NATURAL KIND TERMS ARE SIMILAR TO PROPER NAMES IN BEING WORLD-INDEPENDENT

Ari Maunu — University of Turku

Abstract

According to the New Theory of Reference, proper names (and indexicals) and natural kind terms are semantically similar to each other but crucially different from definite descriptions and “ordinary” predicates, respectively. New Theorists say that a name, unlike a definite description, is a directly referential nondescriptional rigid designator, which refers “without a mediation of the content” and is not functional (i.e. lacks a Carnapian intension). Natural kind terms, such as ‘horse’ and ‘water’, are held to have similar distinctions, in contrast to other predicates. However, the New Theory contains some problems related to reference, descriptionality, content and meaning. In view of these problems, it will be argued that the distinctive shared feature of proper names and natural kind terms, while technically corresponding to nonfunctionality, is to be explicated in terms of independence of possible worlds, rather than in terms of reference and content: natural kind terms are world-independent predicates, making “worldless” predications. Just as, say, ‘Elvis’ names Elvis even with respect to “Elvisless” worlds, or, rather, names Elvis independently of worlds, natural kind terms are in an important sense “worldless” as well: to talk about Elvis is to talk about him irrespective of moments of time and possible worlds, and is to talk about a human, also irrespective of moments and worlds, while it is not to talk about, say, a drug-addict irrespective of moments, nor about a singer irrespective of worlds. There is no genuinely timeless and worldless predication of the sort “Elvis is (was) bald”, but there is, it seems, such a predication “Elvis is (was) human”. This notion of independence of times and worlds is detached from those of descriptionality and content mediation.

1. Introduction

developing some ideas discernible already in the work of Ruth Barcan Marcus (Barcan 1946, 1947; Marcus 1961), introduced the New Theory of Reference, the theses of which amount to something like the received view in the philosophy of language today. According to the New Theory, proper names (and indexicals) and natural kind terms are semantically similar to each other, but crucially different from definite descriptions and “ordinary” predicates, respectively. New Theorists say that a proper name (and an indexical, as used in a context), unlike a definite description,

(RD) is a rigid designator, or, as this is customarily expressed, a proper name “refers to the same individual in every possible world in which that individual exists”; 

(ND) is nondescriptional, that is, is semantically inequivalent to (any combination of) definite descriptions; 

(UM) is “unmediated by the content”, or refers “without a mediation of the content”; 

(NF) is not functional, i.e. is not to be interpreted as having a Carnapian intension (or, a function from possible worlds to referents); 

(DR) is directly referential.

These tenets are taken to apply, mutatis mutandis, to natural kind terms, such as ‘human’, ‘horse’, ‘gold’, ‘water’, in contrast to other predicates. Also, the following version of essentialism is accepted: 

(EP) Natural kind terms predicate essential properties to individuals they apply to, in the sense that if an individual b is an N, where ‘N’ is a natural kind term, then b is an N in every possible world in which it exists, and is not a non-N in any world.

The purpose of this paper is to point out some difficulties in these theses, especially in regard to the parallelity between proper names and natural kind terms. The positive proposal outlined here is
that the distinctive shared feature of proper names (and indexicals) and natural kind terms is best represented, not by means of such excessively semantic notions as reference, content and meaning but rather by means of more metaphysical notion of independence of possible worlds (and other contextual factors such as time): just as the distinguishing feature of a proper name, in comparison to a definite description, is best represented as independence of possible worlds, natural kind terms are to be regarded as world-independent predicates, making “worldless” predications.

2. Rigid designation

To construe rigid designation according to RD, that is, as constancy of reference with respect to possible worlds, is problematic for the simple reason that RD does not fully separate proper names from definite descriptions. Many definite descriptions, such as ‘the square of 2’, are rigid in this sense. Furthermore, if natural kind terms are supposed to be rigid designators (in this sense), we should be able to give such an account of reference of these terms, which makes their referent constant with respect to possible worlds. The usual approach to construe the referent of a predicate (whether a natural kind term or not), with respect to a possible world, as the extension, that is, the set of individuals described by that predicate, will not do, for then the referent of a natural kind term, say, ‘horse’, is not constant through possible worlds (since the set of horses, it appears, is not the same in all worlds) and thus is not a rigid designator (in this sense). Another possibility is to regard the referent of a predicate as a universal — for ‘horse’, for instance, the one and same universal The Horse with respect to every world. However, besides being ontologically suspect, it is hard to see how this alternative can avoid making other predicates, such as ‘bald’, rigid as well — why could we not say that ‘bald’ refers to The Bald irrespective of possible worlds — and thus avoid spoiling the distinction between natural kind terms and other predicates. In conclusion, the rigid designation thesis RD seems as a misguided, or, at best, misleading, expression of what is commonly distinctive in proper names and natural kind terms.

