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Ontogenetic Perspectives on Affectivity with an Enactive Approach

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To Jankó

My masterly friend and friendly master,
who has been a constant source of motivation
for me ever since our childhood.

Abstract

Cognitive science, until recently, has neglected affectivity and subjectivity which is partly due to dualistic conceptions of the cognizing subject. The present work aims to further expand the scope of the mind sciences with a phenomenological treatment of affectivity. More specifically, it discusses Daniel Stern's notion of vitality affects (1985), employing an interdisciplinary approach with an emphasis on ontogenetic perspectives.

Formulating a critique on the current stance of embodied views, it is argued that they presuppose a dualist ontology, hence the "embodied" notion of affectivity lacks phenomenological depth and accuracy. Instead, the enactive approach is advocated that puts affectivity on central stage in explaining the "deep continuity of life and mind" (Thompson 2007 p. ix). Following Thompson and Sheets-Johnstone (2011b), I ground the concept of the body in the life–mind continuum, then following Aristotle and Colombetti (2014), I ground affectivity in the body–life–world continuum.

Stern's model of the early organisation of the self helps to gain a more refined understanding of the developmental and clinical aspects of those cultural splits between body and mind that appear as a result of the Cartesian dualism. Along this developmental model focusing on vitality affects, two major ontogenetic events are identified in the infant's experience which I call *body-mind splits* – where an objectification of the self occurs. Describing the phenomenological nature of the splits, Ratcliffe's & Colombetti's taxonomy of bodily feelings is adopted (2012). In identifying the splits in the infants' experience, I connect Stern's theory with phenomenology (Husserl 1960; Merleau-Ponty 2010b; Vermes 2006), psychoanalytic views (Lacan 2001), and enactivism (Thompson 2007).

My hope is that this thesis is a step towards a mutually informed discussion on the fundamental role of vitality affects in intersubjectivity between enactive cognitive science, phenomenology, affective science, as well as developmental psychology. This step expectantly helps gaining a deeper understanding on the nature and genesis of various splits between body and mind, which can consequently facilitate the success of somatic psychotherapies.

Keywords – affectivity, body-mind split, enactivism, intersubjectivity, phenomenology.

Übersetzung

Die Kognitionswissenschaften haben in ihren bisherigen Bemühungen Affektivität und Subjektivität zum größten Teil vernachlässigt. Dies lässt sich u.a. darauf zurückführen, dass von einem kognitiven Subjekt ausgegangen wird, das von dualistischer Natur ist. Die vorliegende Arbeit versucht die wissenschaftlichen Ansätze über das Bewusstsein um eine phänomenologische Auseinandersetzung mit Affektivität zu erweitern. Im Zentrum steht hierbei Daniel Sterns Konzept der 'Vitalitätsaffekte' (1985), das mittels eines interdisziplinären Diskurs aus enaktivistischer und ontogenetischer Perspektive beleuchtet wird.

Zunächst zeige ich, dass der derzeitige embodiment-Diskurs von einer dualistischen Ontologie ausgeht, was kritischerweise dazu führt, dass in den Konzeptionen von Affektivität, die von embodiment ausgehen, phänomenologische Tiefe und Genauigkeit fehlen. Im Gegensatz dazu, stehen enaktivistische Ansätze, für die, zur Erklärung einer „tiefen Kontinuität von Leben und Geist", Affektivität als zentral gilt. Ausgehend von Thompson (2007) und Sheets-Johnstone (2011b), verankere ich das Konzept des Körpers in das Kontinuum von Leben und Geist; um dann mit Aristoteles und Colombetti (2014) Affektivität in ein Kontinuum von Körper-Leben-Welt einzuordnen.

Mit Sterns Konzept zur frühen Organisation des Selbst wird ein differenziertes Verständnis der Entwicklungs- und klinischen Aspekte kultureller Spaltung zwischen Körper und Geist möglich, die als Folge des Cartesianischen Dualismus entstehen. Eine genauere Betrachtung von Vitalitätseffekten, im Rahmen von Sterns Entwicklungskonzept, führt mich zu der Identifikation von zwei ontogenetische Ereignissen im Säuglingsalter, in denen es zu einer Objektivierung des Selbsts kommt – diese nenne ich Körper-Geist Spaltungen. Für eine phänomenologische Beschreibung der Natur dieser Spaltungen berufe ich mich auf Ratcliffe's & Colombetti's Taxonomie der körperlichen Gefühle (2012). Indem ich die Spaltungen in den Erfahrungen der Kinder identifiziere, verbinde ich Sterns Theorie mit Phänomenologie (Husserl 1960; Merleau-Ponty 2010; Vermes 2006), psychoanalytischen Einblicken (Lacan 2001) und Enaktivismus (Thompson 2007).

Mit dieser Arbeit erhoffe ich mir einen Schritt in Richtung eines beidseitig informierten Austauschs über die fundamentale Rolle von Affektivität und Subjektivität zwischen den enaktivistischen Kognitionswissenschaften, Phänomenologie und auch der Entwicklungs-Psychologie. Es ist zu erwarten, dass ein solcher Diskurs sich in der Forschung und dem Verständnis über die Natur und Entwicklung von Spaltungen zwischen Geist und Körper als fruchtbar erweisen würde und somit langfristig zu einem Erfolg von Bewegungs- und Psychotherapien beitragen kann.

Contents

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Phenomenology regards affects as encompassing phenomena that connect body, self, and world.

Thomas Fuchs

INTRODUCTION

Cartesian views, which radically split body and mind, have penetrated our day-to-day lives (Sheets-Johnstone 2009). However, if we look at our everyday human experience with a phenomenological attitude, we find that the 'true subject' is not only the 'thinking Ego', but a body-subject (Merleau-Ponty 2002). The aim of this study is to understand how this body-subject develops in infants, to study the ontogenesis of a sense of self that encompasses an experience of the split between body and mind – along Daniel Stern's central concept of vitality affects (1985). His model of the early organisation of the self helps us to gain a more refined understanding of the developmental and clinical aspects of the cultural split that appears as a result of the Cartesian dualism.

Although the importance of the question of how culture and the sense of self influence one another cannot be overestimated, the present work will not elaborate on it, as it would open up the far-reaching fields of constructionism, deconstructionism, and feminist philosophies (Butler 1993; Foucault 2012), which would point way beyond the scope if this essay.

Despite Stern's groundbreaking work on intersubjectivity and affectivity, there is surprisingly little attention payed in phenomenology and the mind sciences towards his work on vitality affects. There is only one remarkable exception, the works of Katalin Vermes (Vermes 2000, 2006, 2011). Vermes integrates phenomenology and psychoanalysis with Stern's model of the early organisation of the self in general and with vitality affects in particular in a highly sophisticated and comprehensive manner.

The present work wishes to continue this vein of research by Vermes and elaborate it further with adding new viewpoints to the discussion from embodied cognitive science (Stapleton

2011; Varela, Thompson, & Rosh 1991), enactivism (Colombetti 2014b; Thompson 2007). a critical phenomenological analysis (Fuchs 2013; Husserl 1960, 2001; Merleau-Ponty 2010b; Ratcliffe 2019; Sheets-Johnstone 2009, 2011b; Simms 1993).

Daniel Stern has brought together the fields of developmental psychology and psychoanalysis to develop his theory of how infants experience their world (Stern 1985). The affective aspect of the infants' hypothesised experience is central to Stern, particularly his notion of *vitality affects*. By the writing of his book *The Interpersonal World of an Infant* in 1985, Stern clearly had not read authors either from the phenomenological tradition or from cognitive science. Yet, arguably, he has deep and worthy phenomenological insights regarding, among other things, the genesis of intersubjectivity (Simms 1993). Looking at the other end of the spectrum of literature that we aim to cover, Evan Thomson writes in 2007: "Cognitive science has focused on cognition while neglecting emotion, affect, and motivation [...]. In addition, a complete science of the mind needs to account for subjectivity and consciousness" (Thompson 2007, p. 3). Indeed, affect has hardly ever been discussed in paradigms of cognitive science prior to the trend of enactivism and embodiment. The situation, however, has changed since 2007 – a growing number of works have been published on affectivity within the field of cognitive science since then (Colombetti 2014; Slaby 2008; Stapleton 2011). Yet, a lack of communication between phenomenologically influenced cognitive science and developmental psychology is still apparent which goes hand in hand with a lack of recognition of the fundamental importance of affectivity in animate life within the wider cognitive science community (see on this matter: Sheets-Johnstone 2011). The current essay aims to take a step towards a mutually informed discussion on the role of affectivity in subjectivity amongst developmental and analytical psychology, phenomenology, embodied and enactive cognitive science, and philosophy of mind. Such a discourse can lead to a deeper understanding on the nature and genesis of various splits between body and mind.

1. A preliminary introduction to vitality affects

With the term vitality affects Stern describes a rather particular and, more importantly, fundamental aspect of experience that can be found in a deeply primordial layer in the self, both in terms of its ontogenesis and in terms of its developed structure in adults (Stern 1985). This is precisely why part of the inherent nature of vitality affects includes the fact that describing them often proves to be difficult since we are not used to verbalise this deep layer

of experience. In fact, it is the case even more so when it comes to giving a short definition of this concept, especially to readers who are used to scientifically rigorous, brief, and eloquent definitions. Moreover, Stern himself changed the way in which he used the term over the years. Køppe and his colleagues identified three main periods in Stern's writings with regard to his conceptual development on vitality affects, covering over twenty years of publications (Køppe, Harder, & Væver 2008). However, what presently important is that the current essay focuses mostly on his first conceptual period, more specifically, on the notion of vitality affects as it is put forward in his book, *The Interpersonal World of The Infant: A View from Psychoanalysis and Developmental Psychology*, published in 1985. The reason for this choice is threefold: first, a comparative overview has already been done on how Stern's understanding of vitality affects was developing in the aforementioned study by Køppe et al. Second, the grand theme of this book of 1985 in which vitality affects as a concept is embedded proves to be the most fruitful approach for the purpose of the present essay for the following reason. In that book, vitality affects are introduced in a way that is deeply intertwined with a developmental theory of the infant's self organisation which instantly allows us to turn to the burden of the present essay, namely, to scrutinize the role of vitality affects in the ontogenesis of the infant's subjective life. Third, the current writing is more concerned with how the concept of vitality affects is related to views in other disciplines rather than with looking at how Stern's thoughts themselves progressed over the years. Admittedly, it would be relevant to extend the comparative multidisciplinary approach, which characterizes the present work, to Stern's entire lifework, but, alas, it would exceed the scope of the essay.

Stern employed a rather revolutionary approach in *The Interpersonal World of The Infant* when he combined the findings of third-person observational data in developmental psychology with first-person accounts in psychoanalysis, namely, self-reports by adults on their memories of how it felt like to be an infant. In other words, he was tackling the central issue of infant's experience – how their subjective world is constituted – from these two directions. Arguably, the task that Stern set himself is at bare minimum one of the most difficult problems in psychology, and in mind sciences in general, if not simply impossible to solve. It is sufficiently problematic to account for subjective experience in adults – as the endless history of unremittingly heated debates on this topic in philosophy of mind clearly shows. Yet, one might reassuringly say that at least adults have language with which they can verbally report their inner states. However, infants do not even have language to communicate with, which seemingly makes their subjective experience somehow even more inaccessible for others. In other words, it makes the problem of subjectivity in infants appear even more impossible to

bride. Therefore, as Stern argues, neither approach alone is sufficient to account for subjectivity. On the one hand, while the observational developmental approach provides real-time and ideally ecologically valid data, yet the issue with it is precisely that it describes only the overt behaviour of infants, not their inner experience. Consequently, one needs to take an "inferential leap", as Stern calls it, from the observed third-person behaviour to the inferred first-person experience. On the other hand, although psychoanalytic reports are indeed first-person data, one needs to take an inferential leap from the verbalized memories of experience to again the infant's actual experience by employing psychoanalytic theories around the phenomena of remembering, verbalizing, self, and so on. Combining these two approaches, including the nature of the different inferential leaps each involves, Stern develops a *working hypothesis* as to how the infant's subjective, interpersonal world might look like.

It is this context in which Stern discovers an aspect, a layer of experience that has not been identified on its own right in either developmental psychology literature, or psychoanalytic literature – as a matter of fact, nowhere else – that he coins *vitality affects*. Sterns defines vitality affects as distinct from the classical Darwinian categorical affects – such as sadness, anger, or joy – in a sense that vitality affects capture an ever present, underlying layer of experience, focusing on the temporal, dynamic aspects of feeling qualities in an amodal fashion. Even when they are only in the background of experience, they ultimately shape the way, the essential structure in which the world is brought forth for us. They are indeed always present regardless whether or not categorical affects are present in the experience. Vitality affects capture how experience or feelings unfold over time, what temporal contour they have. They can be better described in dynamic, kinetic terms, ones that are usually used for descriptions of music or movement, such as "crescendo", "fading away", "rush", "staccato", "explosive", "fleeting", "hesitating", and so on. (Stern 1985 p. 54)

Stern likens the expressiveness of vitality affects to that of a puppet to show. Since puppets do not have facial expressions to express categorical affects, their feelings are expressed in the way they are moved. The viewer can only infer the puppets' feelings, inner states, from the way they move, more precisely, the temporal contour of the movements as they unfold in time, in other words, from their vitality affects. Stern goes on to say that abstract dance and music are also great examples where the expressive power of vitality affects are predominantly used. In such performances, the audience cannot see or hear feelings in a categorical way, only a number of differing vitality affects. In fact, Stern claims that unlike adults, infants initially far more likely perceive the world in terms of vitality affects in an amodal fashion – i.e. in qualities like shape, warmth, intensity, brightness, pleasure – rather than in terms of overt, distinct acts

as such, in categorical forms. In this sense, adults can get close to the experience of how the world opens up for an infant when watching a contemporary dance performance: the specific content of the feelings the dancers express is not so important, not categorical. Instead, the importance lies in *how* the feelings are expressed by the quality and dynamics of movements.[1]

A central difference between vitality and categorical affects as pointed out by Stern is that vitality affects can be neither explained by nor "subsumed under the all-purpose, unswerving dimension of level of activation or arousal" (ibid. p. 57) as he pungently puts it. Activation and arousal are dimensions without temporal dynamics, yet we experience them as "dynamic shift or patterned changes in ourselves" on the level of feelings (ibid.). This new category of feeling quality, in which a temporal dimension is added to the level of activation and arousal, these amodal temporal activation contours are the vitality affects. Notably, they are fundamental entities of experience in their own right.

