

A Congery of Self-Reference

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Grelling's paradox of heterological predicate adjectives is as follows. Some predicate adjectives refer to themselves. For example, 'English' is English, 'polysyllabic' is polysyllabic, and 'orthographic' is orthographic. Let us refer to all such self-referring predicate adjectives as homological predicate adjectives. On the other hand, some predicate adjectives do not refer to themselves. For example, 'German' is not German, 'monosyllabic' is not monosyllabic, and 'misspelled' is not misspelled. Let us refer to all of these non-self-referring predicate adjectives as heterological predicate adjectives. Our newly introduced predicate adjectives 'homological' and 'heterological' provide a mutually exclusive and collectively exhaustive partition of predicate adjectives. A predicate adjective is homological if and only if it is not heterological.

We now must ask, are 'heterological' and 'homological' either heterological or homological? If 'heterological' is heterological then it is homological because it refers to itself. If 'heterological' is homological then it is heterological because of what it means to be homological. What follows is a self-contradiction. 'Heterological' is heterological if and only if it is not heterological.

For some philosophers, Grelling's paradox is an antinomy, a self-contradiction which results from an intuitively acceptable pattern of reasoning. As an antinomy, it calls for a revision in the responsible patterns of reasoning.¹ How much of a revision is called for depends on the method used to avoid the self-contradiction.

Within an extensionalist philosophy, the most economical method comes from the work of Bertrand Russell and Alfred Tarski.² It calls for a hierarchy of languages which are constructed so that any discussion of the referential structure of a given language is carried out in a different, more inclusive language. By being banished from the language in which we find our familiar self-referring predicate adjectives, 'heterological' and 'homological' are not longer the subjects of a heterological/homological classification.

¹ Willard Van Orman Quine, "The Ways of Paradox," *The Ways of Paradox and Other Essays* (New York: Random House, 1966), p. 7.

² Bertrand Russell, an *Inquiry into Truth and Meaning* (New York: W. W. Norton and Company, Inc., 1940); Alfred Tarski, "The Concept of Truth in Formalized Languages," *Logic, Semantics, and Metamathematics* (Oxford: Oxford University Press, 1956), pp. 152-278.

Other philosophers have sought a less artificial means for avoiding the paradox. Among them is Gilbert Ryle.³ Ryle contends that the paradox can be avoided without a call for language-hierarchies. He too argues that the labels 'heterological' and 'homological' cannot properly be applied to themselves. His argument rests on three major points. First, 'heterological' and 'homological' are introduced into the language as specially fabricated instruments for classifying philological epithets, not simply all predicate adjectives. Second, philological epithets are epithets which are appropriately applied to or withheld from linguistic expressions because they (the philological epithets) stand for philological properties. Finally, neither 'heterological' nor 'homological' are philological epithets because there are no philological properties for which they stand.

The extensional solution of Russell and Tarski and the intentional solution of Ryle have at least one feature in common. Both attempt to exclude 'heterological' and 'homological' from the domain of labels which can properly be classified as either heterological or homological. Yet, there are serious problems with both solutions. The extensional solution is not only artificial, but fails to address the paradox as it arises within ordinary language. The intentional solution is equally unacceptable as we lack a principle of identity for individuating properties.⁴ In an attempt to overcome both of these problems, I propose that there is an explanation why 'heterological' and 'homological' are neither heterological nor homological which preserves the integrity of ordinary language without introducing a suspect ontology of properties.

Rather than talk about properties, I talk about symbol systems.⁵ By a symbol system, I mean a symbol scheme correlated with some domain of objects. The labels of a symbol scheme are sets of utterances, inscriptions, or marks, and the scheme itself is a set of those labels. In a linguistic system, the labels are called predicates.

The realm of a system is the set of objects with which the labels of the scheme are correlated. Which objects are actually correlated with which labels depends on the system, indeed on the realm and the correlation *in effect*. It is the correlation of the scheme with the realm which establishes

³ Gilbert Ryle, "Heterologicality," *Analysis*, volume 11, number 3, (1951). Reprinted in *Philosophy and Analysis*, ed. Margaret MacDonald (Oxford: Basil Blackwell, 1966), pp. 45-53.

⁴ Willard Van Orman Quine, "On the Individuation of Attributes," *Theories and Things* (Cambridge: The Belknap Press of Harvard University Press, 1981), pp. 100-112.

