

world of meaning and value bears far-reaching implications for the relationship between epistemology and ethics. In a demonstration of the profound interrelation between matters of knowing and matters of being in the context of scientific inquiry, Vörös and Bitbol argue for the inseparability of epistemic achievements from the existential transformation of the knower (§38). Calling for the importance of complementing the “scientific/objectivist stance” with the “contemplative/phenomenological stance” in scientific inquiry (§38), Vörös and Bitbol – as they are themselves explicit about – focus predominantly on “individual aspects of ethics and morality” (Footnote 4). In fact, even when the pursuit of existential self-transformation as a condition for and consequence of scientific understanding becomes, as envisioned by Varela, embedded in the “collectively shared culture” (§39) of the scientific community, the attainment and preservation of such an “enhanced state of being” (ibid) seems to, in the last instance, rest upon the awareness and skill of individual researchers.

« 11 » I want to conclude the commentary by considering the implications of the target article for our more general conception of science and scientific knowledge. How might the impossibility of a neutral and value-free science, recognized by Vörös and Bitbol (§§40f), be reflected beyond the level of the concrete individual in our views on the scientific theory? What do Varela’s claim that “[t]o know is to evaluate through our living” (§40) and his call for the “explicit recognition of responsibility for what is understood” (§41) have to say, on a more abstract level, about the nature of scientific understanding?

« 12 » I propose that the parallel between the cognizing *pseudo-subject* of the enactive account of mind and cognition and the cognizing *meta-subject* – i.e., the scientist – putting forward this very enactive account, described in §33, not only bears on the individual meta-subject’s ethical responsibility for existential transformation, but also, and quite directly, points to a requirement of a particular *non-objectivist* conception of science and scientific knowledge. As pointed out by Thompson (2016: xxvii), science can be conceived as a “highly refined distillation of our embodied sense-

making,” and scientific knowledge as an “expression of the relation between our embodied cognition and the world that it purports to know.” From the sense-making of concretely embodied organisms, however simple, to the heights of theoretical abstraction, all cognition is a manifestation of a fundamental interdependence between the knower and the known. Recognizing the impossibility of separating the observer and the observed as an inherent feature of all epistemic processes, a consistent (and consistently) enactive cognitive science is thus called to reflexively extend the idea of enaction beyond the *content* of its accounts of mind and cognition to encompass these same accounts’ *epistemological foundations*.

« 13 » As a community of researchers, cognitive science then seems to be responsible for its understanding of the mind and cognition not only by virtue of its scientists’ individual responsibility for their existential transformation, but also by virtue of being called to consistently apply the idea of enaction to its own scientific endeavors. In this way, the enactive conception of science urges cognitive science to recognize the intrinsic reflexivity of its field (Stewart 2001), to explore alternative non-objectivist epistemological frameworks for investigating mind and lived experience (e.g., Kordeš 2016), and to remain open to elucidating, challenging, and potentially changing its own theoretical presuppositions. As a valuable example of the last point, the target article presents an important contribution to understanding the concept of enaction and its implications for researching the mind in the context of cognitive science.

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The Elusive Blueprint for Building Bridges

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> **Upshot** • I consider the lack of clear guidelines for groundless non-dualist research proposed by Vörös and Bitbol’s interpretation of Varela’s programme. I attempt to clarify a mode of being that this kind of research calls for, and propose that understanding such a research-oriented existential attitude might replace the need for a detailed research “technique.” I reflect upon the ethical implications of research-oriented being.

Introduction

« 1 » Sebastjan Vörös and Michael Bitbol re-examine Francisco Varela’s “one idea” (§7), the idea that they see as uniting Varela’s broad and eclectic opus – the attempt to free science and philosophy from the clutches of duality. The authors present this attempt through an analysis of Varela’s concept of enaction. In their eyes, this concept should not be read as the foundation of a philosophical project, but as a new model connecting the life-world with its theoretical explanation (i.e., the world of science), *being with knowledge*. The target article’s second part focuses on the self-referential mutual influence of the changing attachment to the idea of self, ethical stance and the ethical propositional position.

« 2 » Since I almost entirely share the authors’ position (see Kordeš 2016), this commentary will be, as Freud would put it, a narcissism of small differences. Accepting the basic theses of the target article, I would like to point out some potential loose ends, mostly pertaining to the technical side of executing the proposed project. It may turn out that these details are not that insignificant and that they might be hiding a possible solution for the problem pointed out by the authors: “for some reason or other, [Varela’s proposal] has never been taken up and woven into full-blown theoretical and empirical fabric” (§1).

