Russell's anticipation of Quine's criterion

The controversy in *Russell 6* and *Russell 8*[1] as to whether or not Russell anticipated C.I. Lewis's definition of "strict implication" prompts me to report on yet another of Russell's philosophical anticipations. This one is contained in an unpublished paper of 1906 called "The Parodox of the Liar".[2] One of the main props of post-World War II analytic philosophy has been Quine's criterion of ontological commitment, namely, *to be is to be the value of a bound variable*, first proposed by Quine in 1939. On page 106 of "The Paradox of the Liar", Russell notes: "What can be an apparent variable must have some kind of being". Since "apparent variable" is Peano's term for what Quine calls a "bound variable", Russell's criterion of being is the same as Quine's. The discovery that Russell, at least in 1906, accepted the same criterion of ontological commitment as Quine should force scholars to re-evaluate many of Quine's criticisms of Russell, since the bulk of Quine's criticisms hinge on his claim that Russell never developed a clear criterion of ontological commitment, and hence fell in and out of commitments of which he was not aware.

The earliest statement of an ontological criterion in Quine's writings appears in "A Logistical Approach to the Ontological Problem", an address delivered in 1939 but not published until 1966.[3] The crucial passages are as follows:

> What entities there are, from the point of a given language, depends on what positions are accessible to variables in that language. (P. 68)
>
> It thus appears suitable to describe *names* as simply those constant expressions which replace variables and are replaced by variables according to the usual laws of quantification.... We may be said to countenance such and such an entity if and only if we regard the range of our variables as including such an entity. To *be* is to be the value of a variable. (P. 66)

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[1]Frank J. Leavitt, "On an Unpublished Remark of Russell's on 'If ... Then'," *Russell*, no.6 (summer 1972), p. 10; Carl Spadoni, "Reply to Mr. Leavitt", *Russell*, no.8 (winter 1972-3), pp. 16-18.

[2]The 108-page manuscript of the paper is now in the Russell Archives. It is dated in pencil on p. 1 "Sep 1906". This is certainly the correct period, since the paper employs Russell's special system of substitutional notation, invented in March of 1906 and abandoned in 1907. There is also a marginal note on page 87 dated June 1907, which establishes the latest possible date of writing.

[3]The essay is printed in *The Ways of Paradox and Other Essays* (New York: Random House, 1966).

Very similar remarks appeared in Quine's "Designation and Existence" (*Journal of Philosophy*, 1939). Another vehicle for the circulation of his ideas was the essay "On What There Is", published in the *Review of Metaphysics* in 1948, and reprinted in *From a Logical Point of View* in 1953.[4] The crucial passages in the later essay are more modest:

> We can very easily involve ourselves in ontological commitments by saying, for example, that *there is something* (bound variable) which red houses and sunsets have in common.... But this is, essentially, the *only* way we can involve ourselves in ontological commitments: by our use of bound variables. (P. 12)

> To be assumed as an entity is, purely and simply, to be reckoned as the value of a variable. (P. 13)

Quine's criterion is a standard applied primarily to theories. If the sentences of a theory "quantify over" a certain grammatical position, then the linguistic expressions that fill that position purport to refer, and, if the sentence is true, they actually do refer. Furthermore, it is implied in Quine's texts that each grammatically distinct class of referring expressions purports to refer to a different kind of entity. Users of theories are "ontologically committed" to as many kinds of entities as their theories purport to refer to.

To violate Quine's criterion is to use a theory which is ontologically committed to a certain kind of entity and to deny, at the same time, that one is ontologically committed to such entities. According to Quine, the primary offender in this regard is Russell. In "Whitehead and the Rise of Modern Logic",[5] first published in the Library of Living Philosophers volume on Whitehead in 1941, Quine commented on Russell's "reduction" of classes to propositional functions as follows:

> The relevant distinctions are blurred by use of the phrase 'propositional function' to refer indiscrimately both to expressions of the kind that I have called matrices and to objects of the kind that I have called attributes. (P. 20)

> So long as 'propositional function' is thought of in the sense of 'matrix', such a construction would serve its nominalistic objective: but actually Russell's construction involves use of 'ϕ', 'ψ', etc., in quantifiers, and hence calls for propositional functions in the sense rather of attributes. To have reduced classes to attributes is of little philosophical consequence, for attributes are no less universal, abstract, intangible, than classes themselves. (P. 22)

The preceding argument is reiterated repeatedly in Quine's writings, most recently in his *Philosophy of Logic*.[6]

[4] *From a Logical Point of View* (New York: Harper and Row, 1953).

[5] Quine, *Selected Logic Papers* (New York: Harper and Row, 1966).

[6] (Englewood Cliffs, N.J.: Prentice-Hall, 1970), p. 66.

