamental complaint against this thought: perfectly quotidian nominals, such as *London* or *book*, may occur copredicatively as a single argument of categorically mismatched predicates, which prima facie preclude a coherent uniform construal of the nominal argument, and so the nominal is not construed as picking out a unique object in the world. The argument has hitherto been presented via examples that challenge the standard view. My aim here is to present the argument explicitly, defend it against some likely counterclaims, and resolve what might appear to be a decisive consideration against the conclusion of the argument, *viz.*, if nominals as copredicatively occurring do not contribute uniform worldly entities, then how can the copredicative constructions be counted as true?

# 2: Semantic theory and reference

Truth-conditional semantics is most often presented by way of a desideratum along the following lines:

(D) An adequate semantic theory for a natural language L will assign to each sentence s of L truth conditions such that the conditions are (i) interpretive of L-speaker/hearers' use of s and (ii) computable as a (homomorphic) function of the values assigned to the constituent items of s and how such items are organised within s.

Assume that (D) is the basic desideratum of a semantic theory. Particular theories and frameworks differ as regards the kind of conditions they employ to flesh out the bare idea of truth conditions being interpretive, especially as regards the context-sensitivity of many linguistic expressions. Furthermore, many complex issues arise concerning the difference between so-called 'absolute' and model-theoretic approaches. Notwithstanding such complications, *prima facie*, a theorist's accepting (D) involves her in a commitment to referents or semantic values as those 'things' that are involved in the theory's specification of the truth conditions of *L*-sentences, supposing, of course, that one can utter truths with *L*-sentences.1 Perforce, a semantic theory would appear to accommodate (apparently) colloquial notions of truth and reference as relations holding between words/phrases and an independent world (a world out there anyway) that renders sentences true or false. In particular, what (D) appears to rule out is a semantic theory that satisfies itself with linking one kind of structure to another as a form of translation or interface.

Lewis (1970, 190) influentially rejected the so-called *Markerese* semantics of Katz and Fodor (1963) for being merely translational, for a semantic theory must trade in the "the relations between symbols and the world of non-symbols—that is, with genuinely semantic relations". To be sure, Lewis had his substantive arguments against Markerese; my present intent is only to highlight the conception of what counts as "genuinely semantic". Similarly, Dowty *et al.* (1981, 5) claim that "the proper business of semantics is to specify how language connects with the world – in other words, to explicate the inherent "aboutness" of language". Dowty *et al.* go on to endorse a correspondence theory of truth as the one fit for semantic duty. Similar sentiments can be found throughout the philosophical and semantic literature (e.g., Evans and McDowell, 1976; Lepore and Loewer, 1981; Davidson, 1984; Higginbotham, 1988, 1989; Chierchia and McConnell-Ginet, 1990/2000; Carlson and Pelletier, 2002; Stanley, 2007; Kennedy and Stanley, 2009; Jacobson, 2014).

To be somewhat simple-minded about it, the basic thought is that putative theoretical statements of the form in (1) have right-hand sides that specify bits of the world to which language connects, and it is such connections that a semantic theory is designed to specify as ways of fixing the extensions (and/or intensions) of the semantic terms *truth* and *reference* (suitably parameterised) for the language at hand:

# (1)a 'Cat' refers to cats

b 'The cat is on the mat' is true iff the cat is one the mat

This is simple-minded for a number of reasons. Principally, it is the logical form a theory specifies that is intended to record the truth-relevant significance of linguistic expressions and their host structures; so one cannot simply presume that a semantic theory is beholden to deliver ontologically on whatever a language allows us to talk about. Familiar problems arise with fictional and mythic terms and other such cases (holes, sakes, voices, etc.). I shall return to these cases later, but for present purposes, I am happy to grant that some approach to these problematic cases will render them on a par with the 'normal' cases, as it were; in particular, then, the mere existence of some problem cases does not militate for a translational semantics of the kind that is standardly rejected. My concern, rather, is for an argument that puts pressure on the very idea that words have external semantic values, regardless of the vices and virtues of a translational conception of semantics. So, we may grant with Lewis et al. that a translational semantics such as Markerese is out, but it doesn't follow that the supposed proper business of semantics as the delineation of language-world connections is achievable. An argument is on offer that precisely concludes that perfectly quotidian nominals may make semantic contributions to their host sentences that cannot be specified in terms of a uniform external semantic value.

#### 3: The copredication argument against externalist semantic values

*Pro tem*, as advertised, let us put to one side lexical items whose referential status is suspect, or apparently problematic, for everyone, such as fictional terms (*Zeus, Holmes*, etc.), empty terms (*Vulcan, phlogiston*, etc.), and various metaphysically dubious terms (*Joe Six-Pack, 5, holes, the sky, a voice, the average American*, etc.). Any open-class item one likes will serve to make my point insofar as it supports *copredication* (cp., Pustejovsky, 1995; Chomsky, 2000; Pietroski, 2003, 2005; Collins, 2009, 2011; Asher, 2011). Copredication occurs where two or more predicates (verbs, adjectives) take a single argument (or modify a head nominal) that is differentially construed relative to each predicate, but the host construction is acceptable, non-zeugmatic, and so truth-apt. Note, first, that copredication in this sense is not a case of ambiguity. Consider (2):

(2)a The bank was slippery after the rain

b The bank dropped the mortgage rate

c #The bank was slippery after the rain and dropped the mortgage rate

(2a, b) are fine under the different construals of *bank*, but (2c) is semantically anomalous, and does not, anyway, follow from (2a, b). So much, along with other diagnostics based on ellipsis and anaphora, indicates that *bank*, as we knew, is ambiguous.<sup>2</sup> The crucial point here is that there are two unrelated meanings associated with the morphophonemic form *bank*, which is revealed by (2c) being anomalous. In distinction, consider (3):

(3)a The bank was bailed out by the government, which damaged its standing

b The bank's refurbishments improved the queuing problem

c The bank was bailed out by the government, which damaged its standing, but its

refurbishments improved the queuing problem, which was popular with the

customers

Here, *bank* is not ambiguous between (3a) and (3b) insofar as conjoining the two relevant predications in (3c) does not result in anomalousness, i.e., the two occurrences of *bank* clearly don't carry distinct unrelated meanings. Still, between (3a) and (3b), there are at play different senses of *bank*, one as denoting an institution that can be bailed out, and one as denoting a building or set of buildings, which can be refurbished and involve queuing. In standard terminology, we say that *bank* is *ambiguous* with respect to denoting a financial institution or a side of a river, whereas it is *polysemous* with respect to denoting a financial institution or a building serving the institution. The crucial feature to bear in mind with the polysemous case here is that although the two senses are clearly intimate, they are ontologically quite distinct. A bank as an institution, say, could close down all of its branches and remain the same bank. More generally, we reckon there not to be the one entity out there in the world that can receive bailouts and be carpeted, say. Moreover, no such queer entity appears to be licensed by, or be otherwise explanatorily relevant for, our bare linguistic competence with the expressions.