The devil in the details

« 3 » Indeed, why has it not (yet) been taken up fully? One possible answer could

be a lack of details, by which I mean a lack of methodological and technical guidelines on how the project of building bridges is to be implemented. It seems as if the authors deliberately avoid this discussion. This is also indicated by the conspicuous absence of one of the most detailed (though eclectic and incomplete) descriptions of the act of researching being, Natalie Depraz, Varela and Pierre Vermersch's *On Becoming Aware* (2003), from the broad opus of works by Varela referenced in the target article.

« 4 » In the target article, the discussion of the practicalities of implementing Varela's programme is relegated to a footnote (i.e., Footnote 3). There the reader learns that Varela's "method of choice" was meditation, but that he did not want to prescribe a one-size-fits-all solution. The mentioned alternatives show a surprisingly broad range of ways for attending to the mind (not necessarily experience) that supposedly produce the desired results.

« 5 » But what exactly are those results? The target article clearly shows that a theoretical analysis of the concept of enaction is not enough. For the implementation of Varela's plan it is necessary to build a bridge between being and knowledge from the side of being as well. The article is ambiguous about the specific purpose of a being-centered praxis, offering several possible answers that are not necessarily consistent with one another.

« 6 » The authors explain how the process of enacting our world/experience must be understood as groundless and "as dynamically co-arising. This evokes, in the lived experience of the enactivist theoretician, the phenomenological discovery" (§34). If the "being" side of the circle is ipso facto always present, is it then only necessary for us to notice this presence? Is the purpose of this praxis "cultivating practical/embodied modes of knowing" (Footnote 3) that would enable a constant awareness of this co-arising?

« 7 » The target article sometimes gives the impression that the task of the being-centred praxis is more active, that it serves as the implementation of propositional knowledge in being, a "living manifestation of the *practical (existential) Star*" (§26)? Is this "manifestation" the attainment of a special and "*enhanced state of being*" (§39)?

« 8 » Another possible reading allows for an understanding of the target article as an appeal towards an exploratory and open-ended intent of the praxis of being. As "exploration, implementation, [...] of practices and strategies for examining one's lived experience" (Footnote 3). I propose that, in order to stay within the spirit of scientific endeavour, as an open-ended system of constructing knowledge, this is the only acceptable solution.

« 9 » Varela's great insight was that, when researching the living, the mind and – most importantly – experience, facing groundlessness is inescapable. The authors propose the enaction of this groundlessness through an "efficient back-and-forth exchange between third-person (scientific) analyses and first-person (phenomenological) investigations" (§24). Personally, I am having trouble understanding why the "scientific" and the "phenomenological" investigations are separate. The authors do not seem to indicate a separation between science and philosophy (or phenomenology as one of philosophy's main parts), so the only remaining interpretation seems to be a break-up between science and experience.

« 10 » As far as the field of experience research is concerned, this division needs to be reconsidered. Instead I propose seeing the first-person perspective (and with it, the life-world of the researcher) as part of empirical *scientific* research on experience (or "empirical phenomenology," Kordeš 2016). This kind of research incorporates the groundless and constructivist circle, pulling itself up by its bootstraps. Similar to classic science, we ceaselessly commute between enacting data and enacting theories. In the case of groundless science, we commute between knowing and being, both being part of the same scientific process, in exactly the same manner as experiment and theoretical calculations are parts of the same physics.

« 11 » Such an understanding of experiential research (contemplative science?) has its own characteristics. It requires us "to leave behind a certain image of how science is done" (§39). Thus, being becomes a research laboratory and so demands a particular attitude – an attitude of openness, an "I don't know" attitude and an attitude of allowing experience to unfold. This attitude is not without consequences, for in research-

ing her own experience, the researcher almost certainly undergoes a personal transformation.

« 12 » On the side of knowing, expectations need to change as well. A contemplative researcher, upon entering the constructive circle, accepts the participatory nature of her findings and therefore knowledge. The idea of those findings being a representation of a pre-existing phenomenon has to be bracketed. They are enacted, i.e., neither copied from the outside world, nor solipsistically invented – "not one, not two" (Varela 1976). Accepting knowledge as enacted means accepting that the act of observing (the mode of being) is an inseparable part of what is observed and therefore of knowledge. The contemplative researcher becomes responsible for her knowledge.

Competing perspectives of being-centered research

« 13 » The target article evades the explanation of how *the authors themselves* bridge the gap between being and knowing. If that is to be the central point of the presented idea – and the authors certainly advocate this – then omitting reports of a personal being-centred praxis and the consequential experience is problematic.

