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Feeling Our Way: enkinaesthetic enquiry and immanent intercorporeality

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Abstract

Every action, touch, utterance, and look, every listening, taste, smell, and feel is a living question; but it is no ordinary propositional one-by-one question, rather it is a plenisentient sensing and probing non-propositional enquiry about how our world is, in its present continuous sense, and in relation to how we anticipate its becoming. I will take this assumption as my first premise and, by using the notion of enkinaesthesia, I will explore the ways in which an agent's affectively-saturated co-engagement with its world establishes patterns of co-articulation of meaning within the anticipatory affective dynamics and the experiential entanglement necessary for expedient action and adaptation. In advancing this thesis I will reject the minimalist notions of embodiment by amplifying and extending the claims made by the most radical of the embodied mind theories. Crucially, I will offer a new wave of embodiment theory which has at its core the radical extension of sensorimotor affect into the life and being of other agents where their experience is for us both direct and immediate. This I will present as an immanent intercorporeality.

Introduction

It can be taken as uncontentious that human beings act in the world as conscious, socially and culturally embedded, experiencing agents, rich in their unique experiential histories, and rich in their greatly distributed, complex array of felt affective relations and interrelations with other agents and things. In respect of their greatly distributed, complex array of felt affective relations and interrelations with other agents and things, human beings are no different from all other animals; it is with this affective field of activity that we will be concerned. Within this field I will advance the grounds for an immanent intercorporeality with the being of others, conceptualising this notion in terms of an extended, even distributed, notion of enkinaesthetic embodiment. This notion goes beyond those conceived and proposed to date, so it is incumbent upon me to indicate how it differs from the others, and also to demonstrate how it offers an improvement on them.

I will begin by questioning the privacy of experience; in doing so I will agree with Varela that there is an identifiable difference between personal and private in our experience of others and their experience of us. This will enable me to introduce the key concept of 'enkinaesthesia', by which I mean the community and reciprocity of our affectively-laden dialogue¹ with others, including other animals.² Within such an

¹By 'dialogue' I mean only the interactivity of agents and not textual, linguistic, or conversational activity, though interactivity within the human species does usually include this.

²Objects can also affect us, for example, the presence or absence of a treasured possession affects us in very different ways. Interobjectivity is a crucial aspect of our lived and living experience, but it is not characterised by a reciprocity of affect, and it is not the concern of this essay.

affectively-laden dialogue we experience the implicit, and, sometimes, explicit intentional co-agency of the other, learning through experience to anticipate the intentional trajectory of their action, and establishing prosodies of resonance and fragmentation – which we might think of as the felt cadences of living experience – "regulated by emotions of affection and enjoyment, expressed and given meaningful form by rhythms of modulated movement" [Malloch & Trevarthen 2009, p.2] and action. From here I will argue that in all agential action³, and as part of their continually updating experiential horizon, all agents ask tacit, pre-reflective, pre-conceptual, non-propositionalised questions about how their world is and how it is likely to continue to be as part of the anticipatory affective dynamics of their living, breathing experience. Thus they are, in their affectively-laden, intentionally-saturated activity, feeling their way, whatever synaesthetic mix of modalities they might, from moment to moment, employ. At this point I will present a number of theories of embodiment, their advantages and limitations, which I will follow up by elaborating a notion of extended enkinaesthetic embodiment. This, I argue, will offer us a new wave of embodiment theory, and one which has at its heart the radical and reciprocal extension of sensorimotor affect into the life and being of other agents where their experience is for us both direct and immediate, as ours is for them; it is, therefore, a claim for an immanent intercorporeality.

The personal and the enkinaesthetic private

In "Neurophenomenology: A methodological remedy for the hard problem" Varela claims that

Experience is clearly a personal event, but that does not mean it is *private*, in the sense of some kind of isolated subject that is parachuted down onto a pre-given objective world. [Varela 1996, p.340]

In the context of this quotation Varela has been extolling the many virtues of the phenomenological method and, in particular, the phenomenological reduction, as a response to the irreducible nature of conscious experience and the "pragmatic and methodological limbo" [ibid. p.334] that such an epistemic irreducibility entails [Searle 1992]. Key to a phenomenological approach, and a remedy to this apparent irreducibility, is "the re-discovery of the primacy of human experience and its direct, lived quality" [Varela 1996, p.335]. For this rediscovery we must "turn the direction of the movement of thinking from its habitual content-oriented direction backwards towards the arising of thoughts themselves" [ibid. p.337], and this we must do through the practice of living, experiential reflexivity.

With such a careful practice of reflection we can begin to dispense with the "habitual fog separating experiencer and world" [ibid.], and in its place gain an immediacy, that is, an intimacy with the other, both agential (human beings, cats, horses, worms) and non-agential (coffee pots, pencil cases, vases). This practice doesn't just ground us in our embodiment with our world as a condition of our experience, it also discloses the intimacy with which we come to situate the personal in our experience and the immediacy with which we experience the other in what we, and they, habitually, and thus most usually, take to be the private.