As another example of polysemy, consider (4):

No problem arises here, although, clearly, two distinct construals of *book* are in play, one as content and another as a concrete particular; after all, (4a) can be true even if no particular concrete book was memorised, either because the relevant person read a number of copies or memorised the content via varied sources. Indeed, one simply doesn't memorise a book as a concrete particular, but only as a body of information. Hence it is that (4a) can be true in the absence of any unique concrete particular. On the other hand, if a book is burnt, then a single

<sup>(4)</sup>a Bill memorised the book

b Bill burnt the book

c Bill memorised and (then) burnt the book

material book token must be burnt. Still, the copredication in (4c) is fine and appears to follow from (4a, b). The phenomenon is further exhibited by quantification (Asher, 2011).

(5) Bill memorised every book in the library and then burnt them.

The books memorised and the books burnt are counted differently. If Bill memorised every book in the library, then he need not memorise every copy of the first *Critique*, say (it is not even clear what that means, if the copies are the same). If Bill burnt every book in the library, however, then each library copy of the first *Critique* must be consumed by flames.<sup>3</sup>

The same kind of reasoning holds across the nominal domain. Consider so-called bare plurals:

(6) Mosquitoes evolved into very irritating insects

Individual mosquitoes do not evolve, only the species or kind does; on the other hand, only individual mosquitoes can be irritating.<sup>4</sup> The general point is perhaps most vivid with terms for cities, countries, and teams:

(7)a London tends to vote conservatively, despite being the largest urban area in the UK

[population and geographic]

b Germany is a central European democracy [geographic and abstract]

c Manchester United's spending has yet to translate into victories for them [institution

and team]

The same anaphora phenomenon as exhibited in (7c) can be indefinitely extended. Consider:

(8) The Nile runs the length of Egypt and it serves as the most important trade route in the region as well as the source of irrigation for nigh-on all of Egypt's crop production.

A river can be a geographical feature, an abstract relation, such as a trade route, or a body of water (*inter alia*), and these notions are independent (for example, if the Nile were to freeze in perpetuity and be used as a road, it would cease to be a body of water or even be a geographical feature in the relevant sense, but would remain a trade route.

There are cases where a nominal is used to select a definite object or a number of objects; even here, copredicative polysemy can be witnessed. Thus:

(9)a That book [with the speaker pointing at a concrete particular] you haven't read

b Sally picked up and then read three books

In such cases, is a speaker not intending, respectively, to speak, univocally, about one particular book and three particular books, respectively? On reflection, clearly not. Consider the first case. Suppose the addressee responded to an utterance of (9a) by saying, 'Oh, I read that on my kindle just the other week'. If the response is true, then the token of (9a) is false, even though the addressee did not read the object at which the speaker pointed. So, even a demonstrative allows for copredication via simultaneously picking out a concrete particular and something more abstract such as a body of information. We know that, anyway, in fact, for one can as readily use *that* to pick out concrete particulars as well as abstracta, events, and so on (*That is easy/false/implementable/*etc.).

Similarly, the interpretation of the numerical quantifier of (9b) constrains the truth of the sentence to involve three, and only three, books picked up and read, i.e., Sally cannot read more or less books than the number she picked up. It doesn't follow that the three things count as the same kind of thing with respect to the different predicates, for (9b) can be true if Sally continued to read on-line one, two, or all of the books she picked up; that is, the relevant construal of *book* remains dependent on the predicates. One can see this clearly, for *Sally memorised and then burnt three books* involves three things memorised and burnt, but

not necessarily the very same things (the sentence would be true if Sally memorised the books from an on-line source, say). The point is somewhat trivial. The criterion for individuation, and so counting, of books, *qua* concrete particulars, and books, *qua* contents, come apart, but the mere use of a numerical quantifier across a conjunction of predicates that express such different conditions of individuation is not the least semantically anomalous. Such a quantifier in the (9b)-kind of case is simply construed differently with respect to the hosted predicates just as in any other copredicative construction.

From the suggestiveness of the above sample cases, we may formulate a general argument:

(i) Nominals characteristically encode a number of potential construals that can be singularly or severally realised by the occurrence of the nominal in a particular host sentence (see any of the examples above).

(ii) These construals do not mark the relevant nominals as ambiguous, for distinct construals can be selectively triggered by different predicates or modifiers in the one construction. This feature marks the nominals as polysemous, with, say, distinct predicative expressions selecting different construals of the single nominal.

(iii) The construals are categorically mismatched insofar as one either precludes or merely doesn't entail the others, and within a given construction, only one construal need be selected, i.e., not every construal is always selected. For example, one may use *book* to speak just about certain concrete tokens or bodies of information (stories, say) to the exclusion of the other, but one may also use *book* to speak about both simultaneously.

(iv) Therefore, as tokens of lexical types, the occurrences of nominals does not presuppose or entail a single value that occurs invariantly in the meanings (truth conditions) of the sentences that host the items. If there were such semantic relations, then the copredicative cases would be as anomalous. (v) So, insofar as nominals are polysemous and can occur copredicatively, they have no single value that uniformly contributes to the truth conditions of their host sentences; perforce, they have no such external value.

I wish to distil a basic claim: unambiguous nominal items may support distinct referential construals in the one copredicational construction such that no unique referent has the properties that are expressed by the lexical predicate that triggers the relevant construals. For example, there are no books (*punkt*) as the referents of *books* that are such as to provide an invariant value for *books* that makes tokens of ' $\Psi$ (books)' true or false. This is not to deny that there are books (or cities and so on), but only that there are no such things without a specification of the kind of properties they may support such as to make true or false some given claim involving a predicate. The point here bears emphasis. The copredication argument does not militate for a scepticism towards 'ordinary' objects, or propound any other metaphysical thesis. For what it is worth, it might be a welcome conclusion that semantics does not lead to the existence of abstract objects with psychological states. The intent of the argument is only to undermine the common assumption that referential invariance is a semantic property of nominals. A metaphysician of any stripe may go in peace insofar as she doesn't seek ontological conclusions from presuppositions about such a putative semantic property. Equally, the argument doesn't so much as suggest that speakers can't successfully refer to London and War and Peace, say; rather, the argument only purports to show that the relevant nominals do not express invariant referents, and so speakers' understanding of the nominals does not harbour such invariance.

If all that is so, then there just is no external referential invariance for the relevant lexical items, and so an adequate semantic theory should not be beholden to record any such putative relation. What I shall now consider are some extant and likely ripostes to the argument.

