

Revisiting the ‘Wrong Kind of Object’ Problem*

Merel Semeijn
Philosophy
University of Groningen
m.semeijn@rug.nl
and
Edward N. Zalta
Center for the Study of Language and Information
Stanford University
zalta@stanford.edu

Abstract

Any uniform semantic treatment of fictional names (e.g., ‘Frodo’) across parafictional statements (e.g., ‘In *The Lord of the Rings*, Frodo was born in the Shire’) and metafictional statements (e.g., ‘Frodo was invented by Tolkien’) runs into a variation of the ‘wrong kind of object’ problem. The problem arises when an analysis of one of these statements inappropriately attributes a property to an object. For example, it would be problematic if an analysis implied that flesh and blood individuals are invented by someone, and similarly problematic if an analysis implied that abstract objects are born in a certain region. Abstract object theory has provided a solution to this conundrum by distinguishing two modes of predication: encoding and exemplifying. Recently Klauk has argued that the problem reappears for the analysis of explicit parafictional statements in this theory. In this paper we formalize the objection and show that one can distinguish three issues in connection with the ‘wrong kind of object’ problem. We then address them in turn.

*This paper is published in *Organon F*, 28(1) (2021): 168–197. The authors would like to thank the audience at PhiLang2019, Emar Maier and two anonymous *Organon F* reviewers for their valuable feedback. This research is supported by the Dutch Research Council (NWO), Vidi Grant 276-80-004 (Emar Maier).

1 The ‘wrong kind of object’ problem

The semantics of statements about fictions requires a distinction between four different types of statements that feature fictional names (i.e., names of fictional entities). Consider the following four statements about Frodo:

- (1) Frodo had a very trying time that afternoon.
- (2) Frodo was born in the Shire.
- (3) In/According to *The Lord of the Rings*, Frodo was born in the Shire.
- (4) Frodo was invented by Tolkien.

We shall categorize, and subsequently refer to these statements, using the following terminology:

- (1) is a *fictional statement*, i.e., it is part of a fictional narrative (e.g., (1) is a quote from Tolkien’s *The Lord of the Rings*). Such statements are usually understood as neither true nor false but rather as fictional truth-makers; the act of storytelling determines what is true in the fictional story.
- (2) and (3) are *parafictional statements*, i.e., statements about what is true in some fiction but which are not part of the original storytelling. These statements are usually analysed as being true or false (depending on the content of the fictional story) and can be ‘explicit’ like (3) or ‘implicit’ like (2) (depending on whether the prefix ‘In/According to fiction/story *s*’ is overt).¹
- (4) is a *metafictional statement*, i.e., a statement about a fictional entity *as a fictional entity* that can be true or false.

Any uniform semantic treatment of fictional names across these different types of statements runs into a variation of ‘the problem of the wrong kind of object’.² If we adopt a realist approach and assume that the name ‘Frodo’ refers uniformly to an abstract object (e.g., Zalta (1983; 1988a) or Inwagen (1977)), we run into difficulties with the interpretation of (1), (2)

¹Here we follow Recanati’s (2018) terminology. Note that a sentence like (1) can also function as an implicit parafictional statement if used in a *discussion about* the content of *The Lord of the Rings*.

²We adopt this term from Klauk (2014) although he uses it only to refer to the realist variant of the problem.

and (3); abstract objects are not the right kind of things to have trying times or be born in certain regions. On the other hand, if we adopt an antirealist approach and take the name ‘Frodo’ to refer uniformly to a flesh and blood individual in a set of counterfactual or pretense worlds (e.g., Lewis (1978), Walton (1990), or Maier (2017)), we run into difficulties with the interpretation of (4); flesh and blood individuals are not the right kind of things to be invented.

In this paper, we investigate fictional names by using the theory of abstract objects (hereafter *object theory*) as a theoretical framework (Zalta 1983; 1988a). We use this framework to solve the realist version of the ‘wrong kind of object’ problem. Before delving into this debate we shall examine what’s required of a uniform semantic analysis of fictional names in light of the debate on ‘mixed’ discourse (section 2). We then turn to the solution that object theory offers to the problem of the wrong kind of object. This solution centers around a distinction between two modes of predication: *encoding* and *exemplifying* (section 3). We discuss a challenge to this solution that has recently been posed by Klauk (2014) according to which the problem persists for explicit parafictional statements (section 4). We offer a formalisation of this objection in object theory and show that it gives rise to three separate issues that need to be addressed. We explain how object theory addresses those issues by pointing out that the story operator creates a hyperintensional environment akin to that created by propositional attitude reports (section 5). We conclude with some insights that emerge about entailment relations among fictional, parafictional, and metafictional statements (section 6).

2 A uniform semantics for fictional names

In addition to the distinction between fictional, parafictional, and metafictional statements, discussions about the analysis of fiction have also introduced a distinction between discourse that is ‘internal’ to the fiction and discourse that is ‘external’ to the fiction. The distinction attempts to separate (a) discourse that describes the content of a fiction from a perspective within the fiction (e.g., talking about Frodo as a flesh and blood individual) and (b) discourse that describes the content of a fiction from a perspective outside the fiction (e.g., talking about Frodo as a fictional character). We’ll see below, however, that some sentences constitute ‘mixed discourse’ in that they combine internal and external forms of

discourse. These sentences give rise to the question of whether a uniform semantic analysis of internal and external discourse is possible. And this question can be posed for our initial distinction among sentences: is there a uniform semantic analysis of fictional, parafictional, and metafictional statements?

In what follows, we shall examine some arguments in favour of a uniform semantic analysis across internal and external discourse. Second, we will reformulate the desideratum of a uniform semantic treatment of fictional names. As it turns out, the literature on mixed discourse only establishes a need for a uniform analysis across parafictional and metafictional statements. It is not clear whether this desideratum extends to a uniform analysis across fictional, parafictional and metafictional discourse.

2.1 Mixed discourse

An intuitive reply to the problem of the wrong kind of object is to assume (following Kripke (2011) and Currie (1990)) that fictional names are ambiguous; they refer to concrete objects (e.g., a flesh and blood hobbit called ‘Frodo’) in fictional and parafictional statements and they refer to abstract objects (e.g., an abstract entity called ‘Frodo’) in metafictional statements. But a central problem with this analysis is that it doesn’t work for mixed discourse, where co-predication and the use of anaphoric pronouns is not only admissible but quite natural (Recanati (2018), Everett (2013, pp.163–178), and Collins (2019)). For instance, consider:

- (5) Bond is a killer but remains as popular as ever. (Collins, 2019, p.1)
- (6) Sherlock Holmes is a fictional character created by Conan Doyle. In Conan Doyle’s stories, he [Sherlock Holmes] is a private detective who investigates cases for a variety of clients, including Scotland Yard. (Adapted from Recanati, (2018, p.37))

(5) is mixed discourse because Bond’s being a killer is said from a perspective within the story, but his remaining as popular as ever is said from a perspective outside the story. (6) is a similar, but more extended, example. The admissibility of such co-predications (5) and anaphoric dependencies (6) suggests that names like ‘Bond’ can’t be ambiguous in (5), and that ‘Sherlock Holmes’ and ‘he’ co-refer in (6). This forms a *prima facie* reason

to avoid an ambiguity analysis and to instead develop a uniform semantic analysis across internal and external discourse.³

2.2 The internal/external distinction

The internal/external distinction has been used to subcategorize sentences (1) – (4) in different ways, namely:

- to distinguish (1) – (2) from (3) – (4),
- to distinguish (1) – (3) from (4), and
- to distinguish (1) from (2) – (4).

