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Names and Naming Verbs

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Abstract An analysis of naming verbs like 'to be called' is presented, which assumes that names act as predicates or arguments according to the syntactic structure in which they appear. In isolation, names are claimed to be linguistic expressions identifying an abstract category of type *e*. When they denote a name-bearer, they are embedded in a DP and the individual denoted by the DP is associated with the abstract category they identify. This makes it possible to structurally interpret naming verbs as complex copular constructions, which relate a discourse referent to the abstract category named by the name-expression.

Keywords Names. Naming. Naming verbs. Nouns. Kinds.

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1 Introduction

Names mostly appear as arguments, as in *Alice snores*, where the name *Alice* denotes a person with that name; but uses like *I know three Alice's*, where the object means 'three persons called Alice', suggest that names are in fact predicates, and that when they act as arguments they are definite descriptions loosely paraphraseable as 'the one existing person called Alice'.[1] This simple contrast obviously does not exhaust the empirical evidence bearing on the issue, but it suffices to point to a fundamental analytical divergence between those who hold that the semantic value of names amounts to the individuals they denote, and those for whom names, despite their undeniable peculiarities, are fundamentally akin to common nouns and provide the predicative core of a definite description. The debate between these approaches to the semantics of names has now a long history.[2] The following sections do not aim to directly contribute to this major line of philosophical and linguistic inquiry, but to bring into sharp analytic focus an immediately related linguistic phenomenon: naming verbs. Expressions with the content of 'being called *Alice*' or 'calling someone *Alice*' are important because the name in them does not, to all appearances, denote an argument and does not pick out a referent; therefore, they could contribute decisive evidence for a view of names as fundamentally predicational expressions. But this conclusion would still require a precise analysis (if *Alice* is not an argument in *being called Alice*, what exactly is its semantic content there?). *A fortiori*, a precise account would be required for an alternative view of names as non-predicational expressions.

Naming verbs, then, have an intrinsic interest for the analysis of names, which in turn is central for our understanding of linguistic reference. This is the theoretical context of the present contribution. It aims at justifying a novel analysis of naming verbs and naming constructions where names are part of a predicative expression but are not themselves predicates.

The most important new empirical evidence is presented in sections 2.3, 4, and 5 below: there, it will be shown that naming verbs involve one specific construal of 'being named as' (not just 'being known / called as'); that the name *N* in *to call someone N* behaves in the same way as a predicative 'as' phrase (like in *I like you [as a friend]*), and not as a predicate itself (like *green*) as has been claimed; and that the fact that names referring to the same individual may be

1 I would like to thank two reviewers for helpful critical comments, which led to some significant improvements. All faults are my own.

2 See Burge 1973; Elbourne 2005; Bach 2002; Leckie 2013; Fara 2015; Jeshion 2015; Hinzen 2016; Predelli 2017; Saab, Lo Guercio 2020, among many others.

both simple (*Nixon*, *Dick*) and complex (*Richard Nixon*, *Dick Nixon*) is a problem for the one full-fledged analysis offered so far, which overgenerates structures like # *Dick Richard*. Addressing these open questions in a principled and unified way represents the minimal empirical contribution of this analysis.

At the same time, a proper understanding of expressions meaning 'to be called' requires both a reasonably precise hypothesis on what naming means, and a worked-out analysis of how this meaning is integrated in the verb's lexical interpretation. What is proposed here is a novel syntactic analysis decomposing naming verbs into two heads, paired to a compositional semantic interpretation based on a minority philosophical stance which views names as typed open variables (Castañeda 1985; Cumming 2008; Schoubye 2016). This is crucial in the present attempt to reconcile evidence for the predicative nature of names in naming verbs, with the evidence that they do not behave like other predicates. The solution offered here is that the relation between an expression like *Alice* and the person thus named is not direct but mediated. The expression *Alice* denotes first of all a *sort*, an abstract category: the type which individuals named *Alice* are tokens of. Being called *Alice* means being name-related to this sort, and this is what naming verbs do. 'Being called Alice' parallels 'being called silly' or 'being called a liar', but not because *Alice* is semantically a predicate (it is not resumed by the usual pro-predicate forms, as we will see); rather, what is a predicate is being related to this sort, and naming verbs assert this relation by characterizing it as a naming one. 'Being called Alice' behaves syntactically like 'being called as Alice' because this is exactly their structure, with a complex copular construction 'being - as' and relating an individual name-bearer to a nominal sort. There is no need to claim that a name X means having the property of being called X (which circularly explicates name semantics in terms of bearing a name, and in addition fails to distinguish between the different senses of 'bearing a name' or 'being known'). In addition, this avoids the difficulty of having to precisely define a name as a linguistic form. Traditional approaches link directly individuals to names as linguistic expressions, and face unexpected difficulties in defining the latter (written types? phonological matrices? No one representation seems to fit the bill, as we will see in section 5), and ultimately in converging on identity criteria for a name (are *Richard*, *Dick*, *Nixon*, and *Richard Nixon* all varieties of the same name?). The approach proposed here reverses the terms of the question: a name is first of all a label as an abstract type, whose realizations may differ even substantially (like in the pronunciation of a place-name like *Odense* in Danish and in English); conversely, even purely orthographic differences like that between the surnames *Smyth* and *Smith* may be related to different abstract name-labels, depending on social conventions. *Richard* and

Richard Nixon are separate names, and separate abstract sorts; it is a matter of onomastic convention (the system of what we call given- and family names) that relates one to the other. This will be briefly discussed in section 5.

In short, the syntactic analysis of naming verbs here presented rests on a much broader hypothesis about names as abstract sorts, which in turn lies in the context of a global view of nouns and names as linguistic encapsulations of entity types, or sorts (see the brief remarks in section 7). Every aspect of this whole approach would deserve an in-depth discussion; but the following sections just aim at articulating a concrete proposal about naming verbs, pointing at the many ramifications but without delving into them. This goal is facilitated by the presence of an important precursor, namely the analysis of Matushansky (2008), which will be referenced repeatedly. Section 2 outlines the proposal and highlights its most innovative aspects. Then, section 3 spells out the semantic details. Section 4 bolsters the empirical case for treating naming verbs as complex copular constructions, while section 5 refines the analysis fine-tuning it to account for complex names. Section 6 makes explicit what is constant across possible worlds and what is viewed as variable. Finally, section 7 concludes the discussion and relates it to the issues of what counts as identity criterion for names, and to common nouns as names of kinds.

