Chapter 3
Structure of the Relational Thinking Styles Model

ABSTRACT

Though inference patterns are a nearly invisible aspect of natural intelligence, each of these RTS inferencing patterns can be observed by watching patterns of behavior in standardized testing situations. Identifying a typology of habitual inference styles starts from the assumption of non-identity (thinking habits are not identical) and suggests further that one style (at the level style is identified) may not simply learn another. Rather the style is a character that both limits and expands possibilities.

This chapter lays out the initial RTS model designed by Dorothy Davis to describe her theory of thinking styles. Included here is a brief discussion of the Peircean-like phenomenological model that Davis used as the framework from which to develop the theoretical model of RTS and the DNV, an analog model of RTS. The main body of the chapter introduces the underlying structure of the RTS model (and, by association, the DNV), laying out the basic criteria for analysis and identification of inference patterns.

INTRODUCTION

Relational Thinking Styles (RTS) is both a model of and a method for identifying practical thinking habits in individuals. RTS identifies five different types of inferencing patterns that individuals habitually apply in the process of determining what is worthy of attention (Discerning), selecting a purpose (Goal-Setting), and attempting to reach that end (Problem-Solving). Most people persistently lay familiar templates over even novel issues, habitually engaging in crude inductive-like
processes for the solving of new problems. However, some apply generative mental processes in the face of novelty; others apply analytical ones; still others apply a combination of these.

The conceptual model of RTS was initially developed as an inquiry into the nature and patterns of creativity. Dorothy Davis, dance teacher at a public high school in Tucson, AZ, noticed that different students handled choreography assignments in different, yet predictable, ways. She returned to college in midlife to pursue a doctoral program in the hopes that it might help her to discover the reason for the differences in creative styles she observed among her students.

When developing her model of RTS, Davis was guided by a graphical representation of philosopher Charles Sanders Peirce’s three categories of consciousness (Peirce, 1932, Vol. 1, para. 377). Peirce developed his philosophy from these categories, including his logic of discovery and invention (Peirce, 1998). Thus, through this back door into Peirce’s philosophy, Davis was able to develop the RTS model, which not only identifies various expressions of Peirce’s categories, but also identifies instinctive inferencing patterns based upon how different people habitually engage each of these categories in the course of making decisions of value (Discerning), priority (Goal-Setting), and method (Problem-Solving).

Albert Upton (1973) used Peirce’s categories as the basis of an effective method for developing intelligence skills. Upton (1973; Upton & Samson, 1963) transformed Peirce’s categories into a system for developing reasoning skills in college undergraduates by enabling students to acquire the ability to (1) discern qualities of affect, sensation, and reason, (2) analyze things by means of their qualities, and (3) identify, interpret, and manipulate signs (including words and other symbols) to apprehend and produce coherent thoughts. Chiasson was using Upton’s system to improve the reasoning skills of the students in her high school language arts classes when she and Davis first met (Chiasson, 2001b, 2008).

In 1978, as a consequence of the way in which Davis developed the RTS model, she was able to develop an assessment, the Davis Non-Verbal Assessment (DNV), to test the validity of her model as well as to identify these non-deliberate inferencing habits in individuals from various cultures, languages, intelligence, socio-economic levels and educational backgrounds. Davis designed the DNV to identify these different thinking/inferencing patterns as they operate within individuals over real time. She and Chiasson realized very early in the process that these patterns affect learning and job performance as well as creativity. They later determined that these practical inferencing styles might be proto-inferencing types from which the rules of formal logic developed, including those described by Peirce as abduction, deduction, and induction.

As background for this chapter, we discuss Davis’s development of the RTS model and its relationship to Peirce’s three categories of consciousness. The main focus of this chapter is to identify the specific structure of Davis’s model in terms of its categories and the action patterns that each style habitually applies. Specifically, this chapter will cover the following four aspects of the RTS model:

1. The five kinds of thinking styles: Transient (crude abductive-like), Direct (crude inductive-like), Analytical (deductive-like), Relational (abductive-like), and Meta-relational (methodeutic or retroductive-like).

2. The three categories within which thinking styles operate: sequence, intensity, and duration.

3. The syntactical arrangement of the categories for each thinking style, determined by priority and combination.

4. The action patterns or task approaches for each thinking style: simple/complex repeating and random/deliberate varying.
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