For some theorists, the internal/external distinction helps to distinguish sentences (1) and (2) from (3) and (4). Clearly (1) is internal. But consider the analysis of implicit parafictional statements such as (2) when used in a discussion on what is fictionally true in *The Lord of the Rings*. In particular, consider a mini-discourse where you reply to the question “Where was Frodo from *The Lord of the Rings* actually born?” with (2) “Frodo was born in the Shire”. According to theorists such as Everett (2013) and Lamarque & Olsen (1994), (2) is an (unofficial) continuation of the fictional pretense initiated by Tolkien and hence obviously internal. However, when (in response to the same question) you utter an explicit parafictional statement such as (3) “In/According to *The Lord of the Rings*, Frodo was born in the Shire”, you talk about *The Lord of the Rings* as a fictional work and hence adopt an external perspective. The internal/external distinction thus separates fictional and implicit parafictional statements from explicit parafictional and metafictional statements.

Other theorists, such as Recanati (2018) and Evans (1982), consider implicit parafictional statements (e.g., (2)) to be abbreviations of explicit parafictional statements (e.g., (3)) and hence treat them on a par. Both types of parafictional statements involve a continuation of the pretense and hence both are internal (although, for Recanati, parafictional discourse does contain an irreducible external component). Thus, for some theorists, the internal/external distinction separates fictional and parafictional discourse in (1) – (3), from the metafictional discourse in (4).

³There are other interesting cases involving anaphoric dependencies and coreference in discourse about fiction, such as those described in Bjurman Pautz (2008). But since these cases don’t constitute a problem for object theory, we won’t discuss them here.

Still other theorists, such as Currie (1990) and Zucchi (2017) also treat implicit and explicit parafictional statements on a par but would use the internal/external divide to distinguish fictional discourse from parafictional and metafictional discourse. The former involves pretense while the latter two kinds do not.

Note that the first two uses of the internal/external distinction do not distinguish between fictional and implicit parafictional statements (i.e., both kinds of statements are examples of internal discourse). In other words, the sentences used in the original acts of storytelling (e.g., the sentences in a copy of *The Lord of the Rings*) are treated on a par with unprefixed statements about fictional truths (e.g., your statement that Frodo was born in the Shire). This conflation can be misleading in the context of the debate on mixed discourse since the available examples of anaphoric dependencies or co-predication in mixed internal/external discourse involve only parafictional and metafictional statements and not fictional discourse. So while considerations of co-predication and the admissibility of anaphoric dependencies require a uniform analysis for the parafictional and metafictional statements in mixed discourse, there is (as yet) no warrant for a uniform analysis that includes fictional discourse.⁴

Thus, an obvious question arises: can there be co-predication or anaphoric dependencies in fictional/parafictional and fictional/metafictional discourse, as some theories suggest? Prima facie, this is possible but once we try to concoct examples of such discourse the language loses all of its naturalness. Consider the following (attempts at) anaphoric links across fictional/parafictional, and fictional/metafictional discourse:

- (7) In the story I made up yesterday, a wizard called Brian falls in love with a cauldron. Let me tell it to you: One day, he was alone in his study trying out a new love-potion recipe...
- (8) Frey is a fictional character I made up and is the protagonist of my newest story. Here it is: One day she was walking through the woods near her home...

⁴Recanati is, and Everett seems to be, aware of this; Recanati’s examples explicitly target only mixed (implicit and explicit) parafictional/metafictional discourse and Everett hints at the need for a distinction “between discourse which takes place within the original base pretense [fictional discourse] and discourse which takes place within an extension of that base pretense and which is used to convey information about it [implicit parafictional discourse]” (2013, pp.165–166) and concedes that the given examples of mixed internal/external discourse are always of an extended pretense.

- (9) In order to capture the witch, Mary travelled to the woods and disguised herself as a potato.* In the woods she [Mary] encountered many perils...

*I know this is weird but I invented her [Mary] while eating chips.

- (10) Hans and Gretel approached the skyscraper. “Maybe you should have a look inside, Gretel. They might have candy”, whispered Hans.* Gretel moved closer...

*In this story, she is the hero that saves the day. He is the villain.

The anaphoric links seem possible (i.e., the statements are interpretable) but are very awkward. In order to clearly separate the parafictional and metafictional statements from the fictional discourse, the remarks outside the storytelling either have to be clearly marked in the language (e.g., “Let me tell it to you:” or “Here it is:” in (7) and (8)), or by some other means such as by changing the tone of voice as we do in an ‘aside’ (e.g., quickly murmuring the metafictional and parafictional statements in spoken versions of (9) and (10)) or by changing the layout for the written language (e.g., the metafictional and parafictional statements in (9) and (10) are part of footnotes), etc. Hence it becomes extremely challenging to come up with examples of *co-predication* involving mixed fictional and meta- or parafictional discourse. Moreover, the examples of anaphoric dependencies such as those above are decidedly not as common nor as natural as the examples we gave of mixed discourse.

In addition, once we do manage to ‘insert’ such non-fictional statements in the fictional narrative it is not obvious that anaphoric references are in fact permissible. It would be more appropriate to start the fictional discourse in (7) and (8) with use of the names ‘Brian’ and ‘Frey’ (or even better “Once upon a time there was a wizard/creature named Brian/Frey who...”). Similarly, it is more natural to use the names ‘Mary’ (or even better “this character”), ‘Hans’, and ‘Gretel’, rather than anaphoric pronouns, in the footnotes in (9) and (10).

We think, therefore, that the use of fictional names in (1) (during a storytelling) distinctively differs from the use of the fictional names in (2) – (4). When we closely examine the various kinds of mixed discourse, the following desideratum for a theory of fictional names emerges: the account of admissible co-predications and anaphora across different kinds of statements requires only a uniform analysis across parafictional and metafictional statements. So even though it might be thought that a uniform analysis of fictional names across all forms of discourse is desirable,

the use of names in the pretense of fictional discourse seems to be quite different from the use of names in parafictional and metafictional discourse.

3 Object theory

Now that we have established the need for a uniform semantic treatment of fictional names across parafictional and metafictional statements (and hence the need to solve the problem of the wrong kind of object), let’s turn to a theory that attempts to give such an analysis: object theory.

