PHILOSOPHY OF CONSCIOUSNESS AND THE BODY

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INTRODUCTION

DEFINING THE LIMITS OF THE FIELD. Because 'consciousness and the body' is central to so many philosophical endeavors, I cannot provide a comprehensive survey of recent work. So we must begin by limiting the scope of our inquiry. First, we will concentrate on work done in English or translated into English, simply to ensure ease of access to the texts under examination. Second, we will concentrate on work done in the last 15 years or so, since the early 1990s. Third, we will concentrate on those philosophers who treat both consciousness and the body together. Thus we will not treat philosophers who look at body representations in culture, nor philosophers who examine socio-political bodily practices with minimal or no reference to consciousness. Finally, even with the philosophers we choose to treat, we cannot be comprehensive and will instead make representative choices among their works.

With that being said, we will have a fairly liberal definition of continental philosophy, operationally defined as that which makes (non-exclusive) reference to the classic phenomenology of Husserl, Heidegger, and Merleau-Ponty. Thus we will include the radical phenomenology of Michel Henry and Jacques Derrida, who refer to the phenomenological classics from within a 'purely' philosophical perspective, that is, one with little or no reference to the biological and cognitive sciences. We will also treat other thinkers who seek to use phenomenology in conjunction with the biological and cognitive sciences; in doing so we will examine the use of phenomenology to contest certain claims in analytic philosophy of mind, namely the representationalist interpretation of cognition in terms of computationalism and

connectionism, as well as the cognitivist or 'mind-reading' treatment of intersubjectivity in 'Theory of Mind' debates.

GUIDING THREADS AND FORECAST. In Part I, we will first examine two forms of radical phenomenology: pure immanence (Henry) vs. transcendence in immanence (Derrida). In the phenomenological tradition, the concepts of 'consciousness' and 'the body' are part of a network that includes those of 'self', 'self-consciousness', 'self-' or 'auto-affection', and 'subject' / 'subjectivity'. We will concentrate on three key notions in the radical phenomenology of Henry and Derrida: life as auto-affection, temporality, and intersubjectivity. In Part II, we treat three types of recent work at the intersection of cognitive science and phenomenology: (a) that done in the Husserlian tradition (Maxine Sheets-Johnstone, Dan Zahavi, Francisco Varela, Natalie Depraz); (b) that done in the Heideggerian tradition (Hubert Dreyfus, Mike Wheeler); (c) and that done in the 'enactive' school (Varela, Evan Thompson, Alva Noë, Shaun Gallagher).

Due to space limitations, we will unfortunately not be able to address some interesting work in 'somaesthetics', that is, the body as the site of reflective self-knowledge, including its involvement in social and political contexts (Schusterman 2008; Manning 2006); nor can we treat Deleuze-inspired work on perception (Smith 1996; 2007), movement and affect (Massumi 2002), and 'political physiology' (Protevi 2009).

PART I: RADICAL PHENOMENOLOGY

HENRY. Michel Henry's work is gaining more attention in the Anglophone world (Bernet 1999; Calcagno 2008; Mullarkey 2006; Sheets-Johnstone 2007; Zahavi 1999a, 1999b, 2007). Two recently translated works display his phenomenological mastery (<u>Material Phenomenology</u> [Henry 2008]) and his religious philosophy (<u>I Am the Truth: Toward a Philosophy of Christianity</u> [Henry 2003]). We will concentrate on the first of these works, but will refer to the latter at times.

Henry insists that <u>classical</u> phenomenology aims at the transcendental conditions of possibility of manifestation or appearance, that is, <u>how</u> things appear (not <u>what</u> appears). For Henry, 'classical' or 'historical' phenomenology is based in the claim that things appear as constituted by intentional acts, what he will call being 'thrown into the light of the world'.

Intentionality is thus a condition of possibility of appearance; in other words, intentionality is a transcendental feature of subjectivity. But is intentional, constituting, subjectivity—transcendental subjectivity—itself such an object? We risk an infinite regress with a positive answer: it seems that making intentional subjectivity into an object requires another subjectivity to whom that objectified subjectivity appears (Zahavi 1999a, 1999b, 2003, 2007). Zahavi points out that Kant solved this problem by means of the paralogism: only constituted or empirical subjectivity appears as a phenomenon; constituting subjectivity does not in fact appear as a phenomenon; it is purely a transcendental condition. . But to deny that transcendental subjectivity appears at all is to deny the possibility of a phenomenology of constituting subjectivity. How then does transcendental subjectivity appear, if not as an explicit object? Is there a 'pre-reflective self-awareness' in which subjectivity is given, that is, a way subjectivity appears to itself that would not be an intentional object-constitution? In Material Phenomenology (Henry 2008) Henry subjects Husserl's treatment of self-awareness to a careful reading, concluding that Husserl fails to isolate the 'auto-affection' of life as the true way in which subjectivity manifests itself; this failure necessitates a new, 'radical' phenomenology. (For Henry, 'auto-affection' is the purely immanent feeling that living beings have of the concrete modes of their life. One of Henry's prime examples is pain: pain is revealed in and through its very passive givenness: there is no intentional object constitution in the experience of pain, just pain as a purely immanent experience of life revealing itself to itself: a self-manifestation or self-appearance.) Material Phenomenology takes its title from his treatment of hyle in Husserl's published works, notably the Lectures on the Internal Consciousness of Time (hereafter, the Lectures) and Ideas I; it also includes an examination of Husserl's methodology in The Idea of Phenomenology (along with an examination of Heidegger's notion of phenomenology as laid out in Being and Time), and concludes with an analysis of Husserl's treatment of intersubjectivity in Cartesian Meditations. Throughout the book the emphasis is on the way the auto-affection of life is the self-manifestation of subjectivity; intersubjectivity, in turn, is rooted in a 'shared pathos' of life.

Henry has all along insisted that phenomenology's breakthrough was to concentrate on the mode of givenness of phenomena: not what appears, but 'how' it appears. However, phenomenology remains tied to the traditional philosophies it sought to surpass by its adherence to a certain 'ontological monism', that is, the equation of being with being seen, with being

exposed in an Outside, with being made visible in the 'light of the world' (Henry 2008: 2, 55, 58, 91). A radical phenomenology would, however, concentrate on an 'originary manifestation' as the mode in which phenomena are 'phenomenalized', prior to this ecstatic exposure. The discovery of this originary manifestation is Henry's claim to innovation; he is, in his eyes, the first to have thematized this originary manifestation as 'auto-affection', or 'the pathetic immediacy in which life experiences itself' (Henry 2008: 3). This originary manifestation is not object-constitution via intentionality (again, what Henry calls 'appearance in the light of the world'), but self-appearance, which is to be distinguished from all manner of constitution, even the 'self-constitution' via 'longitudinal intentionality' Husserl proposes in the <u>Lectures (we will return to this point below</u>). In so far as phenomenology's adherence to 'ontological monism' leads it to define being as appearance in the 'light of the world' shed by intentional consciousness, life is not a being, but prior to being qua phenomenon. Thus life is not subject to study by biology (Henry 2003: 33-52), nor indeed to study by phenomenology, when that is defined as the study of appearance in light of the world, that is, illumination by intentionality, even longitudinal intentionality. Life is not an intentional object, even a 'self-constituted' one.

