



Why Conceptual Logistics Matters

Paul Thagard's *The Cognitive Science of Science: Explanation, Discovery, and Conceptual Change* includes the chapter, "Why Conceptual Change Matters." Considerable interest in this topic, he observes, was stimulated by the publication of Thomas Kuhn's *The Structure of Scientific Revolutions* in 1962. Kuhn identified revolutionary changes in important scientific conceptions such as "mass." Such major reformulations of scientific conceptions came as a shock to his readers "because this account of strong conceptual change seemed to erase common assumptions about scientific progress and rationality" (195).

Thagard contends that in 2012, fifty years later, conceptual change continues to be a critical area of research for several reasons:

1. "First, understanding conceptual development matters for the general appreciation of the structure and growth of scientific knowledge. . . . a major part of scientific development is the introduction of new concepts such as *gravity*, *molecule*, and *virus*." (195)
2. "Second, conceptual development is not just an occurrence in the history of science, but also in the history of every child." (196) Thus, the ways in which we change our conceptions is a crucial component of our education.
3. "The third reason why conceptual change is an important topic ... results from its relevance to science education. " Thus, we need to "devise educational techniques that are more effective than current ones in enabling the acquisition of scientific knowledge." (196)

These three reasons for studying conceptual change form a casual chain. Understanding how we acquire and change our beliefs is a critical condition for developing "educational techniques that are more effective than the current ones," which, in turn, is vital to the growth of scientific knowledge.

Thagard's reasons for focusing our attention on understanding conceptual change are compelling. They also apply to conceptual logistics which is synonymous with the study of conceptual change in communication research. Moreover, his argument for studying

SCLCR: Why Conceptual Logistics Matters

conceptual change describes the purpose of the Society for Conceptual Logistics in Communication Research (SCLCR) whose founding premise is that we need to study how we change our conceptions in order to improve our ability to change them.

Conceptual logistics refers to the ways we use, maintain, and modify our conceptions. It is the subject matter that the members of SCLCR study. Though a rather abstract term, conceptual logistics is concretely embedded in research discourses—the data that reveals the logistics of our conceptual journeys. SCLCR develops flexible and varied techniques for doing what we call logistical discourse analysis (LDA). We are designing tools for the analyses of conceptual change which are available in the SCLCR Toolkit.

The aim of SCLCR is to foster an educational environment that encourages conceptual creativity—changing old ideas into new ones.