« 14 » The omission of the authors' experiential report reduces the discussion to armchair philosophy and makes it, to some extent, naïve. This approach could be blamed for the lack of attention the authors devote to the underlying characteristics of the researcher's position in areas where the interconnectedness of the observer and the observed cannot be ignored, i.e., the constant shift between the position of a detached observer and the position of being an inseparable part of the phenomenon. Bitbol and Claire Petitmengin (2013b) stress this unavoidable shifting and quote Niels Bohr describing how quantum physicists encountered the same dilemma. They talk about an

“analogy between: (i) the situation of an introspector who wishes to observe herself by splitting into a subject part and an object part, and (ii) the situation of an experimenter in quantum mechanics who is (instrumentally and interpretationally) intermingled with microscopic phenomena, yet wants to observe them.” (Bitbol & Petitmengin 2013b: 178)

« 15 » In the target article the authors opt for a more idealistic version, describing the expected ideal state of the self-transformation (§46), disregarding the regular experiential companion of the being-centred researcher – the constant challenge of navigating between the two experiential positions

What kind of attitude?

« 16 » If we wish to conduct science that includes being, we have to adopt a research-oriented stance, a research-oriented mode of being. It seems then, that Varela's reluctance towards prescribing a technique is sensible – but not necessarily for the reasons presented by the target article. Instead of prescribing a technique for being, it seems more sensible to think of an existential attitude that encompasses openness, acceptance and responsibility for the (results of the) reflective act.

« 17 » This does not mean that we should not learn from the broad range of known reflective techniques (among which, mindfulness-related meditation techniques seem closest to adhering to the above-stated principles, as already noted by Varela). However, to use any ready-made technique is very questionable, for by doing so, we automatically subscribe to the expectations set by the conceptual framework from which the technique originates (Kordeš & Markič 2016). As a practitioner of vipassanā and Zen meditation and as someone with great affection towards these Buddhist practices, I can clearly notice how encounters with Buddhist teachers and practices strongly “pull” the practitioner towards a very specific kind of discoveries and – even more – towards a very specific kind of ethical know-how. I am not a Buddhist scholar myself, but I have the impression that within the various systems of Buddhist training, there does not seem to exist a space for critical reflection on the foundations of Buddhist practice. This does not mean, of course, that there are not many Buddhist teachers who are open towards possibilities outside their ideological credo (the Dalai Lama being the most prominent example).

« 18 » The target article's discussion on ethics builds on presuppositions from the Buddhist canon. Let us take, for example, Varela's quoted claims that “ethical know-

how is the progressive, first-hand acquaintance with the virtuality of the self” (§45) for which the self-transformation that involves experience of *śūnyatā* is necessary (§46). The idea of the illusory nature of the self permeates the entire Buddhist ethos and is familiar to practitioners of Buddhist meditations. However, it is against the spirit of science as an open-ended process to prescribe the goal of the research process, however right it might sound.

« 19 » While the target article is very informative, this is perhaps slightly diminished by its narrow focus on only Varela's opus. There are already some contemporary considerations that view the potential of enactivism in a similar way, including the discussions on the possibilities of science, attempting to incorporate being and knowing,¹ such as Evan Thompson's and Eleanor Rosch's fresh takes on enactivism in the foreword to the revised edition of *The Embodied Mind* (Varela, Thompson & Rosch 2016) or the proposal, described in Kordeš (2016). There I argue that genuinely open-ended, participatory (and I can add now – ethical) research should nurture openness, even in face of the possibility of losing intersubjective agreement. This would enable each observer to allow herself to explore her unique experiential landscape, whether such exploration meets the expectations of “expanding experience” (Varela 1976, in §23) or not.

« 20 » This does not mean that contemplative research will not – as every other science – strive for stable, intersubjective patterns (or “invariants”; Varela 1996a: 337). However, adherence to this standard should not be a necessary condition for results to be accepted. And even more importantly, the freedom of potential pioneers of such research should not be restricted by a predetermined finishing line.

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1| As well as some very old ones, like Goethe's idea of a mutual co-development of researcher and the researched (Wellmon 2010).

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Saying What Cannot Be Said

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> **Upshot** • Setting up a dialectic between knowing and being poses an uncomfortable challenge to our usual way of doing science. As a modest contribution to the new collective culture we need, this commentary shares a few Zen koans, and three Taoist stories.

Introduction

« 1 » This is a remarkable target article. If fully understood, it will be unpalatable to a majority of normal scientists. Let me try and explain.

« 2 » The concept of enaction, if applied reflexively, means that each and every one of us, every day of our life, “brings forth” our own particular world of lived experience. What is at stake is quite simply our very existence, the essential quality of our most intimate experience – and our own personal responsibility for what we make of ourselves. The authors, Sebastjan Vörös and Michel Bitbol, argue that taking the notion of enaction seriously implies a radical shift in our conceptions of science and knowledge, as it encompasses a theoretical and existential move away from a detached observer to embedded and engaged cognizer. For convenience, I will label this the “existential” stance.

« 3 » Now this poses a problem. Normally, science is supposed to be “objective,” and the straightforward way to objectivity,