Winged Horses, Rascals, and Discourse Referents

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Abstract

This paper discusses some remarks Kaplan made in "Bob and Carol and Ted and Alice" concerning empty names. I show how his objections to a particular view involving descriptions derived from Ramsification can be avoided by a nearby alternative framed in terms of discourse reference. I offer a treatment of empty names as variables carrying presuppositions concerning unique occupants of roles, or sets of properties, determined by the originating discourse.

What makes 'Aristotle' more perfect than 'Pegasus'?

– D. Kaplan, "Bob and Carol and Ted and Alice"

1 Introduction

In the "Afterthoughts" to "Demonstratives", Kaplan wrote,

> "Ohsnay" means *snow* in Pig-Latin. That's a semantic fact about Pig-Latin. The *reason* why "ohsnay" means *snow* is not a semantic fact; it is some kind of historical or sociological fact about Pig-Latin. Perhaps, because it relates to how the language is used it should be categorized as part of the *pragmatics* of Pig-Latin (though I am not really comfortable with this nomenclature), or perhaps, because it is a fact *about* semantics, as part of the *Metasemantics* of Pig-Latin [...]. (Kaplan, 1989, 573–74)

In this passage Kaplan cemented the distinction between semantics and metasemantics that has subsequently become a cornerstone of much philosophical thinking about meaning. On Kaplan's use of the terms, the job of semantics is to answer questions concerning what particular words or phrases mean, while metasemantics answers questions concerning why a word or a phrase means what it does.[1]

As this suggests, when it comes to non-empty, referential names, like "Oprah Winfrey", the semantics-metasemantics distinction can be formulated as between two questions:

> **Semantic Question**
> What does "Oprah Winfrey" mean?
>
> **Metasemantic Question**
> Why does "Oprah Winfrey" mean what it does?

Kaplanian orthodoxy answers these questions along with the familiar picture from Kripke (1980) and many others. Namely, "Oprah Winfrey" means Oprah Winfrey: the semantic contribution of the name is its referent. In turn, the reason why "Oprah Winfrey" means Oprah Winfrey is that uses of the name are embedded in a chain of communication originating in an event of dubbing of Oprah Winfrey – the actual individual – with that name.

Both semantic and metasemantic questions are problematic for empty names such as "Anna Karenina", "Pegasus", or "Vulcan". Take "Pegasus". We can distinguish the questions:

[1] "Metasemantics", on this terminology, corresponds to what Stalnaker (2003 [1997]) called "foundational semantics." It should be distinguished from what others, like Glanzberg (2007) and King (2014), call "metasemantics", who use the term to mean an account of how contexts determine the values of context-sensitive parameters in the meanings of certain terms, for instance, how contexts determine the value of "here" on an occasion of use.

Semantic Question
What does "Pegasus" mean?

Metasemantic Question
Why does "Pegasus" mean what it does?

Yet, since there is no referent, the orthodox answer to the semantic question is ruled out. And by the same token, the orthodox metasemantics according to which names refer in virtue of an original act of dubbing of an actual individual is equally unavailable.

In "Appendix XI" to "Bob and Carol and Ted and Alice" (1973), Kaplan made some remarks that suggest a way of approaching these issues, which he then rejected. In what follows I will show that a nearby alternative to the picture Kaplan gestured at can be developed into a plausible answer to both the semantic and the metasemantic questions concerning empty names.[2] We will see that the view I offer avoids the objections Kaplan raised.

2 Ramsifying Pegasus

"Bob and Carol and Ted and Alice" explicitly endorsed the metasemantic picture of referential names mentioned above, and likewise noted the recalcitrance of empty names in this regard:

> The 'Aristotle' we most commonly use originated in a dubbing of someone, our 'Pegasus' did not. Some rascal just made up the name 'Pegasus', and he then pretended, in what he told us, that the name really referred to something. But it did not. Maybe he even told us a story about how this so-called Pegasus was dubbed 'Pegasus'. But it was not true. (Kaplan, 1973, 505)

In other words, whatever "Pegasus" means, it contrasts with "Aristotle" in that the name "Pegasus" that we use did not originate in a dubbing of anything. Instead, Kaplan suggests that the name originated in a made-up story.

[2]The view I present here is developed in more detail in Stokke (2023). An earlier version appeared in Stokke (2021).

Along these lines, let us assume here that "Pegasus" originated in a fictional story. Of course, this is questionable on a number of counts. Most conspicuously, it is not obvious that myths like the stories that were passed on and re-told and adapted for different purposes that we are familiar with from the Greco-Roman or Norse traditions are to be regarded as fiction in the sense that, for instance, Tolstoy's novel *Anna Karenina* is a fiction. Equally obviously, myths of this kind are not (confused or ill-informed) historical narratives, *pace* Euhemerism, which it is fair to say is by now almost universally rejected. They are most likely cases of neither fictional nor assertoric, non-fictional discourse. We ignore this here, since we are mainly interested in the way that names like "Pegasus", which do not refer to concrete, actual individuals like Oprah Winfrey or Aristotle, originate.