3.1 Encoding and exemplifying

Object theory⁵ offers a solution to the ‘wrong kind of object’ problem by distinguishing two modes of predication, two kinds of object, and a primitive property of *being concrete* ($E!$). The exemplification mode of predication is the one used to read ordinary predicate calculus statements of the form Fx , Rxy , etc. But encoding is a form of predication used to characterize the way in which ‘abstract’ objects have the properties that define them. Using this distinction, the theory defines: x exemplifies being an *ordinary* object ($O!x$) just in case x could have exemplified being concrete ($\diamond E!x$). By contrast, x exemplifies being an *abstract* object ($A!x$) just in case x couldn’t have exemplified being concrete ($\neg\diamond E!x$). For example, numbers and sets are not the kind of thing that could be concrete, and so they are considered abstract. If an ordinary object like a particular table (t) exemplifies being round (R), it has the property of roundness in the standard sense. So natural language claims about ordinary objects can be represented using standard predicate logic notation:

- (11) This particular table is round.

1. Rt

In contrast, by encoding a property, an abstract object ‘has’ this property as one of its constitutive characteristics, i.e., the properties that are encoded by some abstract object define this abstract object (and allow us to individuate between abstract objects). For instance, since the property of having no members is, in set theory, definitive of the empty set (\emptyset),

⁵For details on object theory see Zalta (1983; 1988a). See especially Zalta’s (1983) chapter IV, (1988a) chapter 7 and Zalta (2000; 1987 [2003]) for the treatment of fiction.

object theory treats \emptyset as an object that encodes the property of having no members (M). So a simple predication to the effect that the null set has no members has to be represented as an encoding statement, in which the argument term is written to the left of the predicate:

(12) The empty set has no members.

2. $\emptyset M$

Ordinary objects do not encode properties but abstract objects do exemplify properties. For instance, the empty set exemplifies being widely discussed (W), i.e., it has this property but the property is not constitutive of its essence:

(13) The empty set is widely discussed.

3. $W\emptyset$

3.2 Fiction

On the view presented here, discourse about fiction involves two types of abstract objects: *stories* and *fictional characters*. A story s (e.g., *The Lord of the Rings*) is an abstract object that encodes the content of a narrative; it encodes *vacuous* or *propositional* properties of the form *being such that p is true* ($[\lambda x p]$), where p is a proposition that satisfies true natural language statements of the form “In/According to story s , p ”.⁶ A fictional character is an abstract object that is *native* to a story (e.g., Frodo is native to *The Lord of the Rings* but Napoleon is not native to *War and Peace*).

Contrary to analyses given by authors such as Recanati, Currie and Zucchi, object theory rigidly distinguishes implicit and explicit parafictional statements. ‘Implicit’ parafictional statements have a reading on which they are simple predications about what properties a certain abstract object encodes. This is possible given object theory’s realist approach to fictional characters: since they exist as abstract objects, we can talk about them as we do about ordinary objects (i.e., without a story

⁶The logic of λ -expressions implies that all objects *exemplify* the same propositional properties, namely the ones derived from true propositions. For instance, take the proposition that penguins can’t fly (q). Then everything exemplifies *being such that q* , i.e., $\forall y([\lambda x q]y)$. However, only abstract objects *encode* propositional properties (see Zalta (1988a, p.61)).

operator or some type of pretense). So ignoring tense, one can read (2) as an encoding statement about Frodo (f) and being born in the Shire (S):⁷

(2) Frodo was born in the Shire.

4. fS

Explicit parafictional statements on the other hand are analyzed by treating the prefix “In/According to story s ” as an operator. This operator applies to (complex) exemplification statements that make up the content of the story. For instance (3) expresses that *The Lord of the Rings* (l) encodes the property of being such that Frodo exemplifies being born in the Shire:⁸

(3) In/According to *The Lord of the Rings*, Frodo was born in the Shire.

5. $l[\lambda x Sf]$

The axioms and definitions of object theory imply that if x is a character native to a story s , then x encodes a property F if and only if x exemplifies F in s (1983, p.94):

$$\forall x \forall s (Native(x, s) \rightarrow \forall F (xF \equiv s[\lambda y Fx]))$$

Thus, one can derive an equivalence between the readings of implicit and explicit parafictional statements about native fictional characters. The representations of (2) and (3) imply one another given that Frodo is native to *The Lord of the Rings*.

By contrast, metafictional statements are statements about what properties fictional characters *exemplify*. For instance, (4) expresses that Frodo exemplifies the property of being invented (I) by Tolkien (t):

(4) Frodo was invented by Tolkien.

⁷Strictly speaking, fictional names and properties should be indexed to the fiction in which they originate (see Zalta (2017)). So in what follows, we should, strictly speaking, use the notation f_l and S_l , where l is the story *The Lord of the Rings*. For the purpose of this paper, we omit the index for simplicity.

⁸Later in this paper, we’ll note that the story operator creates a hyperintensional context and that this creates a *de re/de dicto* ambiguity. The following formal representation expresses the *de re* reading, and later we’ll offer a second formal representation of (3) that expresses the *de dicto* reading. This applies to other explicit parafictional statements as well.

6. $[\lambda y Ity]f$

With this basic analysis of parafictional and metafictional statements in object theory, we turn to fictional statements (e.g., (1)). These are part of a storytelling practice that is needed in order to secure a reference for names of fictional objects. Zalta (1987 [2003], 2000) suggested that the practice of storytelling constitutes an extended naming baptism of the fictional characters in the story. As such, the use of the names in a story is like an extended definition and reference doesn’t take place until a storytelling has been completed.⁹ It is consistent with this idea to suggest that the use of names during the practice of storytelling involves pretend-reference.¹⁰ This pretend-reference in the practice of storytelling is needed to achieve real reference in parafictional and metafictional statements. For example, the reference of the name ‘Frodo’ is determined by Tolkien’s act of writing *The Lord of the Rings* saga; once the storytelling is complete, object theory yields a unique object for the name ‘Frodo’ to denote, namely, the abstract object that encodes exactly the properties F such that in the story, Frodo exemplifies F . In effect, object theory takes parafictional data of this latter form to determine the denotation of the name. The idea that reference to fictional characters supervenes on the practice of storytelling can also be found in Kripke (2013), Schiffer (2003) and Searle (1975) (this view stands in contrast to Hunter (1981)). Hence object theory unifies the semantic treatment of fictional names across parafictional and metafictional statements, but treats fictional discourse as having a special status. This complies with the desideratum formulated at the end of section 2.

Prima facie, object theory’s treatment of fictional names straightforwardly solves the problem of the wrong kind of object, once it is recognized that the problem doesn’t arise for fictional statements like (1), which may involve pretend reference. But abstract objects are the right kind of

⁹We admit that one can take a different view about the reference of names during a storytelling. Others might suggest that Tolkien is referring to a series of abstract objects as the story grows. Still others might suggest that even though there is no reference during the storytelling, the Fregean sense of the name is in play as the story is being told or written. For our purposes in this paper, the exact analysis of the denotation of a name, if any, during a storytelling will not be crucial to our reply to the wrong kind of object problem for parafictional and metafictional statements.