## **3.1: Setting the standard too high**

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Ludlow (2003, 2011) and Borg (2009) correctly note that standards of what is too count as genuinely extant can be set so high that practically nothing remains, save, perhaps, for the entities of particle physics. Perhaps, then, the force of the above argument trades on an unduly high standard of what is to count as an external semantic value. Ludlow in particular usefully details how many of the kinds of things we readily sanction as external have individuation conditions shot through with human-specific categories and are sensitive to our various conceptions and interests. Thus, rather than thinking of semantic values as the kind of external entities physics is in the business of identifying and measuring, we should think of them as I-substances or I-objects or I-relations, where such entities are partly individuated by our internal cognitive states, but still count as the semantic values of our words and phrases. In this sense, semantic values might often best be viewed as artefacts to some degree, but they remain external things to be referred to, for they are not simply objects of the mind, or yet more conceptual structure.

Although Ludlow's basic point here is correct, it does not address the copredication argument directly. That is, the complaint against the putative world-involvingness of semantics the copredication argument expresses is not merely that the would-be semantic values of *London*, *the Nile*, etc. have individuation conditions that are sensitive to human conceptions and interests. If that were the only argument on the table, then Ludlow's riposte would be decisive. The argument, rather, is that the would-be semantic values have no coherent individuation conditions *at all*, if we are assuming the values to be uniform across the relevant nominals, and especially as they occur in copredicative constructions. Thus, let there be I-objects in Ludlow's sense and let London or the Nile be among them. We are still no closer to seeing how a single object with coherent individuation conditions may be the value of a nominal in the relevant copredication construction. Ludlow (2011, 138) does mention the copredication cases, and suggests that the general approach he presents might

apply to them, even though it 'seems implausible on the face of it'. Ludlow gives no indication of how such implausibility might be ameliorated. One way of putting the crucial point here is that the copredication argument does not claim that individuation conditions for some relevant putative semantic value are recalcitrant, or hard to figure out against some background metaphysics, say, but that the semantic values appear to have a whole family of individuation conditions (the geographical area, the buildings, the population, the atmosphere, the house prices, etc.) that cross-cut each other, and are not even mutually consistent. So, thinking that *London* has a quasi-artefactual semantic value, not the kind of thing a physicist could identify, really doesn't ameliorate the problem of what to think about an abstract object with mass and psychological properties, any cluster of whose properties might be irrelevant to its individuation on a given reference to it.

All that said, the thought underlying the complaint raised by Ludlow and Borg can be developed, for, one might wonder, why should external semantic values have clear individuation conditions? Perhaps many of the things we readily speak about lack such conditions. I'll pursue this thought next.

# 3.2: Persons as a paradigm

What would show that the copredication argument is unsound is a case where a certain type of open class item invariantly refers to a kind of thing that is inherently diverse, as it were, in how it may be construed. Reference to persons might offer a case.

It seems that proper names are different from other nominals, which might suggest a general bite-the-bullet response to copredication, i.e., there are books (etc.) as invariant referents; they are just somewhat queer or complex things, being both concrete and purely informational. The point about proper names, at least ones for persons, is that they can indifferently designate aspects of persons without any zugematicity or metaphysical

absurdity. For example, only mental entities can be in emotional states, such as being happy, whereas only material bodies can have mass. Still, (10) is fine:

# (10) Arbuckle was fat but happy

A standard thought here is that persons just are such complex entities that have mental and physical properties (cp., Strawson [1959]; Stanley [1998]). If some such view is correct, then a proper name may be semantically invariant in that it refers to a person, and so copredication does not amount to any sort of argument against invariant external semantic values, at least not as far as persons are concerned. The generalisation suggested by this line of thought about persons is that acceptable copredication constructions precisely signal referential semantic invariance. The relevant entities that are cities, books, etc., turn out to be objects much like persons, which have various complex cross-categorical individuation conditions. While this line of reasoning is certainly tempting for the semantic externalist, the particular claim advertised about persons misses the point of the copredication considerations, and the suggested generalisation fails anyway, or so I shall contend.

First, then, even if persons are both material and mental entities (why not?), it wouldn't follow that such entities would be the right invariant referents for personal proper names. Consider:

(11) Bill was happy just before being smeared across the road by the steamroller

Bill, *qua* a thing that can be happy, is a mental entity, but, *qua* a thing that can be smeared, Bill is stuff. The point here is not that there couldn't be an entity that is both stuff and mental (suppose there could be and call such a thing a person), but that the respective predicates do not select for such an entity and so no such entity appears to be presupposed or entailed by the coherence of the copredication. That is to say, a thing that can be happy is not merely not just stuff, but need not be any stuff at all. Think of a disembodied spirit, etc. to which it makes perfect semantic sense to attribute mental states; indeed, they consist just of mental states, as it were. Equally, a thing that can be smeared is not merely not just mental, but need not have any mental characteristics at all or any discrete individuation conditions. Thus, the construction in (11) does not to oblige us to think 'What kind of thing could possibly be mental and stuff?' ('Oh, I've got it! A person!'), for there is no underlying kind of entity we need to posit in order to make sense of the individual predications; rather, it is the copredication that reveals that we can simultaneously think of two different kinds of thing via a conjunction of the two predicates. Neither predicate by itself selects a subject who is a person in the relevant complex way, and so nor should the conjunction. To see the point, consider some simple predications:

(12)a Dave is sad

b Sam weighs 11st

c Bill was smeared across the road

d Not even a Gödel could solve that problem

So much tells us that proper names may designate psychological and material entities, stuff, and *types* of human. What the cases do not reveal is that we are talking of the one kind of entity (a person) across the cases; indeed, on the contrary, the truth-relevant individuation conditions for the entities picked out by the names featuring in each of the constructions is distinct from the other. Thus, for (12a) to be true, Dave need not be embodied (he could be an ancestor, as it were), but (12b) turns on nothing other than embodiedness (Sam could be a corpse, with zero phycology). (12c), on the other hand, refers neither to a body nor a mind, but stuff, and (12d) refers to none of the above, but more to the conjured abstract kind to which Gödel, *qua* psychological entity, belonged. So, while we may think of a person as potentially involving cross-categorical properties, the truth conditions of constructions

involving names for such a would-be entity appear not to oblige us to endorse any such entity. Thus, without further ado, even if one accepts the operative notion of a person, it does not appear to be a linguistically sanctioned notion revealed by copredication, for in both simple and copredicative structures, the truth conditions do not involve an entity with the relevant mix of properties.

If the above is right, we should not welcome a generalisation from the case of personal names and persons to a general invariant relation between a nominal and whatever ontology may be conjured to support semantic externalism: even if there are persons in the relevant sense, they appear not to be invariant semantic values of proper names. The situation is considerably worse than that, though. The concept of a person is, if not merely forensic, as Locke suggested, at least sufficiently abstract to avoid being merely one thing or another.