Few people would question the personal nature of first-person experience, though many are willing to question the reliability of first-person introspective reports,⁴ and there are even more who are willing to mull over

³I have elsewhere, for example, Stuart 2010 & Stuart 2012, used the categories of 'agential' and 'non-agential', but given Latour's arguments for the action or participation of non-humans ('actants') within rhizomic-networks (see, for example, Latour 2005), I am content to construe the former as intentional, the latter as non-intentional, and both as significant, contributing to the co-articulation of meaning, within a dynamic material-semiotic.

⁴See, most notably and interestingly, Schwitzgebel 2007, 2008 & 2011 for arguments against reliability, and Gertler 2001 & 2010 for arguments in favour of reliability.

the issue of immunity to error through misidentification.⁵ I certainly do not question the personal first-person nature of experience, but I do question its privacy, and here's why.

Experience doesn't start with language, it starts with dynamic plenisentient enquiry and action within the affective community and reciprocity of other plenisentient living organisms and things. Thomas Reid was aware of this when he wrote that mankind's invention of an artificial language, as an expression of our conceptualisation of our linguistic relation to our world, first necessitates the possession of a natural non-propositional, preconceptual language. [Reid 1769, 1983] The expression of natural language requires no intervention of concepts and no exercise of cognitive conceptualisation such that I need to reason from what I see to what I should think.⁶ Instead Reidian natural language carries with it sensation, so immanent in my experience, so pre-reflexive and spontaneous in my living being, that I am able to anticipate immediately in the nature of a countenance, in the nature of a body, the intentionality of its bearer, preparing me for a range (or horizon) of future possibilities. As Reid says:

An infant may be put into a fright by an angry countenance, and soothed again by smiles and blandishments. A child that has a good musical ear, may be put to sleep or to dance, may be made merry or sorrowful, by the modulation of musical sounds. [Reid 1983, p.43]

And, of course, it isn't just infants. Our plenisentient enquiry, our exercise of our natural language, operates within an enkinaesthetic field, where by 'field' is meant the domain within which a particular condition prevails, and by "enkinaesthetic field" is meant the community and reciprocity of the intentionally-saturated felt cadences of living experience, all of which are regulated by the fluctuating prosodies of affection and resonance, rejection, kindness, indifference and fragmentation. Through the enquiry and action of natural languaging the infant makes sense of its world, reaching, touching, grasping, and feeling resistance, feeling yielding, tasting bitterness and tasting sweetness, creating patterns of concern, of meaning, and patterns of somatosensory emotionally-laden anticipation for how something has been and how it is likely to continue to be.

And, so, experience doesn't start with concepts, it starts with pre-reflective, pre-conceptual sensory enquiry and action; it starts with meaning-making within an open dynamic system, and it begins pre-natally as early as eleven weeks:

Human foetuses tentatively touch the placenta, umbilicus and the uterine wall with their hands at 11 weeks. They make jaw movements and swallow amniotic fluid, expressing pleasure or disapproval at tastes injected into it by sucking and smiling or grimacing with disgust. Complex movements of trunk, arms and legs position the body, and may react to the mother's body movements and the contractions of the muscles of her uterus (Lecanuet, et al., 1995; Piontelli, 2002; Trevarthen, et al., 2006). (Trevarthen and Reddy, 2007)

⁵See, amongst a great many examples, Wittgenstein 1958, Shoemaker 1970, Perry 1973, and Evans 1982. I doubt that there are many, if any, non-pathological examples of such an error. Obvious pathological cases include Body Integrity Identity Disorder (BIID) [see Stirn, Thiel & Oddo (2009)], and the extraordinary experience, documented by Alphonse Daudet who, suffering from a form of tertiary syphilis, *tabes dorsalis*, remarked that "Sometimes I feel as if I don't own part of myself – the lower half. *My legs get confused*." [Daudet 2002, p.41]

⁶Even though we are distinguished from 'the brutes' by our need for the invention of an artificial language, "[T]he brutes have some natural signs by which they express their own thoughts, affections, and desires, and understand those of others." [Reid 1983, Chp. 4, Sect. II, p.32].

⁷The Still Face experiment [Tronick, Adamson, Als & Brazelton 1975; Tronick 2007; Tronick & Beeghly 2011] offers an excellent example of the kind of affective community and reciprocity described by Reid, except that we now know that being soothed after being fearful doesn't work to simply reset the infant's system to its pre-experimental 'settings'; in fact, Tronick and colleagues have discovered that a four month old infant, who has experienced disengagement and neglect within the Still Face experiment, will have a two week memory of it, producing the same negative responses – the production of the stress hormone cortisol and an increase in heart rate – when anticipating the same kind of experience. [See, for example, Grant, McMahon, Austin, Reilly, Leader, & Ali, S. (2009).]

