

### ARTIFACTS, ESSENCE AND REFERENCE

The new theory of reference has popularised the idea that proper names (such as 'Jane' and 'Rahim') and natural kind terms (such as 'cat' and 'gold') do not refer in virtue of associated definite descriptions but because of some real connection between the user and an individual or a kind that the term stands for. The relation between a singular term and an object or individual is described by some philosophers like Kripke as such that when a certain term is used first to refer to a particular object or individual, the reference of the term is 'fixed'. That means after that first occasion, whenever that term is used, it refers to one and only one object or individual. Proper names, on this view, are 'rigid designators', i.e., the same name refers to the same individual in all possible worlds in which it exists. Names for natural kinds (such as 'gold' and 'water') also are rigid designators, because these are used as indexicals.

If this view is correct, then the philosophically nontrivial class of analytic statements is very narrow. That means 'Gold is a yellow metal' is not analytic as Kant thought. It is mainly due to Putnam, that this account of singular terms seems to extend to many kinds of noun and other parts of speech. One of the classes of nouns is the class of terms for artifacts. Putnam regards these terms also as indexical.

I shall first discuss the view (held by Putnam, Donnellan and also in some degree by Kripke) that 'pencil' and 'table' are rigid designators and that, therefore no special treatment is

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necessary for them. On this view, these terms are not different from natural kind terms. Contrary to this, Schwartz maintains that artifacts are different from natural kinds in not having any essential properties. From this he concludes that 'pencil' and 'table' are not indexical. These terms are only associated with some definite descriptions. He thinks that Putnam is wrong about extending his theory to artifact-terms. I would like to consider this view to examine whether Schwartz's criticism can make a serious impact on Putnam's stand on artifact-terms.

### I

As I said before, both Kripke and Putnam regard terms like 'chair' and 'table' as rigid designators. Just like 'gold', 'water', 'tiger' or any other natural kind terms, artifact-terms also stand for a shared nature or at least we presume that they do. "When we use a word 'pencil', we intend to refer to whatever has the same nature as the normal example of the local pencils in the actual world."<sup>1</sup> In a similar vein Kripke maintains that a material object like a table has something essential about it, without which it would not be that table. So artifacts also have some shared essential property. Kripke says that anything coming from a different origin would not be that very object.<sup>2</sup> "If a material object has its origin from a certain chunk of matter, it could not have had its origin in any other matter".<sup>3</sup> This however is not the crucial point. The crucial point is that a table is essentially a table just as a cat is essentially a cat. In addition to the origin, the *substance* of which it is made is also essential for the object.<sup>4</sup> Not only that, if the very block of wood from which the table was made had instead been made into a vase, then the table would never have existed. So being a table is an essential property of the table in the same way as being human is essential for Nixon. The arguments for saying that proper names for individual and natural kind terms are

rigid designators are extended in the new theory of reference to 'table' and 'chair' in the same way. It is tantamount to holding that 'table' and 'pencil' are as indexical as 'gold', 'water' and 'Nixon'. Although there may be some characteristics associated with them, the use of these terms is only to pick out some individual kind of objects named so. Yellowness, for example, is an obvious physical property of gold; it also has some referential element, for yellowness is picked out and rigidly designated as the physical property of the object we call 'gold'.

Putnam as well as Kripke hold that natural kind terms are used only referentially. The meaning of these terms, on this view, is not given by a conjunction of properties semantically associated with the term as thought by the descriptivists. Of course, the features associated with such a term serve as an indicator of a real essence or nature that tells us what it is to be a member of the natural kind, That is discovered by scientific investigation. The extension of the term is part of the meaning, but criteria specifiable in terms of superficial properties are not. In a similar way, pencils and tables have artifactual nature. It is not a matter of language, but matter of fact that they have artifactual nature. Being an artifact is part of the definition of pencil, that is why we cannot discover that pencils are not organisms or that they do not have chemical or biological nature.

Putnam argues that since in the actual world pencils are artifacts, it is necessary that they be artifacts; and this will not be disproved by counterexample. Pencils are 'artifacts manufactured to be written with...' From this it follows: "That 'pencils are artifacts' is necessary in the sense of true in all

about them like 'water is  $H_2O$ .' Nominal kinds are not picked out by essence but by some superficial features like form and function.<sup>6</sup> 'Barbed wire' for example, he says, is an artifact-term. So 'barbed wire is metal' is not stable. That means we can easily imagine barbed wire made of some non-metallic synthetic material even though all the barbed wire found are actually metal. 'Whales are mammal' is stable; that means if we find a whale-like fish, it will not be a counter-example of whale, but only a fish which is very much like a whale but is *actually not*. "The big difference between artifact kinds and water is that we do not presuppose that there is any underlying nature that makes something to be the artifact that it is".<sup>7</sup> Unlike natural kinds, nominal kinds have only superficial characteristics apart from which artifacts have no hidden common nature. By nominal essence he means something like Lockean kind of nominal essence (abstract idea)<sup>8</sup> which, Schwartz says, 'are the workmanship of the understanding rather than nature', meaning perhaps that nominal essence is metaphysically different from essential property.

