How a Process-oriented Approach in Radical Constructivism Affects Empirical Research

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> Upshot: Radical constructivism should be strictly process-oriented to avoid hidden ontology. S. J. Schmidt provides such a strict process-orientation from a very philosophical viewpoint that, however, still lacks access to empirical research. The purpose of this commentary is to show a way to apply Schmidt’s philosophical framework to empirical research.

The problem of (seemingly) neglected empirical research

> 1. Radical constructivism (RC) was established with the help of empirical research. Most of the fathers and mothers of RC started their careers in the field of natural sciences. They subsequently developed the philosophical (epistemological) implications of their empirical work and elaborated the epistemological spin-off towards a coherent philosophical system. The emerging discourse of RC not only included an alternative epistemological and anti-ontological standpoint against mainstream ontology and realism but also a logical system of its own, such as self-referential calculus (sensu Varela), logic of distinction (sensu Bateson or Spencer Brown) or second order cybernetic programming (sensu von Foerster or Glanville). Siegfried J. Schmidt’s origin, too, is empirically based. In his early studies he tried to introduce empirical research to the field of linguistics and literature (empirische Literaturwissenschaft), which, until then, was dominated by hermeneutic methods.

> 2. However, the more autonomous the theoretical and philosophical efforts of RC have become, the more strained has become the connection to empirical research, which is still characterized by the use of conventional methods developed within the framework of mainstream realism (such as critical rationalism and analytical philosophy sensu Popper). As I argued in a former article (cf. Scholl 2011), the claim of universality of RC will not be challenged by this gap between meta-theoretical (logical, philosophical, epistemological) development and empirical (practical) tools or methods. For the practical use of methods and technical tools, it should not be important whether the researcher follows a constructivist or a realist approach. The difference between constructivists and realists should become visible when it comes to the interpretation of empirical results and their relationship to the hypothesis in question.

> 3. Observing the originators of RC and their later works (e.g., Maturana, von Foerster, and von Glasersfeld), one has the impression that they became philosophers and drifted further away from empirical research. Schmidt’s target article for this issue seems to be far from empirical research or from methodological topics, too, as it is based on the self-justification of a rewritten RC.

> 4. The aim of my article is to discover some philosophical implications of Schmidt’s approach for empirical research, which of course cannot be a way back to the roots of his work because this would end up in a circular argumentation. Instead, I prefer the metaphor of a spiral, which includes circular “elements” and progress. This progress is not necessarily linear but can also be dialectic, which is typical of the history of science, including all its errors, dead ends, setbacks, and “indirect” progresses. The specific question that I try to answer is about what we can learn for empirical research from Schmidt’s very philosophical approach – a question that Schmidt himself has al-

http://www.univie.ac.at/constructivism/journal/7/1/001.schmidt
ready studied intensively (Schmidt 1998). As I work in the field of social sciences, I will concentrate my efforts on this field. I will elaborate the topic of process orientation, which seems to be relevant for and to affect the practice of empirical research.

**The relevance of process-related thinking to constructivist epistemology**

*5* Schmidt’s approach to histories and discourse elaborated and pursued in his latest books (2007, 2010a) and in the target article of this issue spins on the spiral of relativism: one of the core ideas of RC conceives of knowledge as strictly observer-related rather than as a true relationship between the knowing subject and the known object. Therefore, RC exponents (such as von Glaserfeld) prefer the verb “knowing” to the noun “knowledge.” As the observer experiences an individual socialisation, this relationship becomes dynamic. As the observer is not an isolated individual but lives in a social and societal context and interacts with other individuals, the relationship becomes social, too. However, it does not suffice to change the direction from object to subject because this may lead to the implication that the observer (subject) will become an ontological object, too. Therefore, Josef Mitterer (1992) has radicalized the relationship between subject and object towards a non-dualizing perspective.