In a recent dictionary of philosophy we can find the claim that what is special about natural kind terms is that they “are rigid designators of underlying natural kinds whose identities are
discovered by science” (Loar 1995, p. 474). Can we not say, by the same token, that e.g. ‘bald’ is a rigid designator of the “underlying kind” of being bald? But perhaps it is thought that being “scientific” has something to do with all this — that while it is a scientific question what is gold or water, and which objects are lemons or horses, it is not so with the predicates such as ‘bald’. I think that this is the case, but the question of whether something is scientific or not, which in fact is a question of strictness of criteria, has nothing to do with the question of rigidity (when the latter is defined as referential constancy). Surely, even though there are strict scientific criteria for the correct use of the predicate ‘horse’ and not so strict, indeed unscientific, criteria for the correct use of ‘bald’, this says nothing about the referent of ‘horse’ or the referent of ‘bald’, and thus nothing about rigidity. As Stephen Schwartz notices, “explaining exactly what the reference of a rigid natural kind term is” is one of “severe difficulties [...] the New Theory] must face” (1977, p. 37). Even though this was written a quarter of a century ago, the question of the reference of natural kind terms has, to my knowledge, yet to be resolved satisfactorily.

3. Descriptionality

Offering nondescriptionality (ND) as the crucial distinctive feature common to proper names and natural kind terms, as New Theorists customarily do, is not fully convincing either. Natural kind terms, such as ‘horse’, unlike proper names, are themselves descriptive — if they were not, it would be hard to see how definite descriptions such as ‘the heaviest horse’ could be. Descriptionality is not a distinguishing feature here: ‘Horse’ is clearly just as descriptional as ordinary predicates such as ‘bald’ are. Further, the customary way to treat rigidity and nondescriptionality as if they were coinciding (at least “in extension”) is refuted by the fact that an expression can be at the same time descriptive and rigid: all rigid definite descriptions, such as ‘the square of 2’, are still obviously descriptional — after all, they are descriptions. (It follows that if proper names are shown to be rigid designators, this does not automatically mean that they are also nondescriptional.)

Admittedly it is more proper to represent the advocates of the New Theory, not as denying descriptivity in this sense, but rather as opposing the Description Theory devised by Russell (and, allegedly,
Frege). That is, the claim that, say, ‘London’, is semantically equivalent to, say, the definite description ‘the capital of England’, and, similarly, that a natural kind term such as ‘water’ is equivalent to, say, ‘that tasteless and colourless liquid that quenches thirst, etc.’. However, even though the orthodox criticism is justified as far as Russell’s explicitly formulated Description Theory (of proper names) is concerned, looking at the matter from a wider historical perspective reveals, again, that the case of proper names and that of natural kind terms is not so straightforwardly alike. The identification of a given natural kind term with a certain set of predicates seems to derive from Aristotle’s doctrine of real definition. Then, combining the natural view that a natural kind term can be analyzed into its defining predicates with the Kantian delineation of analyticity as “true in virtue of the meanings of the terms” seems to produce directly something like a Description Theory for natural kind terms. Now, Aristotle (and Leibniz, and others) need not accept this Kantian “linguistic turn”; were Aristotle and Leibniz around today they could say that in “having the chemical structure H\textsubscript{2}O” we have finally hit upon the correct real definition of water, without claiming that this phrase is semantically equivalent to ‘water’ (i.e. that “Water is H\textsubscript{2}O” is “true in virtue of the meanings of the terms”). The disanalogy to proper names is evident: it is not at all natural to hold that names (or named individuals) have real definitions in this manner.

The historical consideration in the previous paragraph also casts some doubt on the claim, made by Putnam (1970, 1973, 1975) and many others, that the New Theory is a straightforward correction of the “traditional theory of meaning”, according to which, allegedly, the “meaning” of a natural kind term is the same as the “meaning” of a suitable combination of predicates.

