

Definitions and Their Role in Scientific Classification

Corinne L. Bloch

The Cohn Institute for the History and Philosophy of Science and Ideas
Tel Aviv University

Abstract

As a result of the criticism of the classical theory of concepts, definitions are often considered as irrelevant to actual usage of concepts. In this paper, I discuss the characteristics and the function of definitions by using case-studies from 20th century neuroscience.

In the first section of the paper, I examine the contextual nature of definitions and the implications this has on their epistemological status. Next, I discuss the types of causal connections captured by definitions, suggesting a broader type of causality than that usually ascribed to them. I argue that these two characteristics of definitions – their contextual nature and the broad spectrum of causal connections that they capture – are interconnected, and that together they facilitate the role of definitions as tools for integration of our constantly growing knowledge and the formation of concepts. In the second part of the paper, I discuss the role of definitions in scientific classification. I argue for a role for definitions that is more limited than that offered by the classical theory, yet it is a role that is crucial for the formation and application of concepts.