A person is not quite simply a human being, and not quite simply a mind (neither alone is forensic, blameworthy, in Locke's sense). No such issues arise with cities, books, and the rest, however. There are perfectly clear, or clear enough, conditions for the individuation of a city *qua* a population, or a geographical area, say; indeed, governments settle on precise conditions for various reasons; *mutatis mutandis* for books and copyright law or the design of bookshelves. The issue here, therefore, precisely does not turn on our concept of a city or a book being independent of, or irreducible to, other relevant concepts, as the notion of a person is in relation to bodies and minds. The issue, rather, is that the lexical items for cities (etc.) are apt to express a set of clear (or clear enough) notions that cannot be wrapped up as individuative of one kind of entity that may serve as a the invariant semantic value of the relevant items. Thus, a group of people and a geographical area wildly dissociate in every conceivable sense save for them being referred to by *London*, say. We can kill the population of London, but not the area in south-east England. Equally, we can burn the city down while sparing the people, but rebuild the same city elsewhere, with a new population. The

population might be scattered across a far wider area than London (*qua* region) without ceasing to be the population of London (this is actually the case, of course: one's being counted in the population of London does not involve one's living there). In general, the notion of the population of a geographical area is itself a polysemous matter, for a population can be counted in various ways depending on one's interest. Such looseness does not hold for the relation of bodies and minds in persons. Let a person be some complex amalgam of mind and body; if so, then a person is not sometimes wholly mental and at other times not, but cities are precisely like that, and proper names work like that, too, suggesting that they can't invariantly refer to persons.

Cooper (2007) entertains a related line of reasoning, suggesting a mereological account of the relevant semantic values such that the different predicates of a copredication construction take distinct parts of the object values as their semantic arguments. It is unclear, however, how mereology is supposed to be understood on such an account, at least if we are to take it as having fidelity to a common conception of the values in question and mereology to be a uniform part-whole arrangement. For instance, perhaps one should understand a delicious lunch as a thing that is part of a long lunch event. Yet with lexical items like book or London, mereology breaks down. The content of a book, which Bill might have taken two years to construct, is not *part* of a thing that weighs 2lb; similarly, a population that votes is not *part* of a geographical area, it needn't even be located in any one area (it typically isn't). The point is that part-whole relations here are simply an abstract or metaphorical way of expressing some relation between the senses of the copredicated argument, but there is, insofar as I can see, no such relation that remains uniform and has fidelity to a language-independent conception of what books, lunches, and cities are; e.g., the air, the population, and geographical area are not parts of London in any sense beyond the fact that we use London to specify any and more of these things. Gotham (2015) presents a mereological model

somewhat more sophisticated than Cooper's proposal, but the model does not address the general problem faced by any mereological conception of uniform semantic values, i.e., the would-be invariance of a mereological object serves as a mere ontological correlate for whatever senses are related under a polysemous nominal, with no indepdnet semantic or syntactic rationale for such a posit.

In general, then, sanctioning a kind of entity for every nominal is ontologically extravagant, but that is not the real problem; the manoeuvre simply fails to respect the semantic facts, and so appears to save the hypothesis of referential external invariance without respecting the complexity of the copredicative phenomena.

#### **3.3: Context to the rescue**

As noted above, it is perfectly standard for semantic values to be parameterised to contextual or evaluative conditions. An adverb such as *yesterday* has shifting values through time, just as personal pronouns have shifting values across speakers and addresses (*inter alia*). Might, then, the apparent lack of referential invariance for nominals be a matter of hidden context sensitivity? Suppose we grant that context sensitivity is semantically ubiquitous way beyond the class of familiar indexicals, demonstratives, and adverbs, and also grant that much of it is encoded in the semantic properties of the lexical items rather than being due to extra-linguistic pragmatic 'enrichment'. Such suppositions should be highly controversial, but regardless of that, they do not ameliorate the problem copredication raises for external referential invariance.

An item is context-sensitive if its value in its host token sentences is (or can be) a function of some aspect of the context of the tokening of the sentences. In this sense, the value the item contributes to the truth conditions of the token host sentence is not fixed in terms of the linguistic type of the token item, but only via extra-linguistic conditions

obtaining on the occasion of utterance. The selecting of a construal constitutive of a polysemous item is not context-sensitive in this sense. If we think of an item's reference as being indeterminate, then the resolution of a determinate reference is achieved within the language, not by situating an utterance in an extra-linguistic setting, as is the case for indexical elements and also, perhaps, evaluative predicates, such as *tasty* or *fun*. Just so, such a resolution does not fix any entity in the context of utterance as a plausible unique referent. Take *book* to be flexible between construals pertaining to a concrete particular and a body of content. In a copredicative case, what selects one or the other conception of a book via a tokening of *book* is not anything out there in speaker's environs, but what a speaker says with the token as fixed by the relevant predicate. Thus, a single token of *book* can support two contrary construals simultaneously, as it were, regardless of context.

An appeal to an *index* or *circumstance of evaluation* is less obviously forlorn as an amelioration of the problem posed by copredication. It is a desideratum for Lewis (1980, 27) to restrict the 'shiftable' factors of evaluation to just a few, such as world and time, but he does significantly include a 'standard of precision', so that *France is hexagonal*, say, is true relative to a shiftable index that tracks the standard of precision operative in the discourse setting of a token of the sentence. On the face of it, therefore, a restricted approach lacks the resources to capture the range of construals admissible for *London*, *book*, and other polysemous lexical items. Many theorists since, though, have extended the range of possible 'co-ordinates' of an index. McFarlane (2009) has generalised the basic idea of a shifty index. Assume that there is a *counts as* operator, much as there are modal (e.g., *possibly*), temporal (e.g., *yesterday*), and precision (e.g., *roughly/strictly speaking*) operators. The truth value of a sentence in context is assigned relative to the value a co-ordinate of the index takes under the scope of the operator. So, perhaps, the value of *London* can *count as* a geographical area, and on another occasion *count as* a population, and so on. So, the model works in principle for,

say, diverse tokens of *London*: [Counting as a population] *London is jolly*, [Counting as an area] London is vast, and so on. Much could be wondered here about the linguistic licence of a covert *counts as* operator, but even if we eschew any general complaints along such lines, the model fails to fit the copredication phenomena; that is, an account that works for *London* is jolly and London is vast does not eo ipso work for London is jolly and vast. What would be required for the copredicative case is not just one *counts as* operator scoping over a single index that parameterises the truth value of the whole sentence to some single metaphysical categorisation (an area or a population, etc.), but a sequence of operator/index pairs, one pair for each construal. This demand is inconsistent with the model that takes just truth value, not lexical construal, to be parameterised to an index as part of the evaluation of the whole sentence. Furthermore, if one were to seek to finagle the model so that lexical construal is parameterised to the predicate that takes the relevant item, then the species of externalism in contention would, in effect, be rejected. The semantic significance of a lexical item, it would be agreed, is not its unitary referential relation to an external entity, for there are no such fixed relations; rather, the items can be used, relative to the choice of other linguistic material and what one is intending to say about a diverse range of aspects of things, none of which is entailed or presupposed as an independent entity by the bare semantic properties of the lexical items. The resource of shifty operators, even a *counts as* one, should not be ruled out. The crucial point is just that such operators go no way to lend ontological weight to the semantics; indeed, if applicable, they serve to buttress the anti-externalist consequences of the copredication reasoning on offer in the ways just indicated.

