From the Sphere Model of Consciousness to the construction of the OVO Meditation tank
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The Sphere Model of Consciousness (Paoletti, 2011, 2012) suggests three axes of human experience, pointing towards the center of the sphere as the locus of human psychological development. These three axes include time, emotion and embodiment. In the current talk, we will discuss the Sphere Model of consciousness and the construction of the related OVO whole-body perceptual meditation (WBPM) tank. The OVO meditation tank is a specifically structured room in the form of a human-sized egg ('Uovo' in Italian), and is aimed at inducing an altered state of consciousness, including an altered state of time, space which is accompanied by emotional neutrality. Inside the OVO, the participants can sit comfortably. Instructions are given verbally, and sounds are transmitted via concealed speakers. The chamber can be flooded in different lights and colors. In a recent experiment, it was first flooded with white light, followed by red light and indigo light (these two colored-light conditions were presented in a counterbalanced order across participants), enabling an immersive OVO experience. The participant's verbal reports were heard through a microphone, and were recorded. Preliminary analysis of first-person reports collected during a meditation session inside the OVO uncovered subjective alterations in the perception of space, emotion and cognition (Paoletti, Glicksohn, Berkovich-Ohana & Ben-Soussan, 2017) as well as time estimation (Glicksohn et al., 2017). As the feeling was of being in a not defined space (due to the lack of points of references), also time was not defined, which was reflected in the Time Production task by longer productions. We will discuss the current results and compare them to other meditation paradigms, such as the Quadrato Motor Training (QMT, Paoletti, 2011; Lasaponara, Mauro, Carducci, Quattrocchi, Errante, Paoletti, Dotan Ben-Soussan, 2017). We will further discuss the implications of the Sphere Model and the OVO, while emphasizing the importance of the connection between being in a bodily passive in a specifically-structured environment lacking points of reference, and being in the center of the sphere of consciousness, in the location of the singular altered state of consciousness named selflessness.

References

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Behavioral and neuronal effects of the Quadrato Motor Training
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While the study of contemplative neuroscience is thriving and there is a growing understanding regarding the underlying mechanisms mediating the effects of meditation on cognition and emotional well-being; studies examining the effects of movement meditation are still relatively scarce. Recently, the Quadrato Motor Training (QMT), a new movement meditation was introduced. QMT was found to increase reflectivity, ideational flexibility and spatial cognition. QMT also was further
improve emotional well-being compared to breathing meditation. At the electrophysiological level, previous studies showed that a session of QMT practice significantly increases inter- and intra-hemispheric EEG alpha (α; 8–12 Hz) coherence. Interestingly, these changes significantly correlated with creativity improvements in ideational flexibility, supporting the idea of a connection between functional connectivity in the α range and enhanced creativity. Furthermore, using magnetoencephalography (MEG) a month of daily QMT was also found to increases cerebellar oscillatory α power and inter-hemispheric α coherence in dyslexics respect to normal readers which served as controls, also improving the reading performance of both groups. QMT was further found to increase of fractional anisotropy (FA) in tracts related to sensorimotor and cognitive functions and mindfulness, including the corticospinal tracts, anterior thalamic radiations, and uncinate fasciculi, as well as in the left inferior fronto-occipital, superior and inferior longitudinal fasciculi. The QMT requires standing at one corner of a square and making movements toward different corners in response to verbal instructions and involves a state of enhanced attention to the motor response and cognitive processing for producing the correct direction of movement to the next corner in the Quadrato space. QMT incorporates all the three interdependent phases of a mindful act (Kabat-Zinn, 2013), including: (1) suspension from the habitual act of allowing the mind and body to go where they want, (2) redirection of attention, and (3) receptivity toward the experience. Importantly, respect to other mindful movement practices such as Tai Chi and Aikido, QMT has the advantage of being a relatively short training, very easy to perform and practice in limited spaces. We will discuss the neuronal mechanisms mediating cognitive and emotional improvement following movement meditation and the QMT, as well as address the implication of the current results for healthy development and ageing.