« 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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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 Vöros 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,

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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).

the one we have all been trained in, is just to eliminate anything even remotely "subjective." However, the "existential stance" is openly and avowedly subjective; moreover, this is not a peripheral feature that can be easily dispensed with; it is at the very heart of Francisco Varela's original conception of enaction.

« 4 » So. however much we may regret it, there is thus a genuine *reason* why enaction is so often defused by converting it into a much safer research programme of what has been called "4E cognition" (Menary 2010). The "4Es" are: embodied, embedded, extended and enacted cognition. This is a smart move (if one is indeed trying to defuse Enaction so as to get back into the comfort zone of "normal" science), for the following reason. Francisco Varela himself envisaged enaction as the framework for a possible paradigm in cognitive science, and others have attempted to follow up on this (Stewart, Gapenne & Di Paolo 2010). Now, in any such attempt, the notions that cognition is embodied, embedded (it is more usual to say "situated") and extended undeniably play key roles. So, as a proponent of enaction I cannot protest against the association of enaction with Richard Menary's first three "Es." However, what I can and do disagree with is adding in "enacted" as an ancillary element at the end of the list. In my view, these three Es are *subservient* to the over-riding theme of enaction. Mixing them up indiscriminately, in the way that is done by proponents of the "4Es," leads to missing the wood for the trees.

What is to be done?

« 5 » As the authors note in §39, Varela wrote that the new paradigm "requires us to leave behind a certain image of how science is done and to question a style of training in science which is part of the very fabric of our cultural identity"; for him, such a change represents "a call for transforming the styles and values of the research community itself." And as the authors further note in §41, the "ethical know-how" we need can be cultivated, just like any other skill, with the help of exemplars and disciplined practice rather than by means of explicitly formulated prescriptions. In the remainder of this commentary, I would like to propose a modest contribution to the formation of this new

collectively shared culture by way of two exemplars, Zen koans and Taoist stories. I will deliberately not comment or try to explain them. It is like a joke: if you do not get it first time round, explaining "why" it was funny will not help; so, I will just leave you with the exemplars to ponder.

Zen koans

« 6 » A part of our problem with enaction comes from the hiatus between our habitual forms of intellectual/scientific discourse, and the existential core we want to get at; we need to learn to "walk the walk" rather than "talking the talk" (§39). Koans are designed to do exactly this, by providing phrases that cleverly resist any attempt at purely intellectual understanding. Classic examples of koans are:

- What is the sound of one hand clapping?
- What is the colour of wind?

« 7 » Here are some more examples from http://www.ramaquotes.com/html/koans.html:

"There is no beginning and there is no end. Some days there's not even a middle."

"A religious person is trapped by religion. A perfect person is trapped by perfection. An occultist is trapped by the occult. A human is trapped by the human. A squirrel is trapped by squirrel traps."

"Plan not to plan."

"If a tree falls in forest and there's no one there to watch it, did it really fall? Well, it really doesn't matter. If you weren't there, it's not of no consequence."

Taoism

« 8 » Taoist texts pose formidable problems of translation. One of the main difficulties comes from the recurrent use of terms such as "emptiness," "non-being," "non-action," "invisible" and so on, which can easily give the Western reader the impression that Taoism is a form of quietism, consisting of mystical contemplation far removed from the material world and its concerns. Joseph Needham (1969) goes to considerable lengths to dispel this sort of misunderstanding; he pays particular attention to the Chinese term *wu wei*. The word *wei,* to a first

approximation, means "action"; the word *wu* has the meaning of a negation, an absence; thus, at first sight, *wu wei* would seem to mean "non-action." But Needham explains that *wu* is not a simple, passive negativity; it is better translated by a positive attitude, "deliberately abstaining." And *wei,* properly understood, is not simply "action," but rather "violent action, against the course of nature." It is revealing to explain this by the example of water (fluid and transparent, water is one of the Taoists' favourite metaphors). The nature of water is to run downhill. Thus, an excellent example of *wei* would be to obstinately insist on trying to make water run *uphill*. It is easy to understand that if one misguidedly persists in trying to make water run uphill, the sanction will be to exhaust oneself for nothing. *Wu wei* now takes on a completely different meaning: if one "voluntarily abstains from action against the course of nature," it is in no wise in order to remain passive and inactive; quite the contrary, it is with the aim of acting *effectively,* elegance coming as a bonus. I will now illustrate this by three stories.

Story A

« 9 » Ting, the butcher of King Hui, was cutting up a bullock. Every blow of his hand, every heave of his shoulder, every tread of his foot, every thrust of his knee, every sound of the rending flesh, and every note of the chopper, were in perfect harmony – rhythmical like the *Mulberry Grove* dance, harmonious like the chords of the *Ching Shou* music.

« 10 » "Admirable," said the prince, "Yours is skill indeed!"