To see how phenomenology misses life, Henry tells us we have to examine how Husserl treats <u>hyle</u> and <u>morphe</u>, matter and form, material impression and intentionality. We should emphasize that in <u>Material Phenomenology</u> Henry treats Husserl's notion of <u>hyle</u> as it appears in so-called static phenomenology, that is, as the objective or non-intentional aspect of <u>noesis</u>. Even though it is the non-intentional part of subjectivity, <u>hyle</u> as 'purely sensuous lived experiences' is animated by intentionality (Henry 2008: 7; commenting on #85 of <u>Ideas I</u>). If one were to fulfill the promise of a material phenomenology, one would bracket intentionality to yield 'the hyletic or impressional component as the underlying essence of subjectivity' (9). At this point, in a reading that betrays certain formal similarities with Derridean deconstruction, Henry diagnoses a 'slippage' (10) in Husserl that takes what would have been material or hyletic phenomenology and interprets it from the point of view of the intentionality animating it. In other words, rather than focus on sensuous impressions in their own right, Husserl sees them as matter <u>for</u> intentionality, that is to say, as 'adumbrations through which the sense qualities or the noematic moments of the object are grasped intentionally' (10). Matter qua pure sensuous impression is thus no longer self-given, but given <u>to</u> form, or better, 'it gives itself to form in order to be informed, constituted, and apprehended by it' (11). This means phenomenological matter is

thrown into the exteriority of the light of the world. But in itself, if it could be grasped in itself, we would experience it in its radical immanence; as Henry will claim, this self-manifestation of the hyletic content is the auto-affection of life.

Henry's would insist that his isolation of pure phenomenological matter is not a betrayal of transcendental phenomenology. On the contrary, it is for him the truth of the transcendental. The intentional, as constituting the irreal and transcendent thing, rests upon the material sensuous impression as something 'purely subjective and radically immanent' (17). This is a 'first givenness', which is 'always already given and presupposed' before being 'given a second time in and through intentionality, as a transcendent and irreal thing' (17). Now Husserl would say that to understand the manifestation of material sensuous impression, we have to turn to the 'archi-constitution' we find in internal time-consciousness, which is proposed to us as the basis for all appearance. As Henry puts it, Husserl holds that 'temporality is the archi-ek-stasis that constitutes the archi-phenomenality' (20). But here we find an 'aporia', Henry claims (20), which gives us 'the philosophical death of life' (21). Phenomenology is unable to properly isolate the impression because it conforms to the ontological monism of philosophy in which manifestation is exposure in light, that is, intentional object-constitution. So in its analyses of internal time-consciousness, phenomenology will suffer its 'most spectacular, significant, and decisive setback' (22).

Now if there's one thing Husserl's Lectures are known for, it's the focus on primal impression. Henry can then ask 'why doesn't the thesis of impressional consciousness open onto a material phenomenology in the radical sense?' (24). The negative answer can be blamed on the same old villain, intentionality: 'the auto-impression in each impression, which is the reality of absolute subjectivity as the essence of all reality and as the flesh of life, is reduced to a pure ideality in the intentional presentation of the now' (26). To understand Henry's distinction between self-manifestation or self-appearance and self-constitution, we should recall the standard reading (for a résumé, see Zahavi 2003), in which Husserl, echoing Kant, attempts to demonstrate that time consciousness is the most primordial and fundamental of all structures of consciousness. Unlike Kant's search for universal and necessary conditions to which objects must conform, however, Husserl begins his reflection with the concrete ego and through the reductions isolates the transcendental structures of intentionality and time-consciousness that result in the temporal constitution of objects and of the flow of conscious states. In the Lectures

Husserl describes the form of all acts as the 'living present', which has the structure of primal impression-retention-protention. Husserl distinguishes recollection and retention, so that what appears in the concrete living present, including the contents of retention (which is said to be continuous with primal impression) is perceived, while it is this whole living present that is re-presented in recollection. The primal impression of the living present springs up again new, and the whole of perceived time slides along, as the former impressions are retained along with former retentions, which tail off and sink away. Thus we can describe a 'double intentionality' at work in time-consciousness. A 'transverse' intentionality constitutes temporal objects, while a 'longitudinal' intentionality allows time-constitution to appear to itself in a 'primordial consciousness'. In Zahavi's reading, Husserl maintains that constituting subjectivity does indeed appear to itself in internal time-consciousness; it is not the constituted object of another ego, but it is self-constituting thanks to its 'longitudinal' intentionality (Zahavi 2003). The process by which new primal impressions are generated, however, the ultimate level of time-generation, is described by Husserl, bowing to the fear of an infinite regress, as atemporal. About this 'absolute subjectivity', Husserl says, 'all names are lacking', although we do seem able to say something of its paradoxical nature, both mobile and immobile.

Regarding the ever-renewed primal impression and the anonymity of absolute subjectivity, Henry harshly criticizes the 'incoherence and absurdity' (30) of Husserl's phenomenology, its 'failure' (31, 41, 44, 48), its resorting to 'subterfuge' (26), 'ontological mystification' (26), and 'sophisms' (34). The problem is neglecting the self-givenness of impression ('first givenness') in favor of constituted givenness ('second givenness'). Henry writes: 'to this crucial question about the most original phenomenality, which is the phenomenality of constituting as such, Husserl offers no other response than a restatement of the phenomenality of the constituted' (31). In other words, Henry cannot accept that longitudinal intentionality as the self-constitution of subjectivity is adequate to the demands for a self-manifestation of subjectivity. He continues: 'as such, the act of constituting never becomes a phenomenon and the ultimate constitutor thus remains "anonymous". This anonymity epitomizes the phenomenological failure of Husserlian phenomenology' (31). The key failure, in Henry's eyes, is Husserl's positing of retention as internal to the living present (27-28; cf. Zahavi 1999b; 2007). This internality of retention destroys the primacy of impression for Henry, as it does for Derrida. They draw opposite conclusions, however. In contrast to Derrida, who thinks that impression

presupposes retention, Henry insists that retention (which is part of the 'now' or living present) presupposes impression: 'it is the reality of the impression in its original subjective reality—as an *Ur-impression*—that enables the now to exist' (32). Although he acknowledges that Husserl is 'aware of the internal difficulties of his thought' (37), for Henry, Husserl's assumption that manifestation is intentional object-constitution—even (or perhaps especially) when subjectivity is said to be self-constituting via longitudinal intentionality—ultimately ties him to ontological monism and forbids him access to material phenomenology as the focus on the self-manifestation of subjectivity as auto-affectivity.

When he turns to his own positive description of the primal impression, Henry writes that the living present is unchanging Life, a stable form for changing content. 'Like the Euripus Strait, life is changing, but yet through its variations it does not cease to be Life in an absolute sense. It is the same Life, the same experience of the self that does not cease to experience itself, to be absolutely the same, one single and same Self' (38). Life is thus Henry's key term. Its auto-affection is non-ecstatic, pure self-immanence (2). It is self-manifestation without intentional constitution, even self-constitution (3). Now Zahavi (1999b; 2003; 2007) reminds us that in Heidegger's reading of Kant, the structure of auto-affection has been interpreted in terms of time as subjectivity. Zahavi identifies this as the key point, and points us to passages in I Am the Truth where auto-affection is said to be dynamic: 'life, as we know, is a movement, a process' (Henry 2003: 159; cf. Sheets-Johnstone 2007). However, and this is undoubtedly a paradoxical, or at least provocative, formulation, Henry insists that the temporality of life has no ecstases: 'The movement of coming into itself that is never separated from itself is life's own temporality, its radically immanent, inex-static, and pathētik temporality' (Henry 2003: 159). Although these formulations come from Henry's religious philosophy, and so strictly speaking lie outside the scope of this article, we might say that here Henry is trying to come to grips with two demands of his radical phenomenology: (1) he has to take account of the changing content of the primal impression, while (2) insisting on the complete immanence of auto-affection. We feel different things, but the experience of feeling has always the same, completely immanent, structure of auto-affection: our feeling reveals itself in itself, as pure passive givenness. Thus any temporalization of Life can only be an 'eternal movement, an eternal flux in which life continuously experiences itself' (159-60). No doubt much more can be said about this 'Ipseity' of

life, this 'Self that life eternally generates, and which is never separated from itself' (160), but we will have to move on to our third topic, intersubjectivity.