⁵ For a more detailed discussion of the views I summarize here see Nelson Goodman, *Languages of Art* (Indianapolis: The Hackett Publishing Company, 1976), pp. 71-74 and Catherine Z. Elgin, *With Reference to Reference* (Indianapolis: The Hackett Publishing Company, 1983), pp. 37-42.

the reference of the labels and enables the scheme to categorize its realm. In a linguistic system, a set or category of objects associated together under the reference of a predicate is called the extension of that predicate.

A symbol system is a construct. The domain with which the labels of a system is correlated does not determine how the domain is to be categorized. In constructing a system, we determine the relevant categories. This is not to say that anything goes. There are constraints. The most basic of these is consistency. And when a system is to interpret the referential structure of a used body of discourse, such standards as fidelity to antecedent usage and relevance of categories come into play. Within the parameters of consistency, fidelity to antecedent usage, and relevance of categories, genuine and spurious systems can be differentiated.

Fidelity to antecedent usage is satisfied when the system's application of a label agrees with that of competent speakers. But the system's criteria for determining the reference of the labels need not be antecedently recognized or implicitly employed. Where antecedent usage fails to determine how a label is to be applied, a genuine system is free to speak authoritatively. Systems are not constructed merely to reflect antecedent usage, but to extend and refine it as well. Yet, only genuine systems speak authoritatively in cases where antecedent usage is mute.

The relevance of a system's categories depends on our interests. Different systems of categories serve different interests, and any judgment of the relevance of a system's categories must take into consideration the task we set before it. A classification of books by size may work for a small personal library, but would be quite wrong for a large public library. Again this is not to suggest that anything goes. It is simply to say that as our interests vary, so do the specific standards by which the relevance of a system's categories is to be judged.

A symbol system is not the same thing as a language. The labels within a language usually belong to more than one system. Furthermore, a genuine system for interpreting a body of discourse within a language cannot be read of the language. The very words 'system,' 'scheme,' 'realm,' 'label,' 'reference,' 'predicate,' and 'extension' properly belong to semantic theory. In constructing a system, we are engaged in semantic theory. Accordingly, simple observation does not determine how the elements of a language are to be identified and classified in order to meet the needs of system construction.

A systematic analysis of Grelling's paradox frees me from some of the usual categories for talking about the paradox, especially those categories which have figured in determining the reference of the labels involved. So I may dispense with the categories of predicate adjective and philological epithet. All that is required for the system to be faithful to ordinary usage, is that its applications of 'heterological' and 'homological' agree with those of competent speakers of the language. Moreover, within the parameter

of fidelity to antecedent usage, I may ascertain which categories are directly responsible for the paradox. Without begging any questions, I may then ask whether the system in which the paradox arises is a genuine or spurious system for interpreting the semantic structure of ordinary language. I can do so by focusing on the relevance of the system's categories for ordinary linguistic usage. If the categories responsible for the paradox fail to be relevant categories within ordinary linguistic usage, then the system in which the paradox arises is a spurious interpretation of that use.

Let me refer to the system in which Grelling's paradox arises as the heterological/homological system. The realm of the heterological/homological system may be roughly characterized as a set of predicates. These predicates themselves belong to systems, and it is within their respective systems that their reference is determined. Whether or not a predicate refers to itself is determined by some system. Accordingly the labels 'heterological' and 'homological' of our heterological/homological system may be defined as follows:

D1 x is heterological iff there exists some system S such that x is a predicate in S and x does not refer to itself in S .

D2 x is homological iff there exists some system S such that x is a predicate in S and x refers to itself in S .

More precisely, the realm of the heterological/homological system is the set of predicates of systems.

A few comments about the heterological/homological system are in order. First, the systematic applications of 'heterological' and 'homological' do coincide with the applications of competent speakers of the language who have been exposed to their use. For example, 'polysyllabic' remains homological because there is a philological system in which 'polysyllabic' is polysyllabic, and 'monosyllabic' is still heterological because there is a system in which 'monosyllabic' does not refer to itself. Second, the system is somewhat vague, but only to the extent that ordinary linguistic usage is. For example, it is not clear within the system whether 'short' is heterological or homological, but only because ordinary linguistic usage does not decide the issue. Finally, the system is inconsistent as 'heterological' and 'homological' are taken as predicates within the heterological/homological system simply because they are introduced through stipulative definitions.