2 Outline of the Proposal

2.1 The Structure of Naming Constructions

Naming verbs seem to provide strong support for viewing names as predicates. *Alice* has unambiguously the status of a predicate in structures like (1), and this is how it was analysed in the best worked-out analysis of naming verbs so far, that of Matushansky (2008), which is the basis for the alternative treatment proposed here:

(1) a. They baptized her Alice.
b. She is called Alice.

One of the central pieces of evidence confirming this view is the fact that languages which admit an expletive definite determiner for nouns in argument positions, as in (2a), do not tolerate it in naming constructions, as in (2b).

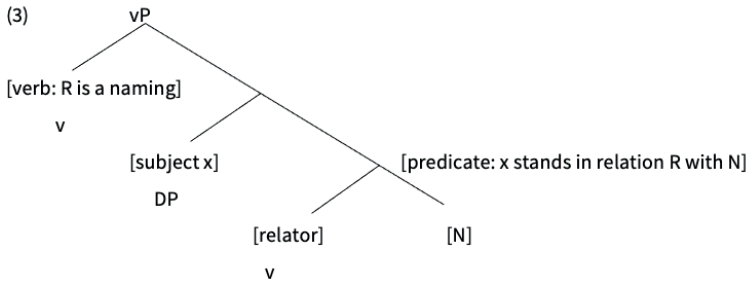
(2) a. Ich habe den Karl gesehen (regional German; Matushansky 2008, 580)
I have the.M.ACC K. seen
'I saw Karl'.

b. Ich habe ihn (*den) Karl genannt.
I have him.M.ACC the.M.ACC K. called
'I called him Karl'.

I propose instead that names act as predicates in (1) and (2b) because of the structure in which they appear, not because of what they mean as linguistic expressions taken by themselves. The words *Alice* and *Karl*, as they are inserted in these contexts, are not predicates. By themselves they denote entities (logical type *e*) corresponding to non-logical constants. These entities are not the persons named 'Alice' and 'Karl', but abstract objects corresponding to 'sorts', or categories of entities. Intuitively, if simplistically, the claim is that speakers' knowledge of names is semantically best modelled by treating names as identifiers for abstract sorts, rather than as predicates true of the entities they name, or as linguistic expressions somehow directly referring to one among their possible referents.

Verbs like French *s'appeler* or German *heissen* (unlike the English *to be called*) are syntactically represented as a construction which predicates the property of standing in a naming relation with the abstract sort identified by a name. This amounts to a complex copular structure where the verb meaning is distributed over two nodes: a copula-like 'relator' (after Den Dikken 2006) which determines a predicational structure, and a higher head expressing lexically encoded information –in our case, the information that this relation is one of naming, not generically equivalent to 'being known as' but as a rigid, world-invariant connection between an individual and an abstract identifier whose only content lies in being distinct from other identifiers. The lower head (the relator) turns the identifier (the sort-denoting name) into the property of being in a relation with that identifier, and the higher head specifies this relation to be a naming one.

(3)



Two questions immediately arise: what is more precisely the 'abstract entity' that appears in argument position as *[N]*, and what does it mean to say that relation R is a naming?

2.2 What is N?

When we speak of the name *Alice*, we may mean the word itself, which can be used to name individuals, or the word understood as referring to a particular entity (Van Langedonck 2007 refers to the former as 'proprial lemma'). Names in this second sense therefore involve a relation between names in the first sense and their respective bearers. This insight was made explicit by Geurts (1997) and especially by Matushansky (2008), who formalized it as a relation R between an individual name-bearer (type *e*) and a name type (type <*n,t*>, a property of names *n*).

In contrast, here a use of a name relates an individual name-bearer to an entity (notated as [N] above) which is not a linguistic representation: when *Alice* is used to refer to Alice, the corresponding linguistic structure does not relate the person Alice to a phonological string /'ælɪs/, as in Matushansky's analysis. What is related to the name-bearer is instead an abstract category, accessible and identifiable as an entity in a speaker's mental ontology, but void of descriptive content, and only meaningful insofar as it contrasts with other such abstract entities. The 'proprial lemma' (here, the word) *Alice* differs from another like *Jim*, and speakers leverage this linguistic opposition to use the words as identifiers (not predicates, but labels) of abstract sorts. The abstract object labelled *Alice* is not the set of Alice-named people, nor the kind of them, nor is it a word (the *n* type of names posited by Matushansky 2008). It is just an abstract entity with the key property of being distinct from other such entities, identified by different names. Individuals given in the domain of discourse may be interpreted as instances of this abstract sort: they are, then, bearers of this name (the sort label), belonging to the *Alice* type of entities.

Importantly, the expressions (proprial lemmata) that can label such abstract entities are not intrinsically defined as names; they *become* names by being part of a linguistic structure, but in principle, any expression can act in this function. The peculiar nature of naming as a relation is stated as part of the lexical content of naming verbs (see directly below); but we don't need a prior definition (intensional or extensional) of names in order to determine which expressions can label an abstract category.

This amounts to treating a name-expression as a *sortal*, or a linguistic term that identifies a type of entities (Frend, Grandy 2023 make it clear that both the word and the concept have been used in

rather different senses). Kinds, as they are generally understood, are also abstract categories which can be referred to directly, independently of their instances (as in *water* in *the formula of water*), and it is no accident that kinds in this sense may be expressed through names like *Ursus Arctos* or *Homo Sapiens*. There is an important difference, however. While natural kinds, and in particular names for biological classes like species or genera, are naturally construed as higher-level concepts arising through generalization over their instances, a name construed as a sortal is simply a way to partition individuals into classes, or 'nominal sorts', following the terminology and the general approach of Castañeda (1985, 110):

> The sentence 'Vladimir loves Tatiana' is, therefore, merely the formulation of a propositional form *x loves y*, where the variables 'x' and 'y' are governed by the rule that their instances or *values* come, respectively, from the nominal sorts being named "Vladimir" and "Tatiana". Such values are individual slices in the worlds of the different parties in the act of communication [.]