4. Content mediation

Much of what was said in the previous section applies to the mediation thesis UM as well, for the simple reason that “semantical equivalence” mentioned above is generally understood as the coincidence of content (or “meaning”). Also, it is customary to relate descriptionality forthrightly to content or “meaning” (as in Loar 1995, p. 474).

David Kaplan (1977, 1989) in particular stresses UM, i.e. the thesis that the reference of proper names is “unmediated by the
content”. (Kaplan concentrates on indexicals but his basic point about them is customarily taken to apply to proper names as well.) Kaplan and other New Theorists hold that the semantic function of a proper name in a natural language is only to label an object for future reference. A proper name just picks out an individual and stays with it even when the properties of that individual change considerably. An indexical (as well as a proper name) is “an expression whose semantical rules provide directly that the referent in all possible circumstances [that is, worlds] is fixed to be the actual referent” (Kaplan 1977, p. 493). Again, it is immediately clear that to extend this characterization to natural kind terms is problematic because we then need to identify the referent of such predicates (cf. Section 2 above).

A more general difficulty with the unmediation thesis UM is that it seems dependent on a specific theory about content (or “meaning”), namely, on truth-conditional semantics, given in terms of Carnapian intensions, in the following way: Kaplan emphasizes the nonfunctionality thesis NF, that is, the thesis that indexicals (as used in definite contexts) and proper names are terms that are not to be construed by the aid of possible worlds: “The referent, in a circumstance, of [... such a] term is simply independent of the circumstance and is [not] a function (constant or otherwise) of circumstance” (Kaplan 1977, p. 497). This amounts to saying, in terms of modal (alethic) logic, that while an interpretation of an individual constant behaving like a definite description is a (typically incomplete) function — a Carnapian intension — from possible worlds to individuals (such a function being constant for rigid definite descriptions), an interpretation of (a constant corresponding to) a proper name is just its referent, irrespective of possible worlds. That is, if \( W \) is the set of possible worlds, \( A \) is the domain of (all possible) individuals, \( V \) is the interpretation function, ‘\( d \)’ is a constant behaving like a definite description, and ‘\( n \)’ is a proper name, then

\[
V(\text{‘}d\text{’}) : W \to A,
\]

while

\[
V(\text{‘}n\text{’}) \in A.
\]
Then, identifying content (or “meaning”) of a term with its Carnapian intension (its “truth-conditions”), this is to hold that only the referent a proper name is relevant to the content of a name (see, for instance, Kaplan 1977, pp. 483, 493-7; 1989, pp. 572-3). That is, while definite descriptions do have such content (by which their reference, with respect to a possible world, is “mediated”), proper names do not, or, as the latter point is often expressed, the content (or “meaning”) of proper names “consists in their reference only”. One problem with this suggestion is that it derives from an excessively specific and restricted (though popular) sense of ‘content’. Arguably, for a word, including each proper name, to be useful in language it must be a symbol, which many find natural to interpret as amounting to just having content. I take this to be the basic point Frege is trying to advance by means of his notion of Sinn when he says, for instance, that “it is via a Sinn, and only via a Sinn that an Eigennname is related to an object” (Frege 1969, p. 135).1 (Michael Dummett (1973, 1981) takes Frege as expressing in this passage and elsewhere something like truth-conditional semantics. For general criticisms of the identification of Frege’s notion of Gedanke with truth conditions, see Maunu 2002.) At any rate, even though proper names are indeed meagre in content in comparison to definite descriptions, it seems that natural kind terms do not quite share this distinction (in comparison to other predicates). As indicated above, ‘horse’ describes horses just as much as ‘bald’ describes those that are bald. Further, to repeat another point made above, the set of horses is not constant through possible worlds (to put it roughly); indeed, in ordinary modal logics all predicates are interpreted in parallel to definite descriptions, namely, as functions from possible worlds to the set of subsets of the domain (i.e. as Carnapian intensions). This does not square well with the claim that natural kind terms, like proper names, “do not have content”, even when ‘content’ is understood in terms of Carnapian intensions.

