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A Decapitated Program?

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> Abstract • In this commentary I suggest that the "E-approaches" advocated by Gallagher should move a step further, beyond the negative critiques that they address to the classical (representationalist and neurocentered) framework in cognitive science. If these approaches do not want to look like a "decapitated program," neglecting the rational dimension of our experience, more should be said about our higher-level capacities and their perceptual and pragmatic foundation.

« 1 » It is commonly held that the classical framework in cognitive science (both internalist and brain-based, or representationalist and neurocentered) have recently been challenged by new developments, targeting the significant role played by external factors in the process of cognition. Since the early 1990s, the so-called "E-approaches" (embodied, embedded, extended and enactive) pointed out the cognitive resources provided by our body, environment, technical surroundings, and ultimately sensorymotor skills. Cognition does not happen only "in the head"; it is largely scaffolded by outer structures that one has to take into account. Shaun Gallagher is one of the main contributors to this current and promising development. In his target article, he makes a compelling case for it, considering that the "four Es" can be taken together beyond their apparent differences, and that, if one puts all these threads together, one can get a better understanding of perception, free will, self and social cognition. My purpose here is not to dispute the main orientation of his article. Gallagher gives us strong reasons to follow his lead, and to assume a "warmer" (embodied, enacted, etc.) concept of cognition. Let us take for granted that a non-Cartesian view gives us a better and more convincing account of our experience; let us consider our mind within "the dynamics of a 'brain-body-world systemic whole'" (De Jaegher & Froese 2009: 445), rather than an abstract, individualistic and closed-in entity.

« 2 » I would like to move a step further in the same direction, suggesting that this general call for a concrete and ecological concept of mind may be not sufficient. What unifies the four E-approaches is a common criticism leveled at the Cartesian framework. However, this negative proposal cannot be the whole story. Let us focus on the central issue of perception (§§17–25). The following question needs to be raised: to what extent can we consider human perceptual experience to be *all the way out* non-representational or non-theoretical (as Gallagher puts it in §19 and 22f) – or as being *all the way out* restricted to sensorymotor skills and affective values? Does such a negative record exhaust the definition of human perception? How does this perception, then, depart from the affordance-restricted and emotion-based experience of pre-verbal infants and higher animals? Would Gallagher assume, as for instance Hubert Dreyfus does, that no difference can be pointed out at the very level of perceptual experience, and that the difference appears only at the upper floor of linguistic and conceptual knowledge (Dreyfus 2006: 49)? Would he endorse such a dualistic position?

« 3 » As it happens, I am not sure that this position completely fits into the E-framework. Rather, I surmise that the E-program would rather hold that the higher levels of cognition strongly depend on the ground floor of receptive coping, bodily structures and information-bearing surroundings. The problem is that Gallagher, like many E-advocates, tends to systematically downplay this side of the problem: our entire life, including our social, verbally shaped and more or less rational activities, should be conceived of in pragmatic and interactive terms, rather than representational ones. When one stresses, on the one hand, that social interactions and rational communication are *not* a matter of objectification and abstract knowledge, it is far from easy, on the other hand, to explain how motoric, ecological and affectively regulated coping make detached representation and objective knowledge possible. By emphasizing the primacy of our pragmatic involvements over abstract knowledge, by insisting that perception is "closely tied to action" and "shaped by bodily-affective processes"

(§19), rather than being representation-based, Gallagher follows a downward path that runs the risk of finishing in an utterly non-verbal and non-conceptual bodily life; one may ultimately ask how human communication and rationality can grow and flourish on such arid soil. A mere sensory-motor, affective and non-representational coping calls inevitably for a compensatory story, populated with concepts and theoretical contents, to counterbalance what the enactive account did not want to give. This is what John McDowell, talking about Dreyfus's pragmatic approach, calls "The Myth of the Disembodied Body" (McDowell 2007: 349).

« 4 » If one wants to cash out the promissory perspective of the E-lines of thought, one should not rest content with the mainly negative records that Gallagher provides of it. Correlatively, one should pay closer attention to the issue of human communication and rationality, and of their pragmatic (bodily or social) genesis. This is the only way to avoid the return of a dichotomous image of human life, portrayed as an abstract "thinking thing" floating over a skilled but half-blind bodily life. The same should be said about the question of free will, that Gallagher raises in his article (§§26–31). He suggests shifting the focus away from the subpersonal level of neuronal processes that both initiate and control our bodily movements towards the conscious and phenomenal level of autonomy and rational deliberation. If we want to account for our sense of agency, we should not scrutinize our brain states and their causal power on our body (as those being disclosed by Benjamin Libet's experiments, §26), but rather the practical way we decide to act, including…

> "the scope of affordances available to the agent in specific environments […], prior intention formation that may benefit from communications with other people, as well as retrospective attribution that may take shape in narrative." (§27)

« 5 » Briefly expressed, the question is "shall we go for a ride today?" rather than "How does this car work?" (Gallagher 2006: 116); it is a question of verbal, social, or rational action, rather than mental causation.

« 6 » So far, so good. The problem is that we do not know much about this social contribution of other people to our rational autonomy, beyond this general assessment. According to the examples disclosed by Gallagher, we just know that other people, through discussion and deliberation, or conversely domination and affective pressure, have the power to increase or decrease our sense of agency. But as long as Gallagher does not say more about this communicational process of deliberation (and its various failures), he leaves us in midstream. He implicitly draws a line between the natural realm of "motor control process," which does not contribute to autonomy, and the normative realm of autonomy, i.e., of social and linguistically shaped interactions. As a consequence, the problem of freedom and of its empirical genesis remains unresolved. Thus, the issue of free will meets up with the issue of perception. In both cases we do not know how to provide a convincing, empirical and pragmatic ground to our rational behaviors. Our perceptual and bodily interactions do not reach this point where detached representation or rational reflection become possible. The E-approaches implicitly tell us a dualistic story where our social norms, our communicative and verbal behaviors, our rational deliberations float in the air without any pragmatic justification.

