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EMBODIED MIND – ENSOCIALLED BODY: NAVIGATING BODILY AND SOCIAL PROCESSES WITHIN ACCOUNTS OF HUMAN COGNITIVE AGENCY¹

abstract

There is a prevalent tension within recent cognitive scientific accounts of human selfhood in that either bodily processes or social processes are explanatorily favored at the expense of the other. This tension is elucidated by the body-social problem (Kyselo, 2014) and at its heart is ambiguity regarding the body's role within embodied cognitive science. Drawing on a range of phenomenological and empirical insights, I propose that we can avoid the problem by embracing the concept of an ensocialled body, in which all organic bodily processes are simultaneously social processes from the perspective of human cognitive agency.

keywords

selfhood, cognitive science, embodiment, ensocialment, Body-Social problem, enactivism

1. Introduction In broad terms, embodied cognitive science construes mind as a dynamic phenomenon that depends non-trivially – sometimes constitutively – on an agent’s physical body and surrounding world. However, a persistent problem for this broadly construed paradigm has been a lack of clarity over the exact role of “body” for embodied cognitive agents. This lack of clarity has recently been highlighted by the *body-social problem* (Kyselo, 2014), which describes how, on the one hand, we have bodily oriented cognitive science that risks an account of human selfhood² that is individualistically confined by the physical boundary of the organic body, thereby downplaying the significance of social processes in the individuation of the self. On the other hand, we have socially oriented cognitive science, which risks prioritizing explanatory focus on constituting social relations to the extent that any notion of bodily individuality seems to be “lost” to supra-individual social organizations. Exactly how one can reconcile these dichotomizing perspectives on selfhood will be the target of this paper. My claim, presented in section 3, will be that one route to resolving the body-social problem is to understand human selfhood as relying on the concept of an *ensocialled body*, in which all Self-constituting³ organic bodily processes are simultaneously social processes. This conception implies that there is no ontological separation between “bodily” and “social” processes as far as human selfhood is concerned. Instead, the body is an inherently social phenomenon, such that *both* bodily and social processes are indispensable to the *constitution* of selfhood.⁴ This claim will be supported by a range of phenomenological and empirical insights.

1 I would like to thank Mike Wheeler for valuable comments regarding an earlier version of this paper. I would also like to note that some passages of sections 2 and 3 have been adapted with revision from “Biosocial Selfhood: overcoming the ‘body-social problem’ within the individuation of the human self” (Higgins, 2017).

2 Throughout this paper, I will take it as granted that ‘human cognitive agency’ equates to ‘human selfhood’. The two phrases will thus be used interchangeably.

3 ‘Self-constituting’ refers to constitution of the human self, rather than referring to an entity’s ability to form or compose itself in a uniquely reflexive manner.

4 The characterisation of *constitution* to which I will adhere is that provided by De Jaegher *et al.* (2010) and subsequently followed by Kyselo (2014). On this view, for a given phenomenon X, “P is a *constitutive element* if P is part of the processes that produce X” (De Jaegher *et al.*, 2010, p. 433). This is contrasted with the notions that “F is a *contextual factor* if variations in F produce variations in X, [and] C is an *enabling condition* if the absence of C prevents X from occurring” (*ibid.*).

In a recent paper, Miriam Kyselo (2014) describes the body-social problem as the “mutual tension” (p. 1) between *bodily oriented* approaches to selfhood and *socially oriented* approaches to selfhood. Whilst theories of selfhood that fall under the former approach risk designating the body as a medium of conceptual isolation – in a move that is comparable to orthodox cognitive science’s conceptual isolation of neural machinery, which the “embodied turn” endeavours to overcome –, theories of selfhood that fall under the latter approach risk losing any notion of ‘individuals’ to the dynamics of various social organizations (in a manner that will be explained shortly) (*ibid.*). Human selfhood is thus primordially either an individualistic bodily phenomenon or an essentially social phenomenon:

- (i) For bodily oriented approaches, selfhood inheres in the biological body and is essentially independent from the sociocultural world. Such an *embodied self* may be importantly embedded in a scaffolding environment, but resists constitutive dependence on this environment in virtue of the body’s status as an organismic body. As Kyselo (2014) explains, “there is nothing social about the organismic or the moving body *per se*” (p. 4); it is, fundamentally, a biological phenomenon. On such a view, the social world amounts to nothing more than a context for the embodied self. In other words, selfhood emerges from biological-organismic autonomy and, as such, is a permanent potential means of isolation from the (non-biologically autonomous) social world.
- (ii) For socially oriented approaches, selfhood inheres in social interactions, such that a cognitive agent is intersubjectively dependent. On this view, selfhood emerges through interactions with others or with socionormative organizations; the body becomes a mere context for selfhood (or, at best, an enabling condition). Rather than being fundamentally isolated through one’s biological-organismic body, socially oriented approaches propose that the self is existentially “open” to assimilation into relational dynamics that are generated through interactions.