I think Putnam would grant Schwartz all these, but the fact remains nevertheless that Putnam might say that all these are irrelevant to whether 'pencil' is indexical,

For 'A' is 'B', we can have

- 1) an A is essentially an A
- 2) an A is essentially a B

"Water" and "Barbed wire" seem both to to befit (1) but differ with regard to (2). Even Schwartz concedes this. But then it is (1) which is crucial for rigid designation and not (2). So even if Schwartz is right about artifacts having some underlying traits that does not by itself justify artifact-terms being of a different kind.

Schwartz also uses another expression 'synthetic class' to distinguish nominal kind from natural kind. Something is a synthetic class if it satisfies a certain description, for example 'pet' is a synthetic class term whereas 'cat' and 'dog' are natural kind terms. Something is a pet not because of its *nature*, but because of its relationship to others and its function as a role. All artifacts are synthetic class; therefore artifact-terms are non-indexical, for artifacts satisfy (to be a synthetic class) a certain description. As nominal essence is not real, Schwartz argues that artifacts do not have any real essence (as presumed by Putnam) to be discovered by scientific investigation.

To sum up : Schwartz concedes to Putnam that

- 1) Natural kind terms are indexical
- 2) Natural kinds have some essential property apart from the superficial ones
- 3) Essential property of natural kind can be discovered by scientific investigation.

But he *denies* that

- 1) artifact-terms are also indexical
- 2) artifacts have essential properties
- 3) These properties are *necessarily* true of artifact terms.

He suggests that the "correct approach to ordinary language is to combine both Putnam's insights and the traditional approach" Putnam is right, Schwartz thinks, about natural kind terms and the traditional theory is right about artifact-terms. According to him, it is a mistake of both the theories to extend it to the realm of the other kind.

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## III

If Schwartz is right about his charges against Putnam that artifact terms need a different treatment than natural kind terms, then we cannot dismiss the distinction between analytic and synthetic propositions. The extension of the direct reference theory to more classes than proper names and natural kind terms tends to make the class of non-trivial analytic propositions shrink. If Schwartz claims that the theory is not applicable to artifact-terms then it would make the analytic-synthetic distinction important again. Moreover, if Schwartz is right, then a large number of general terms (nominal kind terms) would be nominal and not indexical, as Putnam claims. It will be wrong, then, to assert that most terms of natural language are indexicals.

Schwartz seems to be right about artifacts having no essential property. Some superficial traits are the necessary and sufficient conditions for their being pencil or table. One might also go further in a Wittgensteinian way to deny any set of conditions whatsoever for calling pencil a 'pencil' except a family resemblance of some agreed upon similarities. I shall come back to the issue of these 'conditions' for artifacts later. But one should note that it is not so with natural kinds. Any arbitrarily chosen molecules of water will be necessarily composed of hydrogen and oxygen. This observation captures our intuition to a great extent. Take the case of mass production of any artifacts like toy-cars or bicycles. These things have exactly the same *properties* (except the relational ones of course). Which one is *essential*? To have wheels, engines or the key or the brake? It is difficult to decide. If we take the example of parts of a machine, the point is more apparent. Nuts, bolts or pegs have exactly similar form and function. Suppose again that a massive pencil is made, say six feet long with two feet diameter which does not write like Putnam's 'local pencil', nor made of the

usual things, (wood and graphite), but we do use the term 'pencil' for this one also, although the usual material or function is absent in this case. Or take the example of a fancy T. V. like pencil-sharpener, 'Eiffel-Tower' pencils etc., or 'Mermaid' or 'Venus' candles (which have a short wick, but are not meant for lighting). These things are bad in 'function', or sometimes without any function (as in the last case). So there is no essential nature to settle what kind of artifacts they are, statue or candle in the last case? It is arbitrary and difficult to decide except by reference to our particular objective. Or else we might opt for the Wittgensteinian way by denying any essential criterion whatsoever for such decision except recognising some vague resemblance to call them 'pencil' or 'table' whatever is the case.