# 4: Dot-objects and copredication

I do not imagine that the above discussion has exhausted all possible responses to the copredication argument. All I hope to have shown is that some extant and imagined responses

to the argument are non-compelling. If the argument remains standing, what is one to say about copredication in a positive way?

Copredication is an under-investigated phenomenon, but a standard approach in lexicalist semantics appears to offer insight (Pustejovsky, 1995; Asher, 2011). Here, a pretty wide-focused perspective will suffice, or the kind of views I have in mind do not decisively militate for or against the semantic externalism as the target of the copredication argument.

A lexicalist approach seeks to account for the kind of variability copredication exemplifies by taking lexical items to be internally structured in terms of features that may be checked off each other when items syntactically combine, or perhaps in terms of argumenttaking items projecting a structure that fixes the construal of whatever incarnates the projection. So, smear may contain a feature that selects for mass construal, and a nominal may contain a mass feature as an option. Thus, Bill was smeared across the road gets a mass construal because of the checking of the relevant features (the mass feature of smear is checked against the mass option of Bill). On the other hand, Democracy was smeared across the road fails to have a literal interpretation because democracy lacks a mass feature. As for copredication in particular, the most elaborated models on these lines appeal to *dot-objects* as values, where [material•content] might be the linguistically active semantic content of *book*, which leaves it open which construal the item will take as hosted in a clause. A predicate will select one of the construals as a feature of its content (e.g., burn pertains to the material constitution of an object, whereas *memorise* pertains to content). Putting it crudely, then, copredication naturally falls out of an account of dot-objects with relevant predicates selecting their respective dotted contents, as it were. One major problem, though, is how to preclude overgeneration. For example, The Times, let's suppose, has the dot-object [material•institution], but The Times made most of its revenue from advertising and blew *away* is badly zeugmatic. I take it to be an outstanding problem for any account of polysemy

in general and copredication in particular why some constructions are acceptable, finding a ready interpretation, whereas others are zeugmatic. This quandary is an internecine issue, however, and does not affect the force of the copredication argument against external invariant semantic values. The reason for this is that zeugmatic constructions are no more ontologically bizarre than acceptable copredications. A newspaper company or title can't blow away, to be sure, but nor can a geographical area vote.5

If we assume, however, that dot-objects offer the best approach to copredication, then whatever constraints might be spelt out to preclude overgeneration, the very idea of a dot-object is not referential, but conceptualist, i.e., a dot-object is an abstract representation, not a thing in the world to which a token of an nominal refers.<sup>6</sup> For example, dot-objects should not be thought of as conjunctions precisely because copredication is a case of different construals of an argument (e.g., *the book*) being selected, not the same construal or both simultaneously by two or more predicates. Similarly, a pair reading is problematic for the kind of anaphoric cases discussed above, where although divergent construals are realised in different clauses, the binding relation remains unaffected (Asher, 2011, 141-2). Asher's solution to these problems is to think of the complex dot-type as not specifying any kind of individual at all, but rather as the lexical specification of different ways in which bare particulars can be counted and so individuated relative to properties. The bare particular in this sense is simply marked by a variable in the lexical representation whose values are individuated only relative to one aspect or component of the dot-type, which is either selected mandatorily by the predicate or selected by the speaker's intention.<sup>7</sup>

Other approaches might be entertained. Borer (2005) for example, presents an antilexicalsit model according to which the construal of items is fixed by their position within a functional structure. The item itself is simply a root label that carries along whatever conceptual information is packaged under the phonological index without it affecting the linguistic status of the item. Although Borer does not discuss copredication, her account covers the phenomena in the sense that the varied aspects of the relevant nominals might not be a narrowly linguistic matter at all, one to which the grammar is sensitive, but might be an interpretive factor that is triggered by a speaker seeking to 'make sense' of the constructions post the application of all linguistic operations. Again, no referential invariance is in the offing here, for all that is invariant is the label, which carries no determinate content as a linguistic feature, let alone a referential content.

It should be noted that on either view the compositionality of linguistic content need not be forsaken. Compositionality, most simply understood, is a homomorphic relation between syntax and a meaning assignment.<sup>8</sup> That bare idea may readily involve the reference of a nominal, as a truth-relevant notion, being fixed relative to the predicate that takes the nominal as an argument. That is to say, thinking that *book*, say, has no determinate reference in and of itself, does not preclude a compositional treatment under which whatever linguistic content *book* does carry is projected onto the structure that hosts the lexical item, such that an item with a different content would result in the host structure having a different content. In this sense, familiarly, compositionality merely tells us that the composed property is invariant over substitution of the component items that make the same contribution.<sup>9</sup> The scope of the present paper obviously does not admit me to venture into such a tangled web as compositionality. The point is merely that rejecting externalist invariance constitutes no slight against compositionality, unless, perversely, one thought that compositionality is an intrinsic feature of an externalist construal of semantic theory.

Still, a crucial issue remains. Dot-objects allow us to understand how copredication is acceptable in terms of lexical complexity different predicates may select from, as it were. What remains unclear is how any copredication could be true. An utterance of a given linguistic type is true (/false) in part because of how the world is, how whatever the utterance is about is, independent of the utterance itself. Yet since the world, we presume, doesn't contain geographical areas with psychological properties (and so on and so forth), how can the copredication constructions be true?

# 5: The nature of truth and reference

Elbourne (2011, 26) concludes a sympathetic account of Chomsky's position by remarking that "[w]e still have to explain how it is that we can say something apparently straightforward and true [with the kind of copredicational sentences exhibited above]... by using selfcontradictory concepts. I am not aware of any work on this." An error theory might be tempting. Perhaps, strictu dictu, all copredications are false, for the truth conditions involve invariant entities, but there are no such entities. In this light, copredication amounts to a kind of loose talk that can sometimes be corrected with reflection, but, at any rate, does not pose any deep philosophical quandaries. Such a response is quick and dirty. An error-theoretic approach is most plausible, if at all, when a particular domain is in view whose denizens invidiously compare with those of some more quotidian domain. Thus, many have felt the pull of some version of error theory with regard to mathematics and moral discourse. Copredication, however, is not domain-specific; it applies across all domains and is based upon the inherent polysemy of the nominals involved. Thus, one cannot selectively impugn copredication constructions as false and spare the concepts, for books really are things that be concrete, abstract, and purely informational. Global error theory is the upshot, which is profoundly unattractive, and quite unmotivated once the invidious comparisons are forgone. Besides, copredications appear to be quite pedestrian in their truth, unlike, say, mathematical or moral claims. Let's assume, then, that copredications can be true, and how the world actually is bears upon such truths.