So we should ask, on the one hand, how names are introduced by such stories, and on the other hand, how such stories bestow meanings on names. Kaplan continues his speculations on "the rascal" who made up the Pegasus myth:

> Maybe he proceeded as follows. First, he made up his story in Ramsified form: as a single, existentially quantified sentence with the made up proper names ('Pegasus', 'Bellerophon', 'Chimaera', etc.) replaced by variables bound to the prefixed existential quantifiers [...]. (loc. cit.)

In other words, the suggestion is that Ramsification might be a way of understanding story, or myth, content that furnishes a plausible analysis of "made up proper names" like "Pegasus".

As a toy example, suppose (1) is the original Pegasus story or myth:

(1) Pegasus was a winged, white stallion. He was captured by Bellerophon.

So we are imagining that (1) was the original story that introduced the names "Pegasus" and "Bellerophon", in the same way that Tolstoy's novel *Anna Karenina* was the original story that introduced "Anna Karenina" and many other names.

Given this, roughly, (2) is the Ramsified myth:

(2) $\exists x \exists y$(x was winged & x was white & x was a stallion & x was captured by y)

From (2) we can derive a definite description, which I will call "ιPeg":[3]

> ιPeg =df $\iota x \exists y$(x was winged & x was white & was a stallion & x was captured by y)

ιPeg is a definite description which picks out different individuals (or entities or objects if you like) in different worlds. For any world w, ιPeg picks out the unique x that, in Kaplan's (1973, 507) phrase, "plays Pegasus", if there is one. Call such an x a Pegasus *occupant*. At worlds where there is no x that uniquely satisfies the Ramsified (2), ιPeg is empty, it has no value. In such worlds – like the actual world – there is no (unique) Pegasus occupant: no one plays Pegasus.

3 The Abbreviation View

Given this general picture of story content, Kaplan now asks,

> Why not take 'Pegasus' to *abbreviate* 'the x $\mathcal{M}$'? (loc. cit.)

So the view under consideration is that the name "Pegasus" is an abbreviation of ιPeg, in our notation. More particularly, I take the suggestion to be that at the level of logical form (LF) the name "Pegasus" is to be spelled out as ιPeg. Call this the *abbreviation view*.

Kaplan raises some objections to "this wonderfully candid proposal" (loc. cit.). Let us begin by focusing on the following two (we return to some of the others later):

> First, 'Pegasus' loses the status which allowed it to function so smoothly in 'Bellerophon hoped that Pegasus...' contexts. The expansion of such declarations is awkward at best. Second, there is no fixed individual, Pegasus, denoted by 'Pegasus' with respect to all possible worlds in which he exists. (loc. cit.)

[3] Kaplan (1973, 507) uses the notation "the x $\mathcal{M}$" for this, where $\mathcal{M}$ is the Ramsified myth, or (2) in our reconstruction. I will continue to use the more handy ιPeg. Here, as throughout, I allow myself to be sloppy with use vs. mention when there is no danger of misunderstanding.

On my reading of this passage, the first objection worries that the abbreviation view makes "Pegasus" *ambiguous*, and the second that the abbreviation view makes "Pegasus" *non-rigid*. Below I go through each of these points in turn.

Consider a *metafictional* statement like (3).

(3) Pegasus was a horse-god.

(3) might be uttered by a classics professor teaching her students about the myth, or it might be included in an encyclopedia entry on "Pegasus", and so on. As such (3) is an example of a familiar kind of utterances we make about fictions.

I assume, like most others, that used in this way, (3) is an assertion, and is true. On the orthodox treatment, originating in Lewis (1983 [1978]), metafictional statements of this kind have the same content as the corresponding sentences prefixed with an operator of the form "In fiction f," as in (4).

(4) In the story, Pegasus is a horse-god.

To see the motivation for the complaint that the abbreviation view renders fictional names ambiguous, note that the abbreviation view might be plausible for (4), analyzed, roughly, as

(5) In the story, ιPeg is a horse-god.

It is not implausible that, given suitable assumptions, we can derive satisfactory truth conditions for (5), given that we may understand the operator "In the story" to take "ιPeg is a horse-god" and deliver truth just in case occupants of Pegasus – individuals that uniquely satisfy (2) – are horse-gods.

But regardless, the abbreviation view is not plausible for (1), that is, the utterances that were used to tell the original story. Taken literally, it analyzes (1) as (6), or in turn, as paraphrased by (7).

(6) ιPeg was a winged, white stallion. ιPeg was captured by Bellerophon.

(7) The winged, white stallion that was captured by someone was a winged, white stallion. The winged, white stallion that was captured by someone was captured by Bellerophon.

Yet (7) is not a plausible analysis of (1). Surely, the rascal was not saying (7) when he told the original story. I take it that this is what Kaplan had in mind by the complaint that "The expansion of such declarations is awkward at best". So "Pegasus" cannot be an abbreviation of ιPeg in (1). Hence, Kaplan's objection points out, the abbreviation view is forced to conclude that "Pegasus" does not mean the same in (1) and (3). This is unsatisfactory, since we want to say that the same name is being used in both.

Concerning the second objection, consider a *counterfictional* statement like (8).

(8) Pegasus could have escaped Bellerophon.