5. Direct reference

New Theorists say also that proper names, indexicals and natural kind terms are directly referential. The New Theory being also

---

1 I am indebted here to Dr. Tapio Korte.
known as the Theory of Direct Reference, this term appears to be taken as covering all the ideas discussed above: nondescriptionality, unmediation, nonfunctionality, and even rigid designation, though the last notion is then interpreted, not according to RD above (i.e. as a constant function), but as nonfunctionality. (It must be admitted that many writers use ‘rigid designation’ in this way.) No matter which of these is meant, the discussion above shows that to call natural kind terms directly referential is problematic.

This many-sided usage of ‘directly referential’ suggests that perhaps New Theorists have conflated too many ideas with each other: the somewhat technical abstraction of nonfunctionality with their heavily theory-dependent semantic notions of reference, content and meaning. Further, as shown above, none of these ideas seem to sit entirely comfortably with natural kind terms (in view of the alleged parallelity between proper names and natural kind terms): natural kind terms are standardly taken to have Carnapian intensions, identifying their reference is problematic, they do have more content than names.

6. Independence

In order to expose the crucial factor that is responsible for the similarity between proper names and natural kind terms, as well as for their being dissimilar to definite descriptions and ordinary predicates, respectively, we need to downplay the role of such semantic notions as reference, content and meaning, and move on to a more metaphysical territory. More precisely, it will be suggested that the crucial common feature, while technically corresponding to nonfunctionality (as introduced above), is to be explicated in terms of world-independence (rather than reference and content).

In the interest of introducing the notion of independence relevant here, let us consider how names work with respect to time. (It is often useful to approach modal (alethic) issues by means of their temporal analogies; cf. here Kaplan 1973, pp. 503-5, 508-12.) Taking ‘Elvis’ to name Elvis Presley, that famous singer, the statement “Elvis was bald at noon GMT on the first of January, 1970” has a definite truth value, at least in so far as we take it as saying something definite about the definite referent of the subject term (namely, Elvis). (There is, admittedly, some vagueness in the predicate ‘bald’ — this, however, is irrelevant here.) Consider then:
(1) Elvis was bald at noon GMT on the first of January, 2002.

Does this have a definite truth value (looking away from the mentioned vagueness in ‘bald’)? Perhaps it is suggested that since Elvis was not around at the time mentioned in (1), the name ‘Elvis’ in (1) does not refer and, therefore, (1) is without a truth value (assuming that we follow Frege in regarding direct statements with empty subject terms as truth-valueless). However, it seems evident that ‘Elvis’ in (1) is not an empty term, but a referring one: it refers to Elvis. For example, if somebody asked, “Did Elvis do a show in Las Vegas in 1978?”, the following would certainly be an improper reply: that question is unanswerable since it is not about anybody — Elvis was already dead in 1978 and the name ‘Elvis’ does not refer in this question. Instead, something like the following would constitute an acceptable answer: no, he did not — he was already dead in 1978 and thus did not do any shows then. To put the point candidly, it is evident that “Elvis was already dead in 1978” is true.

A temporal analogy of the rigid designation thesis RD, as applied to the proper name ‘Elvis’, says that ‘Elvis’ refers to the selfsame Elvis with respect to those moments of time when Elvis exists. This is misleading (at best). Rather, the referent of ‘Elvis’ is Elvis irrespective of moments of time — as indicated above, even though Elvis is not around any more we may still talk about him by means of ‘Elvis’ and say such true things as “Elvis is already dead”.

Perdurantists hold that individuals, or at least spatiotemporal individuals such as Elvis, consist in time slices or temporal parts (see, for instance, Quine 1950). Elvis is (or was) an “aggregation” or “summation” of his temporal parts, which are numerically distinct; and Elvis of, say, noon GMT on the first of January, 1970, was famous while Elvis of noon GMT on the first of January, 1940, was not. This is how perdurantists explain change — some temporal slices of an individual (such as Elvis) may have a property (like being famous) other slices of that individual lack.

Endurantists, in contrast, wish to keep individuals as wholes enduring through time. Properties are regarded, as it were, responsible for change. Elvis, that enduring individual, has (or had) the (noncontradictory) time-indexed properties being famous at noon on the first of January, 1970 and being nonfamous at noon on the first of January, 1940. Using ‘t’ as a shorthand for the moment of time
Natural kind terms are similar to proper names in being world-independent mentioned in (1), perdurantists, I take it, analyze (1) as “t-Elvis is (was) bald” (or “Beᵗ”, with obvious shorthands), while endurantists think about it rather as “Elvis is (was) t-bald” (or “Bᵗₑ”). Perdurantists seem to be mistaken. Since there is no such thing (slice) as t-Elvis, (1) should be according to them not about anybody or anything at all, which is simply false. Again, “Elvis was dead at noon GMT on the first of January, 2002”, is even more revealing: since there is no t-Elvis, perdurantists are committed to deny that this is true.