Numbers too are abstract notions whose content is given by their opposition with other numbers; but unlike numbers, whose ordering defines a set of precise relations, names (in this sense as sortals identifying sorts) lack any relation between each other beyond identity and difference. They are a language-internal way to define a subset of a speaker's ontology, organizing the broader ontology constituted by all potential discourse referents.

It should be emphasized that this construal is a theory-internal one. In non-technical speech, a name is generally understood as a linguistic representation, identified phonologically or by spelling, or not at all (see the remarks in the concluding section). In linguistic and philosophical theorizing, a name corresponds to a linguistic representation (as in *the name 'Jim'*), or to a *use* of such a representation interpreted as denoting one particular individual (*Jim is here*), or, as noted, as a predicate true of individuals so named (*three Jims*). The abstract entity, or sort, posited here as an entity identified by a name-expression does not coincide with either of these senses.

2.3 What is a 'naming relation R'?

In this view, to say that someone is called *Alice* means that she stands in a relation R with the abstract sort we label by the word *Alice*, and that this R is the relation of naming. The relation is not one-to-one, because one entity may be identified by means of multiple labels (as in *Cicero is Tully*), and the same name-expression, and the same sort,

can of course be related to different discourse referents (there are many people called *Jim*). How is this different from simply repeating that someone is called *Alice*?

The main consideration is that the naming relation R in our analysis is more specific than being known, or identifiable, under a linguistic label.

To see why, consider the antecedent on which this notion is modelled, the relation R as defined by Matushansky (2008). In that analysis, R was a relation "between individuals and proper names (phonological strings, properly speaking)", and it was one of the two arguments of a name predicate (2008, 595). Naming verbs would then assert the existence of such a relation by existentially binding the R variable, while when names appear as arguments, the variable would be contextually bound as "the contextually salient *naming convention in force between the speaker and the hearer*" (2008, 592; emphasis in the original):

(4) [[Alice]] (R_0) = R_0 holds between x and the phonological string (/ælɪs/)
where R_0 is the contextually salient naming convention in force between the speaker and the hearer (Matushansky's (59))

This formulation proves too loose, however. Unsurprisingly for a concept expressed in natural language, a 'naming convention' can be understood in more than one way: a person may bear name *X* for legal purposes, while going under the name of *Y* for all non-legal purposes, and being generally known under yet another name or soubriquet *Z*. The problem is that language seems to care about whether the relation is strictly that of bearing a name or that or being known under a linguistic guise in a social context. The predicate *to be known as* exemplifies the latter; it can be followed not just by a nickname like *Scarface*, but also by a common noun (a whole noun phrase), which may be a definite description. This includes cases of a definite description metalinguistically quoted, as in (5d).

(5) a. He was known as Scarface.
b. He was known as a safe pair of hands.
c. He was known as the terror of Southgate.
d. He was known as 'that bloody idiot'.

But this broader sense of 'naming convention' does not fit naming verbs. This emerges clearly in languages where, as noted above, a name may carry a definite article as an argument but not as a complement to naming verbs:

(2) a. Ich habe den Karl gesehen (regional German; Matushansky 2008, 580)
I have the.M.ACC K. seen
'I saw Karl'.
b. Ich habe ihn (*den) Karl genannt.
I have him.M.ACC the.M.ACC K. called
'I called him Karl'.

(6) a. Arriva (la) Maria. (regional Italian)
'There comes (the) Maria.'
b. Si chiama (*la) Maria.
'She is.called (*the) Maria.'

(7) a. Era generalmente nota come (?la) Maria. (regional Italian)
'She was generally known as (the) Maria.'
b. Era generalmente nota come la Callas. (Italian)
'She was generally known as (the) Callas.'

(8) a. Si chiamava (*la) Maria. (Italian)
'She was.called (the) Maria'.
b. Si chiamava (*la) Callas.
'She was.called (the) Callas.

It is only the strictest sense of naming that appears to be operative in naming verbs.

This empirical evidence, then, shows that we cannot reduce what it means to be a name to an intuitive notion of being known by a (linguistic) label. My suggestion is that naming is a stronger concept, because it involves not just labelling but also a definition of identity: a name is not just a tool of identification, but a proxy identity. A referent individuated as *Alice* truly 'is' Alice in the sense that the name sums up, unifies, and distinguishes from others our experiences of that referent. It seems natural to express denomination by means of copular constructions like *I am Alice*, *for me she was just Alice*, or *from now on you will be Alice* (suggested by a reviewer) – and also *this is water*, in the sense 'this is called water'.[3] The idea of analysing naming verbs as copular constructions pursues the intuition behind this usage, whereby 'being called Alice' is akin to 'being under the guise of Alice'. I believe this sense of equivalence between a name-bearer and a 'guise' lies at the heart of the very notion of 'name'. Here, this approach is reflected in the fact that naming does not

3 Carlson (1980) developed this insight by analysing the content of, for instance, *Nixon* as the kind of stages of one particular referent, just as *water* can express the kind subsuming and unifying our experiences of the same element; see 7.3 for some further brief comments.

directly relate a name-bearer to a linguistic representation, but involves an equivalence between two entities, a bearer and a sort; it is the latter which gets linguistically labelled. In short, naming is not just labelling, but also categorizing.