The broad scope of the body-social problem is that (i) and (ii) each respectively obscure important insights into the roles that social and bodily processes play in the individuation of the human self (Kyselo, 2014). If one endorses (i) then one risks paying “lip service” to the social world (*ivi*, p. 4), treating it as a mere causal or contextual contributor to the self, whereas if one endorses (ii) then one risks an analogous disservice to the organismic body. The problem is that once one has acknowledged the “beyond-the-brain” progression of cognitive science – so as to embrace the integral dependence of cognition on worldly features – then one should be committed to appreciating the important insights that *both* bodily- and socially-oriented perspectives have delivered.⁵ A failure to do this may engender a philosophically hollow stance towards either bodily or social processes as regards the individuation of the self, or, worse, may render bodily and social processes “mutually exclusive” (Kyselo, 2014, p. 4).

As Kyselo (2014) explains, the objective should be to integrate bodily and social processes without conceptually isolating either set of processes, thereby rejecting tendencies to prejudicially cut the cognitive cake. Contrary to Kyselo (2014), however, I believe that only a constitutive fusion of “body” and “social”, such that the body is a fundamentally “ensocialled” phenomenon (see section 3), will satisfactorily overcome the “body-social problem” (see Higgins, 2017 for an expanded discussion of this).

⁵ See, for example, De Haan (2010), Steiner & Stewart (2009) and Vygotsky (1986) for views on the socially constituted self, and Gallagher (2005) and Zahavi (2005; 2014) for views on the primordially embodied self.

Before progressing to the solution of the *ensocialled body*, it is worth quickly considering a crystallized version of the body-social problem. This occurs within the framework of biological enactivism, which is a highly influential position within the field of embodied cognitive science; indeed, it is the position that provides the conceptual background to Varela, Thompson and Rosch's (1991) *The Embodied Mind*, which is one of the "bibles" of embodied cognitive science. For biological enactivism, a cognitive agent is one that is *autonomous, emergent, embodied and experiential*, so as to become a *sense-maker* (De Jaegher & Di Paolo, 2007). Each of these criteria is interdependent. So, according to enactive theory, embodiment is necessary for cognitive agents as the physical manifestation of experiential and emergent autonomy, in virtue of which an agent is able to make sense of the world; that is, the body is the animate locus of autonomy through which meaningful activity is created (*ibid.*). On the basis of this simplistic definition that I have provided, it is easy to see how the body may amount to a phenomenon of isolation, in that it is a unique locus of personal autonomy for each and every cognitive agent.

However, it is important to the theory of enactivism that agents can also make sense of the world in a *participatory* manner (*ibid.*). This is captured by the theory of *participatory sense-making*, which claims that when two or more individuals interact with one another their intentional activity can become dynamically coordinated in such a way that a new relational system *with its own autonomy* can emerge between them (*ibid.*; Luhmann, 2002). Such a relational system has its own autonomy in virtue of the mutual regulation between the coordinated behavior of the individuals, which generates and sustains the interaction, and the reciprocal influence of the interactive dynamics on the individuals' behavior. A specific domain of relationality is thus manifest, through which the involved individuals can "sense-make" (i.e. cognize) in a "participatory" manner (De Jaegher & Di Paolo, 2007). The issue is that once we have an autonomous "participatory" organization alongside "individual" autonomy, the body-social problem rears its ugly head. As Kyselo (2014) explains, on one interpretation, (a) individuals are "lost" within the interaction because their "intrinsic purpose" – which is bodily manifest – seems to be directed at the generation and maintenance of relational dynamics, such that the individuals are *heteronomous* with respect to their cognitive activity. These interacting agents are individuated as "constituents" within a social process that has its own autonomous ("group") identity. We thus run the risk of losing grip on a meaningful sense of individuality for each of the interacting agents. On an alternative interpretation, (b) each of the interacting agents "is individuated from others *qua* being *embodied*" (*ivi*, p. 7), such that the individuals' organic bodies manifest a conceptual boundary of delineation. Yet differentiating each individual from the other and from their jointly created interactive dynamics in virtue of their presence as bodily beings condemns the body as "a locus of isolation, not a means of connection and engagement" (*ibid.*). This interpretation thus runs the risk of losing grip on the meaningful influence of the social world.

