Rethinking the Modal Argument against Nominal Description Theory

Jiří Raclavský

Abstract

According to the Nominal description theory (NDT), the meaning of a proper name is identical with the meaning of the so-called nominal description. Kripke-like argumentation against NDT by means of modal argument can be doubted because names are introduced by means of a contingent baptizing act. I suggest refinements of the modal argument which filter out such objection. I distinguish two kinds of nominal descriptions: rigid and non-rigid; thus there arise two versions of modal argument, which both are valid. But one of them has a conclusion (targeted against NDT) the truth of which remains disputable.

1 Modal argument

Taking advantage of Kripke’s famous claim – “If the name means the same as that description or cluster of descriptions, it will not be a rigid designator.” (Kripke 1972, 276) – one can complete a Kripkean modal argument (MA) against description theory of proper names. It is sufficient to use Kripke’s key thesis – proper names are rigid designators – as a second premise and formulate an appropriate conclusion.¹ I will confine myself to the version of MA directed against the Nominal description theory (NDT). According to NDT, the meaning of a proper name \( N \) is the same as the meaning of a nominal description \( ND \), “the only individual named \( N \)” (or “the only bearer of \( N \)”). It is an interesting proposal going against the meaning reduction advocated by Saul Kripke. NDT as a semantic theory has been recently defended mainly by Kent Bach (1987).² Here is my MA:

¹Scott Soames (1998) formulated another MA. I will not examine here the differences between my and Soames’ version. Btw. Soames did not take into account rigid descriptions (including nominal ones).

²The first proponent of NDT was Bertrand Russell followed by William Kneale. Recently, François Récanati and also Stefano Predelli proposed a ‘formal-pragmatic’ version of NDT (the meaning of a nominal description is not the meaning of proper name but it occurs somehow in its ‘content’).
If a proper name \( N \) has the same meaning as a nominal description \( ND \), it is not a rigid designator.

A proper name \( N \) is a rigid designator.

Hence, a proper name \( N \) does not have the same meaning as a nominal description \( ND \).

MA is an instance of *modus tollens*, which shows its validity.\(^3\) Nevertheless, Bach’s early critical comments on the use of the argument (Bach 1981, 152) made me rethink the formulation of MA and re-examine its soundness. Here are several objections to MA (only the first one was expressed by Bach):

i. \( ND \) is a rigid designator. For there is no possible world \( W \) in which an individual is named \( N \) and it is not picked out by the respective \( ND \).

ii. If \( ND \) is a non-rigid designator due to the fact of baptizing of an individual by \( N \), thus not singling out the individual \( N \) before the baptism by \( N \), then \( N \) is a non-rigid designator too. For despite \( N \) behaves rigidly after the baptism, it does not designate \( N \) before the baptism (or in those worlds in which \( N \) is not baptized by \( N \)).

iii. When we identify the meanings of \( N \) and \( ND \) (or certain other suitable rigid description), the Kripkean MA does not force us to accept its conclusion. Although MA is valid, its soundness is doubtful.

The evident contingency of baptism is in fact the main issue. The question of rigidity or non-rigidity of nominal descriptions is closely connected to it. To resolve the puzzles arising from the above objections, I will expose a comprehensive picture of language and its explication.

### 2 Language and its explication within an intensional framework

A natural language was developed by our predecessors as a medium serving for transmission of information about facts. An elementary fact consists basically in an individual possessing certain property. Suppose that a subject \( S \) confronted with an external reality recognizes various individuals and manages a set of pre-theoretically given attributes (properties, relations) denoted by predicates of a language \( L \) used by \( S \). Modelling attributes as mere classes of individuals, as it is common within extensionalistic construal

---

\(^3\)The attack against its formal validity raised by Brian Loar (and followed by Bach) is wrong. I have not enough space to prove it here.
of language, is inadequate because a class is given by objects belonging to it. It is thus necessary for an individual to be a member of a given class. Empirical facts, however, are undoubtedly contingent. It is clear that there is a plentitude of conceivable distributions – not just a single one – of the same attributes over the same individuals. Each of (realizable) distribution is a possible world. Possible worlds serve then as an index enabling us to model contingency, a modal variability. Attributes are explicated as certain intensions, namely as mappings from possible worlds to classes of individuals (or classes of \(n\)-tuples of individuals). Propositions are intensions having truth-values as their values. Etc. It seems reasonable to adopt also a temporal parameter because possession of a property by an individual changes through the passing of time. Then intensions are mappings from possible worlds to chronologies of objects; they will be spoken simply as mappings from worlds and times (to certain objects). Now I wish to stress the most important point implied by the above consideration. The language \(L\) is underlaid by a definite range of possibilities which I will call intensional ground. Realize that another language, \(L'\), can be underlaid by a different ground because when it names different individuals than \(L\), the thinkable distributions of attributes are naturally different from those related to \(L\).