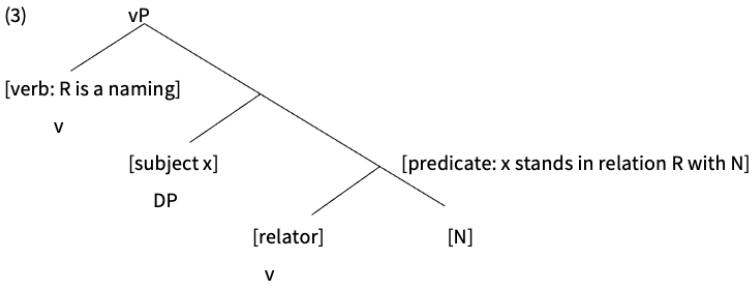
Having noted how easy and natural it is to express 'I am called Alice' as 'I am Alice', we should still distinguish the reading 'my name is Alice' from the reading 'I am one and the same person as Alice'. This becomes crucial in connection with sentences like (9) (Bach 2002, 81):

(9) If his parents had named him 'Aristocrates', Aristotle would have been Aristocrates instead of Aristotle. (Bach's (23))

This example is certainly pertinent, but only if understood as meaning that Aristotle in that scenario would have been called differently (and so everything we may say and know about him would have applied to an individual named Aristocrates), not that he would have been another person. The question of semantic 'rigidity', that is, the claim that names refer to their name-bearers in all possible worlds (in which the bearers exist), clearly must be considered, although the analysis of naming verbs does not necessarily hinge on it. It will be taken up in section 6 below. In connection with the nature of the naming relation, it is important to make explicit here that the rigidity thesis (no one but Aristotle could have been Aristotle, nothing but water can be water) should not imply that establishing a naming relation is also fixed across worlds: anybody could have been named differently, and consequently bear a different name in non-actual worlds.

3 Semantic Analysis

In the structure summarized in (3), repeated here, the expression notated *[N]* has a denotation of type *e*, interpreted as an abstract object which we may understand as a 'sort', as explained in the previous section:



[N] cannot be syntactically a DP, given that determiners must be absent in naming constructions (see (2b), (6b), and (8b)). Therefore, it must be a smaller type of constituent, capable of denoting an abstract entity. I will assume that it is a kind-denoting expression, a bare noun when spelled out as *Alice* or *Sherlock Holmes*, or a larger phrase for 'descriptive names' like *Black Kettle* or *Jumping Badger*. This relies on a well-established if non-mainstream theoretical position, according to which a noun denotes primarily a kind and becomes a predicate through additional grammatical specifications (Krifka 1995; Zamparelli 2000; Mueller-Reichau 2006). The necessity of a determinerless noun in contexts requiring an interpretation as an abstract is illustrated by examples like (10) (see Zamparelli 2000, 131-5, 166-7):

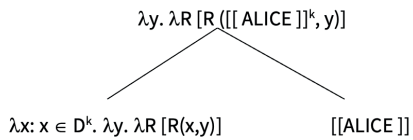
(10) a. Gianni funge da (*un) dottore. (Italian; Zamparelli's (350))
'Gianni functions as %(a) doctor.'
b. Gianni si è travestito da (*un) barbone.
'Gianni dressed-up as *(a) tramp.'

A kind-level interpretation seems appropriate for the denotation of an abstract sort, insofar as kinds are not understood exclusively as generalizations over particulars (as in Chierchia 1998) but as primary semantic notions, as categories which particulars can instantiate.

The notation *ALICE*, then, does not stand for the person Alice (the name-bearer), nor for the class of people called Alice, nor for a linguistic representation corresponding to the name *Alice*. It stands for an abstract category of beings, or sort, semantically kind-level, which we may call the Alice-sort, after Castañeda.

The abstract object [[ALICE]], of type *e*, composes with the content of the relator and provides one of its three arguments: an abstract object, a subject, and a two-place relation R. This is shown in (11), where '$x \in D^k$' means that the variable x ranges over the domain of kinds.

(11)

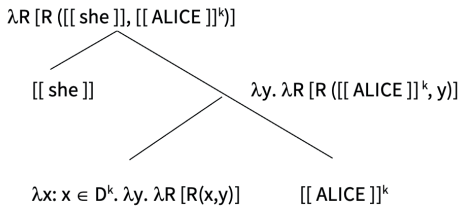


The structure is now interpreted as a formula with two open variables: an individual y and a relation R, where y stands in the relation R with

the kind denoted by *ALICE*. The introduction of the subject (here *she*) provides the second individual argument (the name-bearer).[4]

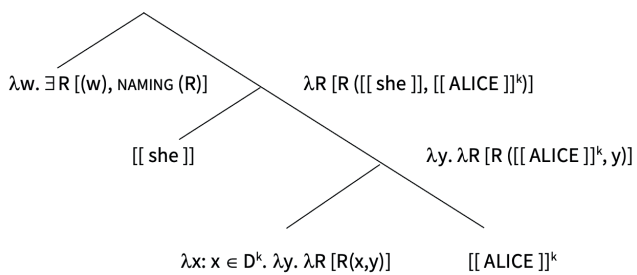
Before composition with the higher verbal head, the VP has the following form.

(12)



The higher verbal head turns the copular relator into a lexically contentful predicate. It existentially binds the R variable and specifies R as a naming relation, in the sense elucidated in the previous section. In addition, it introduces a world variable *w*.

(13) λw. [(w), NAMING ([[she]], [[ALICE]]k)



Notice that a world variable accompanies the higher verbal head, but neither the lower relator nor the kind-level sort N with which the name-bearer is related. This reflects the idea that calling someone one name or another may vary across worlds, but the identity of the sort itself is fixed.

The VP now denotes a function that for each world *w* returns 'true' if the denotation of *she* is named Alice, i.e. is name-related to the abstract sort labelled *Alice*. The event argument may be introduced at this level or higher up.

4 The subject will have to raise to the preverbal case position leaving behind a variable, so we should add an extra level which lambda-abstracts over the predicate formed so far and re-introduces the subject variable, to be closed only at clause level.