As intimated in §2, similar matters arise with fictional/empty discourse, whose standing was put to one side in order to bring the copredication argument properly in view. I think, however, that a promising approach to the truth of fiction is crucially instructive for how to make sense of the truth of copredications. Let us, then, make a detour through fiction and see what can be learnt.

Consider (13):

#### (13) Donald Duck made millions for Disney

According to one view, going back at least to Russell (1905), (13) and similar constructions cannot be true, notwithstanding the prima facie plausibility of the claim expressed; after all, Disney did make millions in part due to films featuring Donald Duck-the films didn't bomb, leaving Disney destitute. Still, there are different ways of articulating the counter-intuitive thought that (13) is not true. It might be that all such sentences *must* be false because there is no Donald Duck (Father Christmas, Zeus, etc.); still, the sentences remain meaningful, truth conditional under the appropriate assignment of logical form (where the singular term position is rendered existentially, say) (Quine, 1953). Alternatively, perhaps all such talk is a mode of pretence or fiction that is not to be judged in terms of truth or falsity (e.g., Everett, 2013). An opposing view takes (13) to be simply true (other cases would be simply false), and attempts to live with the consequences; in particular, it seems as if an endorsement of the truth of (13) involves some commitment to the existence of Donald Duck alongside other objects about which we judge truly and falsely (e.g., Parsons, 1980; Zalta, 1983).10 Such a stand-off between the Russellean and the Meinongian (to give misleading labels to the positions) has conditioned the debate about empty discourse for the last hundred years or so (see, for example, Everett and Hofwebber, 2000; García-Carpintero and Martí 2014). Neither side is a happy position, though, for principled reasons, I think (cp., Kripke, 2013).

Reckoning (13) to be false misses the relevant semantic phenomena. Competent speakers appraised of the facts would uniformly judge (13) to be true regardless of any general conception, if any, of the ontological and semantic status of the fictional realm. The Russelllean, therefore, needs some explanation of this fact. What impedes any such explanation, though, is that fiction or referential emptiness is not a linguistic feature; indeed, perfectly competent speakers of the one language may disagree about whether a term is empty or not (just think of disputes between theists and atheists) without either in any sense being mistaken about the language.<sup>11</sup> So, of course speakers will treat *Donald Duck* in a sentence does not mark it out for any kind of uniform special evaluation. The same problems beset any pretence view, for pretence is not a linguistic feature either. One may, for example, happily mix fictional and literal discourse and predicate truth indifferently (*Donald Duck's voice made people laugh*); or adopt a mode of pretence on the basis of metaphysical prejudices without thereby speaking a different language.

The alternative view, however, appears to be ontologically suspect, incurring too high a cost for acknowledging the truth of (13), for how can (13) be true without it being made true by Donald Duck? Thus, Meinongianism beckons. One might try for an analysis of (13) and all similar constructions that render them *intensional* in the relevant sense, so that the truth of (13) does not involve Donald Duck as such, but some appropriate intensional entity. Space precludes any kind of discussion of this approach, but it should be noted that, from a linguistic perspective, any such account appears *ad hoc*: no intensional device, such as an operator or relevant verb, need occur, just as it doesn't occur in (13), so there appears to be no linguistic basis for the hypothesis. Of course, a theorist can posit what covert items she likes as aspects of logical form, but linguistic evidence is needed over and the above the assuagement of metaphysical qualms.

I do not mean to be overly glib on questioning the traditional approaches to empty discourse—a vast a fascinating filed of research. My intent, rather, is to highlight from a linguistic perspective some problems with the common orientations to the issues in order to better see the virtues of an alternative approach.

A third way on this issue strikes me as highly fruitful, and is one that sheds light on our general topic of how to understand truth in the absence of externalist referential invariance. The insight here is independently offered by Azzouni (2010).

From the above presentation of the problem of copredicative truth, we might construe fictional and empty discourse generally as posing the following challenge to the semanticist or philosopher: explain how it is possible for (13) and its ilk to be true without indulging in a commitment to Donald Duck! Structurally, the challenge is the same as the one copredication poses: how can a copredication involving, say, *book* be true when there is no thing that is both material and abstract? The way out of this impasse is to separate truth-making from truth conditions. The former is a metaphysical matter, the latter is a semantic matter. Assume that truth conditions are fixed by the correct logical form of a sentence, and so are the conditions a correct semantic theory would issue. For my present purposes, I do not make a stand on the controversial matter of truth-making.<sup>12</sup> It will suffice to think of truth-making as involving a specification of whatever reality is like anyway such that we manage to say something correct about it. The only crucial thought presently is that whatever truth-making amounts to, it may come apart from truth conditions. Let's first take the fiction case represented by (13).

Assume that the truth conditions for (13) involve no analysis of *Donald Duck* attendant on it picking out a fictional character as opposed to a real duck or some person, either of whom might inhabit our world or some other world. Suppose, then, just for simplicity's sake, that a competent speaker of English, in understanding (13), knows the truth conditions an adequate semantic theory would assign the sentence that treats names in a uniform manner mapping from their syntactic uniformity, i.e., the semantic theory does not decide or reflect what is fictional or not. Perforce, and this is the crucial point, such a theory need not deliver any kind of recipe or determination of how the world might be such that the sentence would be true. That is because what makes the sentence true is a complex arrangement of factors involving Walt Disney, film rights, merchandising, and so on, none of which involves Donald Duck as an entity, for there is no such thing. The semantically competent speaker, however, need have no knowledge of what makes the claim true. This is so in two respects, which distinguishes truth conditions from truthmakers. The former are systematic and transparent, whereas the latter are typically unsystematic and opaque, in relation to the sentence that is true or false.

Truth-making is typically unsystematic in the sense that many diverse and otherwise unrelated factors can enter into making a claim true, and varied other factors would have made the claim true in another possible world without a change of meaning of the target sentence. Take *Donald Duck* again. Since there is no Donald Duck to contribute systematically to the truth or falsity of *Donald Duck* claims, there appears to be no systematicity as regards the contribution of the expression to what makes the claim true. Similarly, truth making is typically opaque in that it is not a feature of the speaker's competence to know just what factors contribute to the truth of the *Donald Duck* claim. In distinction, truth conditions are systematic insofar as they follow the form of the sentence, and so are transparent insofar as the competent speaker understands the sentence at hand. In short, a competent speaker knows what can be said with sentences of her language, and so knows their truth conditions in a systematic manner to that extent, but she need not know, for every case, what would materially or abstractly in fact make the sentences true. Two caveats are in order. First, as just indicated, the above distinctions hold generally, not for every particular case. For indefinitely many cases, what makes a claim true might well be transparent to the speaker, such as with perceptual reports, and this might well be systematic relative to the interpretation of the uttered sentence (*There is a glass in my visual field*). At any rate, I happily grant such cases. The relevant notion of truth-making, therefore, need not be an ultimate *grounding* notion that will necessarily depart from the ordinary notions of the speaker (cp., Schaffer, 2009). I mean truth-making in as hum-drum a sense as is available. The point remains, however, that mere semantic competence with a sentence does not in general and as such afford an understanding of what makes the sentence true.