A detour around vitality

The reason for the choice of the term 'vitality', Stern argues, is that "philosopher Suzanne Langer insisted that in any experience-near psychology, close attention must be paid to the many "forms of feeling" inextricably involved with all the vital processes of life, such as breathing, getting hungry, eliminating, falling asleep and emerging out of sleep, or feeling the coming and going of emotions and thoughts." (ibid. p. 54) Vitality affects "correspond to the momentary changes in feeling states involved in the organic processes of being alive." (ibid. p. 156)

However, a little historically inclined detour is needed discussing the term 'vitality" in Stern's writing. Alas, Stern fails to explain the choice of the term 'vitality' from an intellectual

[1] Stern's book made in fact an unforeseen impact: it has become the bible for dance and movement therapists, for it has laid down the foundational conceptual framework for their work (Vermes 2011). Stern himself admitted in the now famous new introduction to the first paperback edition of *The Interpersonal World of an Infant* of 2000 that he had not anticipated such a turn of events at the time of the writing of the book in 1985. He writes "One consequence of the book's application of a narrative perspective to the non-verbal has been the discovery of a language useful to many psychotherapies that rely on the non-verbal. I am thinking particularly of dance, music, body, and movement therapies, as well as existential psychotherapies. This observation came as a pleasant surprise to me since I did not originally have such therapists in mind; my thinking has been enriched by coming to know them better." (Stern 2000 p. xv)

historical point of view, provided its morphological similarity with the outdated, yet historically important view of vitalism. One cannot help but recall the vitalist terminologies when encountering first time with the notion 'vitality affects'. This very lack of intellectual historical clarification, or better, the lack of grounding the terminology in the intellectual history becomes even more troublesome given that what Stern mainly utilizes the term for is precisely to account for the subjective quality of human movement – be it "more bodily" or "more mental" movement. In other words, the lived quality of movement that by definition is embedded in vitality affects as a prerequisite, distinguishes from the movement of a stone. The idea put forward this way might get all too close to the idea of *élan vital*. To discuss an example where this intellectual historical grounding regarding the "vital" aspect of movement has been impeccably elaborated both explicitly and in terms of the used terminologies, one has to read Sheet-Johnstone's works. She – following Husserl and in fact Aristotle – writes in several places about *animate beings* and elaborates the phenomenological distinction between *movement* and *object in motion* (Sheets-Johnstone 1979; 2011 Chapters 3, 5, 8; 2012). Object in motion is a third-person description of an object moving from point A to point B, which is not be confused with movement that has a qualitative, phenomenological character, a sensory-kinaesthetic experience as she puts it. Notably, Sheets-Johnstone argues that all animate forms, including us, human beings, are fundamentally grounded in sensory-kinaesthetic experience.

> If we pursued a study of that common wordless ground [i.e. the common way in which we learn to move ourselves as infants], we might find a relationship between our wordless *kinetic beginnings* and our later wordless celebrations of movement, as at the Olympic Games, a relationship we could readily spell out in terms of *the sheer experience of aliveness, the sheer nonverbal kinetic experience of ourselves and others as animate forms*. (Sheets-Johnstone 2011 p. 195, my italics).

The notions of 'animate' and 'vital' are used with similar meanings and they both play comparably fundamental phenomenological roles. Only the term animate is historically well grounded, whereas the term 'vital' is not, hence the latter recalls historical ideas that presumably were not necessarily amongst Stern's intentions when he invented the term vitality affects.

After this brief detour, the focus can now come back to laying down the foundations of the main argument. The following question arises. Why is the choice to scrutinize the formation of body-mind splits with the help of vitality affects? Thinking in terms of vitality affects when

analysing the felt quality of experience has the huge benefit that this concept falls outside the body-mind dichotomy. One can experience “rush” in several situations: a rush of anger, a rush of thoughts, a rush of hunger, a rush in writing, a rush of desire, or a rush in walking. From a Cartesian perspective, in these examples, “rush” has qualitatively different contents, in fact, ontologically different contents: some are more bodily, some have to do more with the cogito. Yet, all these examples potentially can be captured by the same vitality affects. Therefore, this notion serves as a bridge between body and mind. This is precisely what makes the phenomenological treatment of vitality affects an appropriate approach to examine the forming splits in experience between body and mind, for it does not fall in that very dualist framework.

If they breathe, they live. If they live, they think.
If they think, they feel. Just like you and me.

Anthony Douglas Williams

I. IN SEARCH FOR A THEORETICAL FRAMEWORK WITHIN COGNITIVE SCIENCE

Having claimed that vitality affect is a non-Cartesian notion brings us to the need of finding a suitable theoretical approach, a conceptual framework in cognitive science, with which we can appropriately study the phenomenon of vitality affects with sufficient depth. This part reviews two approaches within the mind sciences – the embodied, and the enactive – to see which one is eligible for the task at stake and why.

2. A critique of embodiment

In this chapter, after a short introduction to the Embodied Mind thesis (Varela et al. 1991) and the current stance of the embodiment approach in cognitive science, I formulate a critique on embodiment from three perspectives: a semi-personal perspective, a brief remark on the experimental studies in embodied cognition, and a phenomenological argument.

Embodiment and The Embodied Mind thesis

The Embodied Mind thesis was famously proposed in 1991 – by Varela, Thompson, and Rosch – in a climate when the predominant paradigms in cognitive science were cognitivism and connectionism. In the initial paradigm of cognitive science in the 50's, the classical cognitivism, cognition was conceived with the help of the computer metaphor wherein the mind was thought to be analogous to the software and the brain to the hardware – an analogy

that has been deeply embedded into our day-to-day life since then. Cognition, according to this view, is understood as a process of formal manipulation of symbolic mental representations in the brain. The computer analogy can be considered as the textbook example of the modern-day Cartesian dualism due to the obvious gap between mind and matter. Hence, as Thompson notes, cognitivism offers no account on subjective experience, in fact, some even say that "subjectivity and consciousness do not fall within the province of cognitive science" (Thompson 2007 pp. 6–7). Nevertheless, a new set of body-mind problems have arisen from the framework of classical cognitivism as variants of the explanatory gap. Thompson categorises them as follows (ibid.).

1. *Phenomenological mind-body problem*: how can a brain have experience?
2. *Computational mind-body problem*: how can a brain accomplish reasoning?
3. *Mind-mind problem*: what is the relation btw computational states and experience?[2]

Note, that the way in which these problems are interpreted in the form of questions, the 'body' appears only as 'brain'. Remarkably, outside the brain, the body in itself plays no role in cognition whatsoever. Consequently, according to cognitivism, the seat of cognition is strictly brain-bound.

Connectionism was born in the 80's as a criticism to cognitivism, chiefly for the neurological implausibility of the cognitivist approach. Developing this critique has led to the central metaphor in connectionism, namely, that the mind is a neuronal network. This approach is widely used in cognitive science, in fact, it is currently thriving, amongst other things, with the advancements of deep learning algorithms. The connectionist trend regards cognition as a distributed process in the brain whereby sub-symbolic levels of representations are manipulated, with a special emphasis on emergent properties of the system, i.e. the neural network. In research it is practiced so that artificial neural networks solve problems on an 'input-processing-output' basis. These problems are designed and pre-defined by an outside observer, therefore there is no sensory-motor coupling with the environment. Consequently, in the 80's, subjectivity has not yet been addressed in the mind sciences, let alone affectivity.

[2] This is a version of the famous "hard problem of consciousness" (Chalmers 1995).

It was in this climate where the concept of embodiment was put forth. Growing out from the dissatisfaction that there had been no place for subjectivity in cognitive science, Varela et al. set the aim to expand the horizon of cognitive science by including experience to its subject matter. They did that by forming a dialog between the study of mind – as it was understood and practiced in cognitive science – and our 'everyday human experience' (1991). Following Merleau-Ponty's insights, a circular methodology was proposed for their entire project: to study the body from different perspectives. One perspective is from 'outside', looking at the body as a biological entity, a physical structure, and one from 'inside', studying the body as it is lived, as the locus of our phenomenological happenings. These two approaches were put forward to be investigated in a circular manner so that they inform one another, back and forth, thereby laying down the foundations for the *embodiment* of knowledge, cognition, and experience. As they put it,

> For Merleau-Ponty, as for us, embodiment has this double sense: it encompasses both the body as a lived, experiential structure and the body as the context or milieu of cognitive mechanisms". (ibid. p. xvi)

This goal was explicitly not only philosophical, but also a practical proposal for a direction in which hands-on research in cognitive science shall develop according to them.

This initial, sophisticated philosophical-scientific project, however, has all too often been impoverished in hands-on research and in everyday scientific discussions to the sheer conception which equates embodiment with the statement 'the body plays an important role in cognition'.

A semi-personal critique

The way the concept of embodiment was introduced in the previous section had a dual-purpose. On the one hand, it seemed reasonable to put it in a brief historical context, to see where the motivation for the Embodied Mind thesis came from and what it added to cognitive science in the early 90's. On the other hand, my aim was to make us reflect a little on this introduction. For anyone, I believe, who has spent at least two hours in a library, or on the internet, to find out what cognitive science really is, surely has read what has been written in this chapter so far. The cognitive revolution began as a response to behaviorism and cognitive science was born with its first paradigm, the classical cognitivism, heavily driven by cybernetics. Then connectionism emerged as a response to cognitivism in which more and more complex and neurologically increasingly plausible models of the brain have been engineered. When

connectionism had become mainstream, voices began to be raised saying that the concept of cognition had been all too disembodied, as a consequence, embodied cognitive science has gained its place on the palette of the paradigms in cognitive science.

As I wrote before, one of the purposes of introducing the concept of embodiment in a historical context was because it seemed reasonable. It is indeed reasonable. It does makes sense. Yet, my provocative question is this: would the notion of embodiment be such a strong proposal otherwise, without its immediate historical antecedents? Before elaborating on this question, let me clarify the difference between the 'Embodied Mind thesis' with capitals and 'embodiment' how they are used here. By the Embodied Mind thesis, I refer singularly to the now canonical book *The Embodied Mind* by Varela, Thompson, and Rosch from 1991 and what is put forth in that book in its entire complexity. It includes the proposed attitude with which one shall think in the mind sciences that they imply already in the opening of the book by saying "A phenomenologically inclined cognitive scientist (…)" (p. 3). Whereas by embodiment, I mean the currently overly popular word itself *as it has been taken up*, used, and distilled in and out of cognitive science, or rather – as it will be argued – misused, impoverished, and emptied by both cognitive scientists and laypeople.

Returning to the question raised above: would the notion of embodiment make sense to someone without presenting the historical context in which it was born? This question not only sounds provocative, but also quite bold. Let me be clear that as a background assumption I am not claiming that historical context of ideas is irrelevant or that concepts should be able to stand erect alone without the intellectual texture in which they have acquired their form. Instead, the following observation lies behind this provocative question. In the past years, after partaking in countless discussions on the embodied approach at conferences, at university, in pubs, with my peers, with scholars, as well as with people knowing hardly anything of cognitive science, I have noticed that if one begins to introduce the embodied approach with its central idea saying that "cognition is the exercise of skillful know-how in situated embodied action" (Thompson 2007 p. 11) – or even with the simple claim that 'the body plays an important role in cognition' – then it does not come across as something of particularly striking, unless one then explains that this idea has emerged as a reaction to the conception of cognition as conceived by classical cognitivism and connectionism. Obviously, the idea of embodiment is by far not non-sense. Only the context in which embodiment is usually introduced seems to be overly too important, as if embodiment in itself would not be a strong enough proposal.

Despite the fact that it is not common practice in academic texts to measure the value of scientific ideas on the bases of how people outside of that particular discipline – or going even

further, outside of academia – receive certain ideas in a spoken conversation, I believe it does measure something rather important about the idea at stake. What the notion of embodiment has revealed to me in such conversations is the following. If, on the one hand, I talk to anyone with any kind of movement background – be it dance, manual therapy or theatre – their most common response is that the thesis of embodiment is stating the obvious, for they cannot even imagine their body *not* being their main means of thinking, hence they do not understand what new insights this recent trend have brought to the conception of cognition.[3] If, on the other hand, I talk to philosophers with a classical background who, however, do not have a background in philosophy of cognitive science, they usually benevolently wait until the end of my "introduction to embodied cognition" before they start citing a long list of works and arguments in philosophy ranging from the Greek classics to continental philosophers saying that what I had just explained can be found in many philosophical works ever since Aristotle. They usually conclude that apparently embodied cognitive scientists might simply not have read any of these texts. The reactions by both groups should be taken into consideration, for their profession is moving and thinking – which, for that matter, are the two core ideas in embodied cognition.

We can draw a slightly paradoxical conclusion as an answer to my question raised in the beginning of this section. What seems to be the case is that the embodied approach – again, *not* the Embodied Mind thesis – offers new insights or appears to be a strong proposal only if we emphasise its proximal intellectual historical embeddedness – namely, classical cognitivism and connectionism – and if, at same time, we ignore its distal intellectual antecedents – including Aristotle, Hegel, Spinoza, Maine de Biran, Ravaisson and Dewey, not to mention here the phenomenologists from the 20th century much discussed later in this thesis. Otherwise, if one does not emphasize the proximal intellectual climate, then the claims of embodiment strike as rather empty, whereas if one in fact does recognise the classical philosophical insights,

[3] This idea appears not only in my personal conversations with dancers. See a beautiful, thought provoking writing on this matter proposing a new way of conceiving cognition, *Thinking in Movement* by Maxine Sheets-Johnstone (2009 Chapter 2). She had been a dancer-choreographer and only after that career did she become a phenomenological philosopher.

then the philosophical presuppositions behind embodied cognitive science turns out not offering much novelty in approaching cognition. [4]

A critique on experimental research

Let us now turn to examine as to what presuppositions experimental research in embodied cognitive science has been carried out with. The reason why this question is interesting for the present line of argument is because hands-on research often largely ignores philosophical reflections on its own activity. Therefore, such a blink into experimental research can provide us with a revealing cross section of how the term embodiment is used by philosophically not inclined researchers. This can inform us about the nature of the gap that has been formed between the Embodied Mind thesis and embodiment – a distinction that I have made earlier.

Within embodied cognitive science, a general agreement can be found in the view that there is little consensus as to what constitutes embodiment. But one thing is certain: embodiment has been a hot topic in cognitive science – and accordingly, extensive and various research has been done in the past decade or so (See for example Chemero 2009; Clark 1999, 2015; Knoblich & Sebanz 2010; Shapiro 2011, 2014; Ziemke 2016). While the lack of consensus means that people in the field have to cope with conceptual plurality, which is – in my view – to be saluted, for it sustains a fresh look on the subject and maintains a persistent need to challenge what is in fact being studied in an experiment, it also creates an urge to categorise these variations that can lead to the formations of various distinct trends within the field.

