

# PUTTING THE BUDDHISM/SCIENCE DIALOGUE ON A NEW FOOTING

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## DIFFERENT LEVELS OF ENGAGEMENT WITH LIVED EXPERIENCE IN CONTEMPLATIVE NEUROSCIENCE AND THE PROBLEM OF THE “NOT SAID”



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## **Different Levels of Engagement with Lived Experience in Contemplative Neuroscience, and the Problem of the “Not Said”**

*Giovanna Colombetti, DPhil*

Colombetti began by acknowledging that her presentation was an interdisciplinary collaboration with sociologist Brian Rappert of the University of Exeter and anthropologist Catelijne Coopmans at the National University of Singapore. She framed her own work as a philosopher of cognitive science who has focused on 4E (embodied, embedded, enactive, and extended) cognition with a special focus on enactivism, as well as the philosophy of emotion and affective science.

She introduced enactivism as a critique of the idea that the mind exists solely in the brain, and as the ground from which neurophenomenology was born in Varela, Thompson, and Rausch’s *The Embodied Mind*. Enactivism holds that the mind is enacted or performed by the whole living organism in interaction with its environment. Further, the study of consciousness should be taken seriously as central to cognitive science—which implies the development of rigorous first-person methods as in neurophenomenology—and in complementary relationship with the study of the whole organism, including both brain and body.

As an example of experimental neurophenomenology she offered Antoine Lutz’s 2002 study on the perception of autostereograms, where phenomenological interviews complemented the EEG data and revealed different patterns of neural activity as subjects experienced the task differently. As an example of theoretical neurophenomenology she offered Evan Thompson’s *Mind in Life*, where he develops phenomenological accounts of conscious processes such as perception, emotion, empathy, and imagination, and then reviews the neuroscientific literature for compatible evidence, and also uses the latter to inform phenomenological analysis.

Contemplative neuroscience, which shares similar roots, remains dominated by traditional cognitive behavioral paradigms, with very little engagement with lived experience. Colombetti proposed the labels “thick” and “thin” to describe different levels of engagement with lived experience in contemplative neurophenomenology. The “thin” approach draws on existing categories of experience to design the experiment and then interprets the brain activity accordingly without further exploration of experience. The “thick” approach uses the methods of qualitative psychology and social sciences to explore meditators’ experiences in more detail and then extrapolate further categories of experience.

As an example of the “thick” approach, Colombetti described a 2013 study by Dor-Ziderman et al. in which subjects were instructed to enter three different “self-related” states: a narrative self involving characterization, a minimal self experiencing the present moment, and a selfless state focusing on the present moment but without centering themselves. Researchers analyzed the participants’ phenomenological accounts of these states and discovered a further level of detail. For example, the selfless condition was found to have three subcategories, described as lack of ownership, altered experience, and less-happening. The experience of lack of ownership was found to have its own specific neural signature.

In the discussion that followed, participants raised a number of concerns about the studies Colombetti had referenced, including:

- Whether the values implicitly assigned to thick and thin might be reversed if thin studies were recognized as exploratory, while thick studies were described as hypothesis-driven and confirmatory.
- Whether Lutz's autostereogram experiment, described as thin, was not in fact potentially thick, given the very highly trained nature of the subjects involved.
- Whether the language used by the subjects was truly descriptive or was influenced by a vocabulary and repertoire of concepts from the context of meditation, or conversely, whether subjects that had training in phenomenology were borrowing concepts, such as lack of ownership, from existing literature in that field.
- Whether the categories identified by the open interview method would be reproducible in a different task assigned to another set of individuals.
- Whether the term "neural signature" is valid in this context as signifying a reproducible instantiation of the identity of a mental state, or whether it leads to reification that is not substantiated.
- Whether even highly trained experts can accurately describe mental experiences that may be only partially accessible to consciousness.

In the second half of her presentation, which Colombetti prefaced as being more exploratory and tentative, and in need to be refined in collaboration with Buddhist scholars and neuroscientists, she explained how the thick neurophenomenological approach that she favored was inadequate to address the complexity of the meditative experience because of the problem of what cannot be said about the experience. As several participants had noted, one may become engrossed in the words that describe the experience, and eventually lose sight of the experience itself. She referred to the debate between Tsongkhapa and Gorampa on the Two Truths, where Gorampa argued that linguistic expression always introduces subject/object duality and thus necessarily reinforces delusional thinking and cannot express non-dual reality, while Tsongkhapa held that conceptual thought can, in a limited and indirect way, provide access to ultimate non-conceptual truth, and language can be a useful stepping stone.