The basic structure of Henry's argument is the same, so we can be brief in our treatment. In Henry's reading of the Cartesian Meditations in his Material Phenomenology, the constituted ego, which is used as the basis for the 'apperceptive transfer' with the alter ego (Henry 2008: 109), misses the 'original' ego self-given in auto-affection (108). Rather than a 'phenomenology of perception applied to the other' (114) we should recognize our 'real experience' of the other is in terms of 'a feeling of presence or absence, solitude, love, hate, resentment, boredom, forgiveness, exaltation, sorrow, joy, or wonder' (104). The problem comes with the famous reduction to the sphere of ownness in Cartesian Mediations 5. Here Henry will oppose the ('true') transcendental Ego with the 'constituted ego' that is the basis for Husserl's analysis (108). Here we see a 'demotion of the original Ego to the rank of a psychophysical ego appearing in an objective form in the world of my sphere of belonging' (110). Now we must be careful to remember that for Henry 'the light of the world' is his term for intentional constitution: the originality of self-manifestation is 'deposed' in the reduction to the sphere of ownness. The elements of the sphere of ownness 'are deposed in the sense that appearing, which is the basis of their being … is their appearing in this first world of ownness' (106). Following the thesis of ontological monism, this 'first world of ownness' is still a world for Henry; it presupposes yet forgets the non-worldly, non-appearing auto-affection of life. As a result of this demotion, 'the worldly ego in the primordial sphere of ownness functions as the pivot of the pairing association with the body of the other' (110). In focusing on the constituted ego, Husserl also enacts a 'demotion of the body' in which 'the body is no longer the radically subjective and immanent "I can" that I am and that is identical to my ego' (110). The key thesis, again, is that constitution is not primary self-manifestation: 'It [the constituted body] is shown in ownness but not in itself' (110; italics in original). The fundamental problem for Henry is that Husserl does not examine the true reason why the other can never be presented, but only appresented. From the fact that 'every subjectivity understood in its original way … escapes from every perceptual presentation' (112) we should not conclude, as do Levinas and Derrida, that the other is too much an other to be presented. Rather, Henry will insist, 'it is not because the alter ego is an alter [that it escapes perception]; it is because the other is an ego that I cannot perceive the other in itself' (112-113; cf. Zahavi 2007). That is because the true ego, the transcendental Ego that is the 'Ipseity' of

transcendental Life, can never 'appear' in the 'light of the world', but only self-manifest in auto-affection.

At this point we can move to consider Derrida's recent work. In one sense, everything Derrida has ever done concerns auto-affection, temporality, and intersubjectivity, so the points of comparison and contrast with Henry will be our focus.

DERRIDA. As Derrida's work on the phenomenology of life as auto-affection, temporality, and intersubjectivity is so well known, we can move quite quickly. We will concentrate on On Touching—Jean-Luc Nancy (Derrida 2005; see Lawlor 2006 for an excellent analysis). In this last of his major works, Derrida uses a reading of Nancy's writings on touching to take us on a tour of the history of philosophy, encompassing extended readings of Aristotle, Maine de Biran, Ravaisson, Husserl, Levinas, Merleau-Ponty and others. As Derrida (curiously? meaningfully?) never mentions Henry in On Touching, we will focus on Derrida's reading of Husserl therein to enable a confrontation with Henry's Material Phenomenology ..

Part II of On Touching is comprised of 5 'exemplary histories' of touch, focusing on how a certain privilege of the human and the hand as sites of auto-affection, which Derrida names, with typical insouciance, 'humanualism' (214). The second chapter of Part II is entitled 'Tangent II'; it treats Husserl's analysis in Ideas II of the two hands touching as a privileged site of auto-affection for Husserl. At stake is the constitution of the 'body proper' [corps propre; Leib]; in Derrida's reading of Husserl, the body 'becomes body proper only through touch' (Derrida 2005: 160; 169). In Husserl's analysis of the auto-affection of the two hands touching, Derrida finds 'a very familiar landscape … freedom, spontaneity, the will of an ego, the Ego-subject as will, its can-will [pouvoir-vouloir], the motor activity of a free, spontaneous, immediate, and so forth, movement' (160).

Now we should note that Derrida agrees with Henry about the centrality of vision in the history of philosophy, but instead of decrying this as leaving behind the truth of life as auto-affection, Derrida disengages a curious relation between vision and touch, the latter supposedly bypassing mediation and allowing auto-affection. Thus we see a certain 'optical intuitionism [that] as paradoxical as this may appear—always and necessarily fulfills itself … in an intuition tactually filled-in and in the hyperbole of continuistic haptocenteredness' (161). Lawlor points to the way any such 'hyperbolic' auto-affection is always contested by Derrida: 'For Derrida, there is

no pure intuition, not even in my own lived-experience. Even in my solipsistic sphere of ownness, there is only ever a <u>Vergegenwärtigung</u> [re-presentation], and therefore some sort of nonpresence and nonbeing' (Lawlor 2006: 16). Thus instead of assuring vital self-presence, the auto-affection of the two hands touching relies on re-presentation; lived experience, the lived body, life itself, is thus never pure for Derrida, so that vital auto-affection plunges us into 'the abyssal problem of life, phenomenology as thinking of the living, transcendentality of the living present, and so forth' (Derrida 2005: 164). Auto-affective life is an 'abyssal problem' for Derrida, whereas for Henry, it is the truth that philosophy should have established for itself.

We are now in a position to recap how Derrida's well-known theses on temporality and intersubjectivity inform his reading of Husserl and provide a contrast with Henry. Derrida shows how in <u>Ideas</u> <u>II</u> Husserl wants to establish that 'the self-relation of touch … acts without empathy or analogical appresentation' (171). This immediacy is what sight is missing; vision lacks the 'possibility of … a double sensation fully intuitive, direct, and synchronous' (171). Thus Husserl would have it that the 'touching-touched pair is grounded in a temporal coincidence meant to give it its intuitive plenitude' (172). This is exactly what Derrida cannot accept; from his earliest work to his latest, he insists on space at the heart of time and exteriority at the heart of the interiority. Thus with regard to the touching-touched experience he writes: 'this detour by way of the foreign outside … is at the same time what allows us to speak of a "double apprehension" (otherwise there would be one thing only: only some touching or only some touched)' (175). Here we can see that Derrida follows Husserl's text past the point where Henry says Husserl fails by not keeping to the immanent auto-affection of life revealed in pure hyletic content prior to intentionality's 'second givenness'. For Henry, of course there is foreignness in the two hands touching; that is exactly why it is a bad model of auto-affection, for it is already entangled in too much transcendence just by being an intentional object. Henry is happy to say there is 'only some touching' without a constituted ego—or better, to emphasize the passivity of auto-affective life, 'only some touched'—but he would insist that this 'some touched' self-manifests in its hyletic content as the auto-affection of life, without and before having a constituted object or a subject. We are thus faced with a difference in levels of analysis between Derrida and Henry. Derrida traces how Husserl isolates the body proper as I vs. not-I in the sphere of ownness. But the I of phenomenology as constituted ego is already transcendent for Henry, when compared to the Ipseity of the auto-affection of life. But Derrida will not admit any access to such full self-

presence prior to intentionality, or at least not any <u>phenomenological</u> access. He thus refuses what Zahavi calls Henry's 'phenomenology of the invisible' (Zahavi 1999b). Thus Derrida writes: 'in the experience termed "solipsistic" of the manual touching-touched … the touching-touched cannot be accessible for an originary, immediate, and full intuition, any more than the alter ego' (176).