One such taxonomy of the various theoretical propositions behind experimental research in embodied cognition is given by Goldinger and his colleagues (2016). They identify four propositions: "(1) cognitive processes are influenced by the body, (2) cognition exists in the service of action, (3) cognition is situated in the environment, and (4) cognition may occur

[4] Since the meanings in everyday use of the nouns 'assumption', 'presumption', and 'presupposition' are rather blurry, I now clarify in what sense they will be used throughout the thesis. Following the Webster Dictionary and Plumer (2017), *presupposition* is used as the premise of an argument or a tenet, 'an assumption made beforehand; a preliminary conjecture or speculation' (Webster). Whereas *assumption* is used as 'the act of assuming' (Webster) in a sense that that "the argument as a whole in that it is integral to the reasoning or inferential structure of the argument." (Plumer 2017). I will avoid using *presumption*, on the ground that Plumer points out, unlike the other two notions, it is not a logical notion. At places I use 'background assumption' more in the sense of presupposition defined here when I feel emphasising that what is currently at stake is in the *background* as a spacial metaphor is important.

without internal representations." (ibid. p. 959).[5] This paper, entitled *The poverty of embodied cognition*, argues that these four principles are either "unacceptably vague", or "they offer nothing new" (ibid. p. 959). Their argument is not elaborated only on a theoretical level, they also provide a review of experimental research done in the "classical topics in cognitive science" – such as priming effect, facial perception, mental rotation, or sentence processing – and in each example they challenge whether the principles of embodied cognition has anything new to offer. Their answers are refuting, with one exception, in the case of mental rotation.

The paper does not lack bold statements. The opening sentence, for example, of the section 'Mind and body' is this. "Everyone knows that mind and body are deeply connected." (ibid. p. 960) I find this statement refreshingly simple, yet very true, hence sobering. Maybe precisely because it does not want to introduce the body as a result of a recent discovery that it is a constitutive part of cognition. Elsewhere, where the claim 'cognition is situated' is discussed, they write, "For example, a person can only see objects in her immediate surroundings, which is trivially true and offers no insight." (ibid. p. 963) The phrase "trivially true" is used multiple times all across the paper and is never elaborated on what they mean by that. Surely, one has a good sense of it, but it falls short on proving why embodiment lacks novelty in this case. Making claims that are "trivially true" in itself would not be a problem. Indeed, this is called the beginning of philosophizing. To ponder over trivially true things. What *is* problematic however, is if these trivial claims are not elaborated philosophically, but the discussion remains on such a shallow level. As a matter of fact, the quoted example that "a person can only see objects in her immediate surroundings", is one of the central topics of early phenomenology. In fact, the project of phenomenology, generally speaking, is exactly the attempt to give a highly rigorous and detailed description of how such "trivial" – or mundane, if you will – observations appear in experience and precisely how these are constituted in the subject. Yet, with regard to embodied cognition, as long as it does stay on a shallow level in dealing with such trivial claims, then of course the entire treatment remains shallow and trivial, in which case I agree that it cannot offer much new insights in philosophical terms.

[5] This taxonomy is similar and somewhat based on Margaret Wilson's system regarding the claims in embodied cognition: (1) cognition is situated; (2) cognition is time-pressured; (3) we off-load cognitive work onto the environment; (4) the environment is part of the cognitive system; (5) cognition is for action; (6) off- line cognition is body based (M. Wilson 2002). However, the claims by Goldinger et al. that are based on their taxonomy are much more provocative than that of Wilson's.

How Goldinger et al. build up their argument does not follow quite the same direction in reasoning what this section aims to seek. What they do is, after pointing out theoretical flaws and logical errors in embodied cognition, they review an array of experimental research topics that are paradigmatically studied in the classical approaches in cognitive science and point out that in nearly every example, the embodied approach fails to provide new insights based on its theoretical propositions. This way of reasoning, so the argument goes, stands in contrast of what they call the "'standard approach' to scientific debate: Some empirical arena is determined, data are collected, and interpretations are offered." Granted, this way of arguing is correct, and what conclusions they draw upon these findings can be valid – namely, that the embodied approach cannot replace cognitive psychology as the proponents of radical embodiment claim (Chemero 2009), and that it cannot facilitate psychology to unify its subdisciplines (Glenberg 2010).

Notably, Goldinger at al. (2016) do not mention Varela, Thompson, and Rosch and their book, *The Embodied Mind*, as the theoretical origins of embodied cognition. It can potentially mean two things. Either they have been ignorant of the roots of embodied cognition, or empirical research in embodied cognition has dislodged from the theoretical foundations of this research project to the point that it is not even necessary to discuss the original, philosophically inclined texts in embodied cognitive science when formulating a critique about the current stance of the experimental research in the field.

While I believe, one ought to read this paper with a pinch a salt, by and large, it demonstrates that the conclusions of the experiments in embodied cognition are misinterpreted – at least regarding the discussed classical experiments in cognitive science – therefore overstating the role of the body by performing logical flaws within their framework.

Another way to critically examine the relationship between the theoretical constructs and empirical studies in embodied cognition is given by Fred Adams (2010). His critique focuses on the embodied studies in the psychological literature, concentrating – similarly to Goldinger et al. – on the conclusions drawn from empirical data, more specifically, whether the conclusions are supported by the collected data in the experiment or not. He likens the current practice in embodiment literature to the practice in Identity Theory of mind and brain in the '50s. Identity theorists built up their arguments in two parts, in an empirical and in a logical part, in the following way. In the empirical part, they found *correlations* between mental states and brain states. Then in the logical part, they argued that mental states *are* brain states, based on the best explanatory hypothesis. We can see the flaw here: an empirical correlation was interpreted as the correlating data being identical, without challenging other possible forms of

what this relationship can take. According to Adams, a similar methodology can be observed in the embodied literature these days. In the empirical part, correlations – in his example – are found between particular cognitive processing and sentence comprehension and certain sensorimotor performance. This is followed by the interpretation of this correlation, arguing that the sensorimotor process is constitutive to the given type of cognitive processes – as the best explanation for the empirical correlation – again, without challenging other forms of relations between the correlating entities.

Adams argues that often where research papers conclude that perceptual-motor activity is constitutive to cognition, close examination of the data indicates at most causal correlation between perceptual-motor activity and cognition, but certainly not a constitutive role (ibid. p. 627).

Adams concludes his paper by proposing three differences between sensorimotor activity and cognition that should be considered when evaluating claims drawn from experimental data, and which are overlooked by proponents of embodied cognition. First, "perceptual/motor experiences have a phenomenal content, a *what it's like*". Second, "perceptual states generally admit of more or less intensity". Third, "perceptual states have a particularity (this blue, that bitter)" (Adams 2010 p. 627).

It is promising that Adams came to this conclusion in his argument, and in fact, this is precisely the direction where my argument is heading, namely, towards a phenomenological critique of embodiment. Yet, the phrasing of these differences, furthermore, the very distinction between "perceptual-motor activity" and cognition, clearly shows that even such a critical account of embodied cognition that attempts to show where embodiment research falls short, bears the signs of dualist understanding of body and mind. Based on this, experimental research in embodiment, in effect, seems to differ from connectionism only in that it extends the seat of cognition from the central nervous system to the peripheral nervous system too. In other words, what happened was that the Cartesian boundary has been pushed in the body by a few centimetres away from the brain. With this approach, we are still very far from explaining subjectivity and affectivity.

A phenomenological critique

At this point, it is apposite to pause and analyse what the term embodiment really means, what sort or philosophical body interpretation it implies. In Sheets-Johnstone's words,

> The current and pervasive practice of 'embodying' in present-day philosophical and scientific writings is an epistemologically and ontologically improper practice verging on phenomenological malpractice. (Sheets-Johnstone 2015 p. 23)

We thus need to look behind the surface of the term embodiment and see what kind of implicit philosophical presuppositions might lie behind this concept regarding the status of the body and its relationship with the mind. It is all the timelier to do so in an era where the body is living its rather odd mixture of renaissance: in the present Western culture there is so much money and energy invested in yoga, massage, fitness, healthy diet, T'ai Chi, meditation, beauty products, let alone cosmetic and aesthetic plastic surgery. The list is diverse, but the more it shows the abundance of different understandings and interpretations of the body in everyday life. As to how the body is understood in each item in the list above is an important question.

The essay *Can the Body Ransom Us?* written with an eloquent rhetoric by Sheets-Johnstone deals with this issue, differentiating three main categories of such understandings of the body (Sheets-Johnstone 2009 Chapter 1). Firstly, the third-person body as a machine, as often conceived of by popular science, for example. The body as an incredible machine with billions of cells in it hosting countess chemical reactions just like minuscule factories. The mysteries of this body are revealed by scientists in white cloaks. Once a certain mystery is revealed, science can fix that part of the body, akin to how cars are being fixed. Rusty joints need oiling. Our knee joint similarly to the joints of a robot. Statements of this kind are prevalent according to this simile: "our bones are superb shock absorbers" (ibid. p. 18), just like top-notch carbon frames of the latest models on a road bike. This body is thus impoverished to "the status of a mechanical object, devoid of intentionality, of affections, of autonomous power" (ibid.). Secondly, she distinguishes the biological body. It still has a rather observed than a living presence. Diarrhoea is treated with activated-carbon pills to absorb excess contaminating molecules in the bowel. It is observed as a biological entity, not as a machine any more. Yet, it still lacks the first-person reality of the body, which is in fact the third category according to Sheets-Johnstone. The first-person body, the most immediate body, primal to both of the previous categories. This body is the single most fundamental precondition for our being and feeling alive, for our experiencing the world. No scientist in a white cloak is there describing it – it is deeply our own, kicking and breathing from the very moment of our birth.

"Can you smile without a face, wiggle without hips, pant without a chest? Can you go out for a game of tennis, make love, repair a roof, plant a garden, short of being in the flesh?" (ibid. p. 20) asks Sheets-Johnstone, then goes on by saying that the smile does not exist without the

face. In other words, the first-person world, the unique first-person affectivity during a smile cannot exist without the face that can be described in the third-person. Conversely, the face does not exist without the smile. First-person and third-person perspectives mutually assume one another. “Only in departing from that first-person world can we meet with a stray face – or a disembodied smile.” (ibid.) In other words, a “disembodied smile” can only be comprehended if we ignore experience and subjectivity altogether – the affective and phenomenal aspects of life.

If, however, we accept that the concept of a “disembodied smile” must lack subjectivity, then what about the notion of embodiment? To clarify this question becomes even more urgent once we consider how widely embodiment is used all across the mind sciences. As Sheets-Johnstone elsewhere notes, the list of “embodied” topics and entities are rather long: mind, cognition, self, subject, experience, action, self-experience, subjectivity, language, including even movement and existence itself. (See references for each topic in Sheets-Johnstone 2015 p. 24, 2018 p. 11.) Embodiment and disembodiment are of one conceptual kind, they both refer to the presence of a third-person body – or lack thereof. They share the same implied ontological status of the body. But what is this ontological status precisely? What would be the adequate question to ask: ‘what embodies what?’ or ‘who embodies whom’? To be more precise, what is this ontological entity that does the embodying? And, in turn, what is this other ontological entity that is being embodied – or disembodied, for that matter?

Even the forms of these questions that attempt to somehow grasp the problem sound philosophically akin to the problem itself that needs to be answered. That is, both the raised problem and questions seeking for an answer suffer from the Cartesian dualist heritage: two distinct ontological entities seem to be acquiring their full-blown shape in front of us when trying to account for the ontological status of the body in cognition in embodied cognitive science. What is it if not the blossoming of postmodern Cartesianism? One might surely oppose, saying that I have managed to formulate these questions only so that they sound Cartesian. My answer would be that these questions inevitably emerge when one carries out a philosophical enquiry about the nature of embodiment. What these questions in fact do is that they make the situation more transparent by magnifying the key points of the issue. Sheets-Johnstone formulates the problem at stake as follows.

> In using the term [embodiment], we are actually perpetuating a divide that has not healed and will never heal so long as the terms of the division remain part of our thinking. They remain part of our thinking because we have not yet

> fathomed what it is to be the bodies we are. (…) To unmuddle our thinking, we must go back to everyday human experience. Thus, with respect to embodiment, we must ask ourselves not only what it is that is embodied and challenge ourselves to describe it, but ask ourselves how it is embodied and challenge ourselves to describe in experiential terms just how the what we believe to be embodied — a mind, a soul, a spirit, a self, our organism, or whatever — is embodied by the body. (Sheets-Johnstone 2011b pp. 311–312)

She offers a way out from this conundrum by reminding us of the concept of animation and thereby suggesting a return to Aristotle and to Husserl (Sheets-Johnstone 2011a, 2011b, 2015, 2018). In *De Anima – On the Soul* – Aristotle does not talk about embodied souls, she writes.

> He wrote, among other things, that the modality of touch is 'indispensable', that 'the loss of this one sense alone must bring about the death of an animal', hence that without touch, an animal would not be. (Sheets-Johnstone 2018 p. 2)

Elsewhere, she writes

> Husserl did not write about *embodied* organisms, or even *enactive, embedded*, or *extended mind* organisms. He wrote about *animate* organisms." (Sheets-Johnstone 2015 p. 24)

They – both Husserl and Aristotle – do not talk about embodied souls but *soulful bodies,* as she points out. Sheets-Johnstone does not write about embodied minds but about mindful bodies (Sheets-Johnstone 2011a). Animation is foundational for life, for living beings, organically encompassing all aspects of it, not tearing apart what are in fact of one piece. Animation is notably not a forceful attempt to avoid the burden of arguing against the dualist way of thinking – in the present case, especially against the conception of embodiment – by claiming to have found yet another obscure concept that happens to be not dualist. No, animation precisely describes how we experience and understand not only ourselves and in fact all living creatures. Let me close this line of reasoning with another quote by Sheets-Johnstone.

> Life and movement go hand in hand, which is to say that animate forms of life are indeed animate and that cognition and affectivity are inherent dimensions of their foundational animation. When we properly begin our inquiries with animation, with movement, with the quintessential feature of our aliveness, we have no need for lexical band-aids on the order of embodiment. Minds are not embodied. Bodies are mindful. (Sheets-Johnstone 2011a p. 464)

There are philosophical accounts that attempt to overcome the "standard" notion of embodiment from within the embodied cognition framework, and to offer something more – such as Mog Stapleton's works (Stapleton 2011, 2012). With her PhD thesis *Proper Embodiment: The Role of the Body in Affect and Cognition* from 2011, she proposes an extension to embodied cognitive science. According to her terminology, 'proper embodiment' differs from 'embodiment' in that while embodiment takes the thesis 'the body matters in cognition' only in virtue of morphological and sensorimotor features, proper embodiment includes the internal, affective, fine-grained physiological happenings of the body that matter to cognition. She identifies the "fine details" of this "internal embodiment" in the molecular signalling between cells. It is in this theoretical embeddedness where Stapleton grounds her treatment of affects in interoception. Shaping embodied cognitive science as a theoretical framework in a way that it could offer a platform for discussing affects was indeed Stapleton's merit, at least as far as I am aware.