Intuitively, (8) is about *our* Pegasus and Bellerophon, not some other characters in an alternative myth. That is, (8) is not plausibly read as saying that there could have been a myth in which something called "Pegasus" escaped something called "Bellerophon". But according to the abbreviation view, "Pegasus" and "Bellerophon" are non-rigid descriptions that pick out occupants at different worlds. Indeed, no x that satisfies (2) escaped a y that satisfies the corresponding Bellerophon-description. So the challenge is that the abbreviation view threatens to make (8) untrue (or perhaps even false) by *fiat*.

4 Currie on Ramsification and Abbreviations

It is instructive to note how the abbreviation view has explicitly been adopted by later theorists. In particular, I want to briefly comment on the proposal in Currie (1990).[4] Just as on Kaplan's (1973) version, according to Currie, the content of a fictional story is, to a first approximation, a Ramsified content. Take the following story:

(9) Wayne went on holiday. He was happy.

For Currie, the content of (9) is the following Ramsified version:

(10) $\exists x$(x went on holiday & x was happy)

[4]Currie (1990) cites Kaplan (1973) on multiple occasions throughout the book.

Currie further refines this basic idea to include uniqueness:

> When we read a story that purports to describe the activities of n individuals we do not make believe merely that there are n individuals who do these things. We make believe that there is a particular n-tuple of individuals who do these things and about whom we are learning [...] (Currie, 1990, 150)

To capture this, we can modify (10) to (11).

(11) $\exists!x(x$ went on holiday & x was happy)

In other words, this is parallel to the view that Kaplan discusses.[5]

Currie provides an explicit treatment of metafictional uses of fictional names. He follows the Lewisian approach according to which, to take Currie's example, (12), when used metafictionally, has the content in (13).[6]

(12) Holmes smokes a pipe.

(13) In the Sherlock Holmes stories, Holmes smokes a pipe.

For Currie (1990, 161), "fictional names in their [metafictional] use are abbreviated descriptions." Specifically, Currie understands (13) as (14).

(14) $\mathscr{F}_h(\iota F^{\#}(x)$ smokes a pipe)

Here $\mathscr{F}_h$ is the operator "In the Sherlock Holmes stories..." and $\iota F^{\#}(x)$ is the definite description that picks out unique Holmes occupants at different worlds. In turn, $\iota F^{\#}(x)$ is determined, roughly, by a Ramsified representation of the relevant Sherlock Holmes stories.

Kaplan's objection concerning ambiguity applies to this proposal, too. What does "Sherlock Holmes" mean, on Currie's view, when it occurs in fictional discourse, that is, in the text written by Doyle? The answer cannot be $\iota F^{\#}(x)$. Rather, it must be something like a variable that can be bound by $\exists!$. The reason is that, for Currie, the content of Doyle's text is given by a Ramsified regimentation, like the one in (11). Hence, the occurrences of "Sherlock Holmes"

[5] Currie (1990, 154–155) includes further elements in contents like (11) yet these are not relevant for the points I am discussing here, and so I leave them out.

[6] Needless to say, one can also utter (13) itself with the same effect.

in Doyle's text must be seen as variables that can be bound existentially to ultimately determine this Ramsified form. In turn, the description $\iota F^{\#}(x)$ is derived from the Ramsified content, but cannot be the meaning of the name in the original text.

Even though Currie is not explicit on this point, the only way of understanding this proposal is that it takes the fictional name "Sherlock Holmes" to have one semantics on fictive uses and another on metafictional uses. When used fictively by Doyle, in writing the stories, the name is a variable that will be bound in the Ramsified form that ultimately represents the content of the story. When used metafictionally by you or me, the name is a definite description picking out occupants of the role determined by the Ramsified story content.

In other words, Currie's view implies that "Sherlock Holmes" is ambiguous, that is, it has different meanings on different uses. As before, this is hard to square with the datum that the name "Sherlock Holmes" that you and I use, for instance in saying things like (12) *cum* (13), is the name that Doyle used in writing the stories.

5 Discourse Reference

I want to suggest an alternative, albeit nearby treatment. This approach thinks of fictional, or more broadly, empty, names in terms of *discourse reference* as this notion is understood on the dynamic picture of discourse information pioneered by Karttunen (1976), Kamp (2002 [1981]), Heim (1982), (2002 [1983]a), (2002 [1983]b), and others.[7] A central insight of the dynamic paradigm is that communication and understanding a discourse require keeping track not simply of which worlds are "live," as on Stalnaker's (1999 [1970]), (1999 [1978]) ancestral picture, but also of a range of variables called *discourse referents*.

This is most clearly seen in cases of anaphora. Take (15).

(15) Sam opened the door. He turned pale.

Confronted with (15), the listener or reader must decide whether "He" in the

[7]For a useful overview, see e.g. Groenendijk and Stokhof (2000).

second clause is Sam or someone else. We represent these alternatives using indices:

(16) a. Sam_1 opened the door. He_1 turned pale.
b. Sam_1 opened the door. He_2 turned pale.

On the standard view, the indexing choices in (16a–b) represent differences at LF.[8] As such, indexing at LF is akin to disambiguation and has analogous consequences for meaning. Fiengo and May (1994) make this explicit:

> coindexing grammatically causes, or determines, covaluation. That is, it is part of the *linguistic meaning* of S that $x = y$, and that for any utterance of S, it will be determined by the grammar that the value of x will be the same as the value of y. (Fiengo and May, 1994, 3–4)

In other words, the co-valuation of "Sam" and "He" in (16a) is fixed by the grammar.

