Variabilism in light of Naming and Necessity

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1 *Introduction*

Few contributions, if any, have had a more significant impact on philosophy of language than Kripke's (1980) 'Naming and Necessity' lectures. As a result of Kripke's work, *Millianism*, viz. the view that names are singular terms a kin to individual constants in first-order logic, became orthodoxy. In this paper, we want to explore the idea that there is an alternative to Millianism that is not only compatible with Kripke's seminal arguments in 'Naming and Necessity', but in fact strongly supported by those arguments. This alternative view is now typically referred to as *Variabilism*. Variabilism maintains, like Millianism, that proper names are singular terms, but rather than individual constants, the Variabilist argues that names are in fact individual variables.

Throughout the years, there has been a number of Variabilist views proposed. These views share the assumption that names should be treated as variables, but they differ significantly in how these variables behave, what kind of restrictions are imposed, and what syntactic environments they can occur in. These details are essential, especially for assessing how closely a given view resembles standard Millianism.

1.1 *The Canon*

Before exploring the history of Variabilism, let's begin by distinguishing between four canonical views on the semantics of proper names. As mentioned above, the orthodox view is Millianism. This is the view that the meaning of a proper name is simply its referent. Nothing less, nothing more. Using '$[\![\cdot]\!]$' to denote a function from expressions to intensions, we can formalize the Millian view as follows:[1]

- *Millianism*

  $[\![\text{Alfred}]\!] = \lambda w_s.\ \text{Alfred}$

The intension is a function whose domain is a set of possible worlds and whose range is a set of individuals, namely the set containing just Alfred. In other words, the name always picks out Alfred. In Kripkean terminology, the name is a *rigid designator*.

Historically, the main competitor to Millianism, and the dominant view before Kripke's groundbreaking lectures, was *Descriptivism*. This is the view that the meaning of a name is (or forms part of) a uniquely denotation-determining description. This is deliberately vague

[1] We use lambda notation in our metalanguage as an informal way of representing functions. This follows standard practice; see, for example, Heim and Kratzer (1998, §2.1.3). We also assume the standard semantic types: e for individuals, t for truth-values, and s for possible worlds. If x and y are types, then $\langle x, y \rangle$ is also a type.

since 'Descriptivism' should really be understood as a family-name for a range of different views that share the aforementioned assumption. Here we distinguish between three distinct Descriptivist views.

First, there is the classical Descriptivist view (also called *famous deeds* Descriptivism) originating with Frege, according to which a name is *semantically equivalent* to the syntactic complex consisting of a definite determiner and a predicate, viz. a definite description, but where definite descriptions are assumed to be referential terms. In the context of a typed semantics, definite determiners are thus functions from predicate semantic values to individual concepts, i.e. functions from worlds to individuals.

· *Classical Descriptivism*

$[\![\text{Alfred}]\!] = \lambda w_s.\ [\iota x_e.\text{inventor-of-the-theory-of-relativity}(x,w)]$[2]

According to this view, the meaning of the name 'Alfred' is thus a description which uniquely picks out the referent. In the case of Albert Einstein, the description associated with 'Alfred' might therefore be 'the inventor of the theory of relativity'.

In contrast to *classical* Descriptivism above, there is the Russellian view of names which we will refer to as *Quantificationism*. Russell (1905) famously observed a variety of problems for Frege's referentialist view and proposed an alternative Descriptivist view according to which definite descriptions are complex quantificational constructions. With a bit of assistance from generalized quantifier theory, we can capture Russell's proposed analysis of names in the following way.[3]

· *Quantificationism*

$[\![\text{Alfred}]\!] = \lambda w_s\ .\ [\lambda f_{\langle et\rangle}\ .\ \exists x\big(\text{inventor-of-the-theory-of-relativity}(x,w) \wedge \forall y(\text{inventor-of-the-theory-of-relativity}(y,w) \rightarrow x = y) \wedge f(x,w)\big)]$

On the Russellian view, a name is essentially a generalized quantifier which in combination with a suitable predicate yields an existentially quantified sentence. So, a sentence such as 'Alfred is sleeping' is analyzed as expressing the literal content 'there is an individual x such that x is the unique inventor of the theory of relativity and x is sleeping'.

As we will see shortly, there is a wide variety of problems with the *famous-deeds* aspect of both Frege's and Russell's analysis, i.e. the assumption that the relevant description associated with the name is some exceptional property. As a result, various metalinguistic variants of these views have been proposed, i.e. views according to which the relevant property associated with a name is a naming predicate. Throughout this paper, we will be mostly concerned with metalinguistic variants of Descriptivism as these views face fewer problems than the famous deeds versions.