The question is how should we fairly adjudicate between these seemingly disparate bodily and social autonomies when it comes to the individuation of selfhood?

3. The *Ensocialled Body*

One solution to the body-social problem is, I believe, to characterize the body as an *ensocialled* phenomenon. I will initially elucidate this solution through consideration of the pervasive constitution of cognitive agents by social "norms",⁶ before clarifying the body's essential role in accomplishing the lived and living performance of these social norms.

⁶ Here, and throughout this paper, I am using 'norms' (and 'normativity') in a very broad sense, to capture those principles by which human behavior (and cognition) is deemed appropriate, equating loosely to *ways of being*. In this sense, norms are generally implicit and always socially permeated, such that they simply encapsulate *what one does*, as much as *what one ought* to do.

Firstly, by ‘ensocialled’ I mean that a bodied agent is always and irrevocably social. Unlike the terms ‘socialized’ or ‘enculturated’, which suggest the assimilation or transformation of an agent within a specific socio-cultural domain, ‘ensocialled’ is intended to convey a fundamental feature of one’s existence. That is, an ensocialled agent does not grow *into* the social world, nor can she shed her social nature by living as a hermit; instead, an ensocialled agent is a constitutively social being. This means that, foundationally, the body is a social phenomenon, such that the ongoing generation of one’s selfhood is constituted by the active experience of the socially permeated body.

In order to better grasp this idea, consider that the fictional character of Robert Neville (from Matheson’s *I Am Legend*, 1954) may be considered “de-socialized”, as he is completely isolated from other humans, but is still ensocialled (and always will be) because he continues to live (and think) in accordance with recognizable social norms. That is, his thoughts and behavior cannot *but* be socio-normatively permeated. Think, for instance, of any number of everyday acts: how one carries oneself whilst walking, how loudly one talks, how far one stands from another person during conversation, or how one dresses – all of these are executed through implicit conformance to the intersubjective norms of *what one does*. The myriad occurrences of these norms amounts to a normative “lifeworld” through which human agents inevitably live (cf. Ikäheimo, 2009), such that one conforms to socio-normative standards regardless of the presence of others.⁷ Indeed, it is not just overt behavior that is suggestive of such norms; there is also evidence that one’s linguistic descriptions will vary in accordance with one’s societal conformance (Athanasopoulos *et al.*, 2014), as will one’s neural responses to perceiving objects (Goh and Park, 2009), to evaluating threats (Park & Kitayama, 2012), and to judging the performances of in- and out-group team members (Molenberghs *et al.*, 2012). Further to this line of thought, there is also considerable empirical support for the view that gender, which is commonly taken to be a social construction, produces notable divergences in cognition and behavior; for example, genders adopt differing cognitive strategies when faced with tasks requiring creative or generative responses (Abraham *et al.*, 2013; Abraham, 2015), as well as undergoing the activation of differing neural regions during affective experiences (Moriguchi *et al.*, 2013), and showing differing sensitivity to physical pain (Wiesenfeld-Hallin, 2015).⁸ The enaction of socio-normative conformances thus runs “deeper” than just overt bodily activity, to a point where the experientially lived nature of one’s bodily agency – neurally, affectively, linguistically and behaviorally – is implicitly bound to social practices and *miens*. This holds even if one is an isolated hermit: the very foundations of one’s agency remain suffused with social ways of life.⁹ One therefore simply cannot avoid the pervasiveness of these social norms as constituents of one’s cognitive agency.

7 “Private” behavior may seem to be an exception here, in that it is often claimed that one may behave differently when alone and behind closed doors. But the very fact that being alone is occasion to act differently is itself telling of social norms of when and where to behave in certain ways. As this section of the paper goes on to explain, both iconoclastic and conformist activities modulate the same normative structures in virtue of what becomes implicitly sedimented as the common disposition for *what one does* in a given situation.

8 With the issue of gender, physiological differences in sex will have some role to play, but I believe that gender divergence is primarily generated through the *normativity* that pervades social conceptions of female and male roles and capacities.

9 Of course, over time, a hermit’s cognitive and behavioral enactions may stray from those of regularly interacting social groups (to which the hermit previously belonged). But the socio-normative behavior of an ensocialled agent is not merely a socially conferred property; it is an (*en*)active engagement with socially established and maintained domains of normativity, which, in the absence of interactions with others, will persist in virtue of deeply sedimented conformances from the hermit’s early life. If the hermit were to re-engage with social peers, s/he would thus bodily present sufficient traces of implicitly recognizable normativity such that s/he could be acquiesced to as harboring a shared normative background.