¹⁰We note that this is consistent with the views of Currie and Zucchi, since the internal/external divide distinguishes fictional statements from (implicit and explicit) parafictional and metafictional statements.

objects for analyzing implicit parafictional and metafictional statements: they can *encode* properties like being born in the Shire and *exemplify* being invented by someone. And names in explicit parafictional statements involve reference to abstract objects as well, though under the scope of a story operator.

4 Does the problem return?

4.1 Is Tolkien’s *Ring* trilogy about abstract objects?

Recently, Klauk (2014) has suggested that the ‘wrong kind of object’ problem threatens to reappear for object theory when we consider the analysis of explicit parafictional statements. He writes:

[“In *Casablanca*, Rick Blaine is cynical”] would not mean any more that an abstract object is cynical, but that, according to some movie, an abstract object is cynical. However, this is not persuasive. One way to see this is by remembering that recipients are typically prescribed to imagine whatever is the case according to a fiction. But viewers of *Casablanca* are not prescribed to imagine an abstract object that has a property (being cynical) that it actually cannot have. (Klauk (2014, p.241))

In the first sentence of this passage, Klauk argues that the inference from “In *Casablanca*, Rick Blaine is cynical” to “In *Casablanca*, an abstract object is cynical” is valid in object theory. Presumably, he would also say that the inference from (3) to “In *The Lord of the Rings*, an abstract object was born in the Shire” is also validated by object theory. In the next few subsections, we shall formalize the inference and then show that these inferences are in fact not valid in object theory.

Note that in the next part of this passage Klauk then argues why such inferences should not be accepted. Indeed, we *agree* with him that if these inferences were valid, that would count against the object-theoretic analysis – object theory would in fact be subject to the ‘wrong kind of object’ problem. *Casablanca* does not mandate that we imagine:

- Rick Blaine is an abstract object and is cynical.
- Some abstract object is cynical.

and *The Lord of the Rings* does not prescribe that we imagine:

- Frodo is an abstract object and was born in the Shire.
- Some abstract object was born in the Shire.

That is, we agree that the following are in fact false:

- In *Casablanca*, Rick Blaine is an abstract object and is cynical.
- In *Casablanca*, some abstract object is cynical.
- In *The Lord of the Rings*, Frodo is an abstract object and was born in the Shire.
- In *The Lord of the Rings*, some abstract object was born in the Shire.

So, if object theory were to imply those claims, it would allow us to derive falsehoods from the truths that “In *Casablanca*, Rick Blaine is cynical” and (3).

We also agree with Klauk when he says, in a later passage (2014, p. 242), “Although we can make-believe almost anything, to make-believe category mistakes is special and remarkable.” He goes on to describe cases where this would be an acceptable result, given the unusual nature of the story in question (e.g., because the story is about strange abstract objects). But he concludes, in this passage, that the above cases about *Casablanca* and *The Lord of the Rings* are not cases of unusual stories. These are standard cases of fictions in which the story makes it clear that it is talking about concrete objects. Here again, we accept this conclusion.

Thus, Klauk’s argument against object theory turns on whether the theory endorses the invalid inferences outlined above. We therefore need to investigate the inferences that can be drawn in object theory between explicit parafictional statements, since these are the crux of his argument. We plan to show that from the data, one can only infer that “In *Casablanca*, a flesh and blood creature is cynical,” and “In *The Lord of the Rings*, a flesh and blood creature was born in the Shire.” We’ll focus primarily on the example from *The Lord of the Rings*, since what we say about it applies to the example from *Casablanca*.

4.2 Three issues revealed by formalisation

To see the concern more clearly (and eventually see where Klauk’s argument breaks down) it will be useful to represent the problematic claims

formally in object theory and then check to see whether the undesirable consequences can be derived from its axioms and definitions. But we start with a principle of object theory that will play an important role in what follows, namely the principle that allows one to identify native fictional characters as abstract objects. Given that Frodo is native to *The Lord of the Rings*, object theory implies (1983, p.93): Frodo is the abstract object that encodes exactly those properties that, according to *The Lord of the Rings*, Frodo exemplifies, i.e.,

$$7. f = \iota x(A!x \wedge \forall F(xF \equiv I[\lambda z Ff]))$$

Henceforth when we discuss the technical description on the right side of this identity in our text, we abbreviate it as $\mathbf{a}_{\text{Frodo}}$.

Now datum sentence (3), i.e., “According to *The Lord of the Rings*, Frodo was born in the Shire”, was represented in section 3 as 5:

$$5. I[\lambda w Sf]$$

It is important to note here that, although object theory allows for failures of substitutions of co-referring expressions in natural language (we’ll discuss this below), its formal language is fully *denotational* (or ‘extensional’); it preserves the principle of substitution of identicals without exception in its formalism, i.e., substitution of co-referring terms preserves truth in *every* context. Hence we can substitute the description $\mathbf{a}_{\text{Frodo}}$ in 7 for the name f in 5 to obtain the following:¹¹

$$8. I[\lambda w S\iota x(A!x \wedge \forall F(xF \equiv I[\lambda z Ff]))]$$

At this point, 8 has been validly derived. But now three issues about 8 arise.

First, 8 appears to attribute inappropriate content to *The Lord of the Rings* (namely, that $\mathbf{a}_{\text{Frodo}}$ was born in the Shire). When we *read* 8 in natural language, it appears to say something false.

¹¹Those familiar with object theory will remember that, as it is currently formulated, a λ -expression of the form $[\lambda x \phi]$ is well formed only if ϕ contains no encoding subformulas. So it might be thought that 8 is not well-formed given the encoding formula in the description $\iota x(A!x \wedge \forall F(xF \equiv I[\lambda z Ff]))$. However, 8 *is* well formed, for the definition of *subformula* implies that xF is not a subformula of the term $\iota x(A!x \wedge \forall F(xF \equiv I[\lambda z Ff]))$. So xF is not a subformula of the formula $S\iota x(A!x \wedge \forall F(xF \equiv I[\lambda z Ff]))$. The only expressions that have subformulas are complex formulas; the subformulas of the matrix of a complex term do not become subformulas of any formula which contains the term.

Second, if we can substitute identicals within the encoding claims of object theory, then the following argument becomes valid:

- (3) In/According to *The Lord of the Rings*, Frodo was born in the Shire.
- (14) Frodo is the character portrayed by Elijah Wood.
- (15) In/According to *The Lord of the Rings*, the character portrayed by Elijah Wood was born in the Shire.

Thus, from two true premises, we seem to be able to derive a false conclusion.