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[2] Here, ιx_e.bearer-of-'Alfred'(x,w) functions as a name in the metalanguage for the unique individual who invented relativitity theory in w. It is equivalent to the compositional output of the syntactic complex [DP [D The] [NP inventor-of-the-theory-of-relativity]].

[3] Technically, this is a modernised version of Russell's view. Russell only provides an analysis of names in the context of a full sentence.

Lastly we have *Predicativism* which is also a metalinguistic view of names (see e.g. Elbourne (2005), Matushansky (2005), Matushansky (2006), Fara (2015)). However, according to Predicativism, names are not descriptions, but rather appellative *predicates*.

· *Predicativism*

$[\![\text{Alfred}]\!] = \lambda w_s\,.\,[\lambda x_e\,.\,\text{bearer-of-'Alfred'}(x,w)]$

The main selling point of Predicativism is that if names are simple predicates, this explains straightforwardly why and how names can occur as the argument of various determiners as in for example 'every Alfred', 'most Alfreds', 'three Alfreds', etc. However, when names occur as bare singulars in argument position of a predicate, proponents of Predicativism maintain that the name forms a complex with a phonologically null definite determiner. So, in sentences where a name occurs as e.g. the subject of the sentence, Predicativists maintain that there is an unvoiced definite determiner heading the predicate denoted by the name thereby forming a definite description as the grammatical subject.

If attention is restricted to simple subject-verb-(object) sentences where the name occurs either as the subject or the object and metalinguistic variants of Frege and Russell's view, these views are more or less identical with respect to the predictions made. However, it is important to recognize that each theory comes with substantially different syntactic assumptions which have significant consequences relative to other uses of names.

1.2 A Brief History of Variabilism

While Variabilism is a recent development, its roots extend through a series of contributions in philosophical semantics. Despite differences in motivation, formalism, and theoretical commitments, these contributions converge on a common core.

One of the earliest explicit articulations of a type of Variabilism appears in Yagisawa (1984), who argued that occurrences of proper names are occurrences of variables, and, in fact, they are *bound* variables, each governed by an existential quantifier introduced at the name's baptism. On this view names are bound by a phonologically null existential quantifier—one that, in the case of 'Bertrand Russell', was generated in the nineteenth century! This formulation is reminiscent of certain views of anaphora from dynamic semantics, e.g., Kamp (1981) and Heim (1982), though Yagisawa does not provide a detailed formal system.[4]

Dever (1998) advanced a different version of Variabilism in which proper names are treated as *free* variables in logical form. On this account, a sentence like 'Aristotle was fond of dogs' is an open formula containing the free variable 'Aristotle'. Dever holds that variables do

[4]Yagisawa clarifies that his view only requires an event serving a quantifier's semantic function: "By this I do not mean, of course, that someone in the nineteenth century actually wrote down an existential quantifier … What I mean is that some event took place in the nineteenth century which should be construed as an occurrence of an existential quantifier which binds the … occurrence of 'Bertrand Russell' ... To introduce a new proper name into a language is to initiate existential sentences, which can be continued by speakers of the language; each subsequent use of the name is a completion of an existential sentence so initiated." (Yagisawa (1984): 196)

not semantically refer, so no proper name semantically refers, and thus a sentence containing a name fails to express a proposition – and does not have a truth-value. Dever acknowledges that these consequences are counter-intuitive but suggests that speaker meaning and pragmatic enrichment can address the apparent gaps.

A further view that aligns with Variabilism in form but diverges in spirit is Salmon's (1990), who characterizes names as "maximally restricted variables" (p.13, fn.11). He considers the possibility of "invariable variables" (p.13)—i.e., variables whose range is a unit set. Salmon suggests that names could be understood as these maximally restricted variables, forming one end of a spectrum that also includes unrestricted variables. Maximally restricted variables functionally resemble Millian terms, since their values are fixed to a single referent. And this is Salmon's point – since, as Kaplan said, variables are "the paradigm of direct reference" if names just are variables of a special sort, then they too are directly referential or Millian (cf. Salmon (1990), p.13, fn 12). Crucially, Salmon remains a Millian: contra Yagisawa, he denies that names can be bound; and contra Dever, he maintains that names, even as maximally restricted free variables, have semantic reference (although he rejects their context-sensitivity).