Extending these temporal considerations to (alethic) modal ones, it seems plausible to maintain that ‘Elvis’ names Elvis even with respect to “Elvisless” possible worlds, or, rather, that ‘Elvis’ names Elvis independently of possible worlds. (This is sometimes called Kaplan rigidity, in contrast to Kripke rigidity, cf. Kaplan 1973, pp. 503-5; 1977, pp. 492-3; 1989, pp. 569-70.) “Elvis is the same as Presley”, for instance, is true simpliciter, irrespective of moments of time and of possible worlds. The misleading characterization of proper names (and indexicals as used in definite contexts) as rigid (in the sense of RD) seems to be due to perdurantist assumptions, as extended to possible worlds: individuals like Elvis are thought of as somehow consisting in “worldslices”, and then the properties of such worldbound slices are considered. An approach of this sort is clearly visible, for instance, in the work of Jaakko Hintikka (see, for example, Hintikka 1969, 1974, 1975, 1987; Hintikka & Hintikka 1989). Alethic endurantism, in contrast, takes individuals as wholes even with respect to possible worlds and takes such individuals to have world-indexed properties (in addition to time-indexed ones).

Even though the point about independence is metaphysical in nature, the semantic notion of reference is, admittedly, important in the above discussion. This is because it is customary (and as such natural) to regard an interpretation of a proper name ‘n’, V(‘n’), as the referent of ‘n’. At any rate, on the present, independence emphasizing approach, there is no need to drag in content or “meaning” and say things like “proper names fail to have content”.

Natural kind properties, such as that of being human, are in an important sense “worldless” as well. Assuming that Elvis was human, he was human irrespective of moments of time and possible worlds; to talk about Elvis is to talk about him irrespective of moments and worlds, and is to talk about a human, also irrespective of moments and worlds, while it is not to talk about, say, a drug-addict irrespective of moments, nor about, say, a singer irrespective of
worlds. On the other hand, it could be held, plausibly, that the statement “Elvis is human” allows for several construals, for instance “\(H^t e\)” (that is, Elvis is actually human at \(t\)), “\(H^e\)” (Elvis is actually human, irrespective of time), and “\(He\)” (Elvis is human simpliciter, irrespective of worlds and times). It is, on the present view, the possibility of this last interpretation that sets natural kind terms apart from other predicates such as ‘bald’. The mere “Elvis is (was) bald” prompts the question, “Was bald when?” (“For which \(i\), \(B^i e\)?”), unless the time is understood from the context, or even (at least among philosophers sensitive to possible worlds) the question, “Was bald when and with respect to which possible worlds?” (“For which \(z\) and \(i\), \(B^zi e\)?”). There is no genuinely timeless and worldless predication “Elvis is (was) bald”, but there is, it seems clear, such a predication “Elvis is (was) human”. Only the predicate ‘\(H^zi\)” — where ‘\(z\)’ and ‘\(i\)’ are place-holders (in the sense of Frege’s ‘\(\xi\)’) for worlds and times, respectively — relates to times and worlds; the mere ‘\(H\)” (without superscripts) is independent of times and worlds, signifying the property of just to be human. In contrast, for ‘bald’ we have only ‘\(B^zi\)” and not ‘\(B\)” (without place-holders, or “gaps”). When New Theorists such as Kripke say that Elvis is (was) essentially human, they mean that Elvis is (at least) weakly necessarily human, or human (at least) in those worlds in which he exists; that is, they mean to affirm “\(\forall z(E^z e \to H^z e)\)” or probably rather “\(\forall zi(E^zi e \to H^zi e)\)” where ‘\(E^z\)” shortens ‘exists in a world \(z\)” and ‘\(E^zi\)” shortens ‘exists in a world \(z\) at a moment \(i\)” . These statements (that is, statements which I just presented formally) may be true but highly misleading if intended to characterize natural kind terms. Rather, Elvis just is (was) human, irrespective of anything.