The third issue about 8 is that, when combined with the theory of definite descriptions, it appears to imply that *The Lord of the Rings* asserts something explicitly about an abstract object. Object theory uses a version of Russell’s theory of descriptions (1905), for it adopts the principle *Descriptions* (1988a, p. 90). This tells us that a formula of the form ‘the Q exemplifies (or encodes) property P ’ is equivalent to ‘there is a unique y that exemplifies Q and there is a y that exemplifies Q and that also exemplifies (encodes) P ’, i.e.,

- 9. (a) $\exists!x(Qx) \equiv \exists!yQy \wedge \exists y(Qy \wedge Py)$
- (b) $\exists!x(Qx)P \equiv \exists!yQy \wedge \exists y(Qy \wedge yP)$

This principle applies to the formula *embedded* in 8:

- 10. $Sx(A!x \wedge \forall F(xF \equiv l[\lambda z Ff])) \equiv$
 $\exists!y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff])) \wedge$
 $\exists y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff]) \wedge Sy)$

If we could then substitute the equivalent formulas in 8 we would obtain the following:

- 11. $l[\lambda w \exists!y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff])) \wedge \exists y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff]) \wedge Sy)]$

Let ϕ be the formula $A!y \wedge \forall F(yF \equiv l[\lambda z Ff])$. Then 11 says that *The Lord of the Rings* encodes that there is a unique abstract object y such that ϕ and that there is an abstract object y such that both ϕ and y exemplifies being born in the Shire. Thus 11 explicitly mentions abstract objects and says that one exemplifies *being born in the Shire*. We agree that even though both 8 and 10 are derivable in object theory, the ‘wrong kind of object’ problem would return if these two claims implied 11. But, in fact, they do not, as the following analysis will show.

In what follows, we address all three of the foregoing problems. Our investigations will address the first problem by showing why 8 should not be read in natural language and so does not assert anything seriously problematic about the content of *The Lord of the Rings*. We address the second problem by appealing to a *de re/de dicto* ambiguity and showing how object theory offers a reading on which (3) and (14) do not imply (15). We address the third problem by showing that 8 does not imply anything that suggests it is part of the fictional discourse of *The Lord of the Rings* that there is an abstract object that exemplifies being born in the Shire.

5 The realist reply

5.1 Hyperintensionality

For reasons of simplicity, we start with the third problem. To see that 8 and 10 do not imply 11, one only has to observe that substitution of necessarily equivalent properties is not generally valid in object theory. λ -expressions create *hyperintensional* contexts (i.e., necessarily equivalents *cannot* be substituted within them *salva veritate*). A context can be both extensional (i.e., allow for substitution of identicals) and hyperintensional because necessary equivalence does not imply identity in object theory. In particular, $\Box(p \equiv q)$ does not imply $p = q$ and $\Box\forall x(Fx \equiv Gx)$ does not imply $F = G$ (cf. Myhill 1963).

To see the guiding intuition here, consider the property *being a barber that shaves all and only those who don’t shave themselves* ($[\lambda x Bx \wedge \forall y(Sxy \equiv \neg Syy)]$). Intuitively this is distinct from the property *being a brown and non-brown dog* ($[\lambda x Dx \wedge Bx \wedge \neg Bx]$) even though both properties are necessarily equivalent (i.e., in every possible world, nothing exemplifies them). Property identity in object theory is defined in terms of encoding: $F = G =_{df} \Box\forall x(xF \equiv xG)$. In other words, properties are identical whenever they are necessarily encoded by the same objects. Intuitively, we can tell a story about a brown and non-brown dog without it being a story about a barber who shaves all and only those who don’t shave themselves. Given that these two properties are distinct, they can’t be substituted for one another in every context, though we may be able to infer that anything exemplifying the one exemplifies the other.

To take another example, the formulas $\neg Px$ and $\neg Px \wedge (q \vee \neg q)$ are

necessarily equivalent. From the fact that an object a exemplifies $[\lambda x \neg Px]$ and the fact that this property is necessarily equivalent to $[\lambda x \neg Px \wedge (q \vee \neg q)]$ one cannot substitute necessarily equivalents to infer that a exemplifies $[\lambda x \neg Px \wedge (q \vee \neg q)]$.¹²

This is all we need to see that 8 and 10 do not imply 11. Suppose for the sake of argument that 10 is necessarily true, and that the properties involved in 8 and 11 are necessarily equivalent.¹³ This would not justify the inference from 8 and 10 to 11 – the λ -expressions create hyperintensional contexts and one cannot substitute necessarily equivalent formulas within those expressions. We can express this more intuitively by again using ϕ to represent $A!y \wedge \forall F(yF \equiv l[\lambda z Ff])$, for then we can say that being such that $\mathbf{a}_{\text{Frodo}}$ was born in the Shire is *not* the same property as: being such that there is a unique abstract object y such that ϕ and there is an abstract object y such that both ϕ and y exemplifies being born in the Shire.¹⁴ The inference is simply invalid in object theory.

Thus, 8 doesn’t imply that, in the *The Lord of the Rings*, Frodo is an abstract object born in the Shire, or that some abstract object was born in the Shire. That is, object theory does not imply that it is part of the content of *The Lord of the Rings* that there is an abstract object

¹²In this case, you can derive such a conclusion by λ -conversion, but this won’t work in all contexts. In this particular case, $[\lambda x \neg Px]a$ implies, by λ -Conversion, that $\neg Pa$. And this is necessarily equivalent to $\neg Pa \wedge (q \vee \neg q)$. So by reverse λ -Conversion, it follows that $[\lambda x \neg Px \wedge (q \vee \neg q)]a$. So in this case, it looks like we have substituted necessarily equivalents and preserved truth. But this fails for belief contexts, for example. From the fact that someone believes that an object a exemplifies $[\lambda x \neg Px]$, it doesn’t follow that that person believes a exemplifies $[\lambda x \neg Px \wedge (q \vee \neg q)]$. Similarly, from the fact that someone believes that an object a exemplifies $[\lambda x Bx \wedge \forall y(Sxy \equiv \neg Syy)]$ it does not follow that this person believes that a exemplifies $[\lambda x Dx \wedge Bx \wedge \neg Bx]$.

¹³In fact, in object theory, the properties involved are not necessarily equivalent because 10 is not a necessary truth. Definite descriptions in object theory are rigid; $x\phi$ denotes, in every world, the object that uniquely satisfies ϕ in the actual world, if there is one. So the Russellian analysis of descriptions is not a necessary truth; it is a classic example of a logical truth that is not necessary. See Zalta (1988b).

¹⁴There is in fact another reason why we can’t derive 11. That is because it isn’t even well-formed! Notice that the λ -expression in 11 begins $[\lambda w \exists!y(A!y \dots)]$. The uniqueness quantifier $\exists!y$ is defined in terms of identity formulas (i.e., $\exists!xPx \equiv \exists x(Px \wedge \forall y(Py \rightarrow (y = x)))$) and those in turn are defined in terms of encoding formulas (i.e., $x = y \text{ }_{df} (O!x \wedge O!y \wedge \Box \forall F(Fx \equiv Fy)) \vee (A!x \wedge A!y \wedge \Box \forall F(xF \equiv yF))$); see Zalta (1988a, p.21). So this λ -expression, when you unpack the defined notation, is not well-formed because it contains encoding subformulas. One can, in object theory, build λ -expressions with weaker notions of identity, such as identity among ordinary objects (\equiv_E) and identity among the characters of *The Lord of the Rings* (\equiv_l). But neither of those play a role in the uniqueness statements in 11.

that exemplifies being born in the Shire. So by addressing the third issue raised above, we have the beginnings of a reply to Klauk’s claim that the ‘wrong kind of object’ problem has returned.

