

Theory of types and theory of knowledge

by Bernd Frohmann

Dieter Würtz. *Das Verhältnis von Beobachtungs- und theoretischer Sprache in der Erkenntnistheorie Bertrand Russells*. (Europäische Hochschulschriften, Reihe 20, Bd. 53.) Frankfurt am Main, Bern and Cirencester, U.K.: Peter D. Lang, 1980. Pp. iv, 110. Sfr25.

THE SUBJECT OF Dieter Würtz's short monograph on Russell's theory of knowledge is the significance of the theory of types for the distinction between theoretical and observation language in Russell's epistemology. According to Würtz, the theory of types is central to Russell's epistemology because it forms an essential part of the logical apparatus required to construct the external world from sense-data. An unexpected result of this interpretation is that for Russell, all concepts become theoretical entities. The relation between observation language and theoretical language reduces to the relation between a concept belonging to any arbitrarily selected logical order and its extension. Since the concept is an abstract class of entities and may not be defined by or reduced to its extension, it is theoretical with respect to its extension. This result is a consequence of what Würtz sees as Russell's confused exposition of the distinction between extension and intension. Russell's attempt to reduce theoretical expressions to perceptual expressions by means of his theory of denoting phrases fails, according to Würtz, because the denoting phrases employed to translate theory into observation contain an irreducibly theoretical element in the concept of "the only $x \dots$ ".

Würtz illustrates his thesis with the simple example of the relation "to the right of" holding between two objects in the visual field. His example contains the details of his argument that the construction of physical objects involves irreducibly theoretical entities. Würtz concludes by arguing that any adequate construction of the external world requires hypotheses as instruments for verification, and that such hypotheses provide further examples of theoretical entities that cannot be reduced to their extension. Since the language of "common sense" includes concepts, logical principles, and hypotheses, it therefore contains irreducibly theoretical elements that transcend experience.

Würtz's critical exposition is based mainly on Russell's own writings, containing almost no references to the secondary literature on his epis-

temology. Some references are made to Hempel and Carnap in the course of making the relevant comparisons between Russell's and their views on hypotheses and the logical construction of the world. Many positions taken in this very short book could benefit from more extended argument, but the work as a whole has the virtue of staying close throughout to its main theme. Russell scholarship would benefit from any further investigations that might be provoked by Würtz's study of the relation between Russell's logic and his epistemology.

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