4 Evidence for Copular Structure

This complex-copula approach interprets transitive verbs like *to call / baptize* or intransitive ones like the German *heissen* or the French *s'appeler* 'to be called' as involving a predication loosely paraphraseable as 'to be in a naming relation with the sort [X]'. The formal representation that results is very similar to Adger and Ramchand's (2003) semantics for the 'substantive', non-defective copula of Scottish Gaelic, apart from the role of R and the restriction of the first argument to kind-denoting terms. Scottish and Irish 'substantive' copulas have been analyzed respectively by Adger and Ramchand (2003) and by Doherty (1996) as a stage-level predication. Unsurprisingly, Irish uses precisely the substantive copula to express a naming predication.

(14) a. Bríd atá orm (Irish)
B. REL.is on.1SG
'My name is Bríd'. (literally: 'Bríd is on me'.)
b. Cén t-ainm atá air?
what name REL.is on.3SG.M
'What is his name?' (literally: 'what name is on him?')

The stage-level copula of Scottish and Irish is known to parallel the Slavonic copular construction where the predicate has instrumental case, as argued by Citko (2008). This tallies with the use of instrumental name *Ninoj* in the Russian construction exemplified in (15), with in the instrumental.

(15) Moju sestru zavut Nina / Ninoj. (Russian; Matushansky's (37a))
my.F.GEN sister.F.GEN call.3PL N.nom / N.instr
'My sister is called Nina'.

In Russian, the instrumental appears also in (16), which instead parallels (10b) and lacks a copula (and correlatively also lacks the possibility of marking the predicate as nominative).

(16) On prjehal zamaskirovannij *zhenshina / zhenshinoj. (Russian)
he come.PST disguised woman.NOM / woman.INSTR
'He came disguised as a woman'.

There are empirical reasons, then, for analyzing naming verbs as akin to copular constructions of a particular type, identified across different languages by a specific morphosyntax and by a stage-level

reading. This accords with Matushansky's (2008) evidence for a predicative and not argumental nature of the name is naming constructions.

However, there is evidence calling for an important qualification, which brings us beyond existing approaches to naming verbs. Languages that have pro-predicate pronouns cannot use them to resume a name in a naming construction:

(17) a. Elle s'appelle Louise (French)
she REFL=calls L.
'Her name is Louise'.
b.* Elle se l'appelle
she REFL=IT=calls
'She is called so'.

(18) a. Sie heisst Anne (German)
she is.called A.
'Her name is Anne'.
b.* Sie heisst es
she is.called it
'She is called so'.

Here the name patterns like the manner argument of *behave*-type verbs:

(19) a. Mi chiamo così (Italian)
REFL.1SG=call.1SG so
'I am called like that'.
b. Come ti chiami?
how REFL. 2SG=call.2SG
'What's your name?'
c. Mi chiamo in questo modo (Italian)
REFL.1SG=call.1SG in this way
'I am called like that'.

These facts follow if the complement of the verb is akin to a manner adverbial headed by *as*. In Den Dikken's analysis (2006, 62-4), this preposition is the spell out of a relator in verbless predications. The previous section argues for the same structural analysis, with the difference that the predication is lexicalized by naming verbs and not by a preposition like *as*.

5 Complex and Meaningful Names

Names are not just simplex like *Alice*; they can be complex, like *Alice Smith*, and their complexity may be that of compositionally interpreted linguistic structures, like *Jumping Badger*.

The issue of names with descriptive content should be clarified first, as it is immediately accommodated within our approach. Since a name in isolation denotes not its bearer but an abstract category, nothing bars the label of this category from having descriptive content. This includes names like *Jumping Badger*, *Big Jim*, *Inge daughter-of-Anna*, and names constructing according to systems very different from Western European ones, like the Hoocąk Siouan *haas-hóną-wį-ga* 'berry-seek-FEM-PROPER.NAME' (Helmbrecht 2015), which is a verb phrase followed by a suffix indicating name status. What matters is that these descriptions are *used* as names, and so they just act as labels for a sort (and, once placed in a syntactic frame, they denote a name-bearer) independently of their descriptive content. The man called *Big Jim* might be small, *Jumping Badger* is the English version of the Sioux name used to refer to a man (otherwise known as Sitting Bull) and not to a badger, and *berry-seek* refers to a person and not to an activity. The lack of descriptive content of most modern Western names is a historical accident.

Internal complexity is a distinct issue, which highlights an important difference between the present approach and its precursor analysis by Matushansky (2008). The analytical problem is how to derive the entailment that someone called *Sherlock Holmes* is also called *Sherlock* and is also called *Holmes*. Matushansky (2008, 604) assumed that in a complex name, each subpart bears the same relation R to a single name-bearer. But this has an undesired consequence: *all* segments of a complex name, including those that are in mutually complementary paradigmatic relation, are on the same level and should be able to co-occur. So not only *Nixon*, *Richard*, *Richard Nixon*, and *Richard Millhous Nixon*, but also *Richard* and *Dick* and *Richard Dick* (and *Dick Millhous*).

The alternative made available by our approach is sharply different. We can take each self-standing name, simplex or complex, to be a different label, for a different sort. This is possible because the sort is a purely abstract notion, something of which we only know that it is different from the sorts corresponding to other labels; it is not the extension of the various names (the same person who was 37th president of the USA). It is a matter of world knowledge, not a semantic entailment, that *Nixon* is the same person as *Richard Nixon*; or in other words, that the two sorts are regularly paired to the same discourse referent. Indeed, many referents are paired to the sort *Richard*, and many also to the sort *Nixon* (but probably only one to the distinct sort *Richard Millhous Nixon*). The fact that we cannot refer to the former president as *Richard Dick* is historically contingent. Likewise, given that in this account *Alexander* and *Alex* are distinct

names labelling distinct sorts, it is not a linguistic fact that calling someone *Alex Alexander* is odd. It is true that names consisting of the full and the truncated form, like *Richard Dick* or *Patricia Pat*, seem to be regularly impossible; but while this might have an independent pragmatic explanation (as suggested by a reviewer, pointing to Alber, Lappe 2023), the existence of 'redundant' (nick-)names like *John John* suggests that the internal composition of names is governed more by social convention than by pragmatic principles.

