Russell was long preoccupied with the problems posed by relational predication. One problem, concerning the difference between monadic, dyadic, etc. facts, he resolved by recognizing different exemplification relations as forms of facts. Such logical forms of facts (or propositions) were recognized as entities, if not as constituents of the facts they "informed". Not taking such forms as constituents of facts supposedly forestalled a Bradley-type regress regarding the need for the constituents of a fact to be related or connected to form the fact. Thus, to take a relation of exemplification as a constituent of a fact would supposedly require a further relation to connect it to the other constituents, and so on ad infinitum. Russell, like Frege, was concerned about the need to avoid such a purported regress.

A second problem that Russell sought to resolve concerned the analysis of the order of relational facts: the ground of the difference between the facts represented by atomic sentences like 'αRβ' and 'βRa'. Russell's most detailed attempt to deal with this question occurs in the long unpublished manuscript Theory of Knowledge, which dates from about 1913. It has recently been suggested that the analysis of the problem of order that Russell presented in that manuscript is similar to the so-called Wiener-Kuratowski construal of ordered pairs. This is not accurate, and it is worth understanding just what Russell's early view was, and not only for historical reasons. For, by contrasting Russell's analysis with a Wiener-Kuratowski type procedure for handling relational predication we will see, first, that Russell's analysis does not face a problem that Wiener-Kuratowski (hereafter, WK) type procedures do face, and, second, what a viable analysis of order, in relational predication, must involve.

Russell suggested that a relation, say R, be taken to be without direction or sense. The relation would be connected to two other relations, say R* and R**. Whereas R would hold between the
particulars \(a\) and \(\beta\) if, for example, \('aR\beta'\) was a true statement, the relations \(R^*\) and \(R^{**}\) would obtain between a particular and a "complex". Such a complex would consist of \(a\), \(\beta\), and the directionless \(R\). In effect, it is a fact, and Russell says that he will "assume" that such a complex is a fact. If such a complex is the complex to which \(a\) has the relation \(R^*\) and to which \(\beta\) has the relation \(R^{**}\), then the complex in question is the one that we would normally represent by the sentence \('aR\beta'\). If the complex is the one to which \(a\) stands in \(R^{**}\) and \(\beta\) stands in \(R^*\), then it is the one that would normally be represented by \('\beta Ra'\). The complex (fact) \(aR\beta\) may then be "denoted" by a definite description:

\[
(1) \quad \{p \mid (aR^*p) \land (\beta R^{**}p)\}
\]

with \(p\) as a variable ranging over Russellian complexes. Such an analysis raises an obvious problem, since it presupposes that one may distinguish the complexes \(aR\beta\) and \(\beta Ra\) by the fact that \(a\) stands in one relation to the first and in another relation to the second. This means that Russell assumes that he may distinguish two entities by means of relational properties. Ironically Russell, following Moore, had, in the classic paper of 1911, argued that one cannot do this. Moreover, he obviously still held to such a view in his analysis of particulars in An Inquiry into Meaning and Truth.

Aside from the general question regarding the viability of using relations to "individuate", there is an obvious problem with the use of \((1)\) to specify the complex involved. For, clearly, \((1)\) is only a viable description if the relations \(R^*\) and \(R^{**}\) have been adequately specified. But, it is also clear that they have not been, since, on Russell's pattern, one must make use of implicit definite descriptions of those relations. That is, Russell implicitly construes \(R^*\) in terms of:

\[
(2) \quad \text{The } \Phi \text{ such that for any object } x \text{ and any complex } p, x \text{ has } \Phi \text{ to } p \text{ if and only if (i) } x \text{ and } R \text{ are constituents of } p, (ii) there is a } y \text{ that is a constituent of } p, \text{ and (iii) } x Ry.
\]

This pattern is plainly circular, since it: (1) implicitly specifies \(R^*\) in terms of complexes containing \(R\), (2) specifies the complexes involved in terms of \(R^*\), (3) takes \(R^*\) and \(R^{**}\) to be the basis for the distinction between \(xRy\) and \(yRx\), and (4) makes use of \(xRy\) in (iii) above. The problem is that \(R^*\) runs together two distinct matters: first, an instance of \(R^*\) involves an instance of \(R\); second, the particular term \(x\), as opposed to the complex \(p\), of an instance of \(R^*\) is the first term in the complex \(p\).

But the circularity of Russell's pattern can be avoided by slightly