Cumming (2008) contends that Kripke's arguments undermine Descriptivism, while Millianism fails to account for bound uses and belief contexts, necessitating an alternative approach. For a case of bound name consider:

(1) There is a gentleman in Hertfordshire by the name of 'Ernest'$_1$. Ernest$_1$ is engaged to two women. (Cumming, 2008, 526)

Cumming takes such examples to provide strong evidence that names are variables. According to his view, names can be free (contra Yagisawa), are assigned values via a contextually determined variable assignment (contra Dever), and can be non-trivially bound and shifted in attitude contexts (contra Salmon).

Although Cumming insists that names are like pronouns in that they are assigned their referents by a contextual variable assignment, he also insists that unlike context-sensitive terms, names receive the *same* value in all contexts where they occur free. Other key antecedents to Variabilism explicity link proper names to demonstratives, indexicals, or pronouns. For example, although Burge (1973) is officially a Predicativist about names, his view that occurrences of names in argument position function as complex demonstratives (i.e. "that Alfred") can be seen as an antecedent. An even clearer antecedent is Sommers (1982), who characterized names as "special duty pronouns" (p.333) and as "anaphoric pronominal expressions" (p.230). These early views, treating names as pronominal expressions, anticipated key features of contemporary Variabilism.[5]

The most recent version of Variabilism is found in Schoubye (2017, 2020).

> "On my preferred version of Variabilism, the analysis of names is analogous to the standard analysis of pronouns. Specifically, names are assumed to be assignment dependent singular terms with a presuppositional constraint where

[5] Closely related to the Variabilist view are so-called indexicalist views of proper names. However, since these views are strictly not Variabilist, we do not discuss these views here, see e.g. Recanati (1993); Pelczar and Rainsbury (1998); Rami (2014).

this constraint is semantically equivalent to a pronominal ϕ-feature. So, the semantics of the name ['Alfred'] is the following:" (Schoubye, 2020, 66)

$$(2) \quad [\![\text{Alfred}_i]\!]^{c,g,w} = \begin{cases} g(i) & \text{if } g(i) \text{ is the bearer of 'Alfred' in } w_c \\ \textit{undefined} & \text{otherwise} \end{cases}$$

While Schoubye's view is clearly in the tradition of aforementioned Variabilist views, it is also importantly different from these previous views. For example, according to Schoubye, proper names (*a*) semantically refer in context (contra Dever), (*b*) can occur free (contra Yagisawa), (*c*) are non-trivially bindable (contra Salmon), (*d*) are context-sensitive (contra Cumming), and (*e*) are restricted by a presuppositional metalinguistic constraint.

Schoubye's view builds on aspects of the anaphoric and variable-based insights of earlier theorists while introducing a further feature: a presuppositional metalinguistic constraint on names. This constraint is the same as the ϕ-feature restrictions found in pronouns such as 'he' or 'she'. Just as the pronoun 'she$_i$' is a variable restricted to the set of women (i.e., $g(i) \in \{x \mid x \text{ is a woman}\}$), the name 'Alfred' is a variable restricted to the set of bearers of 'Alfred' (i.e., $g(i) \in \{x \mid x \text{ is a bearer of 'Alfred'}\}$).

What emerges is a compelling framework that captures both the flexibility and the rigidity of proper names, positioning Variabilism as a serious alternative to traditional Millian and Descriptivist accounts.[6]

One thing that is worth mentioning here is that in Kripke's pioneering work on quantified modal logic (1959; 1963), the object language did not include names or individual constants. There were variables, of course, and Kripke's semantics relied on these variables being interpreted rigidly –remaining fixed in value across possible worlds. The absence of names in Kripke's early system underscores an important point: once names or constants are introduced into Kripke's quantified modal logic, it would be reasonable to assume that they behave like variables in crucial ways.[7] Kripke's treatment of variables foreshadows his later philosophical discussion of proper names, so there is inevitably a close connection between names and variables in the context of Kripke's work.

2 *Kripke's Anti-DESCRIPTIVIST Arguments and Variabilism*

In many people's view (including ours), Kripke delivered at least three devastating arguments against the traditional Descriptivist analyses of proper names in 'Naming and Necessity'. These arguments are now commonly referred to as the *modal*, *epistemic*, and *semantic* arguments. In this section, we will quickly work through these arguments in order to demonstrate that they are not a threat to Variabilism even when the Variabilist view in question includes a descriptive metalinguistic constraint.

[6] This historical overview is not meant to be exhaustive. We take no stance on this here but Pickel and Rabern (2023) argue that the structure of Frege's theory of quantification puts pressure on the idea that names are constants, suggesting instead that names are better understood as variables within his compositional semantics.

