Niels Bohr’s Complementarity:
Its Structure, History, and Intersections with Hermeneutics and Deconstruction

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door

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Preface

This doctoral dissertation is a product of my almost ten years of inquiry into Niels Bohr’s idea of complementarity, combined with my equally sustained study of contemporary philosophical thought, specifically hermeneutic philosophy and Derridean deconstruction. The thesis is to some extent based on a couple of my earlier writings, although I have revised part of my previous terminology and argumentation. The first two sections of each of Chapters 2 and 4 have been adapted from my paper “Bohr’s Early Complementarity Argument,” Historia Scientiarum, 8-1 (1998), 1-19. Some of the main points in Chapters 5 and 6 have been provisionally given in my French-language article “L’idée de complémentarité de Bohr en comparaison avec l’herméneutique et la déconstruction,” included in Thomas Bedorf und A. B. Blank (eds.), Diesseits des Subjekprinzips: Körper – Sprache – Praxis, Sophist: Sozialphilosophische Studien, Vol. 3 (Berlin: Edition Humboldt, 2002), pp. 211-227. Sections 2 to 4 of Chapter 6, together with some of the arguments in Chapter 4, derive from my as yet unpublished article “Complementarity and Deconstruction: Plotnitsky’s Analysis and Beyond.” Many parts of the thesis also go back to a number of conference presentations I have made in the last several years. Specifically, a paper on Bohr’s later idea of complementarity read at the 11th International Congress of Logic, Methodology and Philosophy of Science (Cracow, Poland, 1999) formed the basis of the second half of each of Chapters 2 and 4, while a lecture on complementarity and hermeneutics given at the 2003 Conference of the International Society for Hermeneutics and Science (Tihany, Hungary) has grown into Chapter 5 of the present thesis. It is only Chapters 1 and 3 that I have for the most part newly written for this dissertation.

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