However, we must challenge once again what sort of presuppositions in philosophy of mind the proper embodiment thesis rests on and whether it offers anything new compared to "standard embodiment" from a metaphysical perspective. Has this account managed to get anything closer in casting off the Cartesian legacy?

There are certainly steps in the proper embodiment account towards the direction that is advocated here insofar as it enriches the interpretation of the body. The way in which the body 'matters to cognition' in standard embodiment, Stapleton argues, is merely a result of conceiving the body in virtue of sensorimotor processes and of gross morphological features – which morphology itself allows to offload certain cognitive processes from the brain.[6] What the proper embodiment thesis adds to this understanding of the body is that it proposes to include the internal, fine-grained physiological processes to the list of features of the body that matters to cognition. In the conclusion, she writes:

> I showed how affect can be grounded in various facets of interoception. I then showed that affect should be considered constitutive of cognition in various ways including being involved in perception, structuring perceptual phenomenology, and being a core ingredient of many (I believe all, but cannot claim to have demonstrated this) forms of cognitive processing. (ibid. p. 161)

[6] See the canonical examples for this approach by Brooks (1991) and Webb (1996).

Stapleton grounds affects in interoception, which is to say to extend the sensorimotor processes not only to sensing the outside world, but the inside too, with all its minuscule physiological events. This approach, however, remains entirely in the third-person world with no qualitative, phenomenological distinction made between the felt quality of perceiving and sensing the outside world on the one hand, and the inside world – namely, our body – on the other hand. This becomes even clearer when she writes "Core-affect is the experiential dimension of affect, which is understood to be the changes in homeostatic regulation. (…)" (ibid. p. 100). It turns out that Stapleton understands affect in itself as a biological measure, with very little phenomenological dimension in it, which dimension is in fact differentiated by another other term, 'core-affect'. Elsewhere, she defines affective that is "to denote information pertaining to the viscera, information which is likely to be a guide to how the system is faring in the world." (Stapleton 2012 p. 5) And later in the paper, another wording on what affective is: "it is constituted by afferent homeostatic information, and motivational because it is also constituted by the activation of motor areas." (ibid. p. 6) We can see that her notion of affective is explicitly used in its neuroscientific sense: the pathways going from the peripheral to the central nervous system. In effect, what the proper embodiment thesis proposes is to include the internal bodily environment into the perceptive field of the nervous system along with that of the outside world. Based on this move, it claims that the sensory information from the internal environment is constitutive for cognition.

Granted, the task Stapleton subscribed to is indeed ambitious, namely, to account for affects and first-person experience – as she conceives them – with third-person physiological research. Her work shows that no matter how hard one tries to extend, make proper, or enrich embodiment – including explaining affectivity, and with it, subjective experience – unless one incorporates a phenomenological perspective in the argument, for embodiment in itself is simply insufficient.

Conclusion

In this chapter, I have formulated a three-fold critique on embodiment in the quest of finding an approach in cognitive science in which affectivity can be discussed with sufficient phenomenological depth and accuracy. After making the distinction between The Embodied Mind Thesis and embodiment, my semi-personal comment on embodiment arrived to the conclusion that the claims of embodiment strike as powerful and anew if and only we open a rather narrow window into its philosophical progenitors, which window includes no more and

no less than classical cognitivism and connectionism. Looking at the practice in experimental research, we found that while there is a persistent plurality as to what it is that is being experimentally investigated under the term embodiment, there are, accordingly, prevalent mis- and overinterpretations of the data in favour of the constituent role of the body in cognition. Most importantly, however, the language used in these texts imply a heavily Cartesian understanding of body and mind. In the phenomenological critique, I argued that embodiment is a "lexical band-aid on the Cartesian wound", as Sheets-Johnstone often puts it, and even the more recent 'radical', 'deeper', and 'proper' accounts of embodiment are phenomenologically not accurate enough to account for the role of affects in cognition.

Based on these three perspectives on embodiment, I conclude that embodied views operate with such understandings of the body and affectivity which are, on the one hand, phenomenologically shallow and inaccurate, and on the other hand, remain if not "brain-bound", but certainly nervous system-bound.

Therefore, the paradigm of embodiment fails to provide an appropriate framework for the task at stake. It fails to cope with connecting first and third-person research, as the Cartesian understanding is too heavily settled in the embodied approach – prominently, due to the lexical package the term embodiment itself perpetuates. As long as the ontological status of the body remains unfathomed and the term embodiment is not vented out properly, the stale Cartesian air will stay in the room of embodied cognitive science.

Consequently, in the next chapter, we will have to look further in the mind sciences for a suitable conceptual framework in which affectivity is duly recognised as a central and formative aspect of experience both from ontogenetic and from adultist perspectives.

3. Enactivism

Not many authors can say about themselves that in one and the same book they launched two research programmes, from which in fact both have gained remarkable popularity. Varela, Thompson, and Rosch have done precisely this. Their book, *The Embodied Mind*, was introduced in the previous chapter as the book in which the Embodied Mind thesis was formulated that marked the birth of embodied cognitive science. At the same time, this book

was also the birth of enactive cognitive science.[7] As a matter of fact, due to the same origin of the two research programmes, they intertwine at multiple places, therefore there is no clear-cut distinction between the two approaches.

Hence, at this point, a confession from my part is in order: in the previous chapter – out of sheer didactic reasons – I simplified and introduced embodiment in a manner as if it was possible to single out from the deeply interconnected views of the embedded, extended and enactive approaches. However, once we acknowledge the close connection and the sometimes blurred boundaries between embodiment and enactivism, we can find the distinct philosophical tenets of each approach, which indeed define them in their own right. Yet, the aim of this chapter is not to provide a systematic comparison between the two. Instead, we leave behind embodiment (as much as didactics will allow us), and see what enactivism offers. For this, let us first have an overview of the main tenets of the original Varelian conception of enactivism and how this have been further elaborated by Evan Thompson. Then, a brief outlook on the current trends in enactivism will allow us to see why I adopt in the rest of the thesis only the trend marked by Thompson.

Searching for the middle way, finding a groundless ground

The traditional views in cognitive science take for granted two deeply interconnected epistemological views. First, that there is a pregiven, objective outer world. Second, this pregiven world is cognised by a pregiven subject. That is the subject's cognitive structure is readily given to receive the information from the outer world. Hence, perception is conceived

[7] In all fairness, as the Embodied Cognition entry in *The Stanford Encyclopedia of Philosophy* notes (R. A. Wilson & Foglia 2017), the book *Metaphors we live by* (Lakoff & Johnson 1980) was published eleven years prior to *The Embodied Mind* and it is considered an early landmark publication in embodied cognition. It is nevertheless not an intellectual progenitor of the work by Varela et al. There is no reference particularly to the book M*etaphors we live by* in *The Embodied Mind*, only in a footnote they mention certain works of Dreyfus, Johnson, and Lakoff as the ones that hold a similar conception of embodiment as theirs. (1991 p. 173 footnote #43) Then, interestingly, Varela et al. consider the tone of anther work, Cognitive Semantics, by Lakoff in accord with enaction, not with embodiment. They comment on the central theme of Lakoff's work as follows. "This statement would seem consonant with the view of cognition as enaction for which we are arguing. (1991 p. 178) Therefore, I believe it is not false to say that both embodied and enactive cognitive science were born with the publication of *The Embodied Mind.*

of as a process through which the information out in the world – independent from the perceiver, precisely because it is pregiven – is taken in and processed by the cognitive agent. Varela et al. call these epistemological presuppositions *cognitive realism*, which, as they argue, are shared in cognitivism and connectionism (cf. Demšar 2017). Note, that there lies another presupposition behind these claims of cognitive realism, namely that the world – be it as separate from the subject as this thesis holds – is nevertheless *cognisable*, which is to say, that through cognition, one can learn about this world, one can acquire knowledge of the world.[8]

Enactivism offers a radical departure from the epistemological stance of cognitive realism by challenging the basic presuppositions of these epistemic processes, primarily inspired by Merleau-Ponty.[9] They do not simply reject realism, rather they try to find a balanced position between realism, and idealism. Showing the ambitious nature of their project and in fact showing how paradoxical the epistemological stance seems to be at first sight that enactivism wishes to defend, they employ two analogies in their reasoning, two images to illuminate their position. One is when the realism vs. idealism debate is likened to the chicken-egg problem, asking "which came first, the world or the image?" (Varela et al. 1991 p. 172) They call realism the chicken position, "The world out there has pregiven properties. These exist prior to the image that is cast on the cognitive system" (ibid.), whereas the egg position is idealism: "the cognitive system projects its own world, and the apparent reality of this world is merely a reflection of internal laws of the system." (ibid.). The enactive approach to the study the mind rejects both of these extreme positions and suggests that the solution to this problem lies in finding a middle way where subject and the world are in fact inseparable and depend on each other, hence bypassing the inner-outer dichotomy. Possibly this very passage by Merleau-Ponty inspired them:

> The world is inseparable from the subject, but from a subject which is nothing but a project of the world, and the subject is inseparable from the world, but from a world which the subject itself projects. (Merleau-Ponty 2002 pp. 499–500)

[8] This very commitment lies behind all scientific endeavour, the commitment to *scientific realism*.

[9] See a detailed discussion on the relationship between scientific realism and the enactive approach to (cognitive) science; as well as between the mind as understood scientifically, and the mind as understood in everyday life in an eloquent thesis by Demšar, 2017.

Varela et al. use colour perception as a case study to show their point that neither the chicken, nor the egg position is tenable.

> Contrary to the objectivist view, color categories are experiential; contrary to the subjectivist view, color categories belong to our shared biological and cultural world. Thus color as a study case enables us to appreciate the obvious point that chicken and egg, world and perceiver, specify each other. (Varela et al. 1991 p. 172)

The other metaphor they use to illuminate their point is that of comparing the two extreme epistemological positions to the two mythological monsters, Scylla and Charybdis.

> It is precisely this emphasis on mutual specification that enables us to negotiate a middle path between the Scylla of cognition as the recovery of a pregiven outer world (realism) and the Charybdis of cognition as the projection of a pregiven inner world (idealism). (ibid.)

They find the middle way between idealism and realism in the body, more particularly, in *embodied action*. This Varelian, enactive understanding of the body, however, is precisely unlike the conception of the body in the philosophically diluted trends of embodiment that I have criticised in chapter two. On the contrary, the strong Merleau-Pontian phenomenological influence is readily apparent in their notion of embodied action. By *embodied*, they mean that cognition is grounded in such experience that originates in "having a body with various sensorimotor capacities" and that these individual capacities are themselves embedded in a cultural-biological context (ibid. p. 173). Whereas by *action*, they refer to the phenomenon that sensory and motor processes, action and perception, are indivisible in experience, moreover, they have always been integral also from an evolutionary historical point of view.

> In a nutshell, the enactive approach consists of two points: (1) perception consists in perceptually guided action and (2) cognitive structures emerge from the recurrent sensorimotor patterns that enable action to be perceptually guided. (ibid.)

The phrasing of the first point importantly deliberately implies a circularity between perception and action, which is a radical break from the scientific realist approach to perception-action, where it is famously schematised in a linear fashion as follows: perception (input) – cognition (information processing) – action (output). This circularity appears for enactivists both on ontogenetic and on phylogenetic levels, where these levels mutually drive

each other. Yet, not only is there circularity in perception and action, but also, they propose a circular dependence between the perceiver and the world. They write,

> the overall concern of an enactive approach to perception is not to determine how some perceiver-independent world is to be recovered; it is, rather, to determine the common principles or lawful linkages between sensory and motor systems that explain how action can be perceptually guided in a perceiver-dependent world. (ibid.)

According to this concern, one of the main claims of the enactivist proposal is that neither the outer world determines independently the reality of the cognising subject, nor the cognising subject determines independently its representations of the outer world. Instead, organism and environment, subject and object mutually specify and depend on each other; they co-determine, co-create, co-specify each other through "a history of structural coupling that brings forth a world" (Varela et al. 1991 p. 206). This is precisely how Varela el al. defined the term *enactment,* as the 'bringing forth the world', or as their metaphor goes, enaction is "the laying down of a path in walking: [then quoting Varela] Wanderer the road is your footsteps, nothing else; you lay down a path in walking" (Thompson 2007 p. 13), referring to those paths, say in a park, that are not designed in advance, according to a plan, but simply created by people often walking on the same route.

At this point, a burning question arises: what happens, what do we give up when we reject the tenets of scientific realism, and more specifically, cognitive realism – the comforting belief in a certain, definite, pregiven outer world – and the similarly comforting yet more lonesome assumptions of idealism? As Demšar writes, "Pointing out that [the presuppositions of cognitive realism] are not ready-made, but are instead historically rooted in Cartesianism and motivated by the fear of losing the ground of absolute objective reality, enactivists reject the demand for the opposition between subject and object." (Demšar 2017 p. 68) We suddenly find ourselves with no ground beneath our epistemological feet. On a personal level, I believe, this move –away from realism – creates an existential discomfort. As Thompson puts it "cognition as the enaction of a world means that cognition has no ground or foundation beyond its own history, which amounts to a kind of "groundless ground"." (Thompson 2017 p. xviii) Varela el al. imported the idea of *groundlessness* from Buddhist tradition, from their philosophical idea of *dependent origination.* As much as one can try to embrace the idea of groundlessness, enactivism would nevertheless not be a satisfizing philosophical account without offering

something instead of realism and idealism, and to point to an ontological entity still as a source of ground, however groundless it is.