[7] Compare Carnap (1947), where variables are not rigid.

The Modal Argument

Kripke's modal argument is essentially the observation that proper names, in contrast to e.g. definite descriptions, do not shift reference when embedded under various non-epistemic modal operators. So, for example, the sentence in (3) is intuitively true, whereas the sentence in (4) is intuitively false.

(3) Aristotle might not have been the teacher of Alexander the Great.
(4) Aristotle might not have been Aristotle.

The standard explanation of the intuitive truth of (3) is that the denotation of the definite description 'the teacher of Alexander the Great' varies across different possible worlds, hence assuming that the modal verb 'might' functions as an existential quantifier over metaphysical possibilities, there is a possible world relative to which the denotation of 'the teacher of Alexander the Great' is not Aristotle.

By contrast, (4) is intuitively false, and the most natural explanation here is simply that the denotation of 'Aristotle' does not vary across possible worlds and for this reason, there is no possible world relative to which the reference of 'Aristotle' is not Aristotle.

The Millian view, of course, correctly predicts that (4) is false simply because 'Aristotle' is a rigid designator, viz. a constant whose semantic value cannot be shifted by any modals. However, the same is true for Variabilism. Since the meaning of a name on the Variabilist view is an individual determined by an operative variable assignment, then given that a non-epistemic modal cannot shift this assignment function, the individual determined by the assignment will be the same across all possible worlds. In short, Variabilism predicts that names are rigid.

The Epistemic Argument

Kripke's epistemic argument is the observation that if Descriptivism is true, then whatever properties ϕ are deemed denotation/reference fixing for some name N, $\phi(N)$ should be a priori knowable. For example, if we assume that the meaning of 'Alfred' is 'The inventor of the theory of relativity', then (5) should be a priori knowable.

(5) Alfred is the inventor of the theory of relativity.

However, (5) is not a priori knowable and should not be predicted to be a priori knowable. Neither the Millian view nor the Variabilist view make this prediction simply because the meaning of a name, according to these views, is not descriptive.

However, one might think that there is one specific variant of this kind of case which *is* in fact problematic for the Variabilist. Consider the sentence below.

(6) Alfred is called Alfred.

It seems that for sentences such as (6), the Variabilist predicts that these cannot be uttered falsely. Why not? Well, in order for the name 'Alfred' to refer, it is required that its referent bears the name 'Alfred'. As a result, whenever the name refers, the referent is an individual called Alfred. In other words, if (6) is true, then it is a priori knowable. Notice, the

Millian does not make this prediction, because according to the Millian, there are no naming restrictions on the reference of any name.

But is this in fact a problem for Variabilism or rather a virtue? While it seems clear that predicting that (5) is a priori knowable is a mistake, it is far less clear that it is problematic to predict that (6), *if true*, is a priori knowable.

We can compare this to a similar type of case raised by the standard Kaplanian (1989) semantics for indexicals.

(7) You are the addressee of this statement.

According to Kaplan, the character of the indexical 'you' is a function from the context of utterance *c* to the addressee in *c*. Hence, in order for 'you' to refer, it must be the case that the referent is the addressee of the relevant utterance. This means that (7) cannot be uttered falsely. Moreover, it entails that (7), if true, is a priori knowable. But, again, this strikes us as unproblematic. In fact, you might think that not making this prediction is a problem. For example, on the Millian view there is nothing in principle that rules out a context where (5) is true, but where no one is called 'Alfred'. In order to rule this out, one would have to assume that in order for 'Alfred' to refer, at least one individual must bear that name, but this is explicitly denied by Millianism. This strikes us as somewhat strange.

Lastly, it is important to note here that the predictions of Variabilism are still perfectly compatible with the conclusions of the modal argument. Even though we predict that the sentence 'Alfred is called Alfred' cannot be uttered falsely, it does not follow that 'Alfred had to have been called Alfred' is true —a result that coheres with Kripke's idea of the contingent a priori.

The Semantic Argument

Kripke's semantic argument is the observation that Descriptivism makes implausible and counter-intuitive predictions in cases where the description associated with some name *N* might not—unbeknownst to the speaker—refer to the intuitive referent of the speaker's use of *N*.

The standard example here is Kripke's famous Gödel/Schmidt case. On the assumption that Schmidt rather than Gödel proved the incompleteness of arithmetic (because, say, Gödel stole the proof from Schmidt), then on the assumption that the meaning of 'Gödel' is something like 'The mathematician who proved the incompleteness of arithmetic', Descriptivism predicts that the name 'Gödel' now refer to Schmidt rather than Gödel since the former is the individual uniquely denoted the description associated with the name. However, this prediction seems clearly incorrect in that when speakers use the name 'Gödel', they are intuitively referring to Gödel despite whatever descriptions they may or may not associate with the name.