Indeed, full extraction from such social norms amounts to death or a comatose state in which one can no longer meaningfully enact the social world. This is not to say that one's selfhood does not undergo (potentially significant) changes throughout a lifetime, but that these changes can only ever occur within an existential domain that retains certain socionormative connections to a specific (embodied and ensocialled) lifeworld.

Crucially, the social domains of normativity to which one conforms are not a static phenomenological bedrock, but are modulated via our expressive bodily activity. Bodied engagements – either through observation or direct interaction – are the currency by which social norms are generated, maintained and transformed within and across dyads, cliques, groups, institutions and cultures, with these social norms then determining the very nature of bodied engagements. In terms of interaction dynamics, the idea is that bodies are permeated by social norms and bodily activity thereby discloses the socionormative lifeworld, with generated and modulated social norms then feeding back and canalizing individuals' range of potential bodily actions which will, in turn, generate and modulate further norms which will then instantiate further feedback (and so on). Social norms are thereby reinforced or modified by aggregations of collective *embodied* behaviors. In this way, our bodies are not sites of isolation; rather, they are that through which our ensocialled agency is lived – the animate locus of sociality that characterizes our existence. It is our bodily belonging to – and ongoing modulation of – social norms that canalizes our agential existence, from both behavioral and cognitive perspectives.

In order to clarify the manner in which our bodies escape characterization as isolating phenomena, we can refer back to the exposition of the body-social problem within the enactive theory of participatory sense-making. Recall that the issue is whether cognitive agents should be individuated in accordance with the autonomous social organizations that are generated during interactions, or with the organismic autonomy of their individual bodies (Kyselo, 2014). The response that the concept of ensocialment gives us is that the body is never a purely organic phenomenon as far as cognitive agency is concerned, in that it is always directed towards enacting some social norm that is a pervasive constituent of our agential existence. The idea is that just as two individuals can play *participatory* roles in generating a dyadic relational domain that they communally enact through their expressive embodiment, so, too, can society-wide collectives of individuals be seen as playing *participatory* roles in generating society-wide relational domains of normativity that are enacted across a society through the expressive embodiment of everyday behaviors. The bodily activity of any given individual is therefore normatively laden so as to modulate the myriad socio-normative domains that we participate in. In this way, to move one's organic body is thus not to merely perturb the physical world; it is also a perturbation of the socio-normative world that we enact.

In order to further develop this concept of an ensocialled body that is essential to our cognitive agency, one could claim that our bodies are, in an important sense, “linguistic” entities, in that we are bodily sensitive to the social world in such a way that intersubjective activity is habitually rendered intelligible (Cuffari *et al.*, 2014). In virtue of being constituted by pervasive social norms, our bodies are never merely organic phenomena from the perspective of cognitive agency; instead, they are always socially expressive and engaged in the ongoing modulation of the socio-normative “lifeworld” that we all enact. Our bodies thus have a “linguistic” essence, assimilating and dispersing norms through our animate conduct. As Cuffari *et al.* (2014) put it: “world-engagement is an integrated whole of embodied interpreting [...] embedded in horizons of social normativity” (p. 1115). However, it is important that this view of “linguistic” bodies does not downplay the fundamentally *ensocialled* nature of the body that I am espousing. It is not the case that embodiment and ensocialment are separate spheres

of agency that are merely “integrated”; rather, embodiment and ensocialment are, from the perspective of human cognitive agency, ontologically dependent on one another. Without the socio-normative constitution of embodied agency and the bodily manifestation of social norms, one simply does not exist as a bona fide human self.

What’s more, this ontological dependence of embodiment and ensocialment is evident from the earliest moments of life through to the final moments. There is a plethora of empirical data which suggests that, from birth, humans are potentiated to recognize and interact with other humans, with our bodies being the means by which such social accomplishments are achieved. Within minutes of birth, for instance, neonates display meaningful responsiveness to human interaction, such as imitating facial gestures (Anisfield, 1996; Meltzoff & Moore, 1977) and certain hand movements (Nagy *et al.*, 2005). Such fledgling responsiveness combines with studies showing the preferential attunement of neonates towards face-like configurations (Johnson *et al.*, 1991; Valenza *et al.*, 1996), maternal odor (Macfarlane, 1975) and human speech (Vouloumanos *et al.*, 2010). Preferences of this ilk support the view that there is an inherent human disposition towards parsing the world into human and non-human entities (Meltzoff & Brooks, 2001).¹⁰ On the basis of these nascent abilities to recognize and interact with others, newborns gradually begin to accrue further social capacities such as gaze-following at approximately 9 months of age (Senju *et al.*, 2008), joint attention at 9-14 months (Phillips *et al.*, 1992) and comprehension of goal-directed behavior at 18 months (Meltzoff & Brooks, 2001). The significance of such empirical evidence is to bolster the claim that human bodily activity is inherently socially imbued from the first moments of life, with more complex behavior developing from the foundation of this bodily immersion in the social world.