Derrida insists that auto-affection for the subject constituted in the sphere of ownness (and ultimately in internal time-consciousness) involves hetero-affection. Derrida renders his question precise: 'I ask whether there is any pure auto-affection of the touching or the touched, and therefore any pure, immediate experience of the purely proper body, the body proper that is living, purely living. Or if, on the contrary, this experience is at least not already haunted, but constitutively haunted, by some hetero-affection related to spacing and then to visible spatiality' (179). With the term 'spacing' Derrida refers back to the analyses of <u>Voice</u> <u>and</u> <u>Phenomenon</u>, where we can find a certain 'economy of exteriority' relating 'spacing' to real space and to the space of vision, even the 'interior' space of intuition (Protevi 1993; 1994). In such economies, there is never purity, only an economy of mixtures, as Derrida makes clear: 'Where Husserl seems to draw a line between, on the one hand, pure auto-affection of the body proper in the "double apprehension" of the touching-touched, and, on the other hand, the hetero-affection of sight or the eye … shouldn't one rather distinguish between several types of auto-hetero-affection without any pure, properly pure, immediate, intuitive, living, and psychical auto-affection at all?' (Derrida 2005: 180). This economy of exteriority 'would presuppose interruption in general, and a <u>spacing</u> from before any distinction between … psychical "spreading out" … and extension of the real [reell] thing' (180). On the basis of this 'spacing' prior to the distinction of inner and outer and ultimately internal to time, Derrida proposes that 'the constitution of the body proper thus described would already presuppose a passage outside and through the other, as well as through absence, death, and mourning' (180).

Here we see an exact chiasm: for Derrida, hetero-affection renders auto-affection possible; Henry would say the exact opposite. The key point on which to focus is that they place auto-affection on different levels, Henry in a basic reality of life, Derrida in phenomenological constitution. We can thus say that while both demonstrate the 'failure' of Husserl's phenomenology to isolate a pure constituted auto-affection, they differ in their next moves. While Henry produces a radical phenomenology of the invisible, Derrida produces a radical

phenomenology of mixture. (Of course, one can question whether these radical 'phenomenologies' deserve the name, but that's a story for another time.) Again, Henry would completely agree that Derrida has demonstrated the failure of Husserl's phenomenology to square the principle of principles of intuitionism with the economy of exteriority revealed in Husserl's text on the supposedly pure auto-affection of the two hands touching (as well as with the 'voice that keeps silent' of <u>Voice</u> <u>and</u> <u>Phenomenon</u>). But Henry thinks he has gone beyond Husserl; he claims to have produced a radical phenomenology, a material rather than intentional phenomenology, a phenomenology of 'invisible' self-manifestation without intentional constitution. It is this radicality of pure self-manifestation that Derrida refuses; if there is to be a phenomenology for Derrida, it is an intentional phenomenology; if there is to be appearance or manifestation, it is on the basis of intentional constitution, so that there is no self-manifestation that is not a self-constitution. Thus any auto-affection is (self-) constituted for Derrida; as (self-) constituted, it implies intentionality; and as intentional, it implies spacing and hetero-affection.

As this is the crucial point, a restatement is in order. The basis for all manifestation for Derrida, following Husserl, is internal time-consciousness, where the living present is self-constituted in longitudinal intentionality. Of course there is no already constituted ego that is the basis for this; it's an ongoing process of auto-affection. But the auto-affection is the process of self-constitution by longitudinal intentionality. That's where Henry objects, since it's still intentional constitution. Henry says that intentionality relies on <u>hyle</u>, that is, on the impression, which for him is not constituted, even self-constituted, but purely given ('first givenness'). Another way to put it: Henry objects to the way longitudinal intentionality puts impression together with retention and protention to form the living present or now. He thinks Husserl should have stayed with the impression by itself. So he agrees with Derrida as to what the <u>Lectures</u> text says (that impression goes together with retention and protention). It's just that Henry thinks that's a mistake, whereas Derrida thinks that it's the moment of truth in Husserl, the moment where his fidelity to description leads him to describe things as they really are, even if that true description eviscerates the principle of all principles of intuitionism by inscribing absence at the heart of presence.

We can conclude by going back to Henry's phrase 'the philosophical death of life' (Henry 2008: 21), where we see very interesting connections with Derrida. For Derrida, life and death are intertwined, so that we have death at the heart of life. Literally, as in the heart transplant,

where technology is put inside the natural body in the logic of the supplement, so that what is denigrated as inferior or posterior (technology), becomes instead the constituting essence of the supposedly superior and prior (nature) (Derrida 2005: 179; cf Lawlor 2006: 29 and Varela 2001). But for Henry, life is a pure self-manifesting essence that philosophy qua theoretical study, i.e., intentional object-constitution, kills. So what he does is not 'philosophy' or 'historical' phenomenology, but radical phenomenology. For Henry, the history of philosophy is ontological monism, which means holding at a distance for vision in the light of the world. For Derrida, however, as we know, the history of philosophy is the metaphysics of presence, that is, the holding close to self in 'haptic' intuition. So for Henry there is a closeness that philosophical distance betrays, while for Derrida, there is a distance that philosophical closeness covers up. Henry thus agrees with Derrida that Husserl's text betrays the way intentionality destroys immanent self-manifestation; he just wants to affirm that immanence. But desire for pure immanence is what Derrida cannot accept. It may be that the ultimate reasons, the reasons 'in the last instance' shall we say, are political: Henry sees the non-natural outside—science and technology—as alienating, as barbarism, as destroying the pure immanence of 'life' that must be preserved from its grasp (Henry 2003). But Derrida sees the desire for pure immanence as tied into the history of injustice, the pure being the good and the impure being the bad that needs correction. The best we can do—the only just thing we can do—is to live in the impurities of our economies of exteriority.

PART II: THE ENGAGEMENT WITH COGNITIVE SCIENCE

HUSSERL. As a transition to our examination of works that use Husserl to engage with problems in cognitive science, let us examine two works on the question of temporality and auto-affection, or, as it is also known, 'pre-reflective self-awareness'. Such a notion of pre-reflective self-awareness, Zahavi explains in two books (1999, 2005), is needed to avoid the infinite regress of 'reflection theory' whereby subjectivity is made the intentional object of yet another subjectivity. So to avoid such a regress, Zahavi 2003 provides a reading of internal time-consciousness in Husserl's Lectures as pre-reflective self-awareness. Zahavi defends Husserl from Henry and Derrida by making two key points relative to our previous discussion. First, he will attempt to demonstrate that self-constitution via longitudinal intentionality is fully self-

manifestation. Thus, contra Henry, there is no deeper layer of auto-affection; contra Derrida, there is no ineradicable absence at the heart of presence because there is no after-effect in which consciousness becomes self-aware only after the delay of retention brings the just-past into the present. Second, Zahavi claims that the structure of the living present, impression-retention-protention, is an 'ecstatic unity'. Thus, contra Henry, primal impression is ecstatic, that is, it has a temporal articulation as opposed to fully in-ecstatic auto-affective Life; contra Derrida, it is a unity, as it is not riven by the alterity supposedly carried by retention.