Both Millianism and Variabilism do not make this prediction, because according to both these views, the reference of 'Gödel' is not determined by a description of any kind.

2.1 *Kripke's Non-Circularity Constraint*

Since several of the arguments briefly described above are particularly problematic for the specific variant of Descriptivism which assumes that the relevant description (or cluster of descriptions) is various 'famous deeds', one obvious alternative is a metalinguistic variant of Descriptivism according to which the meaning of the name is a simple appellative property, viz. 'is called *N*'. However, Kripke goes on to argue that these types of metalinguistic views have another problem, namely that they are viciously circular. For example, if one assumes that the meaning of 'Aristotle' is simply 'the individual called 'Aristotle'', the description then provides no means for actually identifying the referent.

> *If this were all there was to the meaning of a proper name, then no reference would get off the ground at all.* (Kripke, 1980, 70)

As a result, Kripke proposes a so-called non-circularity constraint on descriptive theories of reference: the descriptive meaning of a name must be specified in such a way that the descriptive content provides a way of identifying the referent.

One might worry that Variabilism would be vulnerable to this type of problem as well since on our preferred Variabilist view, a name is associated with a presuppositional naming constraint. However, there is in fact no problem for Variabilism here. The problem only arises if the description is assumed to be reference-determining. However, this is not the case on the Variabilist view. What determines the reference of a name is the variable assignment and while there is a constraint on what values can be assigned to any given name, reference is determined by that assignment — not by any metalinguistic description.

2.2 *A Non-Trivial Circularity Problem*

Even if Variabilism is not subject to the same kind of circularity problem as Descriptivist metalinguistic theories, one might worry that Variabilism is subject to a different kind of circularity problem. This has been suggested by Gray (2018) who argues that any theory with a metalinguistic component will feature a problematic mutual dependence between what we might term *name-bearing* and *name-reference*.

Assuming a metalinguistic theory of names of some kind, it is uncontroversial that what a name refers to (*name-reference*) depends on what name the referent has. In other words, *name-reference* depends *on name-bearing*.

However, the problem is that it seems that there are cases where an individual or object acquires a name in virtue of that name being used to refer to it. That is, there are cases where an object *o* does not have the name *N*, yet *N* is used by speakers with the intention to refer to *o* and once this has become sufficiently prevalent, *o* then comes to bear *N*. If this is correct, then it would seem that there are cases where *name-bearing* depends on *name-reference*.

The classic example of the case described above is the infamous Madagascar case introduced by Evans (1973). In the standard Madagascar case, it is presumed that a group of speakers *S* learn the name 'Madagascar' from some other group of speakers *S′*, but that the members of *S* mistakenly believe that 'Madagascar' refers to the island off the east African coast. However, this is a simple misunderstanding as 'Madagascar' in fact refers to a portion of the African mainland. Nevertheless, the members of *S* continue to use 'Madagascar' to

refer to the island. Slowly but steadily, this practice of using 'Madagascar' to talk about the island spreads and at some point it becomes conventionalized. Conventionalized to such a degree that even when they are made aware of the original mistake, the practice is so securely rooted that the practice remains unchanged. Consequently, the island is now simply called 'Madagascar'.[8]

This certainly looks like a genuine reference shift in a name, viz. a change in the conventional meaning. So, this demonstrates that *name-bearing* can seemingly depend on *name-reference*. That is, what name an individual has seems to depend, in these particular cases, on what the name is used to refer to. And given that reference shifts are possible, the question is whether metalinguistic theories are fundamentally incoherent: On the one hand, metalinguistic theories assume that name-bearing is a prerequisite for reference. On the other hand, it seems that it's possible not only for reference to succeed prior to name-bearing, but to determine name-bearing.

This looks more like a problem for Variabilism than the original Kripkean circularity worry. The reason is that according to Variabilism, bearing a specific name is a constraint on reference. However, in Madagascar cases, it seems that reference succeeds before there is any established convention that in order for the name to refer, the referent must bear a specific name. Or, to put it differently, if a name comes with such a constraint by default, then Madagascar cases shouldn't be possible. But they clearly are. So, this looks like a problem.