What this systematic analysis suggests is that the question concerning Grelling's paradox and ordinary language is not whether there is a system in which the paradox can arise. Clearly there is. The question is whether the system in which it arises is a genuine or spurious interpretation of ordinary linguistic usage. This is no small matter. If the

heterological/homological system is a spurious interpretation of ordinary linguistic usage, then it lacks the authority to call into question the consistency of ordinary linguistic usage.

The heterological/homological system is a spurious interpretation of ordinary linguistic usage. The paradox arises because 'heterological' and 'homological' are introduced as predicates within the system through stipulative definitions. However, not all of the sets which are systematically definable within a language are actual extensions of predicates within that language. In fact, neither 'heterological' nor 'homological' are predicates of ordinary linguistic usage. The heterological/homological system is a spurious interpretation of ordinary linguistic usage because the crucial categories of heterological and homological predicates are not relevant categories of ordinary linguistic usage.

All extensions of predicates are sets, but not all sets are extensions of predicates.⁶ Drawing the distinction is one of the tasks of a theory of predication. Similarity and respects of similarity don't work. Upon recognition of this, one is left with little more to say than "it is the important sets that are the extensions of our predicates."⁷

What makes a set important? Some philosophers appeal to ontology. The sets which are extensions of predicates are said to be natural kinds which are anchored in reality with properties; for a lack of properties, the other sets are said to be contrived, merely artificial collections. (In point of fact, this is Ryle's approach to the paradox.) But the arguments do not support the ontological thesis. The most that can reasonably be concluded is that the sets which are the extensions of predicates are the sets we take to be important.

There is, then, no sharp distinction between sets which are the extensions of predicates and all other sets, between natural and artificial kinds. The sets we take to be important are those which belong to the systems which successfully satisfy our needs and interests. Since interests and needs vary over time and even within the linguistic community, we must stop short of claiming that there is one fixed set of predicates. Common sense, science, aesthetics, and law call for predicates which are tailored to their respective goals, and their status as predicates is local.

Following this line of reasoning, the full range of sets within a language are to be considered candidates for extensions of predicates. But this does not imply that there is no distinction to be drawn. Which sets actually become extensions of predicates is significantly determined by the interests of the language users. Accordingly, the usage and linguistic intuitions of competent speakers of the language do provide evidence for deciding whether a given label is a predicate.

⁶ The views summarized here come from Elgin, *op. cit.*, pp. 29-35.

⁷ Elgin, *op. cit.*, p. 31.

Neither 'heterological' nor 'homological' are predicates of ordinary linguistic usage because the sets with which they are correlated are simply not important. To show this I will appeal to both linguistic usage and linguistic intuition.

As Ryle points out, 'heterological' and 'homological' are introduced for the sole purpose of partitioning the predicates of ordinary discourse into two mutually exclusive sets.⁸ Lacking any other use, it does not logically follow that the sets themselves are important and their labels are predicates of the language. Hence, it simply does not logically follow that 'heterological' and 'homological' are predicates of ordinary linguistic usage merely because they provide a mutually exclusive and collectively exhaustive classification of the predicates of ordinary linguistic usage.

However, having abandoned a firm ontological basis for differentiating natural and artificial kinds, the entire range of sets are candidates for predication. So it is not surprising that we may find 'heterological' and 'homological' in the role of predicates by occupying the predicate end of sentences. Furthermore, if competent speakers of the language are informed of their use, they will, in most cases, be capable of judging the truth of such sentences. But the question here is not a matter of truth. The question is whether the truth matters.

If current usage by competent speakers of a language is, as I above suggest, an indication of which sets are deemed important, then what is important about a self-referring predicate is not that it is a member of a set of self-referring predicates. What is important is how the predicate classifies itself, not that it is of a kind that classifies itself. In turn, how a predicate classifies itself is important only because it is a predicate within some genuine system. For example, it is true that 'orthographic' is a member of the set of self-referring predicates. But what is important to a competent speaker of the language is not simply that 'orthographic' is self-referring. What is important is that 'orthographic' is orthographic, i.e., that it is spelled correctly. That 'polysyllabic' is a member of the set of self-referring predicates matters very little to the philologist. What is important is that 'polysyllabic' is polysyllabic, i.e., that it contains many syllables. Self-referring predicates are important, albeit distributively, because they are predicates, not because they are self-referring.

