

CREATING A DIALOGUE BETWEEN THE CONCEPTS OF COMPLEXITY PARADIGMS AND THE PRAGMATIC APPROACHES PROPOSED FOR EVALUATING COMPLEX INTERVENTIONS

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First, I would like to thank the co-editors of this special issue for entrusting me with the task of presenting a critical overview of the subject of evaluation through the lens of my own experience. I will not offer here a critical analysis of the articles. Rather, I propose to create a dialogue between complexity paradigms and the pragmatic approaches and lessons presented in this special issue. From my evaluation practice, I believe it is possible to build bridges between paradigmatic propositions and pragmatic experiences with complexity. We will see how the ideas of complexity paradigms accord with and support these reflections on the evaluation of complex interventions. To do this, I would like to invoke certain principles and concepts from two authors whose complexity paradigms of social systems have guided my own evaluative research practice: Edgar Morin (Hartz, 1993) and, more recently, Niklas Luhmann's propositions about meaning-constitution in complex systems (Moeller, 2006).

For Morin, complexity is thinking that is capable of perpetual renewal by connecting the multidimensionality of beings and of things. The concept of system is at the core of complex thinking. Embracing the notion of complexity entails dealing with systems, the modelling principle, and the researcher-actor role, these last being two ways of embodying this concept. But first we need to go beyond the simple expression of the system and look at it in its entirety.

In fact, it often happens that, in trying to avoid a mutilating reductionism, we use the term "system," forgetting that it is equally as possible to reduce down to the "whole" as it is to the parts. The system is made up of the interactions of relationships between its constituent parts and the whole. The whole, however, is both more and less than the sum of its parts; it is more, by virtue of the emergent qualities of

the interactions, but it is also less, because of the limitations placed on its characteristic parts by the recursive nature of the system.

Models are a theatrical representation providing a singular view of the intervention. In this representation, researchers need to determine their position. Some exclude themselves from the relationship between the object to be represented and the receiver—this is the position of the diplomat evaluator—while others choose to be a party in this action. In the complexity paradigm, it should be possible to combine these representations without losing any of the learning explored by the various scientific paradigms.

The term *researcher-actor* signifies that a conception or interpretation of reality is in itself an action that transforms that reality. In that sense, we need to adopt a reflective epistemology. The researcher's intentionality necessarily forms part of the natural history of the conclusions.

It is also important to define certain fundamental principles that play a role in any research approach based on this paradigm, or worldview: *aggregation*—that the object should first of all be apprehended in its relationship with the environment, without excluding its also being understood through reductions; *interpretation*—that causality is a relative and contingent interpretation with respect to the ends/objectives related to the events being studied; and *relevance*—that veracity is conditioned by the researcher, with argument replacing demonstration (Hartz, 1993).

In Luhmann's paradigm, the concepts of observation and description (including self-observation and self-description) are central. The science of systems offers specific properties, because not only can we analyze systems from otherwise inaccessible perspectives (second-order observer), but we can also develop the means to access directly, for ourselves, complexity that is not available to scientific analysis (Neves & Neves, 2006).

To evaluate complex health interventions as self-organizing social systems in the light of Luhmann's paradigm, we must remember that without our communicative operation or "distinction," these "(observ)actions" do not contain complexity meaning. Meaning, as a medium of signs and concepts, represents a state of contingency (within which nothing is necessary but anything is possible), in which (in)formation can (in)form the world, reducing its complexity

into manageable units, but always creating its own complexity in a continuous selective process of reflexive communication. To manage complexity we have to deal with a contingent paradox, which is that of contending with unity and multiplicity simultaneously in the present time and in possibilities. Yet even if a paradox is a self-contradictory operation, it nevertheless contains some truth, and it can be “deparadoxicalized” by using models to “zoom” in and out on different levels. As Eiriksson, Retsloff, and Ulletved Jørgensen have pointed out, this means that we cannot “talk about how something *is*, but only how it is possible to describe this *something*” (2006, p. 5). Observation is itself contingent on the observer’s point of view. Thus, as those authors emphasize, the objective of evaluation is not to offer “a harmonic synthesis,” but rather to create and represent a “fertile disorder” (2006, p. 8).

Within the models inspired by these autopoietic paradigms that are in constant re-creation, and in which life, reproducing itself, creates its new environment, the concept of health is found to be also transformed. It emerges from an exclusive vision of adaptation and of the capacity to resist the external environment in order to refocus on a continuous life-learning project, in its process of re-creation in response to current and future conditions. We no longer speak about determinants of health or health interventions, limited within a pattern of causality or efficacy, but rather, what we seek is to identify the different levels of complexity and connections. This approach can promote more appropriate interventions through better understanding of illness and of patients, by taking into consideration human beings’ intentionalities in their environmental interactions. These characteristics permeate this collective publication and constitute its originality. Ultimately, as each evaluator-researcher-actor uses his or her own expertise to (in)form, all we can do is immerse ourselves in this wealth of knowledge with the eye of someone who analyzes other systems from an inaccessible viewpoint, that of a second-order observer.

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