Chapter 3
A Theory of Learning for the Creation and Management of Knowledge in Learning Communities and Organizations

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ABSTRACT
Social sciences have been in crisis for a long time, partly by being the captive of the Newtonian paradigm, and partly through the effects of this paradigm on practice. This crisis was recognized in the past by the Russian psychologist and philosopher Lev Vygotsky, and continues to this day. The educational crisis is just one instance. It is hard to imagine how to escape this crisis, and a real shift of paradigm is needed. In this article, such a shift toward the paradigm of complexity is advocated. The shift implies a reframing of complexity and a new kind of thinking in complexity. The new paradigm implies the development of a causally generative complexity theory of change and development. Ultimately, the fundamental challenge is to harness the complexity of complex, generative learning in the communities of learners in learning organizations.

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INTRODUCTION

Social sciences has been in crisis since long, partly by being the captive of what may be called “the blinding paradigm”, and partly by the effects of these paradigms on practice. The corresponding dominant view takes a strong reductionist view of reality, which implies an objectivistic, rationalistic stance in viewing and doing science. This crisis in the field of psychology and education was already recognized by the Russian psychologist and philosopher Lev Vygotsky; it is the crisis which is still the crisis of our days. To escape the crisis we are still in, we strongly need a paradigm shift. This, however, is not an easy task, as history has shown us. This view is in line with Kuhnian thinking on the role of paradigms and paradigm shifts in science (Kuhn, 1970). The question, in our case, then, is “what is the very nature of this crisis?” And, linked to that question, what paradigm shift we may speak about? What role may this crisis have for the kind of shift of paradigm needed?

It still seems true what Kuhn remarked about the role and the nature of crisis in the field of science in general and the tools of thought as essential elements of a paradigm: “The significance of crisis is the indication they (the tools of the previous paradigm) provide that an occasion for retooling has arrived” (see Kuhn, 1970, p. 76, emphasis added).

So, the first problem is to recognize a crisis, and to get it recognized and ‘accepted’ as real by scholars in the field. To my mind, this has been the essence of the early work of Vygotsky. For him, it was one of the preconditions for a paradigm shift in his field of study to formulate a so-called ‘theory of the crisis’ (see Vygotsky, 1997, for his work on the crisis in psychology, which was unpublished during his lifetime). By describing and formulating such a theory in the field of education, we may be able to view the crisis as real and take the effects of that crisis seriously. Thus, we may dis-cover new phenomena that we have not yet seen, ‘simply’ because we were not able to look for it. Only by taking such a change of perspective, we may become able to start to ‘solve’ the crisis in psychology and the crisis in education. Of course, this is not an easy job to do. For the crisis never is a given, self-evident crisis for all of the scholars involved in the field of science, as history of science has shown us.

The crisis we speak about, now, is a crisis unrecognized or even denied by many educators in the field of education. This crisis is, in our view, strongly related to what the French pedagogue and philosopher Edgar Morin has called ‘the epistemological problem’ (Morin, 2001: 39). In Jörg (2009), we have sketched the complex tri-partite relationship between epistemology, ontology, and methodology, and the relationship with a potential new (enlarged) worldview. This relationship is constitutive for the paradigm ‘in use’ in viewing and doing science. This paradigm is not always beneficial for science and society, as history has shown (see Kuhn, 1970). However, we strongly believe that staying un-reflective of this position of viewing and doing science runs the risk of getting into a state of crisis (see Jörg, 2009). To put it rather boldly, we may refer to Morin, again, who stated that the crisis can be viewed as a result of what he has called “blinding paradigms” (Morin, 2001: 21). We want to argue here that they are still operative in the field of learning and education. The consequence of this view and their effects is that education and pedagogy may still show blind spots and myopia (Van der Veer & Valsiner, 1994, p. 5-6). They correspond with the prejudices and habits of thinking noticed by Vygotsky (1997), in his analysis of the crisis in psychology in his days (the twenties of the last century). He tried to formulate an adequate theory of learning and development, as an inherently complex process, stressing the role of the other in the communicative human interaction. Although being very critical about the state of art, he did not fully succeeded in his efforts of building a new science of learning and development. He ‘simply’ lacked the tools for it!
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