Throughout its development the foetus, bursting into life, folds into its world as it unfolds in its enkinaes-thetically abundant enquiry and action. Post-natally, with the development of the visual sense, the infant becomes quickly aware of the reciprocal gaze, even of the intersubjective scrutiny⁸, and enkinaesthetically of the felt trespass of the other. Given the recognition of this affectively complex dynamic agency, we can only conclude that there can be no being which is not also an enkinaesthetically enfolded being-with⁹ other open enkinaesthetic systems. In this way, somatosensory enquiry and action requires not just a plenisentient body but a whole world of plenisentient bodies and other bodies too, and so it is that "[w]henever I try to understand myself, the whole fabric of the perceptible world comes too, and with it comes the others who are caught in it." [Merleau-Ponty 1964, p.15].

And, thus, experience certainly doesn't start with privacy. We reach, we touch, we taste, we hear the world around us, spilling over into it, being resisted, touched, tasted and heard ourselves. It isn't just that our affective sensorimotor enquiry and action overlaps and interweaves with the affective sensorimotor enquiry and action of the other, it is that, as meaning-making activities they co-constitute one another. But it isn't within some merely functional sense that they co-constitute one another; they are co-constituting in an experiential affective sense, where the other is "always "already there" [in my experience] before reflection begins" [Merleau-Ponty 1970, p.65]. So, now when I try to understand myself as a possibility of being amidst the whole,

... the whole fabric of the perceptible world comes too, and with it comes the others who are caught in it. ... For [others] are not fictions with which I might people my desert–offspring of my spirit and forever unactualized possibilities–but my twins or the flesh of my flesh. [Merleau-Ponty 1964, p.15]

The others in my experience, my twins, the flesh of my flesh, exist for me within the enkinaesthetic field of my somatosensory affective enquiry and action, and I within theirs, we each with the ability to feel the givenness and ownership of our own experience, as simultaneously experientially entwined with the living feeling breathing dynamical being of all other living beings and things. ¹⁰ So, if we are to reach the point where we are able to speak of solitary individuated beings, it must be as some conceptual derivative of our primary mode of plenisentient enkinaesthetic being, and then as an abstract conceptualisation of ourselves as cognitively contained and cognitively sustainable; as minds in communication with minds, bodies as useful but unnecessary, occasionally even a burden getting in the way of the rational and methodical mind. So, let's establish our main conclusion from this section, that a central characteristic of 'enkinaesthesia' is the experiential immanence – the direct, non-duality of the inescapable experience of the plenisentient and enkinaesthetic 'other', and then we can proceed to the theories of embodiment, from minimal to radical, and beyond with the extended embodiment theory of immanent enkinaesthetic intercoproreality.

⁸I do not mean to imply any notion of critical judgement by the use of the term 'scrutiny'; I mean only an intent curiosity or interest in the other's activity. A good example would be a crow perceiving the progress of a cat through a garden and out through a gate. The crow has no concept of cat, garden or gate, but its experience is intentionally-saturated and affectively-laden. It is plenisentially aware of its world, of the breeze, the proximity, rate and direction of movement of the cat, the rustling of dry leaves and where they gather, the changing expanse of shadows and light, and so on, and all of these exist as concernful matterings for the crow.

⁹Elsewhere I refer to this as the *Mitseinwelt* [see, for example, Stuart 2010, 2011, 2012, 2013, & 2015, & Stuart & Thibault 2015], and which Roche is now describing as *être avec* [Roche 2015, personal correspondence].

¹⁰We already find this notion of community and reciprocity in the A edition version of Kant's third Analogy where he states that "All substances, so far as they coexist, stand in thoroughgoing community that is, in mutual interaction." [A212]; but Kant was shy of ontological commitments and mentions neither embodiment nor emotion, so we must relegate Kant's, still extraordinary, insight to this footnote.

Embodiment Theories

Rorty claims that "If the body had been easier to understand, nobody would have thought that we have a mind." [Rorty 1980, p.239], and in "Six views of embodied cognition" Wilson (2002) describes the "growing commitment to the idea that the mind must be understood in the context of its relationship to a physical body that interacts with the world" [p.625]. Wilson states very tentatively, for these are relatively early days in the resurgence of embodiment theory, 11 that

It is argued that we have evolved from creatures whose neural resources were devoted primarily to perceptual and motoric processing, and whose cognitive activity consisted largely of immediate, on-line interaction with the environment. Hence human cognition, rather than being centralized, abstract, and sharply distinct from peripheral input and output modules, may instead have deep roots in sensorimotor processing. [ibid.]

