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*Dedekindian Abstraction and Its Philosophical Background*

Dedekind is known to have made fundamental contributions to the modern axiomatization of number theory using various abstraction procedures in a series of writings from 1872-1888. However, his way of proceeding has been interpreted in different ways. Whereas some saw it as offering a clear example of structural or axiomatic definitions of abstract mathematical objects (regardless – and sometimes despite – his language of “abstraction” and “creation”), others deemed it to show a psychological understanding of abstraction conflating genetic with axiomatic methods. This paper aims to gain insight into the notion of abstraction at work in these writings by placing it in the context nineteenth-century attempts to conceptualize ideal objects such as Moritz Wilhelm Drobisch’s and Hermann Lotze’s. Dedekind’s connections to nineteenth-century logic open the door a non-psychologistic rendering of his procedure as first proposed by the neo-Kantian philosopher Ernst Cassirer, and more recently by Erich Reck and Audrey Yap. It will be suggested that this line of interpretation is worth exploring further, not only because it sheds light on the philosophical background of Dedekind’s notion, but also because it brings out the premises for a specific version of mathematical structuralism.