For this, they developed the enactive conception of the body – which is inspired by the Merleau-Pontian concept of the lived body – as the ultimate source or ground for experience, be it as groundless and preliminary at first sight as it is. What does the enactive understanding of the body offer? Unlike the embodied conception of the body in which the it is conceived as an ontological entity that plays a constitutive role in cognition (importantly, third person entity – as I showed above), the enactive approach sees the body as an adaptively autonomous and sense-making system. What it means is that the lived body creates and maintains itself, and – together with the environment – it co-creates its own ground both for existence and for meaning, in other words, it brings forth or enacts relevance (ibid. p. xxvi). Meaning – or relevance – is not absolute, it is neither out there, nor inside us, instead it is co-created through enaction.[10]

Coming back to the question: what do we gain and what do we lose with the rejection of cognitive realism and with it with the rejection of the "demand for the opposition between subject and object"? The first-person plural "we" formulation of the question is deliberate here, as I intend to consider not only the philosophical consequences of this otherwise primarily philosophical move, but also to preliminary look at the personal, psychological implications of this new epistemological-ontological stance. As already mentioned, the difficulty to let go of the cognitive realist position lies in the fear of losing the ground for absolute reality. In a way,

[10] The idea of co-creation of living organisms and the lived world can be traced back not only to ecological psychologist J. J. Gibson's concept of *affordances* (Gibson 2015), but originally to physiologist, theoretical biologist Jakob von Uexküll and his notion of *Umwelt*. Umwelt is the German for 'environment', but as a technical term, Umwelt refers to the subjective world in which an organism lives, mostly translated in English as 'lifeworld' (which phrase reveals the connection clearer in the English literature with the hermeneutic tradition, which connection however will not be discussed in this thesis). Uexküll's main concern was not so much the subjective environment, lifeworld of individual organisms, but rather the particular environment, lifeworld different species life in. In this sense, this was the first articulation where the lived environment was considered as a mutual function of the organisms they live in it. This articulation goes hand in hand with the insight that the organism is structurally coupled with the Umwelt through circular sensorimotor coordination. See the discussions on Umwelt and on the sensorimotor cycles in the literature at stake now: Merleau-Ponty 1963 p. 13; Sheets-Johnstone 2011b p. 495; Thompson 2007 pp. 47–48.

enactivism does not offer a solution for that per say, which is to say, it did not offer an absolute ground anywhere else once it has pointed out that the presuppositions of cognitive realism are untenable. What it did, however, was that through a thorough reflection of the scientific and everyday practice as to how the world, and with particular interest, the mind is studied and understood, it recognised that in fact all epistemic processes are groundless – be it scientific or everyday –both in a realist and in an idealist sense. All knowledge, meaning, relevance, and value emerge from the history of dynamic structural coupling through circular sensorimotor processes between the cognising subject and the cognised world that is based on the fundamental interdependence of the two. In this new epistemological landscape, we have gained a conception of the body that does not function as a boundary between first- and third-person events, a conception of the body that seemingly overcomes the subject-object differentiation. It will shortly be clearer why this is so, in the section, *Mind in life*, after a little detour.

Until then, we can recall the aim of this whole part, *part II*, of the thesis – that is to pursue a conceptual framework in which the fundamentally non-dualist notion of vitality affects can be adequately grasped and discussed. And we can already preliminary appreciate that the enactive approach seems to be a promising candidate for this role, largely due to its phenomenologically influenced conception of the body.

A detour again: Sheets-Johnstone and enactivism

Before proceeding to see how Thompson has elaborated further the original formulation of enactivism, let me have a two brief comments on the relationship between Sheets-Johnstone's phenomenological philosophy and enactivism as just presented.

I wish to comment on the wording by Varela et al., "*having a body* with various sensorimotor capacities" (Varela et al. 1991 p. 173). I believe Sheets-Johnstone would likely argue against me when I said that Merleau-Ponty's influence is *readily apparent*. She would take a much stricter position regarding the phenomenological accuracy of this sentence, as she extensively writes about the "practice [that] muddies a clear distinction between the body 'I have' and the body 'I am'" (Sheets-Johnstone 2015 p. 23). There she clarifies the phenomenological subtleties between the two cases chiefly drawing on *The Phenomenology of Perception* by Merleau-Ponty (2002). Therefore, she would likely say that albeit Varela et al. were influenced by Merleau-Ponty, their understanding of his writings remained rather shallow an inaccurate when it comes to the details of his phenomenological ideas. This might well be a

justified position, as – although in a slightly different context, with regard to the interpretation of Husserl in *The Embodied Mind* – Thompson himself plainly admits multiple times that back in 1991, their "interpretation of Husserl was mistaken". Indeed, in his book *Mind in Life*, he dedicates an appendix chapter on presenting how his views on Husserl had changed between 1991 and 2007 (Thompson 2007 p. 413 in Appendix A, 2017). Given these confessions, I hope it does not sound malicious assuming that at the writing of *The Embodied Mind*, the authors might have not known Merleau-Ponty's writings inside and out.

Having articulated a hypothetical critique of enactivism by Sheets-Johnstone, I will now ironically point out certain similarities between her philosophy and the enactive approach, especially despite the fact that she is indeed critical not only towards embodiment, as we saw in the previous chapter, but as a matter of fact, towards the enactive approach to cognition too, although less so (see her critique in Sheets-Johnstone 2011b Chapter 13)

The enactivist aim "to determine the common principles or lawful linkages between sensory and motor systems that explain how action can be perceptually guided in a perceiver-dependent world." (Varela et al. 1991 p. 173) resembles of what she repeatedly writes about as the "synergies of meaningful movement" (Sheets-Johnstone 2011b, 2014, 2015, 2018). This concept refers to the essential dynamic existential fit between animation and environment, how an animate organism finds itself in the world and how it constitutes it through movement. Note, that movement is one of the central themes of Sheets-Johnstone's works. As she puts it, "These synergies attest to the foundational animation and dynamics that motivate, inform, and constitute its experiences. (Sheets-Johnstone 2011b p. 495). The enactivist idea that cognition amounts to a history of structural coupling between organism and environment that enacts, brings forth the world, once again seems to appear in Sheets-Johnstone's thinking, albeit using different terminology. When she discusses the phenomenological aspects of the origins of habit – where habits are understood as dynamic patterns that make the world familiar to us – she writes

> Habits are indeed grounded from the beginning in movement, that is, in the primal animation of animate organisms that gives rise to sensings and sense-makings that evolve into synergies of meaningful movement and habits of mind. (Sheets-Johnstone 2014 p. 98)

There are a number of claims compressed in this single sentence that are worth analysing with an enactivist eye. According to this quote, habits are the means by which a living organism makes sense of the world and this very sense making activity turns into synergies of meaningful

movement. In other words, habits, these dynamic patterns, consist of several movements, each of which together with the other constitutive movements add up in a synergistic manner that results in the creation of meaning that emerges from the dynamic movement pattern between the organism and the environment. In enactivist terms, habit can be construed as an autopoietic function with a specific focus of movement, that enacts its own meaning which co-determined by the animate organism and the world. Thus, even though Sheets-Johnstone's critique towards enactivism is partially based on it falling short of capturing the qualitative dynamics of affects and movement, it seems that the two approaches do aim to explain on a similarly deep layer of what it takes to be alive.

Let us now see how Thompson developed further the original enactive approach, of which Sheets-Johnstone writes "his book *Mind and Life* gives the most authoritative, highly developed, and thorough presentation of enactive theory and "the enactive approach"." (2011b p. 455)

Mind in life – the deep continuity

The main thesis of Evan Thompson's book, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, is that there is a deep continuity between life and mind (2007). This claim has gained significant popularity and almost like a slogan of a product, it is widespread identified with the book, which, I believe, hallmarks the success of this thesis.

Thompson summarises the enactive approach in five main ideas. First, that living beings are autonomous, self-governed agents. They create and maintain themselves with operationally closed metabolic networks, which process is called autopoiesis. The theory of autopoiesis is concerned with the description of the fundamental organisation of the living (See Figure 5.1.).[11]

[11] See some landmark works on the theory of autopoiesis by Maturana and Varela (Maturana 1974; Varela & Maturana 1973), and two more recent accounts: Di Paolo 2005; Thompson & Di Paolo 2014. Also, compare them with the work of the theoretical chemist-biologist, Tibor Gánti, and his minimal model of life, the Chemoton Theory (Ganti 2003). There are remarkable similarities between the two theories – both in their aims and in their manifestations – and an even more striking lack of communication between the two and recognition by one another. In fact, Ganti's work was originally published around the same time, in 1971, as Varela and Maturana published theirs, albeit at that that time it came out only in Hungarian. (Moreover, the core of the chemoton theory was formulated back in 1952.) Still, since the English translation in 2003, to my knowledge, there has not been any comparative work published, even though they would fruitfully complement each other, the theory of

Through autopoiesis, their cognitive domain is brought forth, or enacted. In other words, inside and outside co-emerge in this process, the agent and its correlative world are co-created. The second idea is that the nervous system is an autonomous dynamic system, therefore it does not process information in the computationalist sense, rather it actively creates its own meaning through its endogenous, dynamic activity that is informed by the sensorimotor coupling with the environment. The third is the idea that cognition is a skilful, perceptually guided embodied activity. The fourth idea is the rejection of realist conception of cognition – the belief in an absolute, external realm – and the idea that cognition instead is a relational domain that is brought forth by autopoiesis. (2007 pp. 13–15) Compare the first and the fourth idea and note that both living beings and their cognitive domain, i.e. their mind, emerge from one and the same process, namely from autopoiesis. This is the very foundation of the deep continuity thesis in a nutshell. And finally, the fifth idea – and probably the most directly related one for the main concern of this thesis – is the realisation that

> 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. For this reason, the enactive approach maintains that mind science and phenomenological investigations of human experience need to be pursued in a complementary and mutually informing way. (ibid. 13-14)

Thompson thus takes seriously the original research programme of *The Embodied Mind* and elaborates far further the project of finding a common ground for the scientific investigation of the mind, and the everyday human experience. He does that by following the project of *naturalising phenomenology*, that is, opening up a two-way street between phenomenological investigation and biological research. In other words, it is the recognition that not only phenomenology ought to inform natural sciences about the structure of experience, conversely, biological and the mind sciences equally need to inform phenomenology. With this ambition, Thompson emphasises an important convergence between his enactive approach and phenomenology. Both traditions share the view that the mind constitutes its objects. For enactivism, autonomy is a fundamental feature of biological life, whereas for phenomenology, intentionality is a fundamental feature of the lived body.

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autopoiesis being more sophisticated philosophically, whereas the Chemoton Model being highly elaborated and developed in biochemical terms.

Hence, they "converge on the proposition that subjectivity and consciousness need to be explicated in relation to the autonomy and intentionality of life, a sense of 'life' that encompasses the organism, the subjectively lived body, and the life-world." (ibid. p. 15)

His approach to this investigation, therefore, begins even farther than consolidating first- and third-person views of cognition – where first-person views (most prominently phenomenology) offer descriptions of the structure of experience, where the cognising agent is investigated as a subject, whereas third-person views provide descriptions of cognition as a process in a living organism, where the cognising agent is studied as an object.[12] Instead, Thompson goes even further to unfurl the roots of the issue, which is the prevalent view that there is a profound discrepancy between biological life and subjective experience. One complicated and far reaching consequence of this fundamental discrepancy is the manifestation of the various explanatory gaps in philosophy of mind, such as the persisting gap between mind and matter, subject and object. Thus, Thompson first considers the characteristics of life from a philosophical point of view, heavily drawing on the works of philosopher Hans Jonas, before he would challenge the views of how the mind and consciousness are construed in the mind and life sciences.

This discrepancy between consciousness and biological life is engrained in the prevalent view in philosophy of mind that conceives of consciousness as a set internal, subjective, and qualitative properties of the mind, whereas life is understood as an external, objective, and structural set of properties of a physical system. (ibid. pp. 221-225) Thompson argues that this dualistic conceptualisation of consciousness and life makes it impossible to understand consciousness in its basic bodily sentient. By sentience he means as the "feeling of being alive", the capacity "to feel the presence of one's body and the world." (ibid. 221). This claim naturally includes subjectivity and affectivity too: we cannot properly understand the bodily nature of affectivity and how subjectivity is grounded in bodily affectivity as long as there is conceptually a qualitative difference between life and subjectivity, the former being external, and the latter being 'internal'.

Thompson's enactivist approach, which is inherently built together with the theory of autopoiesis, is claimed to offer a solution that reconciles this discrepancy by being able to go beyond these standard, dualist-materialist conceptions of life and consciousness.

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[12] This research project is called neurophenomenology, an "offshoot" of enactivism. See the original proposal by Varela (1996).

According to the theory of autopoiesis, living beings autonomously create and maintain their own organisation with biochemical metabolic processes. The basic unit of an autopoietic system is a living cell (Figure 5.1.). As we know since Schrödinger's famous *What is life?* (1944), every living being is a thermodynamically open system (in a constant far-from-equilibrium state) – the cell is not unlike. Matter and energy are therefore constantly exchanged with the environment. Metabolism continuously regenerates the matter to maintain its organisation, including its outer membrane. This creates a pole of *internal identity* in relation to the environment and at the same time it creates its own world, its *Umwelt*, along significances, such as which chemicals to avoid and which to be attracted. In other words, the autopoiesis – now in particular of the outer membrane – like the two sides of a coin, one side, there emerges an internal identity, a primordial version of a bodily self, while on the other side of the same coin, there emerges meaning and value in the organism's world.

In effect, "autopoiesis gives rise, in one stroke, to inwardness and outwardness." (Thompson 2007 p. 163) This is what stands behind the claim that the enactive approach goes beyond the dualist formulations of life and consciousness. The theory of autopoiesis shows that a living a being in not merely an exteriority, instead, it embodies an interiority, which has an immanent self-purposiveness to life, precisely due to the self-production of an inside, which goes hand in hand with the self-production of an outside. The claim is then, that by having recognised that life is not purely an external phenomenon, instead it has both an interiority and exteriority, the enactive understanding of life and mind points beyond the dualist conceptions, which lays the foundations to comprehend the relation between body and mind, for now we have found that interiority is characteristic to both life and consciousness. Moreover, in the next chapter, we will see why – unlike the standard conception, from a phenomenological point of view – subjectivity has not only interiority but exteriority too, further expanding the ontological overlap between life and consciousness, body and mind. This, in turn, will further deeper our understandings of affectivity.

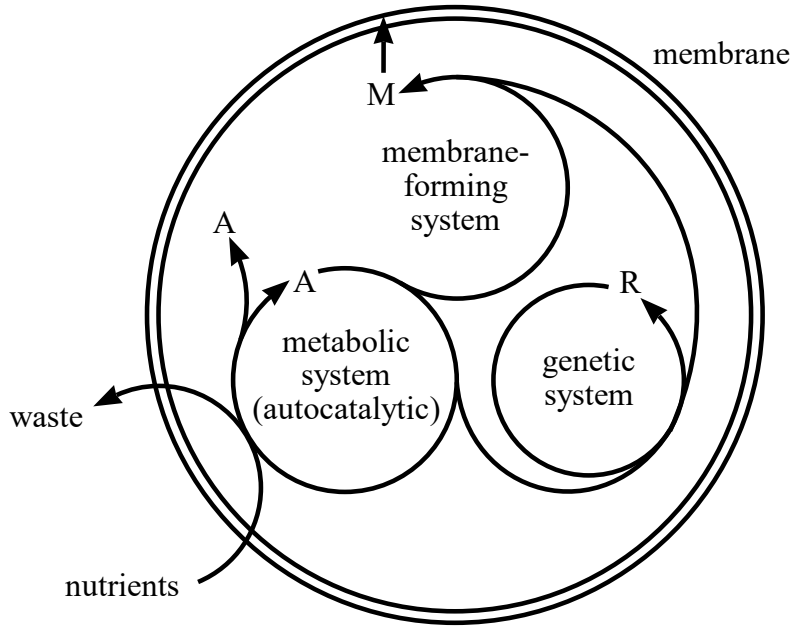

FIGURE 5.1. Schematic outline of Ganti's Chemoton model, the fundamental unit model of living systems (2003), as an example for a minimal autopoietic system, such as a cell. It constantly exchanges matter (in the form of nutrition and waste) and energy with the environment. The system consists of three functionally coupled, interdependent autocatalytic cycles. (1) A metabolic chemical network where metabolic autocatalysis takes place, the molecules in this subsystem are marked with an 'A'. (2) A genetic system, where the replication for the template polymerisation is sustained, i.e. where the genetic information is re-created, marked with an 'R'. (3) A membrane forming system, where the building blocks of the membrane is synthetized in an autocatalytic cycle, which is built in the membrane.[13]

[13] The figure is modified and based on the following source: http://www.istpace.org/Web_Final_Report/the_pace_report/svx_media/kiedro_chemoton.png?View=default

Current trends in enactivism – Varelian epistemology diluted

In this section, I will only briefly remark that the original Varelian enactivism have diversified over the years into different lines of research, not only to the one by Thompson. It is in fact so diverse that when Shaun Gallagher lists seven background assumptions of enactivism in his recent book *Enactivist Interventions* (2017 p. 6), I believe only two of them hold for all the trends that Ward et al. identified (2017). These assumptions are the following: "Cognition is not simply a brain event. It emerges from processes" (Gallagher 2017 p. 6), and "Enactivist approaches have strong links to dynamical systems theory, emphasizing the relevance of dynamical coupling and coordination across brain–body–environment." (ibid.)