Naturally, one may still debate the exact point at which a foetus or neonate becomes a bona fide human self. For the ensocialled account that I am putting forward, what matters is that the earliest tentative signs of intelligible activity in neonates are socially predicated. Neonatal activity seems to be inherently disposed towards social interaction and this nascent bodily behavior concurrently generates and modulates the normative lifeworld that a neonate will enact. Even if one wishes to claim that selfhood emerges with basic bodily self-awareness (Gallagher, 2005, pp. 72-85), the ensocialled view would posit that such awareness is simultaneously a kind of social (self-)understanding of one’s own presence (and modulatory capacity) within the normative “lifeworld” of human cognitive agency.

Thus, even as neonates, our bodies are ensocialled in that *any* bodily activity has a normative component that is an expressive modulation of possibilities for action for others. Such normativity first takes hold through the nascent capacity to recognize, imitate and interact with others, so that the very bonds of social normativity in which our existence is rooted are bodily manifest at a foundational level and then continuously modulated in bodily expressivity and interactions throughout life.

To close this section, it will help to refer the notion of the ensocialled body back to the body-social problem. The claim is that once the body is rightly conceived of as *ensocialled* there is no longer any tension between the individuating credentials of bodily and social processes because the body is fundamentally a social entity as far as human cognitive agency is concerned. To be a human self is to be an embodied modulator of the socio-normative lifeworld that we each enact.

¹⁰ The Macfarlane (1975) study, amongst others (e.g. DeCasper & Fifer, 1980; Pascalis *et al.*, 1994), suggests that this inherent disposition is perhaps even more refined, such that the social world is parsed on a mother/non-mother basis. This remains supportive of my claim regarding the ontological entwining of embodiment and ensocialment, with a neonate being bodily attuned to social phenomena through its mother perhaps even prior to birth (see also Marx & Nagy, 2015).

4. Back to Phenomenology?

One may worry that the account of an ensocialled body is merely a reformulation of the established notion of a *lived body* (Husserl, 1931/1960; Merleau-Ponty, 1945/1962). But the account that I have provided differs in important ways from this stalwart concept of phenomenology.

Firstly, the ensocialled body is relevant to all stages of human life, whereas many giants of phenomenology neglect the developmental aspect of our existence (e.g. Husserl, Heidegger, and Sartre). Secondly, the concept of an ensocialled body is not merely addressing one's lived subjectivity in the sense that we live *through* our bodies; rather, it is focusing on one's ensocialled nature such that the body is, inherently, the site of one's lived subjectivity and, simultaneously, the site of intersubjective expression. It is thus not an account of lived bodily subjectivity that is dressed with a distinct intersubjective dimension, but an account in which lived bodily subjectivity emerges within the intersubjective relations that it enacts. In slightly different terminology, the lived ensocialled body is permanently open to modulation by social norms, and will itself transform social norms as a modulating constituent, such that an organismic agent and societal worlds are two sides of the same coin. Thirdly, for many phenomenological and cognitive scientific accounts of the human self, the body has non-trivial status, but is still secondary to transcendental consciousness or socially constructed identity. For these accounts, the organic body is a sensorimotor constituent of the self, essential only insofar as it physically grounds and ratifies one's dynamic existence in the world. The ensocialled body, however, is more than just the sensorimotor aspect of the wider system that is the self; it is the incarnation of our social identity, both a bearer and emissary of bodily-social enacted worlds through which we individuate ourselves. In other words, the ensocialled body is not a mere "medium" for some primordial sense of self, nor is it an isolating site of lived subjectivity – it is the hub of animate agency in which socio-normative selfhood is manifest.

5. Conclusion

In this paper, I have shown how the human body should be viewed as a resolutely *ensocialled* phenomenon as far as the cognitive agency of selfhood is concerned. Whilst there are still various aspects of this account to be further developed, the significance of the claim is that accepting the mind as embodied is only a tentative step towards a full appreciation of the mind – and any self within which the mind inheres – as a genuinely enworlded phenomenon. The body (including the brain) that constitutes the mind is itself constituted by the social norms that permeate our everyday existence. The worlds of social mores, cultural dictions, postural expressions and emotional reserves that are generated and modulated through our social relations are all constitutive contributors to our cognitive praxis, which is physically manifest by our ensocialled bodies.

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