*6* Schmidt transfers the non-dualizing approach to a strictly process-related model. Of course, the process should not be mistaken as an ontological “object” itself nor as a logical prerequisite (sensu Kant’s a priori). Rather, Schmidt emphasizes its inherent dynamics. The notion of the dynamics of a process, by the way, is not redundant nor does it include a tautological argument: the process itself initially only describes the form of a relationship (which can be distinguished from a static form), whereas the dynamics of this process qualifies the components of the process. To complete the form of a process it is necessary to assume a strictly complementary and auto-constitutive relationship of an actor/observer (in Schmidt’s words “agency” or “action carrier”), a performance/operation/realisation, and an outcome/result/object.” Ironically, a dynamic interplay such as this is expressed in a cascade of nouns. Is this a hint that processing needs objects to be observable as a process at all? Indeed, within a logic of distinction (sensu Spencer Brown) one has to ask the question: What is the other side (or the opposite) of the process?

**Empirical research as a process and as an investigation of processes**

*7* This other side of the dynamic aspect within a process should be the static aspect, which Schmidt calls the result (or outcome) of the process. A process can only be observed (as a process) if the observer manages to adhere to such an outcome. Of course, such an outcome or result of and within the process does not need to be considered a “real” object; but this phenomenon should last long enough to be observable or recordable. Empirical research thus operates as a stopper of the process in order to observe it, which is only possible when the process comes to a stop and takes the shape of an object (sensu Spencer-Brown, Luhmann or Glanville). The empirical observation, no matter whether a (non-)participant observation of people and their actions, a survey among people about their attitudes or the analysis of a text or document, is itself a process of intervention in a process going on (cf. Merten 2005). Methodologists working within the framework of a realistic epistemology make every effort to separate both processes – the process of observation (= research) and the process under observation (= reality) – but from a constructivist perspective, both processes interfere with each other and are intertwined in a way that they cannot be separated. Instead, the self-organization of scientific (or any other) observation is the interference of both processes.

*8* Such kinds of spiral-formed processes of self-organizations can be observed in any societal processes. Klaus Krippendorff (2005) reconstructs the process of public opinion formation as interfering processes including people’s opinions, the observation of people’s opinions by polls and their very specific measurement of people’s opinions, and the observation of public opinion polls by politicians and parties, etc. A similar logic is used in chaos theory, which posits the interplay of chaotic (dynamic, processive) and structured (organized, process-resulting) phases, which themselves are considered a process, etc. Stefan Frerichs (2000) analyzes the news-making process as such an interplay including phases of temporarily chaotic situations, when the information about an event (e.g., a plane crash) is sparse and uncertain and the sources are unconfident, on the one hand, and the well-organized and professional procedures of news gathering on the other hand that result in an acceptable and communicable news item. Although there seems to be a linear process (from chaos to organization when the news is published), the process may at any time go the other way, from a well-structured phase to chaotic uncertainty. Maybe new information emerges that is inconsistent with information gained so far; the structure of the media coverage then turns to chaotic polyphony or even cacophony.

**Meta-theoretical implications**

*9* In all of these cases we – as (scientific) observers – suppose that the observed processes continue while being observed. However, only the intervening (empirical) stoppage of the processes under observation makes them observable and makes us believe that we observe ongoing processes. With the help of empirical research we permanently (sic!) construct empirical results of this process of investigation of observed processes. The empirical results are temporarily static and stable as long as the observing process continues and as long as we are in consensus with other empirical researchers. Empirical research that aims to model and that observes processes operates, itself, within a (research) process. However, empirical research has to fix certain aspects and clues of the process under observation. And it has to do so in a static way: the observed results of the process under study have to be observed within a certain period of collecting and analyzing data and have to be communicated by writing them down and publishing them in a scientific journal or book. Thus, the process of research includes fixed points, which form the process by constituting the tempo and rhythm of the process of investigation as well as the process under study. According to Schmidt, we should figure out the relationships between process and steadiness, dynamic and static aspects of processes, or enduring and changing aspects of steadiness.
within the strictly complementary logic of positing and presupposition.

**Methodological implications**

> **10** Empirical researchers obviously always catch a glimpse of the processes under study. If we ask questions within a survey, the answers cannot be considered stable representations of the respondents’ attitudes but only utterances in a certain social situation at a certain moment with respect to a certain thought emerging at that moment and in that situation. The same should be true for other methods used in the social sciences, such as (non-)participant observation, analysis of texts and documents, etc. Thus, the results of empirical research are very elusive. Can they still be used to test such abstract and permanent systems of thoughts and arguments as scientific theories?