There is also another important point. The language \(L\) is construed as 'synchronically given'. \(L\) is explicated as a (fixed) mapping associating expressions with meanings, or more simply: expressions with denoted objects (intensions or non-intensions). Such mappings may be conveniently called (linguistic) codes. One might doubt whether our natural languages are such codes. But it seems quite inadequate to suppose that languages do not at least contain something as a code, i.e. a vehicle for communication of meanings. According to another possible objection, it is more natural to conceive language as a grammatical system. However, the idea that there is a finite system of grammatical rules generating (or operating on) an infinite list of expression-meaning pairs, i.e. a code \(L\), does not contradict the idea of a code. Another objection against \(L\) explicated as a code is based on the assumption that expressions belonging to \(L\) ‘change’ their meanings: an expression can, for example, mean \(C_1\) at one time and it can mean \(C_2\) at another time or in another world. Within our intensional framework, this fact has a natural explanation. I will borrow the term ‘diachronically given language’ from linguistics intending to name a language modally and temporally conditioned. One should thus distinguish a natural language construed as a code, \(L\), from that understood in the sense of a mapping from possible worlds and times to codes, sign it “\(L\)”.

Let me state a semantical scheme I presuppose. An expression \(E\) expresses in \(L\) a meaning \(C\) which determines the denotatum \(D\) of \(E\) in \(L\). The denotatum of \(E\) in \(L\) is an intension / a non-intension / nothing. I believe that the adoption of an ‘hyperintensional’ level is reasonable, differentiating
thus ‘structured meanings’ from unstructured denotata.\textsuperscript{4} But since I will suppress this semantical consideration in the present paper, the meanings of expressions will be identified with their denotata. \textit{Non-empirical expressions} – e.g. genuine proper names of individuals, names (or descriptions) of numbers or mathematical/logical functions – are expressions whose reference is stable across the possible worlds and times. On the other hand, a typical \textit{empirical expression} has a stable denotation but a varying reference. For instance, the word ‘horse’ denotes a property but it refers to various classes of individuals in distinct worlds and times. The \textit{reference} of an empirical expression $E$ is the value of the intension denoted by $E$ in a particular possible world $W$, time-moment $T$. Examples of empirical expressions: ‘the U.S. president’ (which denotes an ‘individual concept’ but it refers in some $W$’s, $T$’s to G.W. Bush, in other $W$’s, $T$’s to J. Ratzinger), ‘It rains in Austria’. To know the reference of a typical empirical expression in the actual world and the present time one has to examine the contingent state of reality; it is not deducible by means of pure logic. On the other hand, to know the reference of a non-empirical expression is in principle an \textit{a priori} matter. Note also that the \textit{name relation} is best identified with the denotation relation, not with the reference relation. For instance, ‘G.W. Bush’ names what it denotes, i.e. G.W. Bush; ‘the U.S. president’ names certain denoted individual concept (it is quite futile to insist on its naming G.W. Bush).

3 \textbf{Refinements for MA}

I have to elucidate some very important distinctions Kripke took for granted. One of the simplest is concerned with the rigidity or non-rigidity and expressions. An expression is rigid iff its reference is stable across possible worlds and times; otherwise it is non-rigid. But since rigidity is a semantical property of expressions, it is \textit{language-relative}. For instance, when ‘the U.S. president’ denotes in $L$ the number 7, it is a rigid designator, despite it is a non-rigid designator in $L$. Correcting thus the above definition: an expression is \textit{rigid} in $L$ iff its reference in $L$ is stable across the possible worlds and times. (A variant of this definition has “$L$” instead of both occurrences of $L$.)

When discussing semantical properties of expressions in $L$, Kripke has in fact \textit{used another language}, call it $M$. Assume that the code $M$ is a language of our considerations too. ($M$ works as a certain meta-language in which we grasp $L$.) As I have discussed above, $L$ is underlaid by a specific intensional ground, $IG_L$. Also $M$ is underlaid by a specific intensional ground, $IG_M$. Within $IG_M$, there is a conceivable circumstance that $S$ speaks in $W_k, T_k$

\textsuperscript{4}Nearly all ideas from the present section are adapted from the work of Pavel Tichý (e.g., 1988). As structured meanings, Tichý introduced so-called constructions – abstract (structured) procedures that may be seen as objectual pendants of $\lambda$-terms.
by means of L, whereas there is also a thinkable circumstance that S enjoys rather L’ in the same W_k but at T_{k+1}, or a circumstance that S uses L also in W_k at T_{k+1}. Remember, therefore, that M is underlaid by a specific IG_M which enables us to discuss various contingencies, e.g. those about the uses of L.