There is an analogous, but innocuous, argument involving descriptions and the object-theoretic translations of *implicit* parafictional statements. As noted before in section 3, object theory asserts that if a character is native to some story s , implicit and explicit parafictional statements about this character’s properties in s necessarily follow from one another. Recall sentence (2), i.e., “Frodo was born in the Shire”. We can represent (2) as 12:

$$12. fS$$

Since Frodo is native to *The Lord of the Rings*, 12 follows from 5. From 7 and 12 we can infer 13 by substituting identicals:

$$13. ix(A!x \wedge \forall F(xF \equiv l[\lambda z Ff]))S$$

Applying the principle *Descriptions* 9b to 13 gives us the following equivalence:

$$14. ix(A!x \wedge \forall F(xF \equiv l[\lambda z Ff]))S \equiv \\ \exists!y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff])) \wedge \\ \exists y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff]) \wedge yS)$$

This allows us to derive the following:

$$15. \exists!y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff])) \wedge \exists y(A!y \wedge \forall F(yF \equiv l[\lambda z Ff]) \wedge yS)$$

15, however, is not problematic. It merely implies that there is a unique abstract object ($\mathbf{a}_{\text{Frodo}}$) that encodes being born in the Shire. Abstract objects are precisely the right kind of objects to encode such properties.

5.2 Reference to abstracta in parafictional discourse

As noted in section 4, the first problem with 8 is that it seems to entail that someone engaged in a discussion of the content of *The Lord of the Rings*, would be licensed to say that in *The Lord of the Rings*, $\mathbf{a}_{\text{Frodo}}$ was born in the Shire. In fact, object theory does not entail this since 8, even though it is a theoretical consequence of the theory, is not expressible in the language of the parafictional data. It is improper to read 8 back into natural language because this would amount to the following unabbreviated sentence being part of natural language:

- (16) In *The Lord of the Rings*, the abstract object that encodes exactly those properties that Frodo exemplifies according to *The Lord of the Rings*, was born in the Shire.

(16) includes the technical terms ‘encoding’ and ‘exemplifying’. These notions are part of the underlying intensional logic of object theory that was designed to disambiguate natural language and, as such, distinguish things that natural language conflates (e.g., the two modes of predication). Hence these technical notions cannot simply be ‘read back’ into natural language. Although (16) could be used by an abstract object theorist engaged in a technical discussion about the abstract objects Frodo and *The Lord of the Rings*, (16) is not part of the natural language data.

At this point, Klauk might express the following concern: even if (16) is not part of natural language, (3) definitely is. Object theory still implies that the name ‘Frodo’ in the seemingly unproblematic (3) refers to $\mathbf{a}_{\text{Frodo}}$. Since we are not prompted to imagine anything about abstract objects, explicit parafictional statements should also not make reference to them.

However, this worry is unfounded. It is not problematic for fictional names in parafictional statements to refer to abstract objects. As was discussed in section 3, the internal/external distinction cuts across (explicit and implicit) parafictional discourse and fictional discourse. So, even though it is true that explicit parafictional statements track or ‘echo’ the storytelling practice of fictional discourse – and in this sense are statements that report on what is true in some fiction – parafictional statements like (3) are themselves *non-fictional* statements that involve reference to abstract objects. In parafictional statements, we are no longer pretending to refer. Hence parafictional statements prompt *beliefs* (about abstract objects) whereas fictional discourse (which may involve pretense) prompts *imagination* (and may involve pretend-reference to concrete individuals). The fact that parafictional statements refer to abstract objects does not entail that we are prompted or mandated to imagine anything explicitly about abstract objects.

5.3 A *de re/de dicto* ambiguity

Finally, we consider the second problem raised at the end of section 4. The inference from 5 and 7 to 8 shows one can substitute identicals within the encoding claims of object theory. This suggests that (15) follows from (3) and (14). The problem is that there seems to be a reading of these

sentences on which the inference is not valid.

Although the formal language of object theory is fully denotational, it has a logic that explains failures of substitutions of co-referring expressions in natural language. The key is to note that the story operator creates a hyperintensional context like those in propositional attitude reports. So to understand how object theory undermines this second problem, we need to review briefly the treatment of such reports in object theory.

Consider a classical example of a failure of substitution, namely, the following inference in natural language:

- (17) John believes that Bill is happy.
 (18) Bill is the mayor of the town.
 (19) John believes that the mayor of the town is happy.

To explain the apparent failure of substitution, object theory distinguishes between a valid *de re* reading of the argument from the invalid *de dicto* reading. On the valid *de re* reading of the inference, all of the individual terms in the argument are analyzed as having their ordinary denotations. If a term is contributing its ordinary denotation to the reading, then substitution of identicals is valid. Specifically, since the name ‘Bill’ and the description ‘the mayor of the town’ only contribute their denotations to the truth conditions of the *de re* reading of the belief statement, substitution is allowed. In object theory this *de re* reading is represented as follows, where B represents the belief relation between an individual and a proposition:

16. $B(j, Hb)$
 17. $b = \iota x Mx$
 18. $B(j, H\iota x Mx)$

Here 16 and 17 imply 18 because substitution of identicals is licensed in every context. Thus, 16 – 18 give us a reading of (17) – (19) on which the latter constitute a valid inference.

By contrast, on a *de dicto* reading of the inference from (17) and (18) to (19), the individual terms in the argument are analyzed as contributing their *Fregean senses* to the truth conditions of the report. This explains why substitution of identicals in natural language does not hold: the sense of ‘Bill’ and the sense of ‘the mayor of the town’ are not identical. On a

Fregean analysis, the identity statement “Bill is the mayor of the town” is true because the terms flanking the identity sign have the same denotation, and it is informative because those terms have different senses. Indeed, on a *de dicto* reading, we may, for simplicity, suppose that all of the terms in the embedded belief report contribute their senses to the truth conditions, including the predicates. Now to represent the sense of a natural language term in object theory, one *underlines* the formal symbol representing that term. So the *de dicto* reading of (17) – (19) is:

$$19. B(j, \underline{H}b)$$

$$17. b = \iota x Mx$$

$$20. B(j, \underline{H} \iota x Mx)$$

In other words, from the fact that the identity in 17 holds, we cannot substitute the definite description for the name in a context where the name is not contributing its denotation but only its sense (i.e., 17 does not imply $\underline{b} = \iota x Mx$).

This analysis could be adapted to the story operator if the latter creates a hyperintensional context. The data suggests that it does. For clearly we are addressing the question of why there is a reading of (3) and (14) on which (15) does *not* follow. Thus, there seems to be a sense of ‘assertion’ for which “In/According to *The Lord of the Rings*, Frodo was born in the Shire” can be read as “*The Lord of the Rings* asserts that Frodo was born in the Shire”. This sense of assertion creates a context similar to propositional attitude reports. So story operators create hyperintensional contexts. The object-theoretic analysis, on which stories encode propositional properties, preserves the hyperintensionality of the data. By analyzing (3) as $l[\lambda x Sf]$, the story operator becomes analyzed as an operator that represents what propositions are asserted in the story.