Secondly, to say that truth conditions are systematic and transparent does not mean that a competent speaker *explicitly* knows an adequate semantic theory for her language; rather, it means that the truth conditions for her sentences are answerable to what she understands of her language as syntactically and lexically specifiable, such is why the evidential source for the semantic theory is the speaker. For instance, it makes little sense to claim, say, that some sentence of a language a given speaker knows is ambiguous or enters into such and such an entailment pattern, if the speaker herself could not share or sanction such claims. It might be, of course, that a given speaker would not recognise an entailment pattern or an ambiguity because of various interfering factors, which might well be systematic, much as we find in the syntactic domain with parsing failures. Still, any speaker could be brought to recognise the relevant phenomenon as holding for her language. At a certain point, it becomes difficult to distinguish aspects of the phenomena from the underlying principles that give rise to them; my present concern is only for the former.13

So, my basic claim here is that a competent speaker knows the truth conditions of her sentences, which can mostly be simply read off of her competence, without her knowing what makes the sentences true. Fiction and empty discourse precisely reveal the gap.

If we now turn to copredication, some morals are recoverable. We may take copredication cases to be straightforwardly true (when true), even though the relevant nominals do not pick out uniform items of the world that systematically contribute to the truth conditions of sentences featuring the nominals. What makes the sentences true can be a complex state of affairs that lacks a uniform correlate of the nominal. So, take our book example to start with:

## (14) Bill memorised every book in the library, and then burnt them

What would make a token of (14) true is a situation where Bill memorised the content of each book type in the library, and then burnt every book token in the library. There is no uniform kind of book occurring in this truth-making situation. It might seem, from this case alone, that the truth-making is transparent after all (truth making would remain non-systematic because the world does not contain the relevant individual entities). After all, a competent speaker can readily spell-out the worldly state of affairs that makes the sentence true, just as I have done, and that appears to amount to a form of transparency. That impression, however, is an effect of the particular predicates used in this case to coerce the appropriate construal, i.e., one knows the kind of things that can be memorised and burnt, respectively. Consider (15):

# (15) Sam's favourite book was Sally's too

The complex nominal *Sam's favourite book* leaves it open just what notion of book is in play. For (15) to be true on an occasion of utterance some definite notion must be fixed, but nothing in the truth conditions for (15) that a competent speaker knows settles which notion that is. The situation is perhaps clearer still with other cases, such as the kind/count example:

# (16) Mosquitoes evolved into irritating insects

What makes this true is that the members of an evolved kind are irritating, but, again, no uniform correlate of *mosquitoes* occurs in the worldly truth-making conditions, i.e.,

*mosquitoes* picks out both a kind and its members. Note, however, the metaphysical difficulty in thinking simultaneously of a kind and its members in terms of evolution. It took someone as smart as Darwin to provide clarification on this sort of claim, and most competent speakers would offer a somewhat confused response, if asked to say how (16) could be true, for the notion of a kind that evolves is obscure, and no individual mosquitoes do evolve in the relevant sense.

In sum, then, a lack of external semantic values is no in-principle barrier to sentences being perfectly true. The world makes our truths true, but not always by providing one entity per nominal.

As a coda to this line of reasoning, it is well to emphasise that nothing I have argued here precludes a position that sanctions an invariance of semantic values in the shape of conjured entities that are both material and abstract, say, much as one may conjure Donald Duck *et al.* Thus, yet another alternative to the Russellean and Meinongean approaches to fiction is offered by Kripke (2013) (originally written in the early 1970s). Kripke endorses fictional entities that render our claims about them true or false, but these entities exist alongside (ontologically speaking) other contingent entities, rather than being a special sort of modal object. They have an empirically dependent existence on the writings or intentions of authors. I think, however, that such putative entities' bearing on truth making can be cashed out in terms of complex truth-making conditions that do *not* involve the postulation of novel entities. Thus, the kind of position Kripke endorses may be aligned with the one I have offered.

First, while we should be happy to sanction fictional characters/objects as text/mythdependent entities, for they do appear to be an unavoidable short-hand in speaking and thinking about texts and myths, problems quickly mount if we invest such talk with an ontological truth-making significance. As objects, fictional characters/entities are gappy, arbitrary or stipulative, and potentially inconsistent. For instance, Fleming doesn't say what university Bond went to, but indicates that it was either Oxford or Cambridge. A new James Bond novel, however, may arbitrarily depict the spy as going to either university, or some entirely different university, or no university at all without fear of refutation. Worse, a new Bond novel may contradict an old one. It is thus hard to understand what fictional entities are supposed to be, if not mere projections from texts (and other media) with arbitrary and potentially inconsistent conditions of individuation. If we can avoid such an ontology, so much the better. My present claim is that we precisely can, for in explaining what makes a given fictional or empty discourse true, we need not appeal to a fictional entity itself, even if we might make ineliminable appeal to such entities in spelling out the truth conditions of the fictions.14

Secondly, while we might be happy for there to be fictional entities, so long as we don't dwell too much on their gappy, arbitrary, and potentially inconsistent nature, we are not happy at all for there to be abstract objects with mass. On the one hand, Kripke, I think, is right to take ontological commitment to fictional entities to be relatively harmless, for the existence of such entities is not the least miraculous; still less is it a mystery how we refer to them. This is because such entities' existence is wholly due to our literary and mythopoeic endeavours, even if such endeavours are not specified in the truth conditions for the relevant fictional sentences. So, although fiction is not linguistically marked, a competent speaker may take her ontological commitments lightly, for it is understood how to talk truly about Donald Duck, and so on. On the other hand, the relevant would-be entities involved in copredication, such as abstract objects with mass, are not at any point sanctioned by competent speakers, and do not enter into truth-making either, not even initially as a matter of pretence.

It is easy to be confused on this point. An all too ready response to copredication is to bite the bullet and endorse entities that are both abstract and material, say, for *book* needs a uniform semantic value! But when the intuitive worldly truth conditions are spelt out, as done above, no uniform semantic value is invoked; on the contrary, two different notions are invoked, and it is precisely that which makes the truth-making unsystematic relative to the sentence. The copredicative objection to an invariant externalist semantic value is not so much that it is independently absurd, but that it does no work, either metaphysically or semantically.