Sheets-Johnstone 2007 provides a powerful counter-argument to the preceding treatments of auto-affection; for her, auto-affection is not 'ontological' but is founded in feelings of a phenomenologically accessible 'qualitative kinetic dynamic' (370). Sheets-Johnstone begins by criticizing the failure to reference Husserl's concept of kinesthesia (awareness of bodily motion) in the treatment of the two hands touching by Henry, Derrida and Zahavi: 'the omission makes the act—"one hand touching the other"—a wholly pointillist, static phenomenon' (363; 371). Sheets-Johnstone finds a 'transcendental clue' for a way out of this impasse in Husserl's notion of a 'foundational dynamic', that is, the way we are ceaselessly active, even though our activity is based in the passivity of affection (364-65). To get to the truth of the position she advocates— that 'temporality and movement are inextricably linked, and that animation is at the heart of self-affection' (365)—we have to criticize the notion of kinesthetic 'sensation', Sheets-Johnstone claims (367). Rather than the 'temporally punctual and spatially pointillist notion of sensation' (366), we have to remember that kinesthesia occurs in the linkage of sensation and motion (367), a notion we will see reprised in Alva Noë's 'enactive' work (Noë 2004). The problem with Henry's notion of the auto-affection of Life, Sheets-Johnstone feels, is that it is ontological rather than phenomenological; it is 'oddly devoid of experiential moorings' (Sheets-Johnstone 2007: 369), so that 'Henry's ontology is not girded in substantive descriptions of "the feeling of movement," descriptions that would show concretely how subjective movement is not a matter of sensation but of dynamics' (370; italics in original). At the heart of Sheets-Johnstone's philosophy, developed at length in her important book The Primacy of Movement (1999), is the notion of 'animate form'; this is cashed out here in terms of 'movement [that] … creates its own particular temporal quality in the process' (Sheets-Johnstone 2007: 371). This entails that 'we are pre-reflectively aware not of a self but of a qualitatively felt familiar dynamics' (372); thus, for

Sheets-Johnstone, we have thereby de-ontologized or de-reified the implication of 'self' in 'self-affection.

While there is much more that could be said about Sheets-Johnstone's work, especially her interesting reading of emotion and movement—'emotions are dynamically patterned forms contoured by the very shifting bodily tensions, contradictions, rushes, attenuations, spatialities, and rhythms that create them' (379)—but we will have to let this suffice and move on to a consideration of 'neurophenomenology'.

The provocative term 'neurophenomenology' (seemingly designed to elicit opposition from both classical phenomenologists and hard-core cognitive scientists) comes from an article by Francisco Varela (1996). Varela explains that neuroscience works from a 'third-person' perspective, while phenomenology works from a 'first-person perspective'. The 'explanatory gap' then opens up between third-person accounts of conscious experience—which rely on accounts of unconscious neural processes—and first-person accounts. To address the explanatory gap, Varela's neurophenomenology proposes that neuroscience and phenomenology should create a mutually enlightening, reinforcing, and constraining relation. As we would expect, neurophenomenology faces two challenges. A first challenge to neurophenomenology comes from the cognitive sciences, concerning the status of first-person perspectives, which were kicked out of psychology in the 20th century as unreliable 'introspection'. But Varela pointed out that phenomenologists were not just people picked up off the streets; they had undergone years of training to sharpen their ability to report on their experience.[1] Second, Husserl thought phenomenology could never be naturalized; many phenomenologists follow him in discounting the utility of third-person perspectives for phenomenology. In response, Varela, along with the other editors of the essay collection Naturalizing Phenomenology (Petitot et al 1999), tries to overcome such antinaturalism by claiming it stems from Husserl's 'having mistaken certain contingent limitations of the mathematical and material sciences of his time for absolute ones' (42). To naturalize phenomenology, for these thinkers, is to attempt a 'qualitative physics of phenomenological morphologies'; should such a 'pheno-physics' be successful, they claim, it would demonstrate that 'what Husserl called "inexact morphological essences", essences foreign to fundamental classical physics, are indeed amenable to a physical account, provided that we rely upon the qualitative macrophysics of complex systems (and no longer on the microphysics of elementary systems)' (55).

We will return to the use of dynamical systems theory lying behind the notion of a 'qualitative macrophysics of complex systems' when we consider the enactivist school below. But first, let us ask what it is that neurophenomenology does. As Varela's long-time collaborator Evan Thompson (2007) explains, neurophenomenology does not really address the 'hard problem' of consciousness (the relation of mental and physical; see Chalmers 1995). The hard problem is badly formed; it is impossible, because it is based on the insoluble Cartesian mind-body problem. Instead of accepting dualism or trying a reductionism or looking for a mysterious extra element, we need to reformulate the mind-body problem as a 'body-body' problem (lived body vs. living body).[2] The ultimate goal is an integration of first and third person perspectives, that is, an integration of phenomenology and biology (Thompson 2007: 237; cf. Jonas 2000).

Let us now look at an example of neurophenomenology in action. While Zahavi (2003) makes no explicit reference to brain science in his reading of internal time-consciousness in Husserl's Lectures, Varela (1999) reads the 'temporal density' of the living present in terms of neurodynamics. The key to this exemplification of neurophenomenology is therefore Varela's use of dynamical systems theory to bridge the gap between phenomenology and brain science. Thompson 2007 (329-334) provides a very useful overview of Varela 1999. First, Thompson notes that Varela proposes three temporal scales of neurological events. They are the 1/10 scale of fast neural events (10-100 milliseconds), the 1 scale of large-scale integration of distributed brain waves (250-500 milliseconds), and the 10 scale for reporting events using short-term memory (1-3 seconds). Along with his three temporal scales, Varela has three hypotheses:

1. 'For every cognitive act, there is a singular, specific neural assembly that that underlies its emergence and operation'.

2. 'A specific neural assembly is selected through the fast, transient phase-locking of activated neurons belonging to subthreshold, competing neural assemblies'.

3. 'The integration-relaxation processes at the 1 scale are strict correlates of present-time consciousness'.

We need to recall two things at this point. First, Varela is not after the qualia of first-person experience, but its structure, i.e., the temporal 'density' of the living present. Second, we should recall that brain science has been divided between localists and globalists throughout its history. Recently, neurodynamics has assumed the globalist mantle, studying neural events in terms of the large-scale integration of distributed brain waves. A leading concept here for such

integration is 'phase synchrony' (Thompson 2007: 332-333).[3] Putting these two together, we see that the upshot of Varela 1999 is that neuroscience confirms the phenomenological finding of the living present by showing that there is a minimal time within which conscious acts can occur. Now this confirmation is not merely a correlation between two separate realms, but an example of the mutual illumination of neuroscience and phenomenology proposed by 'neurophenomenology'.   As Thompson explains, 'the term strict correlates in Hypothesis 3 is thus misleading because this hypothesis is meant to be causal, nor merely correlative. The aim is to explain how the temporal structure of experience is caused by and realized in the dynamic structure of biological processes' (Thompson 2007: 334). While there are important ontological and epistemological points about 'emergence' to consider in the phrase 'caused by and realized in', we can at least see why Thompson will say that 'cognitive time … arises from an endogenous and self-organizing neurodynamics. According to Varela, this dynamics can be described as having a retentional-protentional structure' (335). In an important preview of what we will discuss in the 'enaction' section below, Thompson reminds us that such cognitive dynamics is not brain-bound, but embedded in a larger system: 'neural assemblies and large-scale integration are thus always embedded in and modulated by particular bodily and environmental contexts' (336).