In the dynamic frameworks, indices of this kind represent discourse referents. Briefly, a discourse referent is a variable that gets associated with various information as the discourse develops. On the reading represented by (16a), (15) involves one discourse referent, which we call "1," and conveys (at least) that whoever 1 is, this individual is called "Sam," opened the door, and turned pale. By contrast, (16b) involves two discourse referents, 1 and 2, and conveys (at least) that whoever they are, 1 is called "Sam" and opened the door, and 2 turned pale.

We think of the information conveyed by the respective readings of (15) as what Heim (1982) called a *file*: a collection of indexed file cards bearing entries about discourse referents. Since there is only one discourse referent in this case, (16a) determines a one-card file:

1
is called "Sam"
opened the door
turned pale

[8] Cf. e.g. Heim (2002 [1983]a, 229), Heim and Kratzer (1998, 45–47).

By contrast, (16b) determines a file with one card for Sam and one for the other individual:

1
is called "Sam"
opened the door

2
turned pale

So a file consists of information structured around an array of discourse referents, as illustrated by file cards with entries on them.

Formally, this is represented by pairing possible worlds with assignments of values to indices, or equivalently, sequences of individuals. (16a), then, is represented by the following set (where g is an assignment function mapping indices to individuals):

(17) $\{< g, w >$: $g(1)$ is called "Sam" in w, $g(1)$ opened the door in w, $g(1)$ turned pale in $w\}$

(17) delineates all the ways you can line up individuals with indices, represented by natural numbers, and hold up the result against possible worlds in such a way that the first individual in the sequence is called "Sam," opened the door and turned pale in the relevant world. In other words, (17) is the set of possibilities that make (16a) true relative to a way of assigning individuals to indices.

Discourse reference is independent of real-world reference. Take this passage from the the opening of Dostoyevsky's *The Brothers Karamazov*:

(18) [Alexey Fyodorovitch Karamazov]$_1$ was the third son of [Fyodor Pavlovitch Karamazov]$_2$, a land owner well known in our district in his$_2$ own day, and still remembered among us owing to his$_2$ gloomy and tragic death [...]. He$_2$ was married twice, and had three sons, the eldest, Dmitri$_3$, by his$_2$ first wife, and two, Ivan$_4$ and Alexey$_1$, by his$_2$ second. (Dostoyevsky, 2003 [1880], 15)

(18) illustrates that you keep track of discourse referents independently of keeping track of *bona fide* reference. Here is a simplified rendition of the file induced by (18):

1
is called "Alexey Fyodorovitch Karamazov" is the third son of 2 is the half brother of 3 is the brother of 4

2
was called "Fyodor Pavlovitch Karamazov" was the father of 1, 3, 4 suffered a gloomy, tragic death was married twice

3
is called "Dmitri" is the first son of 2 is the half brother of 1 is the half brother of 4

4
is called "Ivan" is the second son of 2 is the brother of 1 is the half brother of 4

When you encounter Alexey hundreds of pages into the novel, you co-index the relevant terms with earlier ones, ultimately reaching back to the first occurrence in (18), meaning that you update the Alexey card in the file. This is how you keep track of characters throughout the long story.

As this illustrates, you can keep track of discourse referents independently of keeping track of *bona fide* reference. You co-index occurrences of "Alexey", and other terms like pronouns, even though you are aware that there is no actual, concrete individual as referent for the name, just as you would do in cases where you know the terms actually refer, and in cases where you are not sure whether they do. The process of understanding which terms in a discourse are co-indexed, and hence co-valued, is prior to the process of determining their real-world referents, if any.

Next, we will see how this framework provides an elegant way of analyzing empty names.

6 Empty Names as Variables

Consider our Pegasus myth in (1). It involves two discourse referents, which we call 1 and 2, represented by indexing at logical form:

(19) Pegasus$_1$ was a winged, white stallion. He$_1$ was captured by Bellerophon$_2$.

(19) determines a two-card file:

1
is called "Pegasus"
is white
is winged
is a stallion
was captured by 2

2
is called "Bellerophon"
captured 1

Formally, the information conveyed by (19) is a set of pairs of assignment functions and worlds, call it p:[9]

> $p = \{< g, w >$: $g(1)$ is called "Pegasus" in w, $g(1)$ is winged in w, $g(1)$ is white in w, $g(1)$ is a stallion in w, $g(2)$ is called "Bellerophon" in w, $g(1)$ was captured by $g(2)$ in $w\}$

Consider the information on the Pegasus card. It's a set of properties. That is, the set of properties associated with 1 by p: the entries on the 1 card in p. Let's call it $\circ 1_p \circ$. Note that by p here we mean the final file, and correspondingly 1_p is the card as it is at the end of the story.

Analogously to Kaplan's suggestion, we think of $\circ 1_p \circ$ as the Pegasus role that can be occupied, or played, by different individuals at different worlds. For each possible world, we can ask whether anyone has all the properties in $\circ 1_p \circ$. Related to the earlier proposals, we use the notation $\iota[\circ 1_p \circ]_w$ for the unique x such that x has all the Pegasus properties in w: the unique Pegasus occupant in w, if there is one.