Furthermore, standard intuition tells us that the set of self-referring predicates is not an important category of predicates. If the set of self-referring predicates were an important category of predicates, then self-reference would have to be something more than an incidental feature of a predicate's reference. Apart from how the various self-referring predicates classify themselves, there would have to be some other significant classificatory feature associated with being self-referring and shared by all self-referring predicates. For instance, if 'polysyllabic's' self-

⁸ Ryle, *op. cit.*, p. 50.

reference were to be anything more than incidental, then there must be some significant classificatory feature other than being polysyllabic associated with its self-reference and shared by all other self-referring predicates. On the other hand, if the only relevant classificatory feature for determining the self-reference of a predicate is how that predicate classifies itself, then its being self-referring is nothing more than an incidental feature of its reference.

What follows is this: For self-reference to be anything more than incidental, there would have to be a context of classification in which a predicate like 'polysyllabic' could be self-referring simply because it is judged similar to all other self-referring predicates. (For to say that a classificatory feature is significant means only that there is some context in which objects are judged similar with respect to that feature.) But how might all self-referring predicates be similar? Certainly not in being polysyllabic, nor in being either polysyllabic or orthographic or English etc. The only conceivable feature which could be shared by all self-referring predicates is the feature of being merely self-referring. In effect, there would have to be a context of classification in which being nothing more than self-referring could be a significant classificatory feature, a context in which self-referring predicates could be nothing more than self-referring and judged similar independently of how each individual predicate classifies itself.

The problem here is that the existence of a context in which a predicate could be nothing more than self-referring violates standard intuition. Intuition tells us that there is no self-reference apart from how a predicate classifies itself as a member of its own extension. Moreover, how a predicate classifies the members of its extension is all that is relevant in determining its self-reference. For instance, all that is important in connection with 'polysyllabic' being self-referring is that it is polysyllabic. There is no other significant classificatory feature, like being merely self-referring, to be considered. Accordingly, it is inconceivable that there could be any significant classificatory feature other than how an individual predicate classifies itself associated with being self-referring. It simply runs against intuition that self-reference is anything more than an incidental feature of a predicate's reference or that it identifies an important kind of predicate.

Thus, there is no intuitive support for the claim that 'homological' and 'heterological' are predicates of ordinary language. Furthermore, current usage indicates that whatever value is attributed to the self-reference of a predicate is derived from how it classifies itself, that it is of a kind that classifies itself is incidental. Of course, neither current usage nor linguistic intuition is immune to revision. A set we take to be an extension of a predicate may be lowered to the status of a mere collection, and a set we take to be a mere collection may be elevated to the status of an extension of a predicate. So my argument does not prove categorically that neither

'heterological' nor 'homological' are predicates of ordinary linguistic usage.

Fortunately, I do not have to provide this proof in order to block the inference to Grelling's paradox. I need only show that it does not logically follow that 'heterological' and 'homological' are predicates of ordinary language because they may be taken as predicates within a system which provides a mutually exclusive and collectively exhaustive classification of the predicates of ordinary language. This I have done.

A system, after all, is a construct. The labels a system employs as predicates to categorize its realm achieve the status of predicates within a language only if the system meets the challenge set before it. The challenge for our heterological/homological system is to show that ordinary linguistic usage is inconsistent. To meet this challenge, the system would have to provide a genuine interpretation of ordinary linguistic usage. In this context, what is required is that the labels directly responsible for the paradox must be antecedently established predicates of ordinary linguistic usage. In other words, the system is successful in demonstrating the inconsistency of ordinary linguistic usage only if 'heterological' and 'homological' are antecedently established predicates of ordinary linguistic usage. I have demonstrated that they are not. Accordingly, the system is not successful in proving that ordinary language is inconsistent because it does not establish 'heterological' and 'homological' as predicates of ordinary language.

It does not follow that we must ask of 'heterological' and 'homological' whether they are heterological or homological simply because we can ask (and in some cases even answer) the question of the predicates of ordinary language. We need only recognize that the system in which such a question would arise is a congeries of systems as neither 'heterological' nor 'homological' are predicates of ordinary linguistic usage.