Let us now move to discuss time and emotion, with a focus on protention. While an extended comparison with Sheets-Johnstone 2007 would prove very interesting, let us concentrate on Varela and Depraz 2005. Once again, Thompson 2007 has a good recap (375-78). To understand the neo-Husserlian / neurophenomenological take on emotion, the distinction of receptivity versus affectivity must be understood. Receptivity is the active orienting to something, and so it is founded on affectivity as being affected by something, as the 'allure' or 'pull' on attention. Affectivity is thus our basic 'openness' to the world. By careful reflection we can see the stages of an emotional episode, which involves the shift from affectivity to receptivity. In his original synthesis, Thompson puts Varela and Depraz 2003 together with Lewis 2000 and 2005 on the neurodynamics of emotion. (See also Colombetti and Thompson 2007 for a nuanced critique of Lewis.) In Thompson's reconstruction, the structure of an emotional episode has five stages: (1) a precipitating event or trigger; (2) the emergence of affective salience, that is, the sense of the event's meaning; (3) a feeling tone, which possesses a pleasant / unpleasant polarity; (4) a motor embodiment; and (5) a visceral-interoceptive embodiment. In sum, 'affective allure amounts to a parameter that at a certain critical threshold

induces a bifurcation from passive affection ('passivity') to an active and motivated orienting ('receptivity') toward something emerging as affectively salient or prominent' (Thompson 2007: 377-78). Thompson concludes that 'valence needs to be understood not as a simple behavioral or affective plus / minus sign, but rather as a complex space of polarities and possible combinations (as in the chemical sense of valence)' (378). (We will address the biological basis for such 'valence' in the discussion of 'sense-making' below in the enaction section.)

In the neo-Husserlian approach, then, consciousness is fundamentally based in our affective openness to the world; one of its aspects is pre-reflective self-awareness; and the body is (at least) our organ of sensibility and action. I say 'at least', for in Sheets-Johnstone's conception, the body is the very the basis of consciousness in its feeling of qualitative kinetic dynamics. As with all our recaps (especially when they are recaps of recaps [!]), we have only indicated the bare outlines of rich and provocative analyses. In the hope that these will entice readers to further exploration, let us move to the next section.

HEIDEGGER. In considering the use of Heidegger to consider questions of cognitive science, Hubert Dreyfus is undoubtedly the historically most important figure here, as he indeed is in the entire relation of phenomenology and cognitive science. In the epochal What Computers Can't Do (which first appeared in 1972), Dreyfus launched a critique of Artificial Intelligence as representational and disembodied, predicting its failure due to its inability to solve, among other issues, the 'frame problem'. The frame problem is ontological and epistemological at the same time. The world is assumed to be made up of discrete facts (states of affairs) that are arranged in arbitrary situations. The states of affairs have no meaning in themselves, so that the meaning is created by the knowing agent. Now computers are representational systems working on a linear input-processing-output model. They are physical symbol systems in which meaningless input is encoded in meaningless representations arranged in a certain syntactic order. Changes to the syntax of meaningless symbols are supposed to generate semantics, so that cognition is this change to the syntax; it is the middle step supposed to generate meaningful output from meaningless input. In computationalist work, which is based in classical computer architecture (i.e., computers with a central processing unit, then, cognition is the rule-bound manipulation of discrete symbols. In connectionism, which arose with advances in neural nets or 'parallel distributed processing' , the network weights (the strength of the connections at any one node)

are supposed to do the representational work, and changes in the network weights precisely *are* the processing, that is, the cognition itself. For both approaches, the frame problem arises when the input changes, and the computer has to update its reading of the situation: to which set of its stored facts does the changed environment now correspond? The system cannot find the right interpretation rule for a changing environment simply by searching through a database of facts and interpretive rules, for it would have to have rules for picking the right rules, and so forth. Thus Dreyfus concludes that changes in syntax cannot generate semantics insofar as they are incapable of choosing the appropriate frame for the interpretation of the input. Dreyfus showed that AI got around the problem by restricting the world of the AI agent. But when they moved from such restricted 'micro-worlds' (clean environments with only a few objects and restricted tasks) to anything approaching a realistically complex world, the frame problem reappeared. The basic problem with AI for Dreyfus is that its proponents failed to see that 'world' is a set of meaningful relations, not a set of meaningless facts. For Dreyfus, then, Heidegger's analysis of world as a set of meaningful relations and Dasein as in-the-(meaningful)-world shows the ultimately Cartesian presuppositions of AI. Far from being purely empirical engineering, AI was instead chock-full of unexamined and problematic philosophical assumptions. If they had read Heidegger, Dreyfus claims, instead of having unconsciously absorbed Descartes, the AI workers would have realized that for human beings, there is no 'frame problem', or better, that solving frame problems is just what we do everyday as massively, fundamentally, interpretive agents.

Michael Wheeler's Reconstructing the Cognitive World (Wheeler 2005) picks up on Dreyfus's pioneering work and proposes that Heidegger is useful not just in defeating Cartesian representational AI but also in illuminating the presuppositions of successful embodied-embedded cognitive science, especially some forms of robotics. Wheeler proposes four key points of this 'third wave' of cognitive science (following classical computationalism and connectionism): (1) 'online' intelligence is primary (online intelligence produces 'a suite of fluid and flexible real-time adaptive responses to incoming sensory stimuli'); (2) such online intelligence 'is generated through complex causal interactions in an extended brain-body-environment system'; (3) the third wave requires 'an increased level of biological sensitivity'; (4) the third wave adopts a dynamical systems perspective (Wheeler 2005: 11-14). But while the most radical of the dynamical systems proponents, such as the enactive school we examine below—and, in a late turn, Dreyfus himself, as we will soon see—think themselves able to

dispense with representations entirely, Wheeler will defend a notion of 'action-oriented representations' at work even in on-line intelligence. (No one denies human beings are capable of 'off-line' representations: we can do logic, after all. The controversy is whether representations are used in everyday 'smooth coping' as Dreyfus calls it.) In Wheeler's account, action-oriented representations, echoing Andy Clark (Clark 1997), are 'poised between mirroring and control' (Wheeler 2005: 197). Thus they mirror the world, but in an 'ego-centric', 'situation-specific' and 'transient' manner dedicated to the action of the agent (197), not to what one might call the true or accurate picturing of an independent world. The world is mirrored in action-oriented representations, Wheeler says, but 'the world … is itself encoded in terms of possibilities for action' (197; italics in original). (Here one would have expected Wheeler to turn to J. J. Gibson's notion of 'affordances', as have many others, but Wheeler keeps his distance [301n9]; another avenue for interesting connections might have been with Bergson's idea in *Matter and Memory* of perception as virtual action, but we can't fault Wheeler for keeping his focus on Heidegger!).

