

knows, enactivism is one of the five Es. However, at times she appears to *conflate* the 5E approach with the enactive one (e.g., §§34, 53). Is Smrdu's proposal to advance a 5E theory of pain, then, or only an enactive one? **Q1**

« 4 » If Smrdu's aim is to advance a unified 5E theory of pain (“the 5E theory of pain,” §32, emphasis added), then she needs to explain whether and how, in her view, the five Es fit together. Some theorists claim that at least some of the five Es are incompatible. Michael Wheeler (2010), for example, has argued that enactivism and the extended-cognition hypothesis are at odds with each other: whereas the latter claims that cognition extends beyond the boundaries of the organism, the former entails that the boundaries of cognition and those of the organism coincide. Ezequiel Di Paolo (2009) has also noted a tension between those two Es, although a different one: whereas the hypothesis of extended cognition assumes that cognition can be located, enactivism rejects this view and regards cognition as essentially relational. Whether or not these arguments are valid (see for example Colombetti 2017 for the alternative view that enactivism does not entail that the physical vehicles of cognition cannot include parts of the environment), they indicate that we cannot take for granted that all of the 5Es can be smoothly integrated into a unified account. Smrdu will need to address this issue if she wants to advance a 5E theory of pain.

« 5 » However, if Smrdu's aim is to advance “only” an enactive theory of pain, then she will still need to enrich her approach and methodology to pay serious consideration to how experiential data can be “circulated” with third-person data about physiological processes in the brain and body, and possibly also physical processes beyond the organism. Such a circulation has been a key tenet of enactivism since Francisco Varela, Evan Thompson and Eleanor Rosch's (1991) seminal book, and Varela's (1996) paper on neurophenomenology. As we see it, it is a key methodological principle that reflects enactivism's central commitment to the thesis of deep life-mind continuity – the idea that where there is life, there is mind, and that “mind is life-like and life is mind-like” (Thompson 2007: 128).

« 6 » In Varela's (1996) original characterization, neurophenomenology is a

method for the integration of first-person and third-person data, where the former refer to data about consciousness or lived experience, and the latter to data about brain and bodily activity. Varela, Thompson and Rosch (1991) had already emphasized the need to develop appropriate methods for the study of consciousness, including the cultivation of first-person practices for the collection of first-person data. Varela (1996) continued this project, adding that “meaningful bridges” need to be created between first- and third-person data, and also that first- and third-person data need to “constrain” one another. More precisely, first-person data should be collected to shed light on, or interpret, physical activity, whereas third-person data should in turn be used to guide experiential reports and to help subjects discover and report on previously unattended aspects of their experience. We think that an enactive account of pain should aim for such a neurophenomenological (or perhaps even neuro-physio-phenomenological; see Colombetti 2013, 2014) circulation. As Thompson writes,

“On the one hand, everyday experience provides the sensuous, material contents from which and with which science must work. On the other hand, the scientific analyses built from these contents [...] provide important leading clues for phenomenological analyses of how our experience of the world is [...] constituted.” (Thompson 2007: 34)

We agree with Smrdu when she claims that clinical practice may profit from considering non-physiological (i.e., experiential) factors (§10), but we also think that (neuro-)physiological factors should still play a role in our understanding of pain. From an enactive perspective, such factors must be constrained by phenomenological data and vice versa, and neurophenomenology is a method for doing so.

« 7 » Importantly, there are at least two possible ways to do neurophenomenology. Thompson (2007: Ch. 11) distinguishes between *theoretical* and *experimental* neurophenomenology:

- The former is a theoretical enterprise that emphasizes various “connections” (analogies or even isomorphisms) be-

tween phenomenological and empirical accounts of specific phenomena (e.g., perceptual experience, imagination, affect) and draws on each to illuminate (interpret, refine) the other. Thompson's book *Mind in Life* (2007) embodies such a theoretical-neurophenomenological approach, as does Varela's (1999) account of time-consciousness, which circulates between Edmund Husserl's account of time-consciousness, and a dynamical system approach to cognitive neuroscience that focuses on the dynamics of large-scale neural assemblies. The central idea of Varela's account is that, at three different timescales, the activity of coupled neural assemblies corresponds to the duration of the lived present.