Single cases are obviously susceptible of discussion, and possibly of alternative explanations. But overall, the empirical point is that linking the R relation to a definition of names faces unexpectedly serious difficulties with names that are inside names. The alternative here proposed removes the problem by simply treating as names those expressions that are effectively used as such, without making it a semantic entailment that *Sherlock Holmes* should refer to the same individual as *Holmes*. This seems like a correct way to delineate knowledge of language and knowledge of the world.

6 Rigidity

Given that Aristotle was the teacher of Alexander the Great, the name *Aristotle* and the definite description *the teacher of Alexander the Great* refer to the same entity. Yet, the intuition seems very clear that a different entity could have been Alexander's teacher in an alternative state of affairs, but only the person we mean by 'Aristotle' could have been Aristotle. Since Kripke (1980) diagnosed this phenomenon in terms of rigidity of designation across possible worlds, it has represented an important benchmark of empirical adequacy for semantic theories of names – if indeed it is a defining property of names. The question is particularly relevant in our context because views that deny that names are necessarily rigid designators (see for example Elbourne 2005) typically do so on the basis of examples with naming verbs, as in the example by Bach introduced above in 2.3:

(9) If his parents had named him 'Aristocrates', Aristotle would have been Aristocrates instead of Aristotle. (Bach's (23))

Scenarios with counterfactual naming highlight an important fact: the naming relation by itself has at least the appearance of rigid designation (no one but Aristotle could have been Aristotle), but whether the relation holds is contingent (a person could bear one

name or another).[5] Even though an analysis of naming verbs, by itself, does not have to provide an account of the rigidity of name reference, we should make explicit how our analysis does justice to these facts.

The first step towards that consists in recognizing the ambiguous use of *be* in (9), as we did in 2.3 above: in an alternative world, Aristotle would have been a person called Aristocrates, but he would not have been the same person as Aristocrates. This point too is open to debate, as it ultimately depends on what one assumes about the identity of individuals across different worlds. But this is a much broader question with no bearing on the issue of naming verbs, so we can put it aside and assume that we can identify individuals *a* and *b* as self-identical and distinct from each other in the world of evaluation and in other hypothetical worlds.

Since a name-bearer, thus identified independently of his or her name, may bear different names at different worlds, the R naming relation in (3) must be variable across worlds. This is why the higher segment of the copula, beside existentially binding the R variable and qualifying it as a naming, introduces a world variable *w*. On the other hand, the abstract category, or sort, which is the second arguments of R, is not relativized to situations or worlds. Just like individuals *a* and *b*, it has the status of a non-logical constant in the model. This means that, while the identity of the sort N is world-invariant, the link between a discourse referent (the name-bearer) and N is world-contingent. Across different worlds, the relation between one and the same individual and one and the same abstract sort (say, the one identified as *Alice*, or *Aristotle*) may or may not hold.

The intuition that no one but Aristotle could have been (the person we call) Aristotle, and that Aristotle could not have been any other than (the person we call) Aristotle is independent of this. A full-fledged theory of names cannot and should not be attempted in this brief examination of our analysis *vis-à-vis* rigidity, so I will simply assume that a name in argument function differs from a name in a naming construction because it does not link a name-bearer to a sort N as distinct arguments – descriptively, a very safe assumption. In *Aristotle spoke Greek*, the argument in subject position denotes a discourse referent identified as an instance of the *Aristotle* sort,

5 Cf. Kripke 1980, 49: "Although the man (Nixon) might not have been the President, it is not the case that he might not have been Nixon (though he might not have been *called* Nixon)" (emphasis in the original). And even more to the point: "Sloppy, colloquial speech, which often confuses use and mention, may, of course, express the fact that someone might have been called, or not have been called, 'Aristotle' by saying that he might have been, or not have been, Aristotle." (Kripke 1980, 62 note 25). In connection with statements of identity, we may add that *if I were you* is perfectly normal in natural speech, although few individuals could be more clearly distinct than the speaker (self) and an addressee.

which is one and the same across worlds. No naming relation R is part of the semantic representation (in contrast with Matushansky's 2008 analysis), so there is no basis for the same sort identifying different name-bearing referents across worlds, even though it remains true that different people could have been name-related to that sort, and that the same person could have been related to a different sort. This seems to correctly reflect, if not explain, the fact that purported evidence that names are not rigid designators regularly involves alternative counterfactual naming relations.

7 Conclusions and Related Issues

7.1 Theoretical Summary

In a few respects, the analysis here proposed does not differ substantially from previous approaches. Names only denote specific individuals when they appear as a subpart of an interpreted DP; naming constructions involve a predicative substructure, such that *to call x N* attributes the property of having the name *N* to the argument *x*; more specifically, this involves a naming relation R acting as an argument in the semantic interpretation, as in Matushanky's (2008) analysis which is the basis of the present one. In other respects, our analysis breaks from past approaches. Most obviously, the name which is related to its bearer is not a phonological representation, or any form of 'predicate of names', but an abstract category of beings. It would be misguided to ask for a prior characterization of what kind of entity this is. Insofar as speaker categorize entities, they represent types in their mental ontology; indeed, as Carlson (1980) pointed out, even basic examples of individuals, like you and me, can be understood as generalizations over stages. The leading idea is that we use different names to model different categories, or sorts, or entity types, and then we associate independently-defined discourse referents to those entity types. Using a name to identify and re-identify one and the same element in the domain of discourse amounts to categorizing it, by subsuming our experiences of it under one single type.

Other novel features descend from this main idea: the characterization of these 'name-labelled sorts' as independent of a world or a situation, with the consequence that categorizing a discourse referent under a name means identifying it as a token of that type independently of possible worlds. At the same time, room must be made for counterfactual scenarios where this relation has a different domain; this is made possible by the main syntactic innovation, namely, that of interpreting naming verbs not just as a predicative structure (involving a small clause), but as a more complex double copular structure, involving a relator head and a

separate higher head encapsulating the lexical content (naming) of this relation. The predicate, then, is not the name itself, but the property of being in a relation with it. In so doing, we can capture the fact that the predicates introduced by naming verbs are resumed not generically by pro-predicative forms, but by pro-forms standing for manner adverbials, which in Den Dikken's (2006) analysis involve precisely a predication mediated by a relator head.