In the "Interpretations of embodied cognition" Gallagher (2011) maps "out the landscape of ... various senses of embodied cognition". It is a surprisingly varied and shifting terrain, and Gallagher establishes within it five distinctive (currently) commonly accepted forms: Minimal embodiment, exemplified by the work of Goldman & De Vignemont, particularly "Is social cognition embodied?" (2009); Functional embodiment (Clark 1999, 2008a & 2008b; Wheeler 2005), introducing the extended mind hypothesis (Clark 1997; Clark & Chalmers 1998), the point of which is to reduce computational load; Biological (Shapiro 2004 & 2007); Semantic (Lakoff & Johnston 1999); and Radical / Enactive. I will present the essential elements of these theories very briefly, and then concentrate on two, one requiring a negligible embodiment, if an embodiment at all, for the occurrence of successful cognitive functioning, and the other requiring a fully situated embodiment. Naturally, I am inclined towards an acceptance of the latter, but I will outline its limitations and how these can be addressed by a fleshed-out¹² enkinaesthetic theory.

Summary of embodiment theories

Of the five senses of embodied cognition (EC), minimal embodiment is actually a classical cognitivist (CC) model, where the body is present but without its brain, and even without its environment, and the other four are varieties of embodied cognition which offer no such crude amputation of world or disjunction of brain and body. Mental representations, mental objects with semantic properties, are necessary for minimal and functional embodiment theories, and unnecessary for radical / enactive theory; biological and semantic forms of embodiment theory are committed to weak forms of representation. Minimal, functional, and semantic embodiment theories are concerned with social and higher-level cognitive functioning, functional embodiment theory is also concerned with perception and action; biological embodiment theory is concerned with perception and action, and with social cognition. From this brief summary it can be concluded that minimal and functional forms of embodiment are consistent with classical cognitivism, that radical / enactive theory is definitely not, and that biological and semantic theories are neutral in this regard. Enkinaesthetic theory is non-representational; it is concerned with perception and action, and with social cognition; and it is not consistent with classical cognitivism.

Minimal Embodiment

The most extreme form of minimal embodiment is presented by Goldman & de Vignemont (2009) who, with much good humour, introduce us to their concerns about the 'spectre' of embodied cognition which is

¹¹Before behaviourism and computationalism the body played a crucial role in the work of the American pragmatists, James (1900) and Dewey (1925), and in the work of, for example, Feuerbach (1843/1972) and Nietzsche (1883–91/1961).

¹²Merleau-Ponty pun intended.

distracting theorists from reputable, that is, classical, theories of the mind and the mental. They offer their own notion of embodiment, which pretty much leaves the body behind, and is so unlike what one would expect of a theory of embodied cognition, that it is hard to take them quite seriously.

A spectre is haunting the laboratories of cognitive science, the spectre of embodied cognition (EC). For decades, the reigning paradigm of cognitive science has been classicism. On this approach, higher cognitive functions are analogized to the operations of a computer, manipulating abstract symbols on the basis of specific computations. As embodiment theorists tell the story, classical cognitivism (CC) claims that mental operations are largely detached from the workings of the body, the body being merely an output device for commands generated by abstract symbols in the mind (or the 'central system' of the mind). Embodiment theorists want to elevate the importance of the body in explaining cognitive activities. What is meant by 'body' here? It ought to mean: the whole physical body minus the brain. Letting the brain qualify as part of the body would trivialize the claim that the body is crucial to mental life, simply because the brain is the seat of most, if not all, mental events. [Goldman & de Vignemont 2009, p.154]

This limited, and limiting, gesture to the inclusion of a brainless body as essential for experience and cognition, is extraordinary in its criticism of embodiment theorists for their characterisation of classical cognitivism as claiming that "mental operations are largely detached from the workings of the body", for this is precisely what Goldman & de Vignemont propose in their article. There is a similar sort of hand-waving towards the effects that sensorimotor contingencies have on perceptual experience, for example, although they accept that opening and closing one's eyes can affect what one sees, they deem these contingencies to be too trivial to be of any consequence for cognitive processes; so, they might supply data, but they have no role in the processes themselves. This they also claim to be true for "body-related traits", including body postures and other non-representational bodily activity. In truth the claim to even a minimally embodied system seems tenuous, for whatever it is, their body is neither cognitively coupled nor environmentally situated. Instead they are committed to the claim that "mental representations with bodily contents have an important causal role in cognition" [ibid. p.155], where bodily representations, 'B-reps', are a class of mental representation, and are distinguished into 'B-contents' and 'B-formats'; B-reps are then classified as bodily in virtue of their being encoded in B-formats. So, now we need to know, with some precision, what a B-format is because, if B-reps are mental representations that just happen to be about the body, they are cognitive and, presumably, non-physical, and yet, they are classified as bodily because they are rendered in a particular format, and being in this format gives them "an important causal role in cognition" [ibid.].