There are a couple of different ways to address this concern about Variabilism. First, there are questions about the status of the presuppositional constraint associated with names. One might argue that this presuppositional constraint is in fact a common ground constraint. So, reference to some individual *a* using the name 'Alfred' succeeds only when the speaker intends to refer to *a* and it is common ground that *a* bears the name 'Alfred'. It seems plausible to assume that mutual knowledge of a prior baptism will suffice to establish a suitable common ground permitting reference to succeed, but this commmon ground could also be established in a variety of other ways, for example by testimony, deference, and accommodation. So, in cases such as Madagascar cases, one might think that what happens is simply that before a genuine naming convention is established, the discourse participants simply accommodate the presupposition that the referent is called 'Alfred'. And this as a matter of fact, suffices for reference to succeed.

Another response one might give here is that in the Madagascar case, what is happening is simply that the speaker fails to semantically refer, but succeeds in speaker-referring. At this point the island does not bear the name 'Madagascar' and for that reason the name fails to semantically refer to the island (since it has a presuppositional requirement that the referent is called 'Madagascar'). However, through persistent use of 'Madagascar' to speaker-refer

[8] It seems that historical documents suggest that the origin of the name 'Madagascar' is a mispronunciation of the name 'Mogadishu', see Voarintsoa *et al.* (2019). Apparently, Marco Polo mistakenly thought that 'Mogadishu' referred to the island off the east coast, but then mangled the pronunciation of the name. So, as a piece of anecdotal history, it's not clear that the 'Madagascar' case is in actual fact a case of a reference shift, because the name 'Madagascar' didn't actually refer to anything prior to Marco Polo introducing it. Still, we shouldn't let historical accuracy ruin a perfectly good example.

to the island, eventually the island comes to bear the name, and now 'Madagascar' does semantically refer to the island. In other words, through repeated mistakes, a convention eventually establishes, and at this point semantic reference succeeds.

What is important to note here is that the property of bearing a certain name is socially constructed and shaped through complex social and sociolinguistic interactions. The Variabilist view maintains only that variables carry presuppositions requiring assignments to satisfy certain of these properties – it does not (and needs not) offer a theory of how objects come to possess these socially constructed properties. At a given time, some objects bear the name 'Madagascar', and some do not. It is also true that some objects that did not bear the name can come to bear the name. The world is in flux, but that is not the concern of semantics. For this reason, it is unclear to us that there is any genuine problem here for Variabilism.

3 *Kripkean Metasemantics: Chains and Anaphora*

In contrast to DESCRIPTIVIST theories of proper names, there is a non-trivial metasemantic issue facing theories that assume that the meaning of a name simply an individual. This issue is the following: In virtue of what does a name N refer to the some individual a? Here Kripke proposes his famous causal-historical chain view:

> "A rough statement of a theory might be the following: An initial 'baptism' takes place. Here the object may be named by ostension, or the reference of the name may be fixed by a description. When the name is 'passed from link to link', the receiver of the name must, I think, intend when he learns it to use it with the same reference as the man from whom he heard it."(Kripke, 1980, 96)

According to Kripke's metasemantic picture, each use of a name *links* back to an earlier use, forming a chain that preserves reference over time.[9] These chains bear a striking resemblance to patterns of anaphoric dependence: just as anaphoric pronouns derive their reference from prior linguistic antecedents, so too do names, on this view, depend on earlier uses. In this sense, Kripke's account offers a metasemantic model that closely parallels that of anaphoric pronouns. Given that the Variabilist view treats names as analogous to pronouns, this alignment suggests a deep compatibility between Kripke's metasemantics and the Variabilist semantics.

The idea that the metasemantics of names is fundamentally anaphoric has been emphasized in various ways by different theorists. Donnellan (1970, 352) described the referent of a name as "parasitic" on earlier uses—our use of 'Thales', for example, depends on how the name was used by figures like Aristotle. Chastain (1975, 218) similarly noted that proper names "hark back to a previous occurrence of the same name in an antecedent linguistic context", highlighting their retrospective dependence. Devitt (1981, 45) made the point even

[9] Compare Kripke's unintentionally funny passage (due to faulty comma placement in the transcription): "Someone, let's say, a baby, is born; his parents call him by a certain name. They talk about him to their friends. Other people meet him. Through various sorts of talk the name is spread from link to link as if by a chain." (Kripke, 1980, 91)

more directly, stating that "names are basically anaphoric: reference borrowing is of the essence of their role". Brandom (1994, 470) recast the causal-historical picture in explicitly anaphoric terms, suggesting that such theories are "dark ways of talking about the sorts of anaphoric chains that link tokenings of proper names into recurrence structures". Together, these views—all deeply Kripkean in spirit—reinforce the notion that the mechanism underpinning reference in the use of names mirrors the structure of anaphoric dependence.[10]

While the connection to anaphora is compelling, it brings into focus a potential issue: the problem of name individuation. Consider a standard case of anaphora:

(8) Alfred saw Bertrand. He waved.