Given this, we propose that "Pegasus" is a variable that *presupposes* that its value is the unique Pegasus occupant (where $\neq$ # means undefined: the function has no value):

[9] We do not need to specify for p that $g(2)$ captured $g(1)$ since this is equivalent to $g(1)$ was captured by $g(2)$: there are no worlds in which the latter occurred but not the former. Yet we record this information on the card for 2, since capturing Pegasus is part of the properties of Bellerophon.

(20) $[\![\text{Pegasus}_i]\!]^{c,g,w} \neq \#$ iff $\forall < g', w' > \in c$: $g'(i) = \iota[\circ 1_p \circ]_{w'}$.
If $[\![\text{Pegasus}_i]\!]^{c,g,w} \neq \#$, $[\![\text{Pegasus}_i]\!]^{c,g,w} = g(i)$.

Correspondingly, we analyze "Bellerophon" in the same way:

(21) $[\![\text{Bellerophon}_i]\!]^{c,g,w} \neq \#$ iff $\forall < g', w' > \in c$: $g'(i) = \iota[\circ 2_p \circ]_{w'}$.
If $[\![\text{Bellerophon}_i]\!]^{c,g,w} \neq \#$, $[\![\text{Bellerophon}_i]\!]^{c,g,w} = g(i)$.

I now go on to explaining this semantics in more detail. I begin by commenting on the context parameter, c.

In ordinary, non-fictional discourse c represents the Stalnakerian common ground of the conversation: what is taken for granted for the purpose of the exchange. As an extension of Stalnaker's framework, Heim (1982, 286) suggested that the common ground of a conversation be identified with a file, which we call the *context file*. This is how we understand contexts in the system I am sketching here. So c in (20) and (21) above is a file, that is, a set of pairs of assignments and worlds.

Context files are just a more fine-grained way of representing common ground and the way it keeps track of backgrounded information than the original Stalnakerian framework in terms of possible worlds. To illustrate what this involves, consider the following conversation:

(22) Denise. Rob_1 used to play the piano.
Miranda. Yes. His_1 teacher was [a woman]$_2$.
Denise. I know. His_1 father liked her_2.

Just as above, (22) determines a file structuring information around discourse referents, corresponding to indices. This file has three file cards and various information on each of them:

1
is called "Rob"
used to play the piano

2
was a woman
was the piano teacher of 1

3
was the father of 1
liked 2

This represents the common ground that results from the conversation in (22). (Here we ignore presuppositions and much more.)

According to (20) "Pegasus$_i$" is defined relative to a context file c, an assignment g, and a world w if and only if all the pairs in c make $g(i)$ the unique Pegasus occupant in every world w compatible with what is taken for granted. That is, if and only if it is common ground that $g(i)$ is the unique Pegasus occupant. If so, "Pegasus$_i$" denotes that unique occupant.

Further, we define truth relative to a world w and an assignment g as follows:[10]

(23) If $[\![\text{S}]\!]^{\{<g,w>\},g,w} \neq \#$, then
S is true w.r.t. $< g, w >$ iff $[\![\text{S}]\!]^{\{<g,w>\},g,w} = 1$;
S is false w.r.t. $< g, w >$ iff $[\![\text{S}]\!]^{\{<g,w>\},g,w} = 0$.

This means that when we are interested in truth and falsity, we do not consider a context file representing the common ground, but a context file that simply represents the facts at the world of evaluation w, and the relevant assignment g.

To see how this works, consider the sentence in (3), now indexed.

(24) Pegasus$_1$ was a horse-god.

Let us plug (24) into (23), using w* for the actual world:

(25) If $[\![\text{Pegasus}_1 \text{ was a horse-god}]\!]^{\{<g,w^*>\},g,w^*} \neq \#$, then
Pegasus$_1$ was a horse-god is true w.r.t. $< g, w^* >$ iff
$[\![\text{Pegasus}_1 \text{ was a horse-god}]\!]^{\{<g,w^*>\},g,w^*} = 1$;
Pegasus$_1$ was a horse-god is false w.r.t. $< g, w^* >$ iff
$[\![\text{Pegasus}_1 \text{ was a horse-god}]\!]^{\{<g,w^*>\},g,w^*} = 0$.

According to the semantics we have given in (20), "Pegasus$_1$" is defined in this case if and only if all the pairs in $\{< g, w^* >\}$ make $g(1)$ the unique Pegasus occupant in w*. That is, since there is only one pair, if and only if $g(1)$ is the unique Pegasus occupant in the actual world. There is no such occupant: no

[10] The basic idea of defining truth in this way was proposed by Heim (1982, 330). Stokke (2012) discussed some problems for this view, and proposed a version of the definition in (23), drawing on a related suggestion in Schlenker (2008).

one in the actual world has the Pegasus properties. Hence, the name is undefined relative to the actual world, no matter which g you care to choose. In turn, so is "Pegasus$_1$ was a horse-god". Consequently, (25) does not assign a truth value to (24): the sentence is neither true nor false due to the fact that the name has no value, or denotation.