- Experimental neurophenomenology involves conducting empirical research to collect the first- and third-person data to be circulated. Early examples of this approach include Antoine Lutz's (2002) study of the perception of autostereograms, and Diego Cosmelli et al.'s (2004) study of binocular rivalry.

Smrdu's project could thus become “more enactive,” so to speak, if her experiential investigations were used to illuminate physiological data, and the latter were used to refine experiential descriptions. This research could take the form of either a theoretical or experimental enterprise.

« 8 » In sum, we are sympathetic to Smrdu's anti-internalist and non-reductionist stance, but we think that much more needs to be done to advance either a unified 5E theory of pain, or even “only” an enactive one.

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Funding: Juan Diego Bogotá is supported by the Ministerio de Ciencia, Tecnología e Innovación (Minciencias) of Colombia.

Competing interests: The authors declare that they have no competing interests.

RECEIVED: 7 MARCH 2022

REVISED: 8 MARCH 2022

ACCEPTED: 9 MARCH 2022

Relational Pain: The Perspective from the Other Side of the Lens

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> Abstract • Relational dynamics are the vital cornerstone for a holistic understanding of chronic pain, particularly for a 5E stance. Enactivism and Buddhism prove most expedient to examine such dynamics in a theoretical and practical fashion.

Handling Editor • Alexander Riegler

Introduction

« 1 » In this commentary I offer a supplementary perspective to Smrdu's incisive and extensive kaleidoscopic analysis of chronic pain. Specifically, I explore relational dynamics. I view such dynamics as the vital cornerstone for a holistic understanding of pain and find it to be *the* underlying common element among all 5E elements that ties together her narrative. Before discuss-

ing relationality from two complementary perspectives – enactive and Buddhist – a bit of contextualizing stage setting follows.

« 2 » In the 1999 film, *The Messenger: The Story of Joan of Arc*, there is a revealing exchange between Jeanne (Joan's name in the film) and a sombre, hooded priest (who is her own fabrication). Amid vivid memories of dismembered bodies and pools of blood, he presses her for acceptance of guilt and remorse as a redemptive path. At one point, Jeanne fires back, “Why are you doing this to me? Do you get pleasure from hurting me?” Unemotionally, he replies, “Ah, pleasure... that's a difficult word to define. When does the pain end and the pleasure begin...?”

« 3 » To look at it from the other side of the lens, when does the pleasure end and the pain begin? We will return to this at the end. For now, it is best to revisit pain kaleidoscopically.

« 4 » Maja Smrdu's target article, “Kaleidoscope of Pain,” highlights the imbalances inherent to current biopsychosocial accounts of pain and advocates for a constructivist 5E model that she couples with phenomenology, given their shared outlook on participatory worldly construction within a social framework (§2). Among all the forms of pain (§1), Smrdu focuses on chronic pain in the experimental section because “it seems the most complex and the most life-changing form of pain” (§3). After presenting a plethora of perspectives on pain – biological, psychological, social, emotional, cognitive, and combinations thereof (§§3–10) – she sidesteps polemics to instead offer a “shift in perspective” (§10) that looks beyond physiology. Smrdu discusses sequentially the theoretical fit of embodiment, embedment, enaction, extension, and emotiveness (§§12–25) for our understanding of chronic pain while concurrently delving into phenomenological models of pain (§§13–15). Following the same order, she then integrates discussion of her empirical findings into the 5E framework (§§36–54).

On relationality

« 5 » As far as the relational element is concerned, Smrdu first mentions it in passing regarding embodiment (§15), and then perceptively makes relationality pertinent