As a separate problem, different traditions and cultural attitudes may also discourage talking about meditative experiences for a variety of reasons but especially because of the danger of ego inflation that comes with describing one's own experiences. David Germano commented, however, that many topics that are inadmissible in conversation in Tibetan culture are written about extensively in autobiographical literature, so writing serves as a different context than speaking, presumably because the slow timeframe and limited audience for publishing in a traditional context effectively distanced the author.

Colombetti noted that some neurophenomenological studies acknowledged the language problem by arranging for subjects to signal without speaking when they become aware of entering a non-dual experience. Martijn van Beek observed that there are many possible reasons why language does not serve to describe the ineffable, including "too much going on," unfamiliarity of the landscape perceived, or a lack of clarity around the phenomenal content. He described interviews he had done that elicited descriptions of the moment of release from mind-wandering to return attention to meditation, and how the

subjects often experienced the finding of language for that process as useful and clarifying. This did not obviate the inadequacy of language to describe the experience fully: choosing a different metaphor might bring a different aspect of the experience into focus, which people might find helpful in a different way.

Colombetti also pointed out that the micro phenomenological interview process that Claire Petitmengin described in her own presentation was formerly known as an explicitation interview, pointing to its intention of making explicit aspects of experience that are seen as implicit or pre-reflective. The method aims at developing a refined vocabulary of experience: the more sophisticated the language, the more granular the experience that can be identified, described, and also perceived. This approach does not recognize the need or wisdom of not speaking about experience in certain contexts.

Countering the notion of the inadequacy of language to express the ineffable, Michael Sheehy described Tibetan traditions that use the recitation of literature, including poetry evoking the ineffable, as a method of inducing elevated modes of awareness.

Continuing with her presentation, Colombetti offered some preliminary ideas on how to incorporate these considerations within a neurophenomenological approach to meditation or contemplative experiences. She proposed a tool to directly address subjects' attitudes toward talking about meditative experiences, whether reluctance for socio-cultural reasons, difficulty arising from interpersonal dynamics in the experimental setting, or individual variations around ease of communication. Looking more closely at ineffability, she proposed investigating whether the limitation arises from language or from the nature of the experience itself, whether there are different types of ineffable experience, and whether they correlate with different patterns of neurophysiological activity.

She discussed the possibility of "thickening" a recent "thin" neurophenomenological study of non-dual states of awareness by investigating in more detail the experiences that immediately precede and prepare for, as well as follow the alleged state of non-dual awareness, and identifying possible neural signatures of these transitional states. She also suggested a longitudinal investigation of meta-awareness, which is said to be enhanced by meditation: Does meditation also change the awareness of the limits of a subject's capacity to conceptualize and talk about his or her own experience? Similarly, do long experience or different traditions affect meditators' abilities to report accurately in detail on their meditation? She proposed measuring subjects' ability to track physiological responses as a way of gauging their bodily awareness.

Following the presentation, participants discussed the profound individual differences in subjects' abilities to talk about any experience, let alone meditation, including whether the phenomenological exercise might shift those abilities, and how confidence in reporting skills does not track with actual abilities. The possibility of using facial coding measures in addition to neurophysiological measures was also suggested. Francisca Cho noted that an ability to express fine distinctions is often a sign of a person's attunement to a particular subject, even if they are inarticulate in other domains, and might thus be valuable as a measure of meditative experience.

The prohibitions in Buddhist cultures against speaking of one's own meditative accomplishments were examined more closely, including tensions that exist in the accounts of the Buddha's descriptions of his own enlightenment, and the way individual



differences can affect how others' reports are received in a contemplative community. David McMahan emphasized that cultural differences affect not only subjects' willingness and ability to describe experiences but inform and shape the very nature of the experiences. Sheehy expanded on this to comment on how the dynamics of teaching and guidance within a contemplative community preclude the idea that the phenomenological content of meditative experience is predictable or indicative of neurological factors. Petitmengin noted the complexity involved in micro-phenomenological accounts of even the simplest bodily experience and warned that the technique was not well suited to describing experiences of non-dual awareness.