This view resembles other recent dynamic approaches to fictional discourse, such as Maier (2017), Eckardt (2021), Kamp (2021), Maier and Semeijn (2021), Semeijn (2021). All of these views, in turn, share many traits with frameworks that appeal to what is sometimes called "notions," (Perry, 2001) "dossiers," (Evans, 1973) or "mental files." (Perry, 1980, Crimmins, 1992, Recanati, 1993, 2012) All of these theories are related, very broadly, by their recognition of the centrality of information that is incremented over time from various sources and structured around "pegs" for individuals – the discourse referents of the tradition we are assuming here. Heimian files represent information that discourse participants share with each other, and in this sense, have attitudes toward.[11]

We have been concerned with theorizing about how information is built up by utterances, in particular, by fictional texts or stories. We have used the resulting framework as a springboard for giving a theory of the semantics and pragmatics of fictional names, and their different uses. As such, the files we have invoked model the kind of shared information that serve as backdrop to conversations and with which utterances interact. By contrast, theories of notions or mental files chiefly aim to model information in the minds of the relevant agents. The sam applies to some applications of Discourse Representation Theory, such as Maier (2017) and Kamp (2021).

I now go on to show how this view captures the way "Pegasus" is used in the original story, in metafictional utterances, and in counterfictional utterances.

[11] In frameworks that appeal to "mental files," this term typically picks out mental categories corresponding to Perry's notions, and as such to the file *cards* invoked here, while a Heimian file will correspond to a larger system of mental files.

7 Talking about Pegasus

Here is the indexed Pegasus myth again:

(19) Pegasus$_1$ was a winged, white stallion. He$_1$ was captured by Bellerophon$_2$.

(19) is a *fictive* utterance, used with non-assertoric force to tell the story. This means that the utterance is not aimed at c, the common ground, but at the file for the story, p.

More precisely, for the first clause of the story, c is set to p_0: the initial file for the story. Formally, the first clause of (1) determines the following update:

p_0 + *Pegasus$_1$ was a winged, white stallion* =
$p_1 = \{< g, w > \in p_0 : [\![\text{Pegasus}_1 \text{ was a winged, white stallion}]\!]^{p_0,g,w} = 1\}$

This represents the fact that the fictive utterance of "Pegasus$_1$ was a winged, white stallion" is aimed at adding information to the file for the story, that is, the initial p_0. In particular, is aimed at discarding from p_0 all the pairs that do not satisfy "Pegasus$_1$ was a winged, white stallion", so that the result, p_1, will be a file that satisfies the first clause of the story.

Given (20), this update is defined if and only if for all $< g, w > \in p_0$, $g(1) = \iota[\circ 1_p \circ]_w$. Roughly, that is, if it is presupposed by p_0 that $g(1)$ is the unique Pegasus occupant. At the same time, $\circ 1_p \circ$ at this stage is empty, no entries have been added to the Pegasus card. Indeed, there is no Pegasus card in the file yet! I assume that accommodation results in (at least) that a Pegasus card is opened and "is called "Pegasus"" is written on it. Once we have a Pegasus card, we can update with "was a winged, white stallion." So accommodation plus updating results in (at least):

$p_1 = \{< g, w >$: $g(1)$ is called "Pegasus" in w, $g(1)$ was a stallion in w, $g(1)$ was winged in w, $g(1)$ was white in $w\}$

(This ignores uniqueness for simplicity.) p_1 can now be updated with the second clause of (19). Again, accommodation will result in a Bellorophon card, labeled 2, being opened. So ultimately, we are left with p (or p_2 if you like), the final file for the Pegasus story.

Now consider the metafictional utterance of (24). Let $\mathscr{F}_p$ be the metafictional operator "In the Pegasus story, ..." Then a minimal analysis of (24) is:

(26) $[\![\mathscr{F}_p(\text{Pegasus}_1 \text{ was a horse-god})]\!]^{c,g,w} = 1$ iff
$\forall < g', w' > \in p : [\![\text{Pegasus}_1 \text{ was a horse-god}]\!]^{p,g',w'} = 1$ iff
$\forall < g', w' > \in p : g'(1)$ was a horse-god in w'. (And 0 otherwise.)

According to (26), the metafictional reading of (24) is true if and only if all pairs in the Pegasus file, p, make 1 a horse-god, that is, if anyone who has all the Pegasus properties determined by p is (or was) a horse-god.

If you think this is not the case, and if you think (24) should be true, you can modify semantics for $\mathscr{F}_p$ to fit your preferred theory of truth in fiction. Perhaps you want to restrict the worlds under considerations to close worlds. Perhaps you want to restrict them to those who conform with certain genre expectations. Or something else. Yet the important take away here is that $\mathscr{F}_p$ operates on the same meaning that "Pegasus" has in the original story.

Next, consider the counterfictional (8), now indexed.

(8) Pegasus_1 could have escaped Bellerophon_2.