It is precisely on the notion of action-oriented representations that Dreyfus criticizes Wheeler in his review of the latter's book (Dreyfus 2007). Supplementing his Heideggerian and Merleau-Pontian base with dynamical systems theory (in the form of Walter J. Freeman's work in neurodynamics [Freeman 2000]), Dreyfus upholds a strong anti-representationalist position on the basis of an ultimately ontological argument. Criticizing Wheeler's adherence both to action-oriented representations and to the 'extended mind thesis' (that cognitive processes can be said to include extra-somatic ingredients, such as notebooks and computers), Dreyfus writes: 'Heidegger's crucial insight is that being-in-the-world is more basic than thinking and solving problems; it is not representational at all. That is, when we are coping at our best, we are drawn in by solicitations and respond directly to them, so that the distinction between us and our equipment vanishes' (Dreyfus 2007: 254). He continues, striking at the heart of the extended mind thesis: 'Heidegger's and Merleau-Ponty's understanding of embedded-embodied coping, therefore, is not that the mind is sometimes extended into the world but rather that, in our most basic way of being—i.e., as skillful copers—we are not minds at all but one with the world' (254-55; italics in original).

For the most part, then, in Dreyfus's appropriation of Heidegger and Merleau-Ponty, consciousness is interpretation not representation, and the body is not the processor of representational information, but the site of interpretive skills enabling our everyday 'smooth

coping'. Once again, we cannot follow all the details of these issues here. But we can use Dreyfus's late turn to dynamical systems theory as our bridge to the enaction school.

ENACTION. The founding work in this school of thought is The Embodied Mind (Varela, Thompson and Rosch 1991); a major reformulation, updating, and extension is Evan Thompson's Mind in Life (2007). For the enactivists, cognition is the direction of an organism's action. Enaction thus harkens back to Varela's work with Humberto Maturana on 'autonomous systems', that is, those systems that have sufficient internal complexity and feedback so that 'coupling' with their environment 'triggers' internally-directed action. This means that only those environmental differences capable of being sensed and made sense of by an autonomous system can be said to exist for that system, can be said to make up the world of that system (Maturana and Varela 1980: 119). In the terms Varela later developed, then, such a world is not represented but 'enacted'. The positing of a causal relation between external and internal events is only possible from the perspective of an 'observer', a system that itself must be capable of sensing and making sense of such events in its environment (81). While Maturana thought it possible to extend the notion of autopoiesis beyond the cellular level (an extension picked up by Niklas Luhmann for his sociology), Varela thought it best to speak only of autonomous systems rather than autopoiesis once past the cellular level. Now as we have seen, the basic notion in Varela's version of neurophenomenology is to use dynamic systems theory at both the neural and the (phenomenological) organism level. For Varela, nervous system activity is a dynamic system with massive internal feedback phenomena, thus constituting an 'autonomous system' whose action 'enacts' a world. But 'autonomy' in this sense does not indicate some realist notion of 'independence'; after all, organisms are not just nervous systems! An organism arises as a 'meshwork of selfless selves' when the 'autonomous' nervous system works together with the immune system (itself an 'autonomous' system with cognitive properties), digestive system, endocrine system, and so on (Varela 1991). In other words, the organism is emergent for Varela; it arises from, and mutually constrains, its component systems. But even at the brain level, we find a certain form of emergence: neural firing patterns, blending sensory input with internal system messages, emerge from a chaotic background in which subliminal patterns 'compete' with each other for dominance. Once it has emerged victorious from this chaotic competition and established itself, what Varela 1995 calls a 'resonant cell assembly' (RCA) forms a determinate

pattern of brain activity. Over time, the repetition of a number of such patterns provides a virtually available response repertoire for the system.

The enactivist notion of a complex organism emergent from the interplay of multiple autonomous systems helps explain why they insist on positing a biological basis of the judgments 'good' and 'bad'. This value polarity is grounded in basic organic capacities for affective cognition. Witness the single-celled organism's ability to make sense. 'Sense' has, perhaps fittingly, a three-fold sense: sensibility, signification, and direction.[4] A single-celled organism can sense food gradients (it possesses sensibility as openness to the environment), can make sense of this difference in terms of its own needs (it can establish the signification 'good' or 'bad'), and can turn itself in the right sense for addressing its needs (it orients itself in the right direction of movement). Varela 1991 points to what he calls the 'surplus of signification' opened by the sense-making of the bacterium: 'There is no food significance in sucrose except when a bacterium swims upgradient' (87). This fundamental biological property of sense-making or affective cognition is one reason why the Cartesian distinction of mental and material has no purchase in the enactive approach. There is no 'mental' property (in the sense of full-blown reflective consciousness) attributable to the single-celled organism, but since there is spontaneous and autonomous sense-making, there is no purely 'material' realm either. Affective cognition in humans is simply a development of this basic biological capacity of sense-making. Jonas 2000 notes that 'the organic even in its lowest forms prefigures mind, and … mind even on its highest reaches remains part of the organic' (1). Thompson 2007 thus harkens back to Jonas in upholding the 'strong continuity' thesis of life and cognition.[5]

For the enactivists, then, sense-making is a biological capacity inherent in living bodies, but it seems too much of a stretch to link the sense-making of basic organisms with the consciousness qua sentience or pre-reflective self-awareness that a lived body enjoys (or 'suffers' as Henry would have it!) (Thompson 2007: 161-62).

With this background in the basic concepts of the enactive approach, we can now turn to Alva Noë's notion of the virtual content of perception (Noë 2004). Noë posits a differential relation between movement and perception so that the content of perceptual experience is 'virtual'. Thus some content is 'present as available' (66-67). In other words, you experience an object as something whose appearance would vary in precise ways as you move in relation to it (117). This means that some perceptual detail is present as accessible; furthermore, 'experiential

presence is virtual <u>all</u> <u>the</u> <u>way</u> <u>in</u>. Experience is fractal and dense' (216). Noë continues in this vein: 'Qualities are available in experience as possibilities, as potentialities, but not as completed givens. Experience is a dynamic process of navigating the pathways of these possibilities. Experience depends on the skills needed to make one's way' (217). The ground of perceptual experience is embodied sensorimotor skills; because of this embodied ground, 'what we experience outstrips what is represented in consciousness' (217). Borrowing Gibson's term, Noë claims that objects in the world are perceived as 'affordances': 'to perceive is (among other things) to learn how the environment structures one's possibilities for movement and so it is, thereby, to experience possibilities of movement and action afforded by the environment' (105). As I hope this brief sketch shows, Noë's work offers very interesting possibilities for crossing the 'analytic-continental divide', as the 'virtual' connection of perception and movement suggests possible articulations with Bergson (Robbins 2006), with Husserl and Merleau-Ponty (Sheets-Johnstone 2007) and with Deleuze and Whitehead (Massumi 2002).

We can now move to the conclusion of our review with a look at Shaun Gallagher's <u>How the</u> <u>Body</u> <u>Shapes</u> <u>the</u> <u>Mind</u> (2005), which is a noteworthy achievement in several respects germane to our purposes here. First, we can note how Gallagher distinguishes the body schema as 'a system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring' from the body image as 'a system of perceptions, attitudes, and beliefs pertaining to one's own body' (Gallagher 2005: 24). This distinction enables him intervene in debates in child development. Against the notion that the infant is a pure 'blooming, buzzing confusion' with no way to register somatic boundaries, Gallagher, relying on Meltzoff and Moore's (1977) classic work on neonatal imitation, proposes that the infant has 'innate' body schema enabling self-other differentiation. For neonates to be able to imitate, they must have some 'primitive' body schema and 'some degree of proprioceptive performative awareness' (Gallagher 2005: 74). Together these work with an 'intermodal' neural system so that 'proprioception and vision are already in communication'; this enables infants to 'translate' visual information about the other's body into awareness of the analogous body parts of its own body (75). Gallagher goes on to propose 'mirror neurons' as part of the neural base for neonate imitation (77). With this notion of 'mirror neurons' we can move to our last topic, empathy, which ties together consciousness, the body, and intersubjectivity.