> **11** Both qualitative and quantitative methodological approaches use their own techniques to avoid the impression of investigating only sporadic or accidental results, which need not be discussed here (statistical aggregation, ethnographic research design, etc.). However, a strictly process-oriented perspective provided by RC in general and by Schmidt’s philosophical considerations in particular forces the empirical researcher to reconsider the value of the outcome of empirical research. I understand Schmidt’s strictly complementary logic of a three-part relationship between actor, performance, and results as a hint or advice to look for condensation, concentration, and coherence of single empirical results (in methodological terms: reliability). In order to gain temporarily stable observations, we have to make use of the dynamics of the process of investigation interfering with the process under study in a reflective manner rather than consider the process of investigation a representation of the process under study. Empirical research in this perspective can be characterized a permanent interplay of rather chaotic, elusive, detailed, specific, and fragmented dynamic observations with more organized, stable, general, abstract, and integrated static observations.

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**Faith as Ethically Basic to the Task of Constructing**

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> **Upshot** The aim is to show that, although Schmidt’s thesis must in most respects be warmly welcomed, there is an unexpressed implication concerning the dialogic structure of language that, when drawn out plainly, reveals a further valuable move open to the theory. I offer it therefore as a clarification of his theory with which I hope Schmidt may agree. He has already stressed the differences in understanding between one agent and another; it is because of this that, in order to communicate, agents must play without believing the mutual hypothetical projections of “truth,” “sincerity,” “objectivity,” “reference,” and other ideals of social “reality.” In the language process it is faith upon which this rests rather than blind trust. It is argued that only faith can properly take account of the risks of contingency.

**Dialogue and difference**

> **1** The target of the criticism can be simply put: the fact that language is a social act, repeatedly asserted throughout, may be said to have one aspect that is not sufficiently explored. It involves the motivations of those engaged in dialogue. Siegfried J. Schmidt argues convincingly that language is dialogic in the sense of bringing together more than one contributor, the aim of one or more of whom is, hopefully, to adjust and update the concepts and percepts of others. What is hopefully updated is the action-schemata of those addressed, so that their perceptions are now motivated in a more successful direction.

> **2** One could say, to use a metaphor from perception that Gregory Bateson (1980: 77–81) employs, that it is a stereoscopic mode of encounter with the real. It involves the realization that the understandings of hearer and speaker are distinct though overlapping, a division that endlessly permits readjustments of the so-far socially agreed selections we together call “reality” in the same way that the two eyes, with their differing perspectives, enable the brain to set up a 3-D view. Schmidt correctly insists on the continuing development of the “collective knowledge” enshrined in language, stating that a “balance” is what is aimed at when differing evaluations of language-members are assessed in dialogue (§71). It might be said that, to use Saussure’s terms (Saussure 1983, Ch. 3), the “synchrony” of what has been agreed so far has been subjected to a “diachronic” amendment. To express the distinction in Schmidt’s way, one can say that the synchrony represents “the status quo of shared knowledge,” and that the change results from the incessant “search for discontinuities” (Schmidt 2007: 12, 92). The “models of reality” that result are “constantly co-tested,” for the models are inescapably “affectively and morally charged” (ibid: 33). This acknowledgement of the part played by motivation in perception is largely absent from the current Anglo-American philosophical investigations of perception, in some of which it is given that objects that are the focus of perceiving (see McDowell 1994 as an example).

> **3** So Schmidt rightly identifies the current of collective knowledge as characterized by continual redirectings of its flow,

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**Notes**

20 | Even in the case of a deliberate lie, a perceptive hearer may garner from the liar’s utterance guidance of which the speaker is unaware (for a discussion of an example, see Wright 2005: 144).

21 | I have a rough way of initially checking the reliability of any contemporary Anglo-American book on the philosophy of perception: I look in the index to see whether any of the following terms are discussed in it — “motivation,” “pain,” “pleasure,” “fear,” and “desire.” It is surprising how many fail the test.