7.2 Criteria of Identity for Names

It would certainly be more intuitive to take naming to involve a relation between an individual and a linguistic expression, giving back to the word *name* the meaning it has in everyday language. But to precisely identify a name as a linguistic form proves surprisingly difficult. Obviously we cannot consider written representations, if only because many languages have never been written. Matushansky (2008) resorted to phonological representations; but even extending 'phonological' to the sense of 'available to sensory perception', to include signing, more careful scrutiny suggests that what we understand as a name is in fact something more abstract than a perceivable representation. A written form, we have agreed, does not provide a reliable and plausible criterion of identity for a name; but homophonous variants that only differ in spelling like *Smith*, *Smyth*, and *Smythe*, or *Joe* and *Jo*, are for all intents and purposes (including legally) different names. Conversely, there is a sense in which the name we write *Boris* is the same name whether it is used (and, irrelevantly, written) in Russian or in English; but its pronunciation is sharply different in the two cases (/ba'ris/ vs. /'bɔrɪs/). One could insist that they are indeed unrelated forms, of course, but at the price of having to say that Boris Eltsin and Boris Johnson are not both called 'Boris'.[6] It seems much more respectful of intuitions to admit that the two pronunciations correspond to two linguistic versions of the same name. But then, if the identity criterion cannot be a phonological representation, what are they a version of? Conceptualizing a name as an abstract object does not look so implausible, when one gives these facts careful consideration.[7]

6 Jeshion (2015) considers this issue briefly in his note 26.

7 The whole discussion in this paper concerns proper person names, but a theory of names should not limit itself to them. And once we extend our examination beyond person names, the case against taking linguistic representations as identity criteria for names gets stronger. This is because names also include names of computer files, of stars and other astronomical objects, industrial models of artefacts and al of these routinely include numbers or letters (see Geurts 1997, 327 and Predelli 2017, 42). But there is no 'correct' linguistic interpretation of, for example, the celestial object standardly known by astronomers by the name of *NGC1952*, or the Crab Nebula.

7.3 Names and Common Nouns

As noted, Kripke (1980, 134-40) extended to natural kind terms like *heat*, *water*, or *tiger* his treatment of names as rigid designators, arguing that they too cannot fail to denote the same things across possible worlds. Carlson (1980, 60, crediting Postal 1969) developed this line of thought and interpreted not only bare nouns like *bear*, but also morphosyntactically complex forms like the bare plural *bears* as names for kinds. A reason for this is the observed parallelism between names and kind terms with respect to the predicate *is so-called*: this selects names and terms which can refer to a kind, namely definite singulars and bare plurals, but not other types of noun phrases:

(20) a. Slim is so-called because of his slender build.
b. The cardinal is so-called because of its colour.
c. Cardinals are so-called because of their colour.
d.* Some / All / Most cardinals are so-called because of their colour.

In addition, we should note that a substance noun like *water* behaves like a personal name also with respect to the availability of instrumental case after a naming verb in Russian:

(15) Moju sestru zavut Nina / Ninoj. (Russian; Matushansky's (37a))
my.F.GEN sister.F.GEN call.3PL N.nom / N.instr
'My sister is called Nina'.

(21) Eto veshchestvo nazyvajut voda / vodoj. (Russian)
this substance name.3PL water.NOM / water.INSTR
'This substance is called water'.

Viewing kind terms as names is a long-standing philosophical thesis (Putnam 1975, Kripke 1980; cf. Braun 2006), which however is not the main focus of this discussion (see Acquaviva 2024).[8] It should

8 A reviewer objects that kinds are most fundamentally the expression of generalizations, and wonders what common properties could possibly be shared by a kind *ALICE*. The most direct answer is that it would express the unity behind different re-identifying instances of a name-bearer, much like *Ursus Arctos* and *bears* both do (in different ways) with respect to a kind of animals (cf. Carlson's 1980 view of named individuals as kind-level abstractions over stages of them). We can, of course, restrict the term 'kind' to a sense requiring a generalization over multiple instances, which would be close to the non-technical content of the term. This is how Chierchia (1998) characterized them. As a theoretical construct, a kind can be understood in various ways (see McNally 2017), whose merit depends on how effective they are as analytical tools. Here, the semantic object that categorizes a sort like *ALICE* should be a type admitting instance tokens, distinct from other such types, identified by a linguistic

be noted, however, that treating a term like *water* as the name of a kind-level entity (as distinct from a predicate true of things which are water) is conceptually very close to treating *Alice* as a name for a category of entities (as distinct from a label for a set of individuals, or a predicate true of individuals thus named).[9] These abstract sorts are what we attribute properties to when we learn something about a named individual like *Jim* or a nominal category like *dog*. Abstract sorts thus provide the basis for categorization and inductive learning (Millikan 1998). This is also naturally consonant with analyses of names in terms of 'mental files' which organize information (see Recanati 2012 and Jeshion 2014, 82-4).

Bibliography

Acquaviva, P. (2024). "Nouns, Names, and Abstract Kinds". Gardelle, L.; Mignot, E.; Neveux, J. (eds), *Nouns and the Morphosyntax / Semantics Interface*. Cham: Palgrave McMillan, 37-64. https://doi.org/10.1007/978-3-031-44561-3_2

Adger, D.; Ramchand, G. (2003). "Predication and Equation". *Linguistic Inquiry*, 34, 325-59. https://doi.org/10.1162/002438903322247515

Alber, B.; Arndt-Lappe, S. (2023). "Clipping and Truncation". Ackema, P.; Bendjaballah, S.; Bonet, E.; Fábregas, A. (eds), *The Wiley Blackwell Companion to Morphology*. Oxford: Wiley Publishers, 445-71. https://doi.org/10.1002/9781119693604

Bach, K. (2002). "Giorgione was so Called because of his Name". *Philosophical Perspectives*. 16, 73-103. https://doi.org/10.1111/1468-0068.36.s16.4

Braun, D. (2006). "Names and Natural Kind Terms". Lepore, E.; Smith, B. (eds), *The Oxford Handbook in the Philosophy of Language*. Oxford: Oxford University Press, 490-515.