However, these other trends do not commit to the epistemological framework proposed by Varela el al. (1991). Consequently, the aim of this section is to emphasis that even within enactivism, not the entire approach is suitable for our purposes, namely to find a theoretical framework in which affectivity can be adequately discussed.

Here, I will follow the categorization of the current "varieties of enactivism" of a recent overview by Dave Ward and his colleagues (Ward et al. 2017). They identify four fairly distinct trends in enactivism that have emerged since the publication of *The Embodied Mind*. The first trend is the one that is elaborated by Evan Thompson, presented above, they call this trend *autopoietic* enactivism.

The second trend is *sensorimotor* enactivism, where the main focus is on examining the relationship of perceptive experience and bodily action. Paradigmatic accounts of this trend are Noë 2014; O'Regan & Noë 2001. These works focus largely on sensorimotor contingencies, that is, pattern of dependences between action and perception, and it is not part of their aim to provide a general account of the mind and with it, mainly ignores the theoretical principle of the Varelian enactivism. Moreover, some approaches within this trend explicitly reject autonomy and normativity that emerges from biological life processes, consequently, these enactive accounts on perception and consciousness could be applied by machines in artificial life. Essentially, if we look back to the five ideas of enactivism by Thompson, that sensorimotor enactivism commits chiefly to the third idea, while largely ignores the rest. They are concerned with the perceptual experience explaining the sensorimotor dynamics of it, rather than dealing with its phenomenological aspects.

The third trend is *radical* enactivism, which is seen by Ward et al. (2017) as an attempt to unify all the anti-representationalist views of cognition rather than as competing with the first two trends. Akin to the sensorimotor trend, radical enactivists are concerned neither with the

Varelian rejection of cognitive realism, nor with the Thompsonian mind and life deep continuity thesis. See a paradigmatic work in this trend is by Daniel Hutto and Erik Myin (2012). Their focus is rather on a dynamical embodied and embedded account of cognition and the real time reliance on the environment based on which information processing can happen, instead of representing the environment and the using the representations for information processing (Chemero 2009). In short, radical enactivists heavily draw on dynamic systems theory, Gibsonian ecological psychology and robotics. Also, for these radical enactive accounts, cognition is conceived of as essentially embedded in a socioculturally scaffolded environment. In this regard these radical accounts go beyond the autopoietic and sensorimotor trends.

As a plus one, Ward et al. classify the commonalities found in the enactive and affective approaches, as well as in the rest of the E approaches – embodied, embedded, and extended – as the fourth trend, which they call "Enactivism's Extended Family". The accounts that belong to this family are not necessarily explicitly enactivists, only insofar as they share common ancestry with enactivism. As much as the '4E' approaches are nowadays living their renaissance, the exact relationship between these approaches is unclear.[14] One example who calls into question the consistency of the 4E approaches to cognition is Michelle Maiese, who argues that the views shared in the embodied and enactive approach cannot be logically consistent with the extended mind thesis (Maiese 2017).

After this quick glance into the current trends in enactivism, as a conclusion, I subscribe to the statement by Vörös et al. (2016), saying that many of the present branches of enactivism that claim to be "radical" – or as their analogy goes – "progressivist", and "revolutionary" are in fact epistemologically speaking the opposite of radical: they are only "diluted" versions of the original proposal in *The Embodied Mind*. We, however, have found the enactive approach appealing precisely because of its departure from cognitive realism and idealism, and its philosophical commitment to the groundless middle way. Therefore, we need to leave behind those trends that do not take these aspects seriously enough, in other words, the diluted versions of enactivism.

[14] As a matter of fact, it seems to me that what happens these days is often just habitually putting one E approach after another in a sentence just to sound better, more like a fashionable practice in these domains of cognitive science rather than as a result of a philosophically well-thought and just decision.

Conclusion

In this chapter, we have seen two prominent manifestations of the enactive approach, the original proposal, *The Embodied Mind*, and its highly sophisticated further development, the *Mind in Life*.

The main image that *The Embodied Mind* works with was the image of the epistemological groundless ground, which was found when stepping in the middle way by rejecting both realism and idealism. I interpreted the idea of the groundless ground as something *still* having a ground, albeit not as absolute as the outside world according to realism. This something was nothing else but the body itself, which is the epistemological source, the groundless ground for our uncertain certainty. I welcomed this philosophical move as it has given us a conception of the body, through which subject and world become inseparable, they mutually depend on each other, and mutually project one another. With this conception of the body, the first and third person, subject and object oppositions seem to fade away.

Precisely this fading away of the dualist conceptions was taken even further in *Mind and Life*, with its central thesis about the deep continuity of mind and life. We have seen that autopoiesis gives rise not only to the living organism, but *at the same time*, it enacts the cognitive domain of the organism. From this position, even the problem of the explanatory gap does not seem to make sense any longer, as there is no ontological difference between life and consciousness, as they are both the product of one and the same process, autopoiesis. In other words, mind did not just appear at some point during biological evolution, but life was in fact *always* 'minded'. That said, through autopoiesis, the enactive understanding of a *primordial bodily self* is already present from the beginning of life. We have also seen that autopoiesis create inside and outside "in one stroke". A further step was to see that the standard views in philosophy of mind, life is considered to be an external phenomenon, whereas consciousness is an internal phenomenon, therefore they mutually exclude one another. In contrast to that, the deep continuity thesis shows that life has both exteriority and interiority. We will presently see in the next chapter that it is true for consciousness too, as it is also not only and internal state, as the standard views consider, but it also has exteriority. As a conclusion, the enactive approach thus offers a non-dualist epistemology, where life and consciousness, body and mind, subject and object are not different kinds, but instead have the same ontological status. Such an understanding opens the way to treat affectivity, and vitality affects in particular, duly, as a phenomenon that plays a central role in life and in experience.

Summary of Part I.

The aim of this part was to find a suitable philosophical framework within cognitive science through which we can provide an adequate treatment for the phenomenology of affectivity in the rest of the thesis.

In chapter two, I have argued that embodied cognitive science is not a suitable candidate for the task for despite what it often claims, it did not manage to overcome the Cartesian heritage, hence the embodied notion of the body lacks sufficient phenomenological dimension. Therefore, using this paradigm would, in turn, lead us to a misconceptualized notion of affectivity too, hence we rejected embodiment as a way towards understanding affectivity.

In contrast, in chapter three, we have seen that the enactive approach – organically together with its theory of autopoiesis – has overcome the dichotomic ontology and epistemology of body and mind, subject and object, internal and external, life and consciousness – primarily due to its comprehensible and apt import of phenomenology into cognitive science (and conversely, the import of cognitive science into phenomenology). This enactive epistemology provides us with an understanding of the body that is commensurable – in a Kuhnian sense[15] – not only with affectivity but also with the bodily self, as Stern uses it, as I will later argue. It brings us to examine whether – and if so, in what way – Stern's account as a whole is dualistic and how much it is related to phenomenological ideas.

[15] See the original proposal of the notion 'incommensurability' by Thomas Kuhn (1962), and a recent essay on this topic particularly in cognitive science by Barker (2013).

Affectivity is a staple of life. In the most rudimentary sense,
it is what motivates creatures to approach or avoid.

Maxine Sheet-Johnstone

II. AFFECTIVITY IN THE MIND SCIENCES

Now that the basic theoretical position is established in which it is worthwhile to scrutinise affectivity, in Part III, I will review the literature as to what is the status of affectivity is in phenomenology, cognitive science and in general, in the mind sciences.

Before proceeding, at this point, I shall clarify what I mean by 'cognitive science' and by 'mind sciences', once I already put them in the titles of even two main parts of the thesis (in part II and III). Let me start with a confession: I do not have a clear-cut definition for them, and to me, they differ more on a personal, "feeling" level than on a strict academic level. Still, when I use cognitive science, I refer more to the research project that started in the 1950s with classical cognitivism and then was followed by different approaches to cognition, such as connectionism, dynamic systems theory, embodiment, etc. in a more or less paradigmatic fashion, but certainly something which can be historically traced back. Whereas when I use 'mind sciences', or even sometimes 'sciences of the mind', I have a somewhat cloudier, less organised, less historically ordered image in front me. I am aware that I have adopted this term by Evan Thompson, but I have never found him anywhere giving a precise definition either. Possibly due to this origin personally, 'mind sciences' to me has a more philosophical connotation, with a bigger emphasis on philosophy of mind, particularly, a more phenomenological connotation than cognitive science has. 'Mind sciences' certainly is a broader category to me than 'cognitive science'. In a sense that, for example, I would not consider the works of the phenomenological tradition as part of cognitive science that were published prior to the project of 'naturalising phenomenology', in other words, prior to the beginning of the dialog between phenomenology and cognitive science, for instance, original

texts by Husserl. But I would indeed consider these texts as part of the mind sciences. For that matter, in the present case, this example might precisely be the reason of making this distinction in the titles. In the previous part, in part II, I wanted to look around the so-called paradigms of cognitive science, *within* cognitive science, where enactivism being the phenomenologically most influenced paradigm, but phenomenology *per say* was not part of the scope there. (Let me not discuss now whether or not they can be justly considered as paradigms.) Whereas here, in part III, by 'mind sciences', I refer to this broader category which does include phenomenology or even parts of psychology that for example do not strictly overlap with the classical boundaries of cognitive science.

Before reviewing what the mind sciences have to say about affectivity, I begin with a chapter examining the relationship between Stern's account and phenomenology, enquiring as to how much Stern's original introduction of vitality affects was already a phenomenological treatment. Only after this will I discuss how affectivity is conceived in the mind sciences, so that in the last chapter of this part, I can come back to Stern again and see how specifically his notion of vitality affects appears in the literature.

4. Stern and phenomenology

As already pointed out in the introduction, Stern does not cite any phenomenological work in his 1985 book, *The Interpersonal World of an Infant.* Given that this work concerns the central issues of phenomenology, namely, the intersubjective and temporal structure of experience, we can presume that he had not been aware of phenomenological literature at all. Otherwise, grounding his theory in – or at least seeking for theoretical support – in phenomenology arguably would have been obvious, not to say necessary, had he known their works. After 1985, however, Stern was clearly influenced not only by Husserl's and Merleau-Ponty's canonical writings, but also by the theoretical and empirical experience research in cognitive science, since he dedicates a substantial part in his book of 2004, *The Present Moment* with an overview on the present moment as it is lived employing ideas from embodied cognitive science, neurophenomenology, cognitive neuroscience, and phenomenology (Stern 2004, Chapters 2–4).

All the more interesting is to examine how much Stern's approach in 1985 was phenomenological without him knowing the phenomenological literature. In a way, it gives us a more authentic depiction regarding the extent to which Stern's stance on the nature of

experience is similar to that of phenomenological philosophers. For in this case, any resemblance must be a result of conclusions that indeed have been reached independently from phenomenological thinkers. The question concerning the degree to which an idea or approach is phenomenological is deeply intertwined with the question whether or not the idea at stake is dualistic. To phrase it in a slightly more sensitive manner: to what extent an idea or approach bears signs of dualistic ways of thinking?[16] The reason for this is that although it is not easy to name a unifying concept or trend under which one could safely categorize all transcendental and existential phenomenologists in a straightforward fashion, yet, one unifying feature would probably be the attempt to overcome the dualistic manner of understanding experience – and with it the world – namely, in terms of such dichotomies as subject-object, mental-physical, internal-external, and so on.

Inferring mental states

Eva-Maria Simms argues that even though Stern has a misconceptualized notion of phenomenology, his theory can still be deepened by phenomenological reflection (Simms 1993). As she points out, what Stern writes in the Introduction is indeed remarkable:

> One aim of this book is to draw some inferences about the infant's subjective life from this new observational data. This has not been done before, for two reasons. On the one hand, developmentalists, who are creating this new information, generally work within the tradition of observational and experimental research. In keeping with that approach, they choose not to make inferential leaps about the nature of subjective experience. Their emphasis on objective phenomena, even in clinical matters, is in line with the phenomenological trend now prevalent in American psychiatry, but it places severe limits on what can be embraced as clinical reality-objective happenings

[16] To discuss the ways in which the notion 'dualism' has been used throughout the history of philosophy, more specifically, philosophy of mind, exceeds the aims of this essay. Hence, here I only briefly refer to Thomson's work, *Mind in Life*, for the way he treats different kinds of dualisms inspired the use of this notion in the present work (Thompson 2007). What is meant by dualism in the present work is first and foremost an ontological dualism, namely, that mind and body, consciousness and matter are ontologically different entities. This view has several subversions, all formed as problems, such as the mind-brain problem (see critical works on it: Noë 2009; Sheets-Johnstone 2011, Chapter 10), and mind-mind problem, known as the 'hard problem of consciousness' (Chalmers 1995).

> only, not subjective happenings. And just as importantly, this approach remains unresponsive to the basic questions about the nature of the infant's experience. (Stern 1985 p. 4)

Stern seems to believe that phenomenology is an all too objectivist trend in American psychiatry, as indeed this is the only occasion when he uses the word 'phenomenology' in his book. This, however, does not mean that only by having misled beliefs on what phenomenology is, he could not have noteworthy phenomenological insights, as we will presently see. Yet, the usage of the notion of 'inferential leaps', which pervades the entire book, does have an unfortunately dualistic connotation. According to Stern, what prevented developmentalists to get to the subjective experience of the infants from the observational and experimental data was precisely that they chose not to *infer* from the *objective,* observed behaviour to the *subjective* experience. Such word usage in itself does imply a split, dualistic view of the subject where one needs to perform a *mental process* from seeing the behaviour to somehow "get to" the subjective quality behind the observed behaviour. This choice of words is especially striking considering that the burden of his book is exactly the opposite: to show how intricately and subtly bodily movements and feeling qualities are tight together in the form of vitality affects and that in fact vitality affects are the very bases of the organisation of the self in a foremost intersubjective space. This idea is very much in line with Merleau-Ponty's position, as he also advocates the experience being primarily intersubjective, lacking barriers as opposed to the kind of experience that is subjective, enclosed in an interior world – he maintains that the latter requires more abstraction than the former (Welsh 2013a).