But, for all their over-complication of the issue, there is a certain clarity about B-formats, and, simultaneously there is no great mystery either for they have 'tamed' embodiment to such an extent that only 'sanitized' mentally represented B-reps remain and the B-format of these representations, since they are mental, has got to be in the brain in brain states and neural processes. Body formats are neuronal representations of bodily activity. The evidence for this claim is present in the form of appeals to the role of mirror neurons in our capacity to imitate, especially in the context of social cognition, and to imagine.

B-formats can be exploited for social purposes either during perception or during imagination of another individual in a specific state. The former corresponds to what is called 'mirroring' ... The discovery of mirror neurons opened a wide window on the possibility that some social cognition starts at a primitive level of motor planning. [Gallese, Keysers & Rizzolatti 2004] The prelude to the discovery was finding a neural vocabulary in monkey premotor cortex in which types of actions (e.g. grasping, holding and tearing) are coded by populations of neurons. [ibid. p.156].

¹³ 'Tame' and 'sanitized' are both words used by Goldman & de Vignemont to describe the charge that might be made "with some justice" against their minimalist theory.

So now, it would seem, all that Goldman & de Vignemont say about the body is consistent with its being a dry husk, and their brain, as the seat of all mental events, could exist in some sanitised vat. Theirs is a representation-heavy theory of dis-embodied cognition, and their claim that "Letting the brain qualify as part of the body would trivialize the claim that the body is crucial to mental life" is seriously misleading for the reader, at least initially. The body is crucial to mental life for Goldman & de Vignemont only because it is neural, and the neural, in a move entirely consistent with classical computational cognitivist approaches, can exist without being embodied. But neural signals, the simple electrochemical impulses sent along nerve pathways, cannot do everything. Goldman & de Vignemont ignore, for example, the humoral signals, chemical messages that are sent by the bloodstream [Meijsing 2006], and they also fail to grasp that

Any vat capable of performing the necessary functions will have to be a surrogate body that both regulates and is regulated by the nervous system. In other words, the vat will have to exhibit a level of complexity at least as high as that of a living body with respect to bodily systems of life-regulation and sensorimotor coupling. Thus the entire system (vat plus brain) must satisfy these two basic requirements: (i) it must be energetically open and able to actively regulate the flow of matter and energy through it so as to control its own external boundary conditions (life-regulation); and (ii) it must be capable of actively regulating its own sensorimotor interactions with the outside world (sensorimotor agency). In short, the entire system must amount to a biologically autonomous, sensorimotor agent. [Cosmelli & Thompson 2011, pp.28–9].

So, although Goldman & de Vignemont prefer their claims to be "scientifically and philosophically fruitful", and they urge us to "recognize that selected cognitive tasks might be executed via embodied processes" [Goldman & de Vignemont 2009, p.154], they do not wish us to get ahead of ourselves and actually assert – even for excellent scientific, pragmatic, phenomenological, and philosophical reasons – the more 'global' claim that there really is a body, let alone a biologically autonomous, sensorimotor agent. It is to this we will now turn with the enactive account of embodiment.

Enactive / Radical Embodiment

In stark contrast to minimal embodiment, enactive / radical embodiment argues for dynamic, non-symbolic, non-representational distribution of cognitive processes across brain, body and environment. It is essentially anti-dualistic, but unlike classical cognitivism's inclination towards a monist materialism, the ontological commitments made by the enactivist are rather more complicated. This is largely because of the active processual and relational nature of the extended agential-environment whole, but it's also down to the fact that enactive theorists accept neither individual nor interaction as primary, rather attempting to understand "the mutually enabling relations between the two levels" [Di Paolo & Thompson 2014, p.75].

So, the agent is embodied and dynamically-coupled to the world of other agents and things, such that the "biological aspects of bodily life, including organismic and emotion regulation of the entire body, have a permeating effect on cognition, as do processes of sensori-motor coupling between organism and environment" [Gallagher 2011, p.66]. In this way agent, world and action are so intricately interwoven in their bringing forth a world for the agent, that it would be ludicrous to think of pulling them apart and still having a coherent system in the way Goldman & de Vignemont recommend. Thus, under the radical enactive conception mind and world are inseparable, and it is embodied affective practice, rather than cognitive deliberation and computation, that is the hallmark of the agent's engagement with its world.