Here is how I propose to deal with (8):

(27) $[\![\text{Pegasus}_1 \text{ could have escaped Bellerophon}_2]\!]^{c,g,w} = 1$ iff
$\forall < g', w' >$ such that $g'(1) = \iota[\circ 1_p \circ]_{w'}$ and $g'(2) = \iota[\circ 2_p \circ]_{w'}$:
$\exists w''$: $Rw'w''$ and $[\![\text{Pegasus}_1 \text{ escapes Bellerophon}_2]\!]^{\{<g',w'>\},g',w''} = 1$ iff
$g'(1)$ escapes $g'(2)$ in w''. (And 0 otherwise.)

This means that (8) is true if and only if for any world w in which Pegasus and Bellerophon are uniquely occupied, there is an accessible world w' such that, in w', the w-Pegasus-occupant escapes the w-Bellerophon-occupant. In other words, you look at all the unique Pegasus and Bellerophon occupants across worlds and you check how, in each case, *those individuals* behave in accessible worlds.

So while "Pegasus" denotes different occupants at different worlds, (8) makes a claim about how any occupant behaves modally. This is a way of mimicking rigidity. That is, we consider how occupants of the roles *determined by our story*, p, behave modally. As such, (8) is still a claim about *our* characters, and not about some alternative characters from an alternative story. And moreover, "Pegasus" has the same meaning in (8) as it does in (24) and (1). The same applies, *mutatis mutandis*, to "Bellerophon".

In other words, this view avoids Kaplan's (1973) objections to the abbreviation view. It does not make names like "Pegasus" and "Bellerophon" ambiguous, and it preserves the results of rigidity, even though such names are empty at the actual world.[12]

8 Metasemantics

What we have given above is an account of the semantics of "Pegasus" (and "Bellerophon"). According to this account, the meaning of "Pegasus" involves the Pegasus role, $\circ 1_p \circ$, that was determined by the original myth, p. However, the metasemantic question remains. Why does "Pegasus" have this meaning? Why does $\circ 1_p \circ$, and not some other properties, figure in the meaning of "Pegasus" as used by you or me, or by the classics professor when she utters (3)?

In particular, you might wonder why the properties presupposed by "Pegasus" when used by the classics professor should not be whatever properties *she* associates with "Pegasus", rather than $\circ 1_p \circ$, the properties that were in fact determined by the myth. It is clear that we want the latter to be the case, namely because, among other things, we want things like (28) to be *false*, even when uttered metafictionally by someone with confused ideas about Pegasus.

(28) Pegasus was a lion with a mane of silver.

It is easy to see that (28) is indeed false on the account I have given.[13] (Try plugging (28) into (26).) Yet this is so only because of the assumption that "Pe-

[12] One might wonder wether the abbrevation view can account for counterfictional claims by analyzing e.g. (8), ignoring Bellerophon, as $\exists x(x = \iota\text{Peg} \,\&\, \Diamond(x \text{ escaped}))$. Yet this existentially quantified statement is false at the actual world, as is $\Box\exists x(x = \iota\text{Peg} \,\&\, \Diamond(x \text{ escaped}))$. And while true $\Diamond\exists x(x = \iota\text{Peg} \,\&\, \Diamond(x \text{ escaped}))$ clearly does not capture (8), which makes a claim about *any* Pegasus occupant. Another proposal might be $\Box\exists x(x = \iota\text{Peg} \rightarrow \Diamond(x \text{ escaped}))$, yet one might be wary of the suggestion that any world includes something that is either not Pegasus or which possibly escaped. Again this does not seem to capture what we are after. And of course $\Box[(\exists x(x = \iota\text{Peg})) \rightarrow \Diamond(x \text{ escaped})]$ is not well-formed. Intuitively, we want something like: Any world w is such that if there is a Pegasus in w, it could have escaped. This is what our analysis captures.

[13] This assumes that nothing, in any world, can both by a winged, white stallion and a lion with a mane of silver. This I take to be plausible. Yet the point here is just that there are false metafictional statements, which is undeniable.

gasus" everywhere presupposes the role $\circ 1_p \circ$, regardless of what the speakers might associate with Pegasus.

The metasemantic question, then, is why do empty names presuppose the roles that they do. The answer I favor is parallel to the Kaplanian metasemantics for ordinary, referential names. Namely, the reason is that our uses are links in a chain of communication in which speakers intend to use *the same name in the same way*, ultimately deferring to the original storyteller's use of "Pegasus" in (1).

Following Sainsbury (2005), (2015), and many others, I hold that a name can be successfully introduced even if no individual is dubbed. This can happen by mistake, by fiction making, or in other ways. By a name introduction being successful we mean, at least, that the act initiates a practice by which speakers can succeed in using the same name in the same way by virtue of deferential intentions.

As such, this account also applies to what we might call *failed* names, like "Vulcan", where the originator mistakenly thought they were dubbing something. Sainsbury (2015) writes,

> Take a case of error, Leverrier's introduction of ''Vulcan''. The originating episode perhaps started with a false quantified thought on the lines ''There must be *another body* there affecting the orbit of Mercury''. This can sustain a grammatically singular thought, involving a definite having no bearer: ''Let's call <u>it</u> Vulcan''. (Sainsbury, 2015, 200)

This is a paradigm case of discourse reference, as represented by (29).

(29) There must be [another body]$_1$ there affecting the orbit of Mercury$_2$. Let's call it$_1$ "Vulcan".