The superficial traits for artifacts are the only way to recognise them. That is why we can know a boat or a table from a picture or a bad model or if made of different type of material. There is no essence that needs to be known by scientific investigation. Schwartz gives an example. If a scientist is engaged in a research project to know the essential property of wasps and insects, nobody would find it strange. But imagine a scientist saying that he is trying to know the essential nature of chair. We shall surely think it is very strange.

The entire force of Schwartz's argument against Putnam comes from his insistence that artifacts do *not* have any underlying nature. Indeed they do not. And any theory of reference which requires that artifacts be picked out by the same sort of underlying nature is utterly mistaken. But that is not what Putnam's theory requires by any means; not even for natural kind terms, against which Schwartz has no complaints. The direct reference theory never requires that individuals and objects are picked out on the basis of essential properties. The theory only



requires that names of objects are rigid designators. That means once the reference is fixed (by convention or by scientific definition) the name would necessarily refer to whatever individual or kind it stands for. Of course there are some properties associated with the names. Among these properties some are essential in the sense that without them, the objects would cease to be what they are.

Contrary to his starting point (which is anti-essentialist), Schwartz tries to give an 'underlying nature' for an artifact, namely 'form and function'. But as I have pointed out before, 'form and function' also can be very different among the same kind of artifacts. The fact is that, most artifacts have well-known features and functions; so some traits are always found to be associated with them. But suppose that the archeologists have discovered some artifacts which are very strange and wholly unknown as to their form and function according to our standards. Any names can be given to them and once given, they will be referred to by these names, just like newly discovered elements, plants and animal species. Moreover, in the present fast pace of scientific advancement, 'form and function' also are changing so rapidly that there will hardly be any superficial common nature among members of the same kind which they satisfy according to Schwartz.

Putnam has already pointed out that he can refer to beech trees by using the name 'beech' without any distinguishing features of them. In the same way we can refer to wedgewood (the famous English pottery) or Chippendale (furniture) without any knowledge of true definite description of them. It is possible on the basis of experts in our language community who have such knowledge. One might think that Putnam requires some definite description (Schwartz's 'nominal essence') given by the experts, by which the objects can be picked out.

But Putnam would reject even this weak nominalistic account of natural kind terms in favour of this *realistic* account of theoretical terms.

Peter Geach talks of a kind of 'nominal essence' by suggesting an ostensive kind baptising an object by applying a sortal property, which will clarify the reference and its correct identity over time. For example, if we point to a man and say 'This man's name is 'X, to exclude the possibility of referring to his nose or a time-slice.'<sup>9</sup> Geach's nominal essence possibly is to be understood as apriority and not necessity. So 'X is a *man*' or 'Plymouth is a *car*' are apriori truths and therefore not real, but nominal. This is a good move, but Schwartz surely would not buy this account for its apriori ground.

To come back to Schwartz's allegations. Even if we grant him that the properties of an object which make it a member of a particular artifactual kind are not matters of fact to be investigated by scientists, this would not establish that they are analytically associated with the name of that kind because, as I said before, pencils and chairs are so common that some descriptions are always associated with them. But it will be different if we take a rare kind of obsolete or ancient kind of artifact (about which we have no knowledge). In this case we have to depend on experts and follow their use of a name for a particular referent. The point would be more clear if we take into account the sophisticated inventions of science. Everyday there are additions of newly invented gadgets and instruments for which we have to depend entirely on experts' knowledge and follow the use of the names attached by these scientists to a particular referent. So Schwartz's illuminating arguments, some of which are very forceful, do not really disprove the central claim of the direct reference theory nor establish that artifacts

do not have any essential property. If being gold is essential for gold, then being a table is essential for a table<sup>10</sup> except ceasing to be a table. The direct reference theory can at least establish this form of trivial essentialism. To go further in a metaphysical way from a theory of language, however, leads to serious difficulties.

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NOTES

1. H. Putnam; *Meaning of Meaning*, p. 162.
2. S. Kripke, *Naming and Necessity*, fn. 56.
3. *Ibid* p. 114.
4. *Op. cit.*; fn. 57.
5. H. Putnam: *Meaning of Meaning*, p. 162.
6. P. Schwartz; 'Natural Kinds and Nominal Kinds', *Mind*, April, 1980.
7. P. Schwartz; 'Putnam on Artifacts', *Philosophical Review*, October, 1978. p. 572.
8. Look at the footnote 11 for nominal essence on page 572 of the article 'Putnam on Artifacts', *Philosophical Review* October 1978.
9. This is discussed in S. Kripke; *Naming and Necessity*, fn. 58.
10. Cf. *Supra*, section I.

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