« 7 » Let us suggest that a phenomenological analysis of perception may provide a good resource to bridge the gap between action and reason. As Gallagher has pointed out many times, perception is far from being a solitary experience. As speaking or "ultra-social" animals (Tomasello 2014), we fundamentally share the world with our congeners. Our artifacts have been made, used, or could be used by other people. Our habits have been borrowed from other bodies, by imitation, and identification. Even the natural and silent thing, caught in a solitary act of contemplation, implies others. It is a "social thing," insofar as it can always be linguistically or bodily referred to, being named or pointed out. As Gallagher posits, "we learn to perceptually distinguish objects, and to attend to certain ones over others, on the basis of seeing how others relate to them" (Gallagher 2008: 171). Thus, an artificial or natural thing involves other people through its very sensitive texture. More specifically, the hidden coexisting aspects of the perceived thing imply others, because, as Gallagher notes, they "may be correlated with the possible perceptions that others could currently have" (ibid: 172). The Husserlian *Abschattungslehre*, like the Merleau-Pontian phenomenological account of perception, tend toward the same conclusion: the occluded sides of the object are not only correlated with my possible views of it (with my capacity to move around it in order to disclose its back side); they also imply "an indefinite plurality of consciousnesses," what Maurice Merleau-Ponty called a "perspectival multiplicity" (Merleau-Ponty 1963: 122, my translation).

« 8 » Gallagher knows by heart this intersubjective concept of perception, inherited from Edmund Husserl and Merleau-Ponty. Moreover, he developed this line of thought by paying close attention to "primary" and "secondary intersubjectivity" in the framework of developmental psychology (Gallagher 2004: 204–209). But he should attach more significance to it in order to give enactive and embodied approaches their full extension. We are speaking living things; everything can be named or pointed out, thus implicitly or explicitly addressed to other people; we live in an intersubjective space of "joint attention" (Tomasello 1999), where our points of view are in dialogue with one another. Perception may be "a way of acting," as Alva Noë (2004: 1) puts it; it may be founded on a pragmatic interaction with the world; nevertheless, it must be considered the source of communication, deliberation, and, ultimately, reason, as long as this pragmatic world is also a shared world.

« 9 » Let us suggest that this phenomenological record (regarding the many-sided and intersubjective dimension of the perceived world) could be a good reason to get clear concerning our sense of agency. Human perception is not one-sided: it entails many other invisible aspects, i.e., many other ways of being perceived, but also manipulated. It is full of possibilities, which are both theoretical and practical possibilities. The tree can be given a passing view, in order to be avoided. But the same tree can be patiently observed, like a botanist would do. A painter would devote to it a different and less intellectual gaze. It can be

avoided, or scientifically labeled, or painted, but also joyfully climbed up, or violently chopped down, or lovingly embraced. This means that perception could be considered to provide a good phenomenal basis for agency, defined as the capacity to choose between alternative possible actions (Haggard 2017: 199). As far as E-approaches do not rest content with the dichotomy of bodily, perception-based behaviors and autonomous, deliberation-based behaviors, the "perspectival multiplicity" should be seen as an invaluable resource to ground the "logical space of reasons" in the "logical space of nature" (McDowell 1996: XV). What Merleau-Ponty called the "depth" or also the "transcendence" of the world ("an infinite number of perspectives compressed into a strict co-existence," Merleau-Ponty 2012: 81) appears as a perceptual, pre-rational capacity to communicate with other people, weigh up reasons, make rational decisions (Bimbenet 2009: 67–72). If the current E-approaches in cognitive sciences do not want to run the risk of looking like a "decapitated program," if they want to account for our entire life, including our communicative, verbal and rational capacities, they should pay more attention to the way our language, our institutions, our rules, our social interactions, contribute to transforming perception and making up a common world.

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How Far Can We Extend E-approaches? Calling for an Epistemological and Political History of Embodiment

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> Abstract • I intend to explore some of the implications of Gallagher's target article. Retracing the circulation of concepts such as "embodied," "embedded," "extended," etc. in social epidemiology, feminist science and epigenetics, I advocate for studying E-approaches from an epistemological, historical and political viewpoint in order to critically assess the transformations of knowledge that we are currently witnessing.

Historicising E-approaches

« 1 » In his target article Shaun Gallagher sharply defends "E-approaches," i.e., "embodied, embedded, extended, enactive, ecological approaches to cognition" (§6), against the epistemological problems associated with "classic" cognitivism (§1). The latter posits "neurocentrism" (§3): that the brain is the seat of most of the characteristics that make us what we are: our minds, selves, free will, social dispositions… Neurocentrism implies "internalism" (§4): what we are can only be determined by inner causal mechanisms, i.e., some parts of our brains or some cognitive modules are considered insensitive to external causal factors. This "narrow-minded" (§6) conception of cognition implicitly endorses methodological individualism (§5), i.e., if my brain causes my social dispositions, then society is not independent of me as an individual, rather, it is just the juxtaposition of socially competent brains.

« 2 » I here intend to highlight some of the implications of Gallagher's article that exceed the field of cognition. Referring to the circulation of concepts such as "embodied," "embedded," "extended," etc. in social epidemiology, feminist science and epigenetics, I propose the idea that it is time for E-approaches to be studied from an epistemological, historical and political viewpoint.