The present account involving independence is from a technical viewpoint quite straightforward. In the notation introduced above (in Section 4), with ‘\(P\)” as the power set operator, and with ‘\(n\)” representing a proper name, ‘\(d\)” a definite description (or a constant behaving like one), ‘\(N\)” a natural kind term, and ‘\(D\)” an “ordinary” (monadic) predicate, we have,

\[
V(\text{"n")} \in A, \\
V(\text{"d")}: W \to A,
\]

and, exactly analogously.
Natural kind terms are similar to proper names in being world-independent.

\[ V('N') \in P(A), \]
\[ V('D'): W \rightarrow P(A). \]

7. Connections

It may be instructive to discuss some of the connections the present approach has to some others in the literature. The theory of alethic endurantism, involving world-independent properties, put forward above derives from the work of Alvin Plantinga in the seventies (see Plantinga 1970, pp. 487-92; 1973, pp. 150-1, 155-6; 1974, pp. 62-5, 72, etc.; 1976, esp. pp. 263-5; 1978, pp. 132-8). As indicated above, Kaplan's view of indexicals, with its emphasis on nonfunctionality and dissociation from the rigid designation thesis RD, has important affinities with the present account (see especially Kaplan 1977, pp. 492-5). On the other hand, there are also clear differences: first, the present view, unlike that of Kaplan's, is not primarily in terms of reference, content and meaning; secondly, the Russell-Kaplan notion of singular propositions, or "propositions which contain individuals as immediate constituents" (Kaplan 1975, p. 724), is not needed (nor recommended) in the account given above. In the New Theorist camp, some of Nathan Salmon's (1982, esp. pp. 119-31) views are also similar to the theory involving world-independence presented here. In fact, Salmon (1982, p. 122 n. 16) introduces a notion of world-independence which resembles the one I have utilized. However, even though Salmon (1982, p. 180 n. 3) even seems to identify (his notion of) world-independence with essentialism (of some sort or other), he does not take systematic advantage of this.

The most important inspiration for the account presented above comes from Leibniz (perhaps surprisingly, in view of the tendency in New Theorists, mentioned at the end of Section 3 above, to see themselves as strongly in opposition to traditional views). For one thing, in Nouveaux essais (pp. 299-300, 311) Leibniz, using ‘gold’ as an example, makes a clear distinction between a real (or “rigorous”) definition, which provides us with “the inner nature which is common to the individuals of a given species” (p. 311) (though we may not know, at present, or even ever, such a definition for a given “species”), and nominal definition, which gives us “the outer signs” of a species (ibid.), such as, in the case of gold, ‘the heaviest body we have’ (p. 299); these latter “are only conjectural and sometimes [...]

© Philosophical Writings
merely provisional” (p. 311). This is in harmony with the discussion of definitions in Section 3 above.

Secondly, and more importantly from the viewpoint of the present paper, Leibniz, having a starting point entirely other than reference, content and meaning, seems to have a world-independent conception of natural kind terms, or “notions of species” (or “specific notions”), as he calls the “ideas” expressed by such terms (or at least a subset of them). In the Arnauld Correspondence this comes up as follows (though, admittedly, the particular example Leibniz uses here, ‘sphere’, is not really a natural kind term):

\[ T \]he notion of a species contains only eternal or necessary truths, whereas the notion of an individual contains, regarded as possible, what in fact exists or what is related to the existence of things and to time, and consequently it depends on some free decrees of God which are considered as possible: for truths of fact or of existence depend on God’s decrees. So the notion of the sphere in general is incomplete or abstract, that is to say that one considers only the essence of the sphere in general or in theory without regard to the particular circumstances [...]. (1960, p. 39)

Since in a letter written in 1678 (Leibniz 1926, p. 392), Leibniz also states that “in the region of eternal truths, or in the field of ideas that exists objectively [à parte rei], there subsists Unity, the Circle, Potency, equality, heat, rose, and other realities or forms or perfections” (my emphasis), it could be said that (for instance) rosehood, just as sphericity, is an essential property just because it is independent of worldly contexts, i.e., it appears, is to be construed as the mere ‘R’ (i.e. without gaps), rather than ‘Rzi’, which is precisely what I argued for above.