Since explicit parafictional statements are analogous to propositional attitude reports, the ambiguity between a *de re* and a *de dicto* reading of these statements can be resolved. An explicit parafictional statement such as (3) can be read (a) *de re*, for which substitution of identicals is valid, or (b) *de dicto*, for which substitution of identicals is not valid. In the *de dicto* reading, what *The Lord of the Rings* asserts is sensitive to the senses of ‘Frodo’ and ‘being born in the Shire’. Thus, the argument from (3) and (14) to (15) is valid on a *de re* reading and not on a *de dicto* reading. We can derive (15) when (3) is read *de re*. But this doesn’t follow

on the *de dicto* reading of (3). The valid *de re* argument is represented as follows:

$$5. l[\lambda x Sf]$$

$$21. f = \iota x Pex$$

$$22. l[\lambda x S \iota x Pex]$$

The invalid *de dicto* argument is represented as follows:

$$23. l[\lambda x \underline{S}f]$$

$$21. f = \iota x Pex$$

$$24. l[\lambda x \underline{S} \iota x Pex]$$

Thus, the problem is resolved in object theory by the fact that (3) and (15) are subject to a *de re/de dicto* ambiguity that is disambiguated by the two formal representations, namely, 5 and 23 for (3), and 22 and 24 for (15).¹⁵

6 Story entailment

At this point someone might object that it is incorrect to suggest that the story operator creates a hyperintensional environment. After all, it seems like we *can* sometimes substitute (necessarily) equivalent formulas *salva veritate* in the context of story operators. For instance, in *The Lord of the Rings* we encounter the following statement (after one of its characters, Bilbo, mysteriously vanished into thin air at his own party):

$$(20) \text{ Frodo was the only one present who had said nothing.}$$

Hence it is parafictional data that:¹⁶

¹⁵For most purposes, the *de re* reading of (3) and (15) suffice. The *de re* reading usually captures the normal understanding of these sentences, just as for most purposes, the *de re* reading of belief statements suffices. But in contexts where substitution of identicals is relevant, the *de dicto* readings are necessary.

¹⁶Note that the definite description ‘the one that was present (at Bilbo’s party) who had said nothing (when Bilbo disappeared)’ denotes nothing. Hence, in what follows, when we represent the description formally, we interpret the description as ‘the one who, in *The Lord of the Rings*, was present and who said nothing’. Thus, in the formal representation, we include the story operator right after the description operator: $\iota x(l[\lambda w (Px \wedge \neg Sx)])$; see Zalta (1983, p. 126).

- (21) In *The Lord of the Rings*, Frodo is the only one that was present (at Bilbo’s party) who had said nothing (when Bilbo disappeared).

The *de re* reading of this is:¹⁷

$$25. \ l[\lambda w f = ix(l[\lambda w (Px \wedge \neg Sx)])]$$

Independently, given the theory of descriptions, the following is equivalent to (20):

- (22) There is a unique thing that was present and said nothing, and something that was present and said nothing is identical to Frodo.

Formally, we can represent the equivalence of (20) and (22) as:

$$26. \ f = ix(l[\lambda w (Px \wedge \neg Sx)]) \equiv \exists!y(l[\lambda w (Px \wedge \neg Sx)]) \wedge \exists y(l[\lambda w (Px \wedge \neg Sx)] \wedge f = y)$$

It seems perfectly reasonable to infer from (21) and the equivalence of (20) and (22) that:

- (23) In *The Lord of the Rings*, there is a unique thing that was present and said nothing, and something that was present and said nothing is identical to Frodo.

even though this was never stated in this form in the story itself. The *de re* reading of this claim is:

$$27. \ l[\lambda w \exists!y(l[\lambda w (Px \wedge \neg Sx)]) \wedge \exists y(l[\lambda w (Px \wedge \neg Sx)] \wedge f = y)]$$

The objection stated at the outset, then, is the concern that we cannot derive 27 from 25 in object theory because substitution of equivalents is not allowed within the story operator.

¹⁷In the λ -expressions used in 25 and in the subsequent formal representations 27 and 28, the identity sign ‘=’ should, strictly speaking, either be read as the relation of E-identity ($=_E$) as defined in object theory or as the the identity relation relative to *The Lord of the Rings* ($=_I$). As mentioned in footnote 14, ‘ $x = y$ ’ is defined in object theory and its definiens has encoding subformulas – one cannot form λ -expressions with encoding subformulas, as these can lead to paradox. But one can form λ -expressions with either $=_E$ or $=_I$, as these are not identity relations that relate every object whatsoever to itself. Instead $x =_E y$ holds just in case x and y are both ordinary objects and necessarily exemplify the same properties. And $x =_I y$ holds between x and y just in case x and y are characters of *The Lord of the Rings* and, according to the story, x and y are identical.

But, in fact, one can derive 27 from 25, but not by substituting the equivalent formulas in 26. Instead one applies another part of the object-theoretic analysis of fiction. Such *de re* inferences are valid in object theory because (20) *relevantly implies*, i.e., ‘story-entails’, (22); see Zalta (1988a, p. 124). If we use $\stackrel{R}{\Rightarrow}$ to indicate relevant or story entailment, then this last fact can be represented as:

$$28. \ f = ix(l[\lambda w (Px \wedge \neg Sx)]) \stackrel{R}{\Rightarrow} \exists!y(l[\lambda w (Px \wedge \neg Sx)]) \wedge \exists y(l[\lambda w (Px \wedge \neg Sx)] \wedge f = y)$$

Object theory employs the principle that if p is true in story s and p story-entails q , then q is true in s , and this principle, given 28, is what validates the inference from 25 to 27.

What is story-entailed is determined by what an ordinary reader of the story would say the story implies, i.e., every proposition stated in a physical copy of the story (or uttered in a storytelling) plus all the *relevant* consequences of those propositions.¹⁸ This is what the story ‘asserts’ – what is true in or part of the content of the fiction – and hence this determines the available parafictional information. So storytelling practices, or fictional discourse, should be construed more broadly than as consisting solely of sentences that have been written down by some author or uttered in a storytelling. Inferences made by readers while engaging with a fictional narrative (e.g., a reader’s inference that there was one person present at Bilbo’s party who did not say anything and it was Frodo) supplement the storytelling. Hence they may involve pretend reference (e.g., the reader’s inference may involve the same pretend reference to a flesh and blood hobbit as the fictional statement (1)).¹⁹ This analysis is consistent with the idea that, just as writing fiction may involve pretense on the part of the author (they may be pretending that what they write down is true fact), reading fiction also may involve pretense on the part

¹⁸Unreliable narration complicates this picture since not all stated propositions should be taken at face value. We assume that an ‘ordinary’ reader takes into account this and other complicating factors when drawing inferences about what a fictional narrative implies. See also Friend (2017) who argues against the (common) analysis on which implicit fictional truths can be inferred from the statements given in the fictional narrative.