Should we say that the context determines which *word* was used – "he$_A$" versus "he$_B$" – or that there is a single, context-sensitive word 'he' whose referent varies with context? While the issue is subtle, the standard view is that there is one pronoun 'he', and that its reference is resolved contextually. With proper names, we face a structurally similar choice:

- **Option 1.** There are two homonymous names, 'Aristotle' and 'Aristotle', which have different referents—one picks out the philosopher, the other the shipping tycoon.
- **Option 2.** There is a single name 'Aristotle' that refers to different individuals in different contexts.

Kripke (and Kaplan (1989, 1990), and others in their tradition) tend to favor **Option 1**, which complicates the analogy with anaphora—but doesn't entirely undermine it.[11] The structural resemblance remains: both names and pronouns can participate in chains of reference that unfold over time. What differs is how we individuate the expressions that anchor those chains. In either case, the variability in uses of 'Aristotle' is best understood by analogy to the way 'he' can be anaphoric on different antecedents in different contexts.

The variabilist view is, in principle, compatible with either option, but we take it to be most natural – and most explanatory – when paired with **Option 2**. In fact, our view is that Kripke's historical chain picture is best understood as a special case of the general phenomenon of anaphora. Beyond its conceptual fit, this assimilation is further supported by linguistic data—particularly cases where proper names themselves behave in paradigmatically anaphoric ways.

[10] See also (Salmon, 1981, 31-2) who insists that since the mechanism by which the reference of a name is determined is a *contextual* phenomenon, Kripke's "causal-historical" view should instead be called the *contextual theory*.

[11] Kripke doesn't commit to Option 1, but says "I think it may have a great deal to recommend it for theoretical purposes" (Kripke, 1980, 7-8), while Kaplan explicit endorses it: "The contextual feature which consists of the causal history of a particular proper name expression in the agent's idiolect seems more naturally to be regarded as determining what word was used than as fixing the content of a single context-sensitive word. Although it is true that two utterances of 'Aristotle' in different contexts may have different contents, I am inclined to attribute this difference to the fact that distinct homonymous words were uttered rather than a context sensitivity in the character of a single word 'Aristotle'." (Kaplan, 1989, 562)

Proper names clearly participate in anaphoric chains and can serve as antecedents for anaphoric pronouns. As Dever emphasizes:

> "...we can have (apparently) anaphoric relations between names and pronouns, as in: 'Hitchcock called his actors cattle'. 'His' here needs to be coindexed with 'Hitchcock', so there must be some indexing mechanism that operates on proper names. As with pronouns and demonstratives, coindexing relations among names indicate a syntactic constraint demanding (on the traditional story) sameness of reference for coindexed names." (Dever, 1998, §2.3.2.4.2)

(9) Hitchcock$_1$ called his$_1$ actors cattle.

Moreover, names themselves can serve as links in extended anaphoric chains. Consider how names are introduced and subsequently tracked across discourse:

(10) There was a man named John$_1$, who was sent by God. He$_1$ came to tell people about the light. John$_1$ was not the light. But he$_1$ came to tell people about the light. (Bible, John 1)

(11) A man named Alfred$_1$ saw a man named Bertrand$_2$ kissing Alfred's$_1$ wife.

These examples underscore the anaphoric behavior of proper names and lend empirical support to the idea that their metasemantics is, at base, anaphoric.

One possible reaction to these cases is that, while they may indeed involve anaphoric relations in some sense, they are merely instances of *co-reference* – that is, the pronouns and repeated names simply refer to the same individual, without demonstrating anything deeper about anaphoric structure. This raises a further question: are there cases where a proper name is anaphoric on a quantified noun phrase? Such cases would provide stronger evidence for genuinely anaphoric behavior, going beyond mere co-reference and into the territory of binding and dependency structure.

While there is some debate on this point, we believe such cases do exist. We've already seen Cumming (2008)'s example (1) involving the gentleman in Hertfordshire named 'Ernest'. Another compelling case is given by Dever (1998, §2.3.2.4.1.1): Suppose Holmes arrives at the murder scene, examines the evidence, and says to Watson:

(12) The murder was committed by two men. Call them "Mr. X" and "Mr.Y". Mr. X and Mr. Y sneaked in through the unlocked back door. Had the victim remembered to lock the back door, then Mr. X and Mr. Y would not have killed him.