To consider Leibniz’s view, and his justification for it, in a more detailed manner, he writes later on in the Arnauld Correspondence that “the possibilities of individuals or of contingent truths contain in their notion the possibility of their causes, that is, of the free decrees of God, in which they differ from the possibilities of species or eternal truths, which depend upon God’s understanding alone without presupposing his will” (1960, p. 51). This is just another expression of Leibniz’s view, which he puts forward in numerous places, that truths about essences depend only on God’s understanding and are thus by no means on a par with contingent
Natural kind terms are similar to proper names in being world-independent truths since the latter derive from his will. This is relevant to the present topic because Leibniz stresses that God’s understanding must be (conceptually) prior to his decretory will, which means that true ascriptions of essences are true prior to any reflections upon worlds. Thus, these truths are true prior to the creation, and even prior to God’s “creational arbitrations”, for their being true is entirely independent of them. That is, essential predicates such as ‘is human’ are without the world factor altogether (and thus without the time factor as well). This implies that in the analysis of such predicates (or respective notions) worlds (and times) are to be left out. Leibniz’s view seems to be, in short, that in connection with essential properties we may drop references to worlds (and thus to times as well), which is the view advanced above.

8. Objections

As an objection to the view advanced in this paper, it may be insisted that some answer should be given to the question of the truth value, with respect to times and worlds, of “Elvis is human”, as understood in the worldless and timeless sense of “He” (and not in the sense, “For which times i and worlds z is Elvis H^zi?”). The reply is that there is a sense, albeit parasitic and even spurious one, in which “He” is true with respect to every time and every possible world (even with respect to Elvisless worlds and times). Such a sense may be brought out by means of the following consideration: “x^2=4” is true for 2 and -2, or true “at” 2 and -2, and “∀xx^2=4” is false (for “x^2=4” is not true at every number). Then it might be asked whether “2^2=4” is true at every number (that is, whether ∀x2^2=4), or whether it is true, say, at 7. The reply is that we must say that “2^2=4” is true at 7 and at every number, since it is true simpliciter, irrespective of “ats” (for ∀x2^2=4 is the same as 2^2=4). In the same manner, “Elvis is human”, taken as “He”, is true simpliciter, and the question whether it is true, say, with respect to or “at” a given possible world is really a pseudo-question, even if we had to answer that it is.

This brings us to another potential difficulty, namely, to the question whether the approach advocated above, involving world-indexed properties, makes too many truths to appear as necessary. Plantinga (1974, pp. 55f.) contends that the property of being actually a singer at s, or S^α, for instance, is an essential property of Elvis
“because it is true in every world” that $S^n_e$ (the example is mine, not Plantinga’s). Arguably, this is misleading. For one thing, if we identify essentiality of a property with the quality of having that property in every world, and also utilize world-independent properties, it is much more natural to connect modalities to items like $S^{zi}_e$ (with gaps), rather than to those of the sort $S^n$, and say that $S^{zi}_e$, for example, is necessarily true just in case for every $z$ and $i$, $S^{zi}_e$. However, even this is not accurate from the viewpoint of the Leibnizian world-independence account of natural kind terms outlined above: on this account, it is really not proper to relate the indexed property $S^{zi}$, nor even $H^{zi}$ (i.e. “$<z,i>$-humanity”) to necessity at all (since worlds and times are involved in these), but only properties such as human simpliciter (the mere $H$ without superscripts indicating worlds or times), thus making, as it were, independence a mark of essential properties of individuals.

In sum, it has been argued above that what really separates natural kind terms from “ordinary” predicates, and what they share with proper names and indexicals, is that they are involved in timeless and worldless predications such as “Elvis is human” (in contradistinction to “Elvis is bald”). This notion of independence of times and worlds is detached from those of descriptionality and content mediation.

Bibliography


Frege, Gottlob 1969: [“Ausführungen Über Sinn und Bedeutung”], in


© Φ Philosophical Writings
Dordrecht: Reidel, 253-355, 763-9. References are to the reprint, with some additions and revisions, as Kripke 1980.

--------- 1980: Naming and Necessity. Cambridge: Harvard University Press. (A reprint, with a substantial introduction (pp. 1-21) and some minor revisions, of Kripke 1972.)


Natural kind terms are similar to proper names in being world-independent.


**Ari Maunu**
University of Turku
Department of Philosophy
FIN-20014 Turku
Finland
ari.maunu@utu.fi

© Φ Philosophical Writings