In *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, Evan Thompson characterises enactive embodiment in the following five-point way:

[F]irst ... living beings are autonomous agents that actively generate and maintain themselves, and thereby also enact or bring forth their own cognitive domains. ... [S]econd ... the nervous

system is an autonomous dynamic system ...[T]hird ...cognition is the exercise of skillful know-how in situated and embodied action. ...[F]ourth ...a cognitive being's world is not a prespecified, external realm, represented internally by its brain, but a relational domain enacted or brought forth by that being's autonomous agency and mode of coupling with the environment. ...[F]ifth ... experience is not an epiphenomenal side issue, but central to any understanding of the mind, and needs to be investigated in a careful phenomenological manner. [Thompson 2007, p.13]¹⁴

In addition, and in an earlier piece of writing, Thompson emphasises the crucial role of self-other codetermination, stating that "embodied cognition emerges from the dynamic co-determination of self and other" [Thompson 2001, p.4]. In this he is referring to the "core dyad" which takes experiential development to operate intercorporeally from the beginning, and he quotes Gallagher & Meltzoff [1996] as saying that "The body schema, working systematically with proprioceptive awareness, operates as a proprioceptive self that is always already 'coupled' with the other" [pp. 225–6]. Thompson thus states that

the affective mind isn't in the head, but in the whole body; and affective states are emergent in the reciprocal, co-determination sense: they arise from neural and somatic activity that itself is conditioned by the ongoing embodied awareness and action of the whole animal or person ... [and going] one step further ... much of affect is a prototypical two-organism event, by which I mean a prototypical self—other event. [Thompson 2001, p.4]

There's a great deal to welcome with enactive / radical embodiment, not least of which is the significance it attaches to the distribution of affect, and not just the distribution of cognition; and there is also the way in which it accentuates the role played by the embodied and situated nervous system in creating meaning in the interplay of its perception, action and world; this dynamic affective interplay is the basis for meaning-making, it is semiogenetic, grounding meaning in the agent's values-realising activity¹⁵; and there is also the emphasis it places on the dyadically-coupled nature of conscious human experience. Together these great virtues lead us to a way in which we can speak meaningfully about the agent in the everydayness of its pragmatic activity, where it is situated and embodied and we have no need to invoke neural representations, symbols or computational approaches. Yet enactive embodiment theory also has limitations; its claims for autonomy and operational closure can seem inconsistent with its claims for cognitive distribution, though not with its claims for and distributed affect, and its radicality claim is exaggerated, possibly even a misrepresentation when its focus is firmly on the individual system. We'll address these in the next section.

By now it should be apparent that whilst enkinaesthetic theory is utterly inconsistent with classical computational cognitivist theories of embodiment, it has much more in common with the enactive theory of embodiment. And, yet there are some crucial differences which identify enkinaesthesia as offering a more thoroughgoing and truly radical theory of embodiment, one which involves an immanent enkinaesthetic intercorporeality, which includes other agents¹⁶ and other non-agential things in, what one might call, our living, breathing 'interbeing'.¹⁷

¹⁴As Thompson notes these ideas were first presented in a unified form by Varela, Thompson & Rosch (1991).

¹⁵In this respect, see De Jaegher & Di Paolo (2007) on participatory sense-making, and Hodges (2007) on values-realisation, meaning and affordance.

¹⁶Plants also count as agential because enkinaesthesia starts with life and living and not with what we think of as acting in 'real-time', whatever that may be. It is true that in this paper I am emphasising the neuro-muscular dynamical flows and muscle tensions of particular sorts of agents, the sort which have soft tissue and muscles, but plants also adapt to the contingency and predator, co-creating their environment through the evolution of defence mechanisms like thorns and toxins, and attractors like colours and scents. The *Darlingtonia californica* or Cobra Lily presents a wonderful example of this.

¹⁷ Varela offers some "steps towards a science of interbeing" [Varela 1999] and enkinaesthetic theory is now an ideal candidate for the thoughtful and provocative development of these steps.

Stage 4 is generative cognitive science, where the neurophenomenological perspective is extended to include as foun-

Our focus in the following section will be on autonomy and radicality, and the shortcomings of enactivism as a radical form of embodiment theory, and then on outlining enkinaesthetic interbeing as a means to redress these shortcomings, and put in their place a much more progressive and thoroughgoing immanent enkinaesthetic intercorporeality.

Autonomy & Radicality

The enactive approach does not start from the question of whether cognitive processes extend beyond one or another boundary, such as the skin, skull, or central nervous system, that is supposed to mark some inside/outside distinction. Rather, the enactive approach starts from the question of how a system must be organized in order to be an autonomous system—one that generates and sustains its own activity and thereby enacts or brings forth its own cognitive domain. [Thompson & Stapleton 2009, p.23-4]

The authors continue, saying that the focus for the enactivist is on the enabling conditions for cognition, where 'cognition' is defined as "the relational process of sense-making that takes place between the system and its environment" [ibid., p.26], and where "cognition belongs to the 'relational domain' in which the system as a unity relates to the wider context of its milieu" [ibid.].