If it turns out the murderers were Alfred and Bertrand, then "Mr. X" and "Mr. Y" concern them – but there's nothing that fixes which is which. The names instead appear to be bound to the quantified antecedent "two men". This suggests that the names themselves function anaphorically, exhibiting genuine binding structure rather than mere co-reference.[12]

[12] Dever (1998, §2.3.2.4.1.1): himself takes the lesson to be that since there is no fact of the matter about which of the two murders "Mr. X" refers to, "Mr. X" doesn't refer at all. And he resists the idea

A more natural example along these lines occurs in future-oriented discourse. Imagine a group of high school friends fantasizing about their futures – about their careers, becoming neighbors, and their children playing together, and so on. One of them says:

(13) I'll end up marrying a guy named Sam, and you'll marry someone named Les. Sam and Les will be best friends—and they'll both work at the mill.

In this case,"Sam" and "Les" are not used to refer to particular individuals, but are introduced under the scope of existential claims about future spouses. In the second sentence, these names are picked up anaphorically. The felicity of this continuation again suggests that the names can operate much like discourse-level variables.[13]

Such cases might be described as instances of *dynamic binding* – where the name is tied to a discourse antecedent introduced by prior noun phrase.[14] But what about cases where a name is *syntactically* bound, in the sense that it co-varies with a quantifier whose scope it falls under? These are even more contentious, but we believe they too can be found. Consider, for example, the following sentence, which might appear in a journal's guidelines concerning the ordering of names when co-authors have contributed equally:

(14) If an author named Jones and an author named Smith made equal contributions, then Jones' name should appear before Smith's.

Here, "Jones" and "Smith" do not refer to particular individuals, but instead co-vary with the quantifiers in the antecedent. The names function like variables – bound within the scope of their respective quantifiers. A similar structure appears in the following example, where 'Fischer' is bound to the quantifier introduced by 'a linguist'.[15]

(15) If Heim's co-author had been a linguist named "Fischer", then Fisher's name would have appeared before Heim's on the title page.

Taken together, these cases provide strong linguistic support for the view that names can function much like anaphoric pronouns. This reinforces our claim: that the metasemantic mechanism underlying name reference is best understood as a special case of anaphora. On this view, Kripke's historical chain model captures one particular mode of anaphoric dependence—but the broader linguistic evidence reveals that names can also function like

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that they are dynamically bound. Dever (1998, §2.3.2.4.1.1) suggests that these sorts of cases often show up in mathamatics, e.g., "This function f has two roots—call them '$r1$' and '$r2$'. Since I know that the function is quadratic in form, I know that it assumes its maximum/minimum at $(r1 + r2)/2$.".

[13] See also Geurts (1999), who provides "Mary is under the illusion that she has a son named John and she believes that John is the thief."

[14] See Maier (2009) and Roberts (2009) for treatments of names in dynamic frameworks.

[15] These examples are similar in structure to Geurts' (1997, 321) "If a child is christened 'Bambi', then Disney will sue Bambi's parents.", and Elbourne's (2005, 237) "Every woman who has a husband called 'John' and a lover called 'Gerontius' takes only Gerontius to the Rare Names Convention"

anaphors in other ways: appearing in binding configurations, co-varying with quantifiers, and participating in co-indexing relations. These phenomena are difficult to account for on a strict Millian view, but they follow naturally from a variabilist semantics.

4 *Conclusion*

Variabilism doesn't just survive Kripke's arguments – it builds on them. By treating names as presuppositionally constrained variables, the view explains both their rigidity and their context-sensitivity in a unified framework.[16] Properly understood, Kripke's legacy may point not to Millianism, but to a Variabilist semantics—one that treats names as linguistic counterparts of pronouns, rooted in anaphoric histories and shaped by sociolinguistic convention. And if, as Kripke warned, every philosophical theory is probably wrong, this one at least goes wrong in a Kripkean way.

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[16] A further motivation for variabilism – one not discussed above – is the behavior of names in epistemic contexts. As Kripke notes, "how to treat names in epistemic contexts [is a] vexing question" (1980, p. 21). Treating names as variables naturally allows for shifted interpretations under epistemic modals, where operators can shift not only the world parameter but also the assignment, see e.g. Cumming (2008), Pickel (2015), Ninan (2018), Schoubye (2020), Rabern (2021). On this view, a sentence like 'Del Naja might be Banksy' can be true even if, unbeknownst to us, Del Naja is not in fact Banksy.

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