Likewise, Stern writes "Mental states between people can now be "read", matched, aligned with, or attuned to (…)" (1985 p. 27). Again, the wording "reading mental states" has an all too cognitivist undertone, albeit the "read" is in quotation marks in the original text, yet "mental states" are not. Supposedly again, he might simply not have been aware of the potential misleading connotations of the usage of these words. Stern thus appears to be struggling to balance between the content and the general aim of his writing, and some of the technical terms he uses – and the unfortunately mismatching connotations they come with. It is nevertheless mostly apparent only in the beginning of the book where he presents the method and approach of his work.

Behaviour as expression

Later in the book, however, the underling philosophical presuppositions about the nature of intersubjectivity are remarkably different from what can be found in the initial chapters of the book discussed above. To verify this statement, it is worth to take a closer look at a passage discussing the intricate nature of the problem of sharing affective states with another person that Stern calls affect attunement. For the purpose of the present argument however, it is presently sufficed to read his definition of affect attunement to understand the passage below. Affect attunement is "the performance of behaviors that express the quality of feeling of a shared state without imitating the exact behavioral expression of the inner state" (ibid. p. 142). He thus writes.

> What is being matched [in affect attunement] is not the other person's behavior per se, but rather some aspect of the behavior that reflects the person's feeling state. The ultimate reference for the match appears to be the feeling state (inferred or directly apprehended), not the external behavioral event. Thus the match appears to occur between the expressions of inner state. These expressions can differ in mode or form, but they are to some extent interchangeable as manifestations of a single, recognizable internal state. *We appear to be dealing with behavior as expression rather than as sign or symbol, and the vehicles of transfer are metaphor and analogue.* (ibid. p. 142, my italics)

Again, note the arguably outstanding difference in the two longer passages quoted above (from p. 4 and p. 142) regarding the underling philosophical presuppositions about the nature of intersubjectivity. The issues with the first quote have already been discussed. In terms of the standpoint in philosophy of mind, the latter paragraph, however, resembles of non-dualistic, phenomenological views on intersubjectivity. More specifically, it resembles of what Husserl calls *analogical apperception* in the Fifth Cartesian Meditation (Husserl 1960, §50)[17]. For Husserl, when one encounters another person, the problem is not centred around the question of how to "ascribe mental states" to a human body in front of me, as the traditional formulation

[17] See two excellent secondary sources specifically on the Fifth Meditation: Hammond, Howarth, & Keat 1991 Chapter 8; Vermes 2006 pp. 25–36; and a general summary on intersubjectivity in the entire Husserliana: Zahavi 2003 Chapter 3. The following reasoning is also based on these sources, along the original text.

of the so-called "problem of other minds" puts it, but in fact quite the opposite. As Husserl puts it, "in the case of experiencing a man: the other is himself there before us "in person" (ibid. pp. 108-109). In other words, the other appears as animate organism. Let me explain, following the argument by Hammond et al. (1991 Chapter 8), why there is such a huge difference in terms of how people are conceived in the two paradigms – on the one hand, where one needs to 'ascribe mental states' to the other, on the other hand, where one experiences the other as 'animate organism'.

Intersubjectivity: two opposing philosophical traditions

The classical formulation of the problem of other minds is based on two convictions: one is Cartesian dualism, that people consist of two (onto)logically independent parts, and the other regards how we acquire knowledge, namely, the belief in empiricism. Empiricism says that knowledge derives from the outside world through the senses. Since we have direct sensory contact only with other bodies, but not with other minds, this paradigm produces the problem of other minds as formulated above. One of the solutions within this classical cognitivist approach includes finding a 'legitimate passage' from the sensory data about other bodies to claims about other minds. According to Hammond et al., there are two such 'legitimate passages' (1991). One is 'arguing by analogy', where one argues from observed similarities to unobserved ones. In the case at stake, observed similar bodily states therefore must "house" similar states of mind. The other legitimate passage is the 'best explanatory hypothesis' which claims that the phenomenon that we can observe similar behaviour of other bodies can be best explained with the assumption that there are other minds inside the observed bodies. Hammond et al. note that the latter line – the best explanatory hypothesis – is mostly used in science and in fact it proves to be a reliable and successful method. As we have already seen, Stern also employs this line of reasoning when describing his book as a working hypothesis, for the very same reason: one can only hypothesize about the subjective experience of infants inferred from their observed behaviour.

In contrast to these views, phenomenologists are dissatisfied with ascribing only a probability of the existence of other minds – be it high or low. They demand more. The project of phenomenology is to describe the structure of experience as precisely as possible. Accordingly, in this case, Husserl observes that the knowledge of other minds is foundational for all other knowledge. He insists that the existence of other minds does not appear only with a high likelihood in our experience, instead, other minds appear in experience with a similar

self-evidence that is ascribed to the Ego in the Cartesian tradition. He shows that the opposite case – namely, that other minds do not exist – is in fact inconceivable, in more technical terms, that experience of intersubjectivity is apodictic. This is what is behind Husserl's statement "the other is himself there before us 'in person'" (Husserl 1960 pp. 108–109), as animate being. Discussing the notion of analogical apperception will make it clearer.

Affect attunement and analogical apperception

As a reminder, my claim here is that the presuppositions of Stern's quoted description of what is being attuned in affect attunement regarding the nature of intersubjectivity can be likened to that of Husserl's conception of analogical apperception. What Husserl means by analogical apperception also concerns the experience of bodies – mine as well as others. He establishes in §50 in the Fifth Meditation that one experiences one's own body in a distinctive way compared to other bodies, for there is an irreducible inaccessibility to the other's subjectivity which does not hold to my own subjectivity. Before elaborating the concept of 'analogical apperception', Husserl discusses a phenomenon of what he calls 'analogical appresentation'. Appresentation is the – already mentioned – experience that other bodies are presented to me as animate organisms, added that I perceive them as analogous to my own. To be more precise, Husserl arrives to this point from raising two problems, in the form of hypothesising two radical positions as it were: first, what makes me not to perceive the other as not me, but as other.

> If it were, if what belongs to the other's own essence were directly accessible, it would be merely a moment of my own essence, and ultimately he himself and I myself would be the same. (ibid. p. 109)

This is what was meant earlier in this chapter by the statement that Husserl's approach towards intersubjectivity is quite the opposite to that of the classical formulation of the problem of other minds. For Husserl, the problem of intersubjectivity begins with why I do not perceive the other and myself as one. In contrast, as we saw above, the problem of other minds arises from the question of how I can know that the other body somehow houses a similar consciousness as mine.

Second, the other radical position Husserl puts forth, against which he can later argue, is as a matter of fact peculiarly alike in certain respects to the cognitivist position.

> The situation would be similar as regards his animate organism, *if the latter were nothing else but the "body"* that is a unity constituted purely in my actual

> and possible experiences, a unity belonging - as a product of *my* "sensuousness" exclusively - in my primordial sphere. (ibid., my italics)

Since, however, we neither perceive the other ego as my ego, nor do we perceive the other as "nothing else but the "body"", but in fact, as an animate organism, as another consciousness, as an *alter ego*, he continues by saying that "A certain mediacy of intentionality must be present here" (ibid. p. 109), that we make "present to consciousness a "there too"" (ibid. p. 109). What he means by that is that there exists intentionality – i.e. an opening to the world – there in the organism too. This "making co-present" is what Husserl calls "appresentation". Analogical appresentation thus means that I perceive the other body as analogous to my own, and I appresent, I make intentionality co-present here (in my being) and there (in the other).

Husserl's side note at this point on why we do not perceive the other as me, as "merely a moment of my own essence", is that the co-present consciousness is not itself there and in fact in can never be an "itself-there", referring, as I understand it, to the body's special location, namely that the locus of my intentionality, from where I open to the world, is always 'here', and it can never be 'there', where the other is. He elaborates on the horizon of the perception of other bodies and the particularities of their spacial location later in detail in §53.

What the notion of analogical apperception adds to, or differs from the concept of analogical appresentation is that the former involves a "transfer of sense" from my experience of my own body – my self-experience – to my experience of the other body. As Husserl puts it,

> the body over there, which is nevertheless apprehended as an animate organism, must have derived this sense by an *apperceptive transfer from my animate organism* (ibid. p. 110)

and later

> that body over there with my body can serve as the motivational basis for the "analogizing" apprehension of that body as another animate organism (ibid. p. 111).

Importantly, Husserl states that analogical perception does not involve inference: "apperception is not inference, not a thinking act." (Husserl 1960 p. 111), which finally connects us back to Stern's description of affect attunement and to the comparison of the views of intersubjectivity in phenomenology and in classical cognitive science. What Husserl insists

– that apperception is not a thinking act, in other words, it does not involve cognition – stands in clear contrast with the cognitivist view.

Instead, one of the main distinctive features of this "analogizing" in apperception is the presence of pairing *(Paarung)* in experience. One pairs the perception one's own body with the perception of the other's body. "Pairing happens spontaneously, it is a passive synthesis" (Vermes 2006 p. 34, my translation). Vermes emphasises the paradoxical nature of the experience that analogical appresentation describes (ibid.).

> It [analogical appresentation] expresses that I must begin with a presentation – the experience of the other's body – and at the same time, this presentation refers to something that is in principle unpresentable – the unpresentable sense of the other's alterity (ibid. p. 34, my translation).

She continues by saying that while the other body calls my attention based on its analogy with my own body, yet as its behaviour remains inherently unpredictable and fundamentally inaccessible, I perceive it as *other*, as foreign, which immediately points beyond this very analogy (ibid. p. 35).

In sum, perceiving the other as having a mind similar to mine is, for Husserl – and for that matter all the subsequent phenomenologists – is by no means based on an inference from analogy with a certain likelihood, as the cognitivists would argue. Instead, it is based on analogical apperception that is present in experience on a much more fundamental, primordial layer, in the ego's constitution of the world, involving a transfer of sense regarding the similarity between the self-experience and other-experience by a passive synthesis, by pairing.

Let me point out the similarities of Husserl's and Stern's account presented here. But before that, I wish to make something clear. I am in no way claiming that Stern's notion of affect attunement and Husserl's conception of analogical appresentation describe the same, or even similar, phenomena. They do not. Both notions refer to intersubjective experience, but the two descriptions deliver different levels of explications of these experiences. It might be safe to say that Husserl's analogical apperception provides a well-suited phenomenological support to Stern's affect attunement. In other words, analogical apperception provides one of the underlying mechanisms for affect attunement. Nevertheless, at this point, we are not so much concerned with the comparison of the actual content of these concepts. In this chapter, we are interested in these notions only as long as they provide us a grasp on the presumable stance of Stern's work from the viewpoint of philosophy of mind.

Once again, Stern writes "the ultimate reference for the match [in affect attunement] appears to be the feeling state (inferred or directly apprehended), not the external behavioral event." (Stern 1985 p. 142). Interestingly, he deals with the above presented huge philosophical issue simply in brackets: whether the other's feeling state is inferred by one (striking as a cognitivist) or directly apprehended (striking as a Husserlian), Stern does seem to care to take a stance. Yet, the whole passage comes across as a phenomenologically influenced view: "We appear to be dealing with behavior as expression rather than as sign or symbol" (ibid.). He votes in favour for behaviour being an expression where inner feelings "shine through" movement and behavior – an arguably non-dualist stance. It implies that the other can perceive the "inner" state directly by looking at the "outer" behaviour, which immediately recalls the recurring topic in phenomenology of challenging the notion of "inner, subjective" vs. "outer, objective" dichotomy, with which Stern often sympathise, albeit covertly. He contrasts it with the case of behaviour "as sign or symbol", which implies the classical cognitivist understanding of cognition, where cognition is conceived of as symbol manipulation.

Like Husserl, Stern also deals with the problem of why I do not constitute the other person as myself, which arises as a prime issue for phenomenology in explicating the bodily constitution of experience. We have briefly seen Husserl's offer on this problem. Without getting into the details at this stage, Stern's explanation differs from Husserl. While Husserl finds his solution on the level of the monadological ego and the sense of the "peculiar ownness" of one's body; Stern sees the answer to this problem in the existence of the sense of a core self and core other, and in the fact that one is always more attuned with the core self than with the core other.[18] However, again, the sheer fact that this question is formulated in Stern's thinking is yet another evidence that supports the claim that Stern is a deeply phenomenological thinker.

Finally, there is another topic where resemblance can be found between Husserl and Stern. As Zahavi points out (2003), in Husserliana vol. 15, Husserl establishes that the mother-child relation precedes subject-object (as in physical object) relations, as the infant's relationship with the mother is the most original of all relations. Zahavi goes on to say that according to Husserl "the central question is not how I can get from the experience of a physical object to the experience of a foreign subject, but how my experience of incarnated subjectivity (my own as well as foreign) conditions the experience of mere objects" (Zahavi 2003 p. 113). I am not

[18] Stern's developmental account of the early organisation of the self will be discussed in detail in part III.

aware that precisely this claim has been made by Stern, but generally speaking, we can see as an essential, underlying presupposition of his theory that the early organisation of the self is fundamentally embedded in the infant's interpersonal and intersubjective space as the primal and most formative way in which their perception of the world and their self develop, that the comparison I believe is arguably valid.[19] In addition, Merleau-Ponty's notion of syncretic sociability also supports Stern's approach. Merleau-Ponty argues that the infant's social awareness precedes and therefore serves as a prerequisite their sense of self-awareness (Welsh 2013a). In other words, intersubjectivity has a primacy over subjective self-awareness. These questions will be discussed in more details in part III.

Conclusion

This chapter examined to what extent Stern's thinking – when writing the book, *The Interpersonal World of an Infant* – was dualistic on the one hand, and to what degree it resembled in the presuppositions and approaches to that of phenomenology, on the other hand. I noted that Stern struggles to be consistent when presenting his methodology in terms of his implicit stance in philosophy of mind. While he uses words that have heavily Cartesian connotations, the content of the text implies an understanding of intersubjectivity that is more alike to that of a non-Cartesian, phenomenological view. I presented how intersubjectivity is conceived of in two opposing philosophical traditions – in the more classical streams of philosophy of mind, and in phenomenology. Using this knowledge and terminology, I then discussed more closely, through a concrete example, Stern's phenomenological connection by analysing excerpts by Stern and by Husserl. The underlying philosophical presuppositions were compared looking at the Stern's and Husserl's notions of affect attunement and analogical apperception, respectively. I concluded that Husserl's observation on the experience of intersubjectivity suits well with, moreover, provides a theoretical support for Stern's theory of how sharing affective states works. Hence, I arrived to the conclusion, that regardless of Stern's apparent initial struggles with finding his implicit position in philosophy of mind, he is very much of a phenomenological thinker.