¹⁹This means that sentences such as (2) that are not a verbatim part of the fictional narrative can be both implicit parafictional statements (when uttered in subsequent discourse) as well as fictional statements (when they result from inferences made while reading *The Lord of the Rings*).

of the reader (they may be pretending that what they are reading is a description of real events).

Parafictional statements track the storytelling practice in general; they are reports on what the story asserts, where ‘asserting’ is understood in a broad sense (cf. Maier 2019). Formulas expressing story-entailments such as 28 track a particular part of the storytelling practice; they are reports on the ‘story-entailment practice’, i.e., they track the inferences that ordinary readers make while engaging with fictional narratives. Assuming that someone who reads (20) would in fact conclude (22), they would be licensed to infer the parafictional data (23). And, as we saw earlier, the formal representations of this data preserves this inference: 25 and 28 imply 27.

It is for this reason that object theory preserves the inference from:

- (3) In *The Lord of the Rings*, Frodo was born in the Shire.
- (24) In *The Lord of the Rings*, Frodo is a hobbit.
- (25) In *The Lord of the Rings*, hobbits are flesh and blood creatures.

to

- (26) In *The Lord of the Rings*, a flesh and blood object was born in the Shire.

given that the following three propositions:

- Frodo was born in the Shire.
- Frodo is a hobbit.
- Hobbits are flesh and blood creatures.

relevantly imply (i.e., story-entail):

Some flesh and blood creature was born in the Shire.

But the first three propositions do *not* relevantly entail propositions necessarily equivalent to the fourth, such as: some flesh and blood creature was born in the Shire and either the sun is shining or it is not. Object theory, therefore, does not imply that this last proposition is true in the story. The formal representations of (3), (24), (25), and (26) are analogous to the ones provided in the previous case and so we omit them here.²⁰

²⁰By contrast, the key formal representations 8 and 11 are *not* the counterparts of parafictional data; they are simply theoretical facts about abstract objects that can be derived from the representations of the parafictional data.

This discharges our promissory note in section 4.1, where we promised to show that one can derive “In *The Lord of the Rings*, a flesh and blood creature was born in the Shire” follows from the data.

7 Conclusion

In this paper, we have defended the object-theoretic approach to fictional names against Klauk’s charge that it is subject to the ‘wrong kind of object’ problem. In doing so, we’ve seen that it provides a uniform semantic treatment of fictional names across parafictional and metafictional statements. In our defense of object theory, we’ve developed three main points. First, although 8 *can* be derived in object theory, it is not problematic; it doesn’t attribute inappropriate content to *The Lord of the Rings*. Nor does reference to abstract objects in parafictional statements require us to imagine anything about abstract objects. Second, story operators create hyperintensional contexts similar to those in propositional attitude reports. Hence on a *de dicto* reading of explicit parafictional statements we cannot derive statements such as (15). Third, we *cannot* derive the problematic 11 since necessarily equivalent propositions aren’t substitutable within the hyperintensional contexts created by story operators, though we can infer that propositions relevantly implied by propositions true in the story are also true in the story.

References

- Bjurman Pautz, A. (2008). Fictional coreference as a problem for the pretense theory. *Philosophical Studies*, 141(2):147–156.
- Bueno, O. and Zalta, E. N. (2017). Object theory and modal meinongianism. *Australasian Journal of Philosophy*, 95:1–18.
- Collins, J. (2019). The diversity of fiction and copredication: An accommodation problem. *Erkenntnis*. First online 12 August 2019, doi: 10.1007/s10670-019-00150-1.
- Currie, G. (1990). *The Nature of Fiction*. Cambridge University Press, Cambridge.
- Evans, G. (1982). *The Varieties of Reference*. Clarendon Press, Oxford.

- Everett, A. (2013). *The nonexistent*. Oxford University Press, Oxford.
- Friend, S. (2017). The Real Foundation of Fictional Worlds. *Australasian Journal of Philosophy*, 95(1):29–42.
- Hunter, D. (1981). Reference and meinongian objects. *Grazer Philosophische Studien*, 14:23–36.
- Klauk, T. (2014). Zalta on encoding fictional properties. *Journal of Literary Theory*, 8(2):234–256.
- Kripke, S. (1973 [2013]). *Reference and Existence. The John Locke Lectures for 1973*. Oxford University Press, Oxford.
- Kripke, S. (2011). Vacuous names and fictional entities. In *Philosophical Troubles*, pages 52–74. Oxford University Press, Oxford.
- Lamarque, P. and Olsen, S. H. (1994). *Truth, fiction and literature*. Clarendon Press, Oxford.
- Lewis, D. (1978). Truth in fiction. *American Philosophical Quarterly*, 15(1):37–46.
- Maier, E. (2017). Fictional names in psychologistic semantics. *Theoretical Linguistics*, 43(1-2):1–42.
- Maier, E. (2019). On the exceptionality of reported speech. *Linguistic Typology*, 23(1):197–205.
- Myhill, J. (1963). An alternative to the method of extension and intension. In Schilpp, P. A., editor, *The philosophy of Rudolf Carnap*, pages 299–310. Open Court Publishing Company, La Salle.
- Recanati, F. (2018). Fictional, Metafictional, Parafictional. *Proceedings of the Aristotelian Society*, 118(1):25–54.
- Russell, B. (1905). On denoting. *Mind*, 14(56):479–493.
- Schiffer, S. (2003). *The Things We Mean*. Clarendon Press, Oxford.
- Searle, J. R. (1975). The Logical Status of Fictional Discourse. *New Literary History*, 6(2):319–332.
- Van Inwagen, P. (1977). Creatures of Fiction. *American Philosophical Quarterly*, 14:299.

- Walton, K. L. (1990). *Mimesis as Make-Believe: On the Foundations of the Representational Arts*. Harvard University Press, Cambridge.
- Zalta, E. (1983). *Abstract Objects: An Introduction to Axiomatic Metaphysics*. D. Reidel, Dordrecht.
- Zalta, E. N. (1987 [2003]). Erzählung als Taufe des Helden: Wie man auf fiktionale Objekte Bezug nimmt. *Zeitschrift für Semiotik*, 9(1–2):85–95. Translated (Arnold Günther) as Referring to Fictional Characters in *Dialectica*, 2(2003):243–254.
- Zalta, E. N. (1988a). *Intensional logic and the metaphysics of intentionality*. MIT Press, Cambridge.
- Zalta, E. N. (1988b). Logical and analytic truths that are not necessary. *The Journal of Philosophy*, 85(2):57–74.
- Zalta, E. N. (2000). The Road Between Pretense Theory and Abstract Object Theory. In Hofweber, T. and Everett, A., editors, *Empty Names, Fiction, and the Puzzles of Non-Existence*, pages 117–147. CSLI Publications, Stanford.
- Zucchi, S. (2017). Games of make-believe and factual information. *Theoretical Linguistics*, 43(1-2):95–101.