Russell's earliest ontological criterion is presented in his *Principles of Mathematics*. The widest ontological category in the *Principles* is *object:* objects include both terms, and pluralities of terms (p. 55n). Next widest is the category of *term* or *entity:* anything which can be a subject of predication, or counted as one, is a term, and, according to Russell, has being (sec. 47). Finally, there is the category of *existent:* existents are the terms that occupy some particular portion of space and time. Thus, all existents have being, but not every being has existence.

In early 1905, Russell modified this system, discarding the category of objects, and treating the distinction between existence and being as a distinction between two different kinds of existence, the ordinary sort of existence in space and time, and the logician's sort of existence, which is possessed by non-empty classes.[7] It is clear from the text that Russell believed that the logician's sort of existence was the true philosophical sort. This is the analysis of ontology which is the background of the famous article "On Denoting", written later in 1905.

In late 1906, in his "Liar" manuscript, Russell was led once again to questions of ontology. His route to the problem was almost accidental: one version of the Liar paradox is generated when the statement "All Cretans are Liars" is uttered by a Cretan. (Is the statement true or false? Either answer implies the other.) In analyzing the Liar, Russell was forced to analyze the concept of "all". The analysis of "all" led to the analysis of quantification, and the analysis of quantification to the study of ontology. Ontological considerations of a Quinian sort first obtrude on page 67:

> Some sort of being ought, if possible, to be allowed to propositions, since the possibility of being an apparent variable seems to imply some independent subsistence, and either functions or propositions must be admitted as apparent variables.* There is no objection to allowing that propositions have being of some sort, provided we can reconcile with this the necessity for confining an apparent variable, whose values are propositional, within one type of proposition.

The note, which is a marginal one in the manuscript, is as follows:

> *From what follows, it appears that functions *must* be a[pparent]. v[ariable]'s and props *may* be; hence whatever kind of being is involved in being an a[pparent] v]ariable] *must* belong to fos. [functions], and only *may* belong to props.

On page 69, there is the further comment:

[7] See "The Existential Import of Propositions", *Mind*, 14 (July 1905), 398-401. Reprinted in B. Russell, *Essays in Analysis*, ed. D. Lackey (London: Allen and Unwin; New York: Braziller, 1973), pp. 98-102.

> We may now assume that propositions containing no propositional apparent variable have a kind of being, though not existence.

There is a considerable digression following page 69, and the discussion is taken up again on page 106:

> Let us resume the questions of p. 66, i.e. what kind of being shall we allow to (1) predicates and relations in intension, (2) props, (3) fos. [functions], (4) Cl[asse]s, Rel[ations], etc.
>
> On p. 66 we came to the conclusion that (1) had being if (3) had, and that primâ facie what can be an a[pparent] v[ariable] must have some kind of being. We now, further, have come to the conclusion that fos. [functions] must be a[pparent] v[ariable]'s. Hence whatever being is involved in being an a[pparent] v[ariable] must belong to fos. [functions].

This unpublished 1906 system is strikingly at variance with the published papers of 1905. In the 1905 papers, a class exists if it has a member; in the 1906 essay, a class has being if it is a member of another class. In the 1905 papers, individuals cannot be said to exist; in the 1906 paper, individuals which are in the range of apparent variables do have being. In the 1905 papers, the null class does not exist, since it has no members; in the 1906 paper, the null class has being, because it is a member of the class of classes. In the 1905 papers, commitment to properties is only implicit; in the 1906 papers, commitment to properties is completely explicit.

Tracing the relations between Russell's 1905 and 1906 systems is a task for scholars. I suggest here only one hypothesis that accounts for the discrepancy. In 1905, Russell was preoccupied with the problem of non-existent *individuals*, like the round square, i.e. with the presence or absence of entities in a single ontological grade. In 1906, he was, in his ontological inquiries, preoccupied with the question of how many different ontological *grades* there are, rather than the membership of any particular grade. The 1905 papers thus present a criterion that shows what the members of any grade are; the 1906 paper presents a criterion indicating differences of ontological grade.

It remains to consider whether or not Russell's systems in any way violate Quine's criterion. For Russell to violate the criterion in the manner alleged by Quine, he must simultaneously (a) quantify over property variables and (b) deny that he is committed to properties. In none of Russell's writings with which I am familiar, including a sizeable quantity of unpublished material, do I find Russell simultaneously doing (a) and (b). On the contrary, Russell in none of his writings denies that he is committed to properties or universals; all that he denies is that is he committed to *classes*. Quine, in his attacks, presumes that commitment to properties entails commitment to classes, but Russell would simply deny this, and in his denial he would be supported by those modern philosophers - Nelson Goodman being the most prominent - who have developed systems which are realistic in that they admit propert but nominalistic in that they deny classes. Russell was a Platonist about properties, but he was not confused about his commitment to them; he did not contravene Quine's criterion; rather, he invented it.

Department of Philosophy
Baruch College
City University of New York

Douglas Lackey