Thus, the system, organism, or agent, exists within its milieu¹⁸, with the milieu operating on the system and the system operating on its milieu, in such a way that the system, as a unity, generates and sustains its own activity. These operations are cognitive, because they are sense-making, in the pre-conceptual sense of values-realising, and they occur within the 'relational domain', where the concept, 'relational domain', remains ambiguous. An autonomous system is, therefore, "a thermodynamically open system with operational closure that actively generates and sustains its identity under precarious conditions" [ibid., p.24]. One suspects from this that, in the case of the core dyad, the intersubjective other exists to support the unity and autonomy of the system, and vice versa, and it seems most likely that this is what is meant by "self-other co-determination".

So, let's draw out the notion of a 'between' – one imagines as a somewhere, a some time, though most probably a pragmatic somehow – in which the organism and its environment act together to generate meaning for the organism. It's a claim which prises apart the system and its environment, and drives a claim for operational closure and the autonomy of the individual (whether ant, crocodile, paramecium, or human). The 'between' is a notion which seems to have been derived by little more than the observation of a perceptual split that creates the illusion of "the body here detecting the surrounding environment out there" [Gendlin 2012, p.144], and it's an illusion which continues to encourage the dissociation, and even separation, of organism, "the system as unity", and environment. It is in this 'between', the pragmatic somehow, that the enactivist posits the distribution of cognitive action (and sensorimotor enquiry). What remains is a false dichotomy which conveniently fits many of our existing conceptual and cultural narratives, and is even one that Merleau-Ponty falls prey to when he speaks of the chiasm:

There is a circle of the touched and the touching, the touched takes hold of the touching; there is a circle of the visible and the seeing, the seeing is not without visible existence; there is even

dational its intersubjective, empathic-affective dimension. At this stage, cognitive science begins to touch on the sphere of interbeing . . .

Stage 5 is neurophenomenology – a further extension of the embodied-emergent perspective [Varela 1999, pp.86–7]

Stuart [2013] presents an experimental framework for a neurophenomenological study of the intersubjective, affectively-laden enkinaesthetic union of nervous systems and experiential systems within the practice of the Alexander Technique.

¹⁸The choice of 'milieu' instead of 'environment' is interesting because 'milieu' carries with it the joint notions of internal and external milieux, and even the notion of thermodynamic openness, unfortunately in the quotation above 'milieu' seems only to be used in the external environment sense. For the internal milieu, the homeostatic regulatory system, see Bernard 1974.

an inscription of the touching in the visible, of the seeing in the tangible – and the converse; there is finally a propagation of these exchanges to all the bodies of the same type and of the same style which I see and touch – and this by virtue of the fundamental fission or segregation of the sentient and the sensible which, laterally, makes the organs of my body communicate and founds transitivity from one body to another. [Merleau-Ponty 1968, p.143]

In these sensory intertwinings Merleau-Ponty is indicating something profound about experience¹⁹; he is indicating its "ambiguous transcendence" [Young 1980], that is, the experiential inseparability of our being, which is at one and the same time, both subject and object, and in being both subject and object we cannot be either individually. In fact, at a pre-noetic plenisentient pragmatic level, it makes no sense whatsoever to talk of subjects and objects. And, yet, Merleau-Ponty pulls them apart, distinguishing "the fundamental fission or segregation of the sentient and the sensible", drawing out a perceptual distinction which fits and supports the ongoing conceptual narrative that requires intentional transitivity for its experience, rather than intentionally-saturated experience.²⁰ In doing so he disregards the primordial nature of experience as a prenoetically universal aspect of non-individuated being; which is, in turn, to disregard the primordial nature of experience as the 'between', the process, the enkinaesthetic pragmatic somehow which brings with it the whole fabric of the perceptible world as one and the same 'flesh'²¹. In this way, enkinaesthesia prioritises the relational within the cognitive-affective enkinaesthetic field, and rejects the enactivist's notion of local operational closure, no matter how precarious it might be, as both a semantic and ontological category mistake.

The ontological category mistake is the result of a move from the perceptual to the conceptual, bringing with it an additional ontological duality, the system and its environment on the one hand, and the relational on the other; and it is a semantic category mistake because the notion of local operational closure and the autonomy of the system yields a convenient fiction that the agent is an operationally distinct unity, a theory useful only in our social narratives where we need to, in the case of human beings, differentiate between persons for reasons of taxes, exam results, moral culpability, immunisation histories, and family trees.²² The enactivist might yet be unperturbed, after all, theirs is a theory about the individuated system, but if that is the case, their claims for a really radical form of embodiment are very much exaggerated.

Enkinaesthesia and Immanent Intercoporeality

Let's take stock. The enactivist emphasises the importance of affect and emotion, and how affective and emotional states emerge from the interplay of organism or system and world. They propose the distribution of affect within the body, but that is where it remains as a comparatively localised phenomenon. Affective and emotional states play a crucial role in the generation of meaning through the cognitive sensorimotor engagement of the organism with its world, where world can include other conscious organisms whose role is as one half of a core dyad without whom intersubjective experience and self-consciousness could not emerge. Although organism and world are so closely aligned as to be co-constituting, they retain their autonomy through the precarious condition of their operational closure, and cognition occurs in the 'relational domain' between the system as a unity and the wider context of its milieu. The enactivist claim for radical embodiment is limited by their individuating claims for autonomy and operational closure, and also by their individuated notion of distributed affect, even when accepting co-determination of meaning.