Consequently, there is a Vulcan card in the file for this discourse recording information like "affects the orbit of Mercury", "is called "Vulcan"", and so on. Hence, we use the name "Vulcan" in the same way as Leverrier. In turn, the difference between failed names and mythical, or fictional, names on my view derives from the kind of discourse in which they were introduced.

Similarly, for fictional names, *originating uses* are fictive utterances introducing discourse referents. Sometimes a discourse referent is introduced first,

with information about the name being added later to the relevant card, analogously to (29). This happens in (30).

(30) Once upon a time there was [a rich man]$_1$ who$_1$ lived happily with [his$_1$ wife]$_2$ for a long time, and they$_{1+2}$ had [one little girl]$_3$ together. [...] Since she$_3$ always rummaged in dust and looked dirty, they$_{1+2}$ named her$_3$ "Cinderella." ("Cinderella" in Grimm & Grimm, 2014)

Here we have given the full indexing of (30) to remind ourselves how coindexing relations underpin the vast network of anaphoric relations permeating discourses, fictional or non-fictional.[14] Sometimes the name occurs first, as in (31), the first sentence of *Alice's Adventures in Wonderland*.

(31) Alice$_1$ was beginning to get very tired of sitting by [her$_1$ sister]$_2$ on the bank, and of having nothing to do [...]. (Carroll, 1998 [1865])

Sometimes introduction proceeds by other means.

These differences in the workings of the particular fiction notwithstanding, origination of fictional names consists in introduction of discourse referents by fictional works. As demonstrated above, our theory explains such originating uses in terms of their semantics involving a role that gets fleshed out through accommodation and updating as the story progresses.

Further, we have seen that fictional names have the same meaning on metafictional and counterfictional uses as when occurring fictively. When used metafictionally by you or me, "Alice" has the same meaning as it has in (31). These are *non-originating* uses for which the speaker deferentially intends to use the name in the way of the relevant community, or as the case may be, by deferring immediately to the author's use, as when one has picked up the name directly from reading the relevant work. Such non-fictive uses are not directed at files for fictional stories, and therefore do not expand on the relevant role. Rather, they presuppose the role that was introduced by the author's originating act, or acts.

[14] For particulars about plural pronouns, see Heim (2008).

9 Dubbing Pegasus?

I want to end by discussing some further considerations Kaplan gives in "Bob and Ted and Carol and Alice" concerning dubbings and empty names. At least *prima facie*, Kaplan appears to directly disavow the kind of view I have laid out. In particular, Kaplan says that

> Pegasus does not exist, and 'Pegasus' does not denote. Not here; not anywhere. (1973, 505)

His motivation for this claim seems to be that he thinks that the rascal could not have succeeded in dubbing anything with the made-up name.

Kaplan imagines that the rascal attempted to dub one of the Pegasus occupants with "Pegasus". That is, having made up the Ramsified myth,

> he realized that the result was possible, and that therefore it held in some possible world, and that therefore there was at least one possible individual who played the winged horse in at least one possible world [...] he tried to dub one of those possible individuals 'Pegasus'. But he would not succeed. How would he pick out just one of the millions of such possible individuals? (1973, 505–506)

In other words, while Kaplan agrees that there are worlds in which something has all the Pegasus properties, he does not think that the rascal could have succeeded in dubbing any of these things with the name "Pegasus."

I agree. Yet I do not see why we cannot take "Pegasus" to denote, or refer to, such occupants relative to such worlds. Kaplan makes explicit that he does not think the problem is that one can only dub something one is acquainted with:

> The requirement for a successful dubbing is not that the dubbor know who the dubbee is. [...] the dubbor can point with his eyes closed or use a description like 'the first child to be born in the twenty-second century'. The requirement is simply that the dubbee be, somehow, uniquely specified. This our story teller has not succeeded in doing. (Kaplan, 1973, 506)

Suppose (tragically) that no children are born in the twenty-second century. In that case, we want to say that the description "the first child to be born in

the twenty-second century" does not pick out anyone in the actual world. But surely we can evaluate it at other worlds. Suppose that in some world w', Eve is the first child born in the twenty-second century. Clearly, "the first child to be born in the twenty-second century" picks out Eve relative to w'. At the same time, the introducer of the description in the actual world clearly did not dub Eve, or anyone else, when she introduced the description.

I say the same for "Pegasus". Nothing, actual or possible, was dubbed with the name. Even so, the name picks out different individuals at different worlds – and at many worlds, picks out nothing. At the same time, as explained above, we can mimick rigidity for cases like (8).

(8) Pegasus could have escaped Bellerophon.

To repeat, we are not analyzing (8) as the claim that there could have been a myth in which something called "Pegasus" escaped something called "Bellerophon", or the like. We are analyzing (8) as the claim that anything that, in some world w, occupies *our* Pegasus role could have escaped whatever occupies *our* Bellerophon role in w.

And moreover, we have seen that we can give a metasemantic account of why "Pegasus", as used by you or me, involves the role determined by the original myth, and not some other role. Namely because our use of the name is embedded in a practice that reaches back to the way the name was used in the myth – indeed, on the view I have sketched the name has the same meaning when you and I use it as it had when originally used by the myth-making rascal.

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