It is quite clear that a genuine proper name such as N is a rigid designator (of L). Thus the individual N – named in L by N – figures in the intensional ground IG_L. However, not every proper name syntactically possible within L names a particular individual. For the reasons of simplicity I will assume that a proper name not naming an individual in L is meaningless in L; it may be also spoken as a non-designator of L. For instance, an individual N’ cannot be directly referred to by a proper name N’ of L when N’ was not endowed in L by a meaning (denotation). Now when users of L encounter N’, they can baptize it by the expression N’. After the successful baptism, the users of L cease to use L in which N’ is meaningless – they begin to use L’ in which N’ is a genuine proper name. Needless to say, N’ is a rigid designator of L’, thus the individual N’ figures in IG_{L’}. The changes of codes are not usually noticeable because we do not name codes by L or L’; we use rather “L”, i.e. a description singling out particular codes. Briefly, a baptism of an individual amounts to the replacement of L by L’ within one time-interval, a passage from T_k to T_{k+1}. The description “L” picks out L in W_k at T_k but it picks out L’ in W_k at T_{k+1}. N’ is a non-designator of L but it is a rigid designator of L’. Thus, a baptism is a contingent matter figuring inside IG_M; when users of (a value of) “L” baptize certain individual, “L” changes its value – L is replaced by L’.

Now we are ready to distinguish two kinds of nominal descriptions. The description NDL (or NDL’), i.e. “the only individual named in L by N”, is a rigid nominal description denoting an intension which picks out the very same individual N in all possible worlds and times. The relation ‘named’ mentioned in it links an individual with N and the code L. To know which individual is picked out by NDL one need not examine worlds and check time – it is sufficient to find out which individual is named in L by N. However, the description ND “L”, i.e. “the only individual named N in “L””, is (typically) a non-rigid nominal description denoting an intension (an individual concept) which is not constant. The relation “named” links an individual with N and a code which is a contingent value of “L”. When the value of “L” such as L’ contains N as a meaningful proper name of N, then

---

5Note that N’ can be a non-rigid designator of L’ or that N – originally a rigid designator of L – can become a non-designator in L”, when users of L’ have forgotten what N meant in the preceding values of “L”.

6Rigid nominal descriptions split into two kinds: with or without a reference. For instance, N’DL refers to no individual because N’ does not name in L anything at all. I classify such descriptions as rigid because their reference (that is null) is stable, non-varying.
ND“L” picks out N. When the value of “L” such as L does not contain the proper name N as meaningful, then ND“L” picks out nothing. When the value of “L” is L”, in which N means (say) horsiness, then ND“L” picks out nothing because no individual is identical with horsiness. Notice also that the above disputed circumstances belong to IG_M and that NDL and ND“L” are meaningful parts of M (not of L or any other value of “L”).

4 Soundness of two versions of MA

The original MA should be properly refined according to the above considerations. There arise thereby two versions of MA: MAL containing rigid nominal descriptions and MA“L” containing non-rigid nominal descriptions. It is easy to conclude that MA“L” is a sound argument. As NDTians prefer rather rigid nominal descriptions, the soundness of MA“L” does not disquiet them. However, the truth of the MAL’s consequence — that a proper name does not have the same meaning as a nominal description — is a disputable matter: Kripkeans consider it true whereas NDTians consider it false. Hence, MAL as such is insufficient for the change of opinion on the part of NDTians.

Presumably, both groups of theoreticians share the belief that proper names are rigid designators. Realize, however, that the respective Kripke’s semantical thesis about the meaning of proper names is in fact weak because it cannot distinguish proper names from rigid descriptions. Therefore, we need to suggest another, more provident, semantical thesis. My suggestion of ST is as follows: a proper name is an expression whose denotation is the same as its reference (language-relativity should be added, of course). Rigid descriptions – including the nominal ones – are thus not allowed to be proper names. (Notice also that Kripke’s key thesis follows from my ST.) NDTians may still disagree with this proposal. Consequently, NDTians construe MAL as not sound. Now we should argue that NDT is a materially less adequate explication of proper names’ meaning than ST because most of competent language users do not think that the meaning of N contains the meaning of ‘bearer’ or ‘named’, etc. Hence, ST is a more preferable proposal and MAL becomes sound.

References