¹⁹Note that I do not refer to human experience, or animal experience, or any individuating experience, but to experience itself.

²⁰It would be too much of a side step to go into this issue in greater detail in the body of this paper, suffice, for now, to say that intentional transitivity requires an experiencing subject and an object or objects to which their attention is directed, whereas intentionally-saturated experience is characterised by ambiguous transcendence without a need for additional transitivity.

²¹Here I use Merleau-Ponty's word 'flesh' [1964, p.15], but, it should be clear that this is not his thought.

²²This is not a complete list.

What is now needed is an explanatory system which doesn't multiply its problems beyond necessity, and in this case, we need something which doesn't recreate a dichotomising metaphysics of subject and object, with something extra, a cognitive process, in between. In this respect we need a theory which doesn't make a virtue out of individuation, and for that we need a theory which doesn't fall prey to the narrative attraction of shifting from an apparent perceptual distinction to the conceptual reification of that distinction (even with its thermodynamic permeability). If we can meet these conditions, we will have a thoroughly radical theory of embodiment. I propose enkinaesthetic theory for just this purpose.

If we return for a moment to the "habitual fog separating experiencer and world" [Varela 1996, p.337], we can now understand that one way of reading this phrase is to assume the dichotomy of experiencer and world, and then approach the task of clearing the fog as one which requires a close examination of the cognitive relational domain which draws experiencer and world together at the cost of pulling them apart. This is an approach adopted by enactivism, but we have seen that this approach is flawed for the reasons already given. But there is another approach and one, I contend, more closely aligned with the development of Varela's proposed science of interbeing.

Perhaps Varela intended his phrase to be read as indicating how the fog obscures and misleads the viewer into falsely identifying visible peaks as distinct, and so on, but if we adopt the enkinaesthetic theory with its ambiguous transcendence, there is nothing for the fog to coalesce around, and nothing to be falsely identified. With the dispersal of the fog we find a non-individuating affectively-laden enkinaesthetic field in which the whole fabric of the perceptible affective world comes too. Within this experientially entangled enkinaesthetic field the other's affectively-laden being is immanent in my being as an always already there. We might describe this by saying that our lived experience is always tempered by the direct spontaneous reception, or passive synthesis, of the experientially entangled living being of the other as they transgress our own experience and we theirs, but the point to note is this: this intentional transgression is immediate, non-inferential co-being, characterised by a pre-noetic immanent enkinaesthetic intercorporeality.

This is offered as a new wave of embodiment theory because it has at its core the radical extension of sensorimotor affect into the life and being of other agents, whether other humans, animals, plants, and even, for it is not implausible, other non-agential things. 23 To end this section let me offer an example of this radical extension of sensorimotor affect in a quotation from Steinbeck's short story The Chysanthemums. The protagonist Elisa has the following exchange with a travelling saleman:

"Did you ever hear of planting hands?"

"Can't say I have, ma am.

"Well, I can only tell you what it feels like. It's when you're picking off the buds you don't want. Everything goes right down into your fingertips. You watch your fingers work. They do it themselves. You can feel how it is. They pick and pick the buds. They never make a mistake. They're with the plant. Do you see? Your fingers and the plant. You can feel that, right up your arm. They know. They never make a mistake. You can feel it. When you're like that you can't do anything wrong. Do you see that? Can you understand that?"

Elisa understands her interbeing, the immanence of the living corporeality of the other in her experience, and she grasps her world feelingly, her fingers opening up possibilities of being, not facts about the world.²⁴

²³I do not wish to rule out the extension of our sensorimotor affect into the non-agential, for example, the things we value in our lives like a car or a sculpture, but it cannot be the subject of this current paper. ²⁴This is a paraphrasing of Ricoeur 1981, p. 56.

Conclusion

Everything offered within enkinaesthetic theory is perfectly consistent with the claim that we are, at one and the same time, prenoetically a universal non-individuated being, and perceptually and noetically individuated. But when we talk in this way we must understand and be very clear that the first refers to the primordial nature of experience, and the second is derived and artificial, an expression of our cultural relation to our world. Reid understood this with his distinction between natural and artificial languages. Some theories of embodiment conflate the artificial and the natural, and some theories speak only of the artificial, ignoring the natural. Neither succeeds. I have rejected both and proposed an alternative characterised by the radical extension of sensorimotor affect into the life and being of other agents where their experience is for us both direct and immediate. This immanent enkinaesthetic intercorporeality defines my being through my interbeing, and my corporeality through my intercorporeality with you and the intercorporeality of all things.

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