## 6: Concluding remarks

The copredication argument, as I have articulated and defended it, is really a quite modest line of reasoning. It does not, in particular, have as its goal the overthrow of 'ordinary ontology' in favour of linguistic idealism or a vanquishing of truth-conditional semantics. It simply commends a divorce, as it were, insofar nominals in particular support a range of construals, independently and copredicatively, which are not to be understood in terms of the nominal picking out or semantically contributing an invariant external entity. There are books and Manchester United (thank God!), but, if the copredication argument is sound, it's a fool's errand to posit an invariant ontological correlate for the invariance of the linguistic form. *Book et al.* allow us to speak about motley and complex aspects of our world without presupposing or entailing that we are always just speaking about one queer thing. Worse, it is an errand we should not be tempted to fulfil in the first place, for nothing is lost by giving up on the invariance, not, at any rate, any metaphysical or semantic doctrine worth preserving.<sup>15</sup>

## References

<sup>1</sup> I shall not distinguish between intensional semantic values (sets of possibilia) from extensional values. The difference is not important for my purposes, and no argument I shall mount will invidiously turn upon it.

2 Consider (i):

(i) Joe went to the bank, and Sally did as well

A disambiguation of *bank* in the first clause settles the reading of elliptical clause; that is, (i) is not four ways ambiguous.

<sup>3</sup> It might seem that we do use *memorise* (and related verbs) in relation in concrete particulars rather than abstract contents. For instance, a speaker might say, *This is easier to memorise than that*, while holding up two copies of the first *Critique*, one annotated, say, another not (or perhaps one in German and one in English). In such cases, however, a speaker is not so much suggesting that they can memorise a concrete particular (with mass and dimensions), but saying that they can memorise the same content via one token as opposed to another. See below.

<sup>4</sup> Liebesman (2011) has appealed to copredication in generic cases to support a uniform kinddesignating account. For present purposes, I take no stand on the matter, although see Collins (forthcoming).

<sup>5</sup> An under-appreciated difficulty in the separation of copredication from zeugmaticity is the all-too-easy conflation of genuine semantic anomaly with mere bizarreness or extreme pragmatic oddity. For example, as the example in the main text attests, it appear that *newspaper* [material•institution] is less amenable to copredication than *book*, but there is no real underlying principle, here, for relevant copredications are easily constructible:

(i) The newspaper generates most its revenue via advertising, which it is full of.

Similarly, (ii) is terrible:

(ii) #London voted Labour, and is roughly a hexagon

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Yet there is no bar on copredicating voting behaviour and Eucldean shape to London:

(iii) London voted Labour, but given new boundary changes, which renders it roughly a hexagon, the Tories will stand a better change next time.

Thus, the reason (ii) is bad is perhaps simply due to the juxtaposition of voting behaviour with shape in the absence of any connection.

<sup>6</sup> This is not to say that Asher thinks of meaning as merely conceptual; on the contrary, he presents a model-theoretic framework one may have a realist attitude towards. The crucial point is that the semantic properties of lexical items are not given simply in terms of objects of the model; rather, the semantic properties of the items serve to individuate what a speaker might be using the item to talk about. See note 7.

7 Asher (2011, p. 159) writes:

[D]ifferent predicational contexts will make available different criteria of individuation.

We should relativize the domain of quantification in a world to a criterion of individuation, and for objects of  $\cdot$  type the choice of individuation criterion will depend on the predicational environment. In fact, we should predict that the same discourse may select distinct criteria of individuation for the same  $\cdot$  type.

This latter point is exemplified by a claim as simple as the one exhibited in (i), and less directly by anaphora cases:

(i) The Best of Thomas Hardy is three books in one

<sup>8</sup> Compositionality has been variously defined, but the following characterisation should be uncontroversial. Given a combinatorial syntax, there is a homomorphism *h*, such that for every syntactic object  $F(\alpha_1,..., \alpha_n)$ , there is an operation *O* such that  $h(F(\alpha_1,..., \alpha_n)) = O(h(\alpha_1)..., h(\alpha_n))$ . That is one way of saying that at the syntax-semantics interface, the interpretation of the syntax should respect its constituent structure. <sup>9</sup> Thus, assuming compositionality holds in the sense of note 7, what remains in question is whether  $h(F(\alpha_1,...,\alpha_n))$ , *qua*  $O(h(\alpha_1)...,h(\alpha_n))$ , as it were, is what someone literally says by uttering *u* with the form  $F(\alpha_1,...,\alpha_n)$ , or even if it is the kind of thing that can be said in the appropriate sense. One can disagree about such matters without denying syntax does have a compositional interpretation in the homomorphic sense specified, albeit not up to correspondence with what is said (cp., Pagin, 2005; Szabó, 2010; Recanati, 2010; Pagin and Westerståhl, 2010a, 259-60; Pagin and Westerståhl, 2010b, 278).

<sup>10</sup> We might sanction fictional objects as characters dependent upon certain narratives, but that is a distinct position (see discussion of Kripke, 2013, below).

<sup>11</sup> Judgements might diverge on this issue. Does a speaker really understand *Holmes wears a deerstalker*, if she thinks that Holmes is an actual real-life detective? Equally, it might seem that it is part of linguistic competence to recognise that *the round square* is empty, as is *the least even prime greater than 2*. As an 'intuition pump' the feature to focus on here is that nothing goes wrong linguistically for a speaker so benighted as not to recognise the emptiness in these examples. So, sure, one lacks the relevant concepts, or else is just a bit confused, if one thinks that the cases are not empty; all that might mean is that is the lexical material does not encode the salient conceptual properties, such as whether a person is fictional or not, or whether a mathematical expression has a referent or not. At the very least, nothing is necessarily linguistically anomalous with speech that betrays gross ignorance.

<sup>12</sup> A seminal discussion for the modern understanding of truth-making is Armstrong (2004). See Beebee and Dodd (2005), Chalmers *et al.* (2009), and Lowe and Rami (2009) for a diversity of views on the matter.

<sup>13</sup> It is widely held, for example, that all syntactic branching is binary, which entails that a nominal conjunction, such as *Bob and Ted*, is not symmetrical. Truth-conditionally, however, the order of the conjuncts appears to be semantically inert, at least in English. In some Asian

languages the difference is marked, both semantically and morphologically. The thing to say here is not that English has ternary branching after all, but merely that not all structural differences encode semantic differences.

<sup>14</sup> Kripke is right to note that there is a category of fictional fiction, such as Molach or Gonzago, who appears in the play within the play of *Hamlet*. Thus, it would be a mistake to say *Hamlet doesn't exist* (he does exist, *qua* fictional entity), but Gonzago indeed doesn't exist. Again, however, in explaining the relevant truth values, we need not make appeal to either Hamlet or Gonzago as entities.

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