Burge, T. (1973). "Reference and Proper Names". *Journal of Philosophy*, 70, 425-39.

Carlson, G. (1980). *Reference to Kinds in English*. New York: Garland.

Castañeda, H.-N. (1985). "The Semantics and the Causal Roles of Proper Names". *Philosophy and Phenomenological Research*, 46, 81-113. https://doi.org/10.2307/2107658

Chierchia, G. (1998). "Reference to Kinds across Language". *Natural Language Semantics*, 6, 339-405. https://doi.org/10.1023/A:1008324218506

Citko, B. (2008). "Small Clauses Reconsidered: Not so Small and not so Alike". *Lingua*, 118, 261-95. https://doi.org/10.1016/j.lingua.2007.05.009

expression (no matter how realized), and sharing with natural kind terms like *bears* or *water* the grammatical behaviour discussed in the text.

9 One might object that common nouns are descriptive while names need not be (as we saw in section 5, many names are in fact descriptive, although the descriptive content does not determine the properties of the referent). But this is not true. For speakers who cannot tell an elm from a beech, the two labels are not descriptive, even though they remain distinct common nouns – and this is a very common circumstance indeed. The analogy between name-labels and noun-labels is clearest when considering nouns like *cranberry* and *loganberry*: the sub-categories of what one understand by *berry* are distinguished by morphemes with no descriptive content (indeed, *Logan* was a family name); they only express identity and difference.

Cumming, S. (2008). "Variabilism". *Philosophical Review*, 117, 525-53.
Dikken, M. den. (2006). *Relators and Linkers*. Cambridge, MA: MIT Press.
Doherty, C. (1996). "Clausal Structure and the Modern Irish Copula". *Natural Language and Linguistic Theory*, 14, 1-46. https://doi.org/10.1007/BF00133402
Elbourne, P. (2005). *Situations and Individuals*. Cambridge, MA: MIT Press.
Fara, D.G. (2015). "Names are Predicates". *Philosophical Review*, 124, 59-117. https://doi.org/10.1215/00318108-2812660
Geurts, B. (1997). "Good News about the Description Theory of Names". *Journal of Semantics*, 14, 319-48. https://doi.org/10.1093/jos/14.4.319
Grandy, R.E.; Freund, M.A. (2023). "Sortals". Zalta, E.; Nodelman, U. (eds), *The Stanford Encyclopedia of Philosophy* (Summer 2023 Edition). https://plato.stanford.edu/archives/sum2023/entries/sortals/
Helmbrecht, J. (2015). "On the Form and Function of Proper Names. A Typological Perspective". https://doi.org/10.13140/RG.2.2.16466.73922
Hinzen, W. (2016). "Linguistic Evidence against Predicativism". *Philosophy Compass*, 11, 591-608. https://doi.org/10.1111/phc3.12348
Jeshion, R. (2014). "Referentialism and Predicativism about Proper Names". *Erkenntnis*, 80, 363-404. https://doi.org/10.1007/s10670-014-9700-3
Krifka, M. (1995). "Common Nouns: A Contrastive Analysis of Chinese and English". Carlson, G.; Pelletier, F.-J. (eds), *The Generic Book.* Chicago: University Of Chicago Press, 398-411.
Kripke, S. (1980). *Naming and Necessity*. Cambridge, MA: Harvard University Press.
Leckie, G. (2013). "The Double Life of Names". *Philosophical Studies*, 165, 1139-60. https://doi.org/10.1007/s11098-012-0008-3
Matushansky, O. (2008). "On the Linguistic Complexity of Proper Names". *Linguistics and Philosophy*, 21, 573-627. https://doi.org/10.1007/s10988-008-9050-1
McNally, L. (2017). "Kinds, Descriptions of Kinds, Concepts, and Distributions". Balogh, K.; Petersen, W. (eds), *Bridging Formal and Conceptual Semantics. Selected Papers of BRIDGE-14*. Düsseldorf: Düsseldorf University Press, 39-61.
Millikan, R. (1998). "A Common Structure for Concepts of Individuals, Stuffs, and Real Kinds: More Mama, More Milk, and More Mouse". *Behavioral and Brain Sciences*, 21, 55-65. https://doi.org/10.1017/s0140525x98000405
Mueller-Reichau, O. (2006). *Sorting the World: on the Relevance of the Kind-Level/Object-Level Distinction to Referential Semantics* [PhD dissertation]. Leipzig: Universität Leipzig.
Postal, P. (1969). "Anaphoric Islands". Binnick, R.; Davidson, A.; Green, G.; Morgan, J. (eds), *Papers from the Fifth Regional Meeting of the Chicago Linguistics Society*. Chicago: Department of Linguistics, University Of Chicago.
Predelli, S. (2017). *Proper Names. A Millian Account*. Oxford: Oxford University Press.
Putnam, H. (1975). "The Meaning of 'Meaning'". Putnam, H. (ed.), *Mind, Language and Reality. Philosophical Papers Volume 2*. Cambridge: Cambridge University Press, 215-271.
Recanati, F. (2012). *Mental Files*. Oxford: Oxford University Press.
Saab, A.; Loguercio, N. (2020). "No Name: The Allosemy View". *Studia Linguistica*, 74, 60-97. https://doi.org/10.1111/stul.12116
Schoubye, A. (2016). "Type-Ambiguous Names". *Mind*, 715-67.
Van Langendonck, W. (2007). *Theory and Typology of Proper Names*. Berlin; New York: De Gruyter.
Zamparelli, R. (2000). *Layers in the Determiner Phrase*. New York: Garland.