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[19] A reminder needs to be added. Namely, that, if otherwise not stated, when I am making claims discussing "Stern", they always refer to his book *The Interpersonal World of an Infant*. At this point of the argument, however, see *The First Relationship – Infant and Mother* (Stern 2009), for a discussion on the developmental aspect of this Husserlian question.

After having positioned Stern's views on the palette of philosophy of mind, we can now continue to see how others understand the role of affectivity in experience. This leads us towards those parts of cognitive science and the mind sciences that have something to say about subjectivity, affectivity, and the nature of human experience in general.

5. Affectivity in the mind sciences

From what we have seen so far in the first four chapters regarding the philosophical presuppositions of cognitive science, it should not take us as a surprise that the classical paradigms in cognitive science have nothing to say about affectivity, experience, and subjectivity. They are simply outside the scope of their investigation which is largely due to their dualist conception of the body. In these classical trends, if noted at all, affectivity is considered to be an almost negligible colouring factor to cognition. It was not even the embodied paradigm, as I argued, but the enactive approach that finally set the stage for affectivity in cognitive science, most prominently two books: one is the already much discussed *Mind in life* by Evan Thompson (2007), the other one is by Giovanna Colombetti, called *The Feeling Body: Affective Science Meets the Enactive Mind* (2014a). This book is explicitly a continuation of Thompson's work insofar as it extends the thesis of deep continuity of life and mind to affectivity by rephrasing the original as follows: there is a deep continuity of life and affectivity. Let us go back to the source of this thesis.

Aristotle – animation is inherently affective

This idea that life is inseparable from affectivity, or as Colombetti puts it, "The mind, as embodied, is intrinsically or constitutively affective; you cannot take affectivity away from it and still have a mind." (ibid. p. 1) recalls Aristotle's conception of animation.[20] Even just briefly returning to Aristotle's insights into *animate beings* will make us appreciate why Colombetti's work is ground-breaking in "reclaiming the deeper notion of affectivity" in an

[20] As a matter of fact, Colombetti did not build her thesis on Aristotle, she mentions him in the book only once, in the context that Thompson's enactivism can be traced back to Hans Jonas, and in some sense to Aristotle too (Colombetti 2014a p. xvi). Therefore, recalling Aristotle at this particularly from this sentence is my proposal.

era which clearly has long forgotten that life, affects, and mind are of one kind, as it is for Aristotle.

In *De Anima – On the Soul*, Aristotle defines everything living in nature as animate, whereas rocks for example are inanimate. For him, it is the soul that constitutes the living in animate beings. As he writes,

> Two characteristic marks above all others have been held to distinguish that which has soul from that which has not: movement and sensation. (403b25-27)

Marking *movement* as a foundational feature of animation places a great emphasis in Aristotle's philosophy on the recognition of the dynamic, qualitative aspects of life and living, as Sheets-Johnstone untiringly advocates it (See for example Sheets-Johnstone 2011b).

Phenomenologist, psychotherapist Eugene Gendlin in his *Line by Line Commentary on Aristotle's De Anima, Books I & II* writes: "Aristotle [insists] that the soul cannot be moved or affected. Only the soul-and-body can be affected." (2012 I-1 p. 14, my added hyphens). To understand this better, note that for Aristotle, the distinction is not between soul and body, as it is generally held today, instead between the soul and the soul-and-body, as it is in the quote. Aristotle writes:

> It appears that in most cases the soul is not affected, nor does it act apart from the body, e.g., in being angry, being confident, wanting, and in all perceiving. (403a.7)

It is also worth to pause and acknowledge that for Aristotle, "being angry" and "all perceiving" are on one and same list being cases that affect the combination of soul and body. The only potential candidate, Aristotle finds, that is "peculiar to the soul itself", as it affects only the soul and not the soul-and-body, is noein, which translates as 'thinking, understanding'. But even here, he adds cautiously,

> But if this too is a form of imagination or does not exist apart from imagination, it would not be possible even for this to be apart from the body. (403a9-10)

He thus concludes,

> It seems that all the affections of the soul happen along with the body – passion, gentleness, fear, pity, courage, and further, joy and both loving and hating; for, together with these, the body is affected in a certain way. (403a16-19)

Gendlin summaries,

> The soul is affectable only through its matter which is the *ensouled body*. (…) [Aristotle says that] the soul as such is never affected or moved. (Gendlin 2012 I-1 pp. 14-15, my italics)

Aristotle thus presents a remarkably different ontology regarding the body and affectivity whose presuppositions are in fact the very opposite to that of embodied cognition and traditional affective science. For Aristotle, animate beings are affected only through their *ensouled bodies*, that is through the body which is alive.[21] Precisely because for Aristotle, "soul is that constitutes the living in animate organisms", which is to say, that the soul constitutes the *living* in living beings, affectivity is indeed one of the most foundational characteristics to life and this characteristic is deeply bodily. In effect, according to this, affectivity cannot in principle not encompass the entire body, the entire organism; affectivity cannot not have a fundamental role in life and in how we constitute the world. This, put together with Aristotle's notion of animate being – which is distinctly characterised as that which has movement and sensation –, results in affective animation that is concerned with the qualitative bodily dynamics of life and of experience.

In contrast to this, as a reminder of chapter two, what 'embodied mind' implies is a mind that is originally not embodied, therefore must lack substance – i.e. the Cartesian res cogitans – which then did meet substance in the form of the body – the Cartesian res extensa – to form the embodied mind. Therefore, in the Cartesian view, accounting for affectivity is an additional task to accomplish, which in fact largely amounts to the challenge to account for the relationship between the so-called "affective phenomena" and "cognitive processes" – precisely because in this ontology they are two qualitatively distinct kinds.

However, our affects, our affective life, does not appear in our experience as something different from cognition, something as merely a secondary colouring to our cognitive processes. On the contrary, affectivity appears in experience not as something separate from thinking, but as something fundamentally tied to whatever we do, think, move toward, remember, feel, plan, move away from, count, wish, interact with, reach for, read, desire,

[21] Sheets-Johnstone's phrasing for this 'ensouled body' is 'soulful body' (2018 p. 3), which is equally precise and informative (let alone poetic), but for the present argument, the 'ensouled body' suites better the 'embodied mind' due to the identical grammatical structures of the two.

encounter with, write, fight with, draw, hope for, or play. If anything, if we really were to tear apart affectivity and cognition, as the majority of affective science, psychology, cognitive science and philosophy of mind do, then certain types of affective phenomena are in fact preconditions for cognition, not the other way around. What is the role of affectivity in experience then? How does it structure our experience? These questions lead us to see what phenomenology has to say about affectivity.

Phenomenological considerations

One could discuss many more works in the history of philosophy that share the view with Aristotle in that life, body, and affects are inseparable. However, as it would go beyond the intended scope of this thesis, I thus here only point again to the book *The Feeling Body* by Colombetti, that provides a brief overview on some of these works (Colombetti 2014a Chapter 1). In this chapter, she discusses philosophers, all them with a constant attempt to work their way out from the Cartesian standpoint – which seems inevitable to somehow situate themselves against the tapestry of Cartesianism that weaves across a number of philosophies. Descartes functions as the reference point for many.

She presents Spinoza's notion of conatus, Maine de Biran's treatment of bodily subjectivity, Michel Henry's work who applied Biran's philosophy of the lived body to affectivity, Heidegger's important notion of mood – which account peculiarly does not mention the body at all. Colombetti furthermore deals with Jan Patočka's criticism of Heidegger, and his primordial dynamism that is, for him, characteristic for bodily subjectivity.

In this chapter, however, the focus is not on tracing back the history of affectivity, but more so on recent accounts of affectivity – in this section particularly on the phenomenology of affectivity – and on that are currently debated. With this in mind, for this section, I will, amongst other sources, rely on Thomas Fuchs' contribution to *The Oxford Handbook of Philosophy and Psychiatry*, titled *The Phenomenology of Affectivity* (Fuchs 2013).

Fuchs adopts a similar position on affectivity to my concluding remarks in the previous section on Aristotle. He writes,

> My account is based on the assumption that affects are not mental states in the immanence of the subject that we project onto an otherwise indifferent sum of objects. Rather, they are modes of bodily attunement to, and engagement with, the lived world. It is only through our affectivity that we find ourselves in a meaningful environment in which persons and things matter for us, and in

> which we care for them as well as for ourselves. Affects are the very heart of our existence. (Fuchs 2013 p. 613)

There are a few rather widely ranged yet related concepts to affects, amongst which there exists no clear-cut boundary or well-defined relations. Indeed, occasionally they are even used interchangeably. These include bodily feelings, emotions, moods, atmospheres, passions, and existential feelings. This conceptual diversity keeps phenomenologists busy with fleshing out the exact role each concept plays in the constitution of one's reality. What could be preliminary said which would elicit probably the least disagreement is that in one way or another these all belong to the umbrella category 'affective phenomena'.

As William James famously wrote on the essentially bodily nature of emotions,

> If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its characteristic bodily symptoms, we find we have nothing left behind, no "mind-stuff" out of which the emotion can be constituted. (…) What kind of emotion of fear would be left, if the feelings neither of quickened heart-beats nor of shallow breathing, neither of trembling lips nor weakened limbs, neither of goose-flesh nor of visceral stirrings, were present, is quite impossible to think. (James 1884, 193–194)

It is not the case – contrary to what the classical cognitivist picture suggests – that there is fear, conceived of as a *mental state* in the head, and albeit at the same time yet as a distinct event, the body is shaking as a sheer epiphenomenon of fear. It is not that we feel ashamed and as a consequence, we start blushing, which blushing we could hold back if we really wanted to. It is not that the feeling of love *causes* the entire body trembling and feeling inexplicably funny. On the contrary, fear *is* the shaking of the body, shame *is* the blushing of the face, and love *is* precisely the inexplicably funny feeling in the whole body. They are not *causally* related where certain mental states cause certain changes in the body, instead, they are mutually *constitutive* of one another. Blush constitutes the feeling of shame, fear is constituted by the trembling-shaking body, feeling inexplicably funny is constitutive to love. Once again, it is not a nitty-gritty "faffing around" over semantics, but such a difference has far reaching implications on the one hand, and serious differences in the presuppositions on the other hand, regarding the conceived philosophical status of the body in subjectivity.

Indeed, not only in emotions, but in all affective phenomena, the "body acts as a tacit or more explicitly felt medium of our affective relation to the world." (Fuchs 2013 p. 626) Affectivity emerges as a pre-reflective bodily attunement to the world, which – as we will

presently see in Part III – is primarily a social, interpersonal world both in the early ontogenesis of human life and in adulthood.

The relational nature of affectivity

This bodily attunement to the world is the process whereby we *make sense* of the world. It suggests that we can be attracted to certain things and repelled by others, which idea is closely connected to – if not the same with – the fundamentally relational aspect of affectivity. Many authors put and emphasis on this dimension of affectivity. Fuchs words this as

> affectivity conveys *meaning* to our life: it is only through affects that we live in a world in which persons and things matter, that we learn what is relevant for us, and what a world in which persons and things matter, that we learn what is relevant for us, and what is worth our engagement. Without affects, the world would be a place without affordances is worth our engagement (Fuchs 2013 p. 627)

Colombetti puts it this way:

> Affectivity (…) refers broadly to a *lack of indifference*, and rather a *sensibility* or *interest* for one's existence. (2014a p. 1)

Whereas Sheets-Johnstone's phrasing, part of which served as the quote for this part, goes thus.

> Affectivity is a staple of life. In the most rudimentary sense, it is what motivates creatures to approach or avoid. In this sense, it is one aspect of what is biologically specified as a defining feature of life, namely, 'responsivity'. (2011b p. 454)

We relate to world in a way that things matter to us, things appear as significant precisely through our bodily affectivity. These 'things' in fact are primarily other people, other subjects that we are responsive to, that we attune to, that we lack indifference to, etc. Affectivity is thus inherently embedded in our interpersonal, intersubjective world. Fuchs calls this *interaffectivity* – which is similar to what Stern termed *affective attunement*, as we have seen in chapter four – the phenomenon that our bodies affectively attune to one another, the other's expression, for example, with its kinaesthetic, dynamic qualities. Fuchs takes it as the bodily bases of *empathy* and *social understanding*, which is connected to Merleau-Ponty's *bodily resonance* or

intercorporality (Fuchs 2013 pp. 625–626). We will see in Part III, what Stern has to say about it from an ontogenetic perspective and how the sense of self is constituted along precisely the relational aspects of affectivity – along affect attunement with others and with ourselves.

Affective intentionality

Certain dimensions of experience help distinguishing between these concepts that can be found in the phenomenologist's vocabulary. One of them is the intentional character of consciousness, or experience. Intentionality as a philosophical technical term can be traced back to Franz Brentano, which was later developed further primarily by Husserl – which at the same time means that for phenomenology it has become a significant dimension for characterising experience. Intentionality means 'aboutness', 'directedness'. It is an essential characteristic of consciousness. Consciousness is always *about* something: if I think of the Himalaya, then my consciousness is *directed towards* the Himalaya, this particular conscious state is *about* that mountain.

Consider, for instance, the difference between mood and emotion. In psychology, it is usually said that moods last longer from a few hours up to weeks with no well-defined beginning and end, whereas emotions form short-lived, more dynamic and more intense episodes. They are often compared to climate and weather, respectively. Or, as Fuchs suggests, according to another analogy, if moods are like tides, then emotions are like the waves. These dimensions alone, however, do not always do justice as to something is a mood or an emotion, for sometimes moods can be rather ephemeral, and emotions can also be sustained for a longer period of time. Yet, Fuchs claims that they differ more clearly in terms of their intentionality, or lack thereof (ibid.). He says that while emotions are intentional, they are always *about* something or someone, they are inherently directed towards things, persons, events: one is sad *about* …, angry *at* …, or one feels hope for …, joy of … Whereas moods lack intentionality, they are not motivated by a particular object. They can be elicited by a particular object or event, but if it sustains, the original cause fades away, it is no longer a characterising motif of the mood.

I believe, one can easily find counterexamples or borderline cases, where intentionality appears or disappears in the dynamics of experience. One example would be that I feel sad – which is traditionally considered to be an emotion – without any apparent reason or aboutness. Then I nevertheless suddenly realise *why* I am sad, which comes with an indeed very particular directedness. If we assume my example captures a realistic experience, then the question is

whether such a case would cause to change ‘sadness” from being an emotion to being a mood, or it would simply falsify