After many years of comparative neglect following intense scrutiny in the early phenomenological movement, empathy has gotten a good bit of attention lately (see Steuber 2006 for a survey of both historical and contemporary work). The most basic component of empathy is what is known as 'emotional contagion' or a shared affective state: that is, you feel what another person is feeling. We will refer to this as 'proto-empathic identification'. In recent philosophy, empathy is involved in the controversies surrounding 'Theory of Mind', that is, our ability to attribute mental states to others. As explanations for the widely-shared capacity for empathy, we first find simulation theory, which in its most rigorous formulation posits the idea that perception of others triggers a separate internal modeling that enables the attribution of affective cognitive states to them (Ratcliffe 2007). Simulation theories are thus a 'first-person' standpoint; the discovery of human 'mirror neurons' (which fire when we observe a goal-oriented action) gave a great boost to simulation theory (Gallese and Goldman 1998). The most current scholarship (Decety and Lamm 2006) here does not rely on action-oriented mirror neurons (as Gallese thought in his 'shared manifold' article of 2001), but on what Gallese, Keysers, and Rizzolatti 2004 call 'viscero-motor centers'. An important set of confirmation findings are those of Singer et al. 2004, in which 'empathy for pain' is correlated with increased activity of the anterior insula and the anterior cingulate cortex, which map the viscera.

A second approach to empathy comes from phenomenological accounts, which find the simulation theory approach still too representational and appeal to a field of directly felt corporeal expressivity or 'primary embodied intersubjectivity' grounding our 'pragmatic interaction' with others (Gallagher 2005: 223; see also Thompson 2001 and Ratcliffe 2007). These phenomenological accounts are thus a 'second-person' standpoint, as opposed to the first-person simulationists and the third-person 'Theory Theory' proponents (in 'Theory Theory', the perception of others leads to inferences as to the affective cognitive states to be attributed to them). For Gallagher, simulation theories align with fully cognitive 'Theory Theory' inferences as special cases 'unable to capture the full range of second-person interactions' (Gallagher 2005: 224). Empathy for the second-person phenomenologists is grounded in a primary corporeal intersubjectivity in which body expressions of the other are immediately felt as meaningful: 'in most intersubjective situations we have a direct understanding of another person's intentions because their intentions are explicitly expressed in their embodied actions, and mirrored in our own capabilities for action' (224).

Let us end with a brief consideration of the political consequences of the new research on empathy. First, and most importantly, we can say that the right wing view of human nature is false in so far as it focuses exclusively on the individualist / competitive content of human nature, whether that comes in the mode of the rueful paleo-conservative acknowledgment of the fallen nature of mankind or the neo-liberal celebration of competitive entrepreneurship (the domestic face of the neo-conservative equation of 'freedom' with capital mobility). In the face of all this, we have to find the courage to insist that human nature is equally, nay predominately, prosocial. Now of course there are sociopaths. But this only defeats the claim that human nature includes a wide-spread prosocial tendency if you have an essentialist view of 'nature': as if in identifying human nature we were isolating a finite set of necessary and sufficient characteristics for belonging to the human species and claiming that prosociality belongs on that list. So the counter-example of sociopaths would defeat such a claim—if it were advanced in an essentialist manner. But we have to see 'nature' as statistical, as the dominant cluster of the distribution of traits in a population, as we are taught by Darwin and population thinking. We might even think of nature as that which occurs 'for the most part', as Aristotle puts it (Physics 2.8.198b35), if we can remove the teleology and just retain the truth of the observation: at any one time, species traits clump together.

We have to insist on the following: the prosocial character of human nature is revealed by the widespread capacity for proto-empathic identification. Based in mother-child primate relations, proto-empathic identification has been extended in human evolution to kin and then to in-group and finally to all other humans, and, often, to other animals. We see here an occasion for the rehabilitation of the theory of moral sentiments proposed by Adam Smith and David Hume (de Waal 2006), not to mention the need to recognize the role of cooperation in evolution (Kropotkin 2007; Gould 1988). The primate basis of prosociality, Frans de Waal argues, is extended to include a sense of fairness, reciprocity, and harmonizing: 'In stressing kindness, our moral systems are enforcing what is already part of our heritage. They are not turning human behavior around, only underlining preexisting capacities' (de Waal 2006: 181). The challenge we face is to extend the range of prosocial impulses from the in-group, protect them from the negative emotions of rage and fear, and build on them to genuine altruism, that is, acting for the sake of the other, not just feeling what the other feels (Joyce 2007). All this is not to deny the selfish nature of the basic emotions of rage and fear. The key to a progressive politics of human

nature is studying how such selfish, negative emotions are manipulated, or, more positively, how a social order is constructed to minimize them and to maximize positive affects (Singer 1999; Gatens and Lloyd 1999).

So in the recent work on empathy, we see a final take on consciousness and the body. Consciousness must be seen in its affective (open and emotional) mode, not simply as the site of cool and calculating cognition, and the body cannot be seen merely as the source of behaviors which form the sensory input for our simulations or inferences of the inner mental life of others, but is the site in which shared emotion or 'proto-empathic identification' enables a recognition of our widely-distributed prosocial nature.

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NOTES

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[1] Varela also thought people who had undergone meditation training would be excellent subjects for reliable and accurate first-person reports. He brought together Tibetan Buddhist monks into contact with neuroscientists in the 'Mind and Life' group. Following this line of thought, Depraz, Varela and Vermersch 2003 look to the development of introspection as an embodied skill.

[2] Thompson's body-body problem (lived body vs living body) is not equivalent to *Leib* vs *Körper*, since the latter is the merely physical body. Thompson's body-body problem is not the confrontation of the lived body and the physical body, but the lived body and the living body, or the confrontation of first-person experience and third-person biology. We should recall, however, that for Thompson, following Varela and the theory of autopoiesis / autonomous systems, third-person biology indicates that self-hood, or at least interiority and sense-making, go all the way down to single celled organisms. So there's a tenuous sort of 'first-person perspective' in living bodies.

[3] 'Phase' is the relation of two waves, such that if any one chosen point of the waves occurs at the same time, the two waves are in phase, even if their amplitudes (the size of a wave from mid-point to top) differ. On the other hand, they can have the same frequency (the number of any one chosen point per period of time), but if their chosen points occur at different times, they are out of phase. Thus having same frequency is a necessary but not sufficient condition for being in phase, while amplitude is irrelevant.

[4] There is an archaic sense of the English word 'sense' meaning 'direction', as in 'the sense of the river'. This sense is still present in French, as in, among other uses, the expression sens unique for 'one-way street' (Protevi 1994 and 1998).

[5] For a precise statement of the strong continuity thesis, which poses the difference between a Cartesian and Aristotelian notion of consciousness, as well as making an exciting appeal to the notion of self-organization in dynamical system theory, see Wheeler 1997.