« 11 » "Sir," said the cook, laying down his chopper, "what your servant loves is the Tao, which is higher than mere skill. When I first began to chop up oxen, I saw before me the entire carcasses. After three year's practice I saw no more whole animals. Now I work with my mind and not my eyes, my spirit having no more need of control by the senses. Following the natural structure, my chopper slips through the deep crevices, slides through the great cavities, taking advantage of what is already there. My art avoids the tendinous ligatures, and much more so the great bones. An ordinary cook changes his chopper once a year, because he hacks. A good cook needs a new chop-

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per once a month, because he cuts. But I have had this chopper for nineteen years, and although I have cut up many thousands of bullocks, its edge is as if fresh from the whetstone. For where the parts join there are interstices, and since the edge of the chopper has no thickness, one can easily insert it into them. There is more than enough room for it…. Nevertheless, when I come to a complicated joint, and see that there will be some difficulty, I proceed with caution. I fix my eyes on it. I move slowly. Till by a very gentle movement of my chopper, the part is quickly separated, and yields like earth crumbling to the ground. Then standing up with the knife in my hand I look around and pause with an air of triumph. I wipe my chopper and put it in its sheath."

« 12 » "Excellent," cried the prince. From the words of Ting the Cook we may learn how to nourish (our) life." (Translation from Needham 1969).

Story B

« 13 » On the edge of a wood, Confucius came across a crippled hunchback who was catching crickets on the end of a stick as easily as if he could crouch and pick them up off the ground. Confucius admires his skill, and enquires as to his Tao. "For years, replies the hunchback, I practiced balancing balls on the end of my stick without letting them fall: when I manage to balance two balls, I still miss some crickets; when I manage to balance three balls, I only miss one out of ten; when I get to five balls, I catch the crickets as if I were simply picking them up." (Translation from Jullien 2007).

Story C

« 14 » Confucius was walking beside a terrifying cataract, "a hundred yards high with the foam spreading in every direction; neither giant turtles nor alligators nor fish could swim there." Suddenly, Confucius sees a man lolling in the water and, believing that the unhappy individual is trying to commit suicide, sends a disciple to follow the current and try and help him out. Great was Confucius' astonishment to see the man step calmly out of the water a hundred yards further down, shake his loose hair to free it of the water, and to saunter on down the bank quietly humming to himself. As was his wont, Confucius questioned the swimmer as to his *Tao*. The latter replies that he has no tao: "I follow the whirlpools and let myself come back with the eddies; I simply follow the *tao* of the water and don't do anything myself. If I have no *tao* of my own, it is because I wed the *tao* of the water by conforming to its changes: I slip into the vortex of the current and slip out again by letting myself ride on the crest of the wave. There is not even need of a slim board to surf on the wave: by letting oneself be breathed in by the flow, one is then simply breathed out; by entrusting oneself to the surge of the flow without opposing any resistance, one finds oneself given back without sustaining any damage." (Translation from Jullien 2007).

Conclusion

« 15 » We are faced with a challenge, because what I have called the "intellectual stance" cannot be properly expressed in conventional intellectual terms. Zen koans and Taoist stories share the property of pondering the question: "what does one do when one does not know what to do?" In this way, they open up fresh possibilities for enacting enaction.

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Authors' Response
Not Hagiography but Ideational Biography: In Defense of Existential Enaction

Sebastjan Vörös & Michel Bitbol

> Upshot · First, we argue that our contribution was not meant as a mythization of Varela's work, but rather as a Varelian-inspired existential reconstrual of enaction. Second, we expand and elaborate on the notion of dialectics and the role of Buddhist philosophy. Third, we briefly formulate three main domains (theoretical, empirical, educational) of investigation for enacting enaction.

« 1 » Every epoch has its preferred written forms of encapsulating and transmitting knowledge. Modern scholarly articles are one such form, which, although sharing many family resemblances with its predecessors, embodies a unique *stylized* mode of presentation, interpretation, and argumentation. As such, it is not only more accommodating to certain topics and certain ways of expressing them, but also significantly predetermines the contours of our epistemic landscape – what I will, should, and can take on as my subject matter so as to meet the socially endorsed criteria for what constitutes a well-formed vehicle of knowledge – much as a geographical landscape is likely to contribute to the layout and organization of a given city. We mention this because, despite all its merits, the scholarly article – like any other mode of academic exchange – has its disadvantages and its epistemic blind spots. In view of its limited length, its reviewing process, and its format constraints, its sensitivity to shared prejudice and latent academic paradigms is exceptionally strong. Would there be an Edmund Husserl, a Martin Heidegger or a Ludwig Wittgenstein if contemporary scholarly articles were the sole arbiter as to what counts as epistemically (and existentially) relevant? And can there be one now?

« 2 » However, the aim of these preliminary reflections is not to compare ourselves with these giants or demote the significance of the academic article, but to thematize the implicit, yet nontrivial horizons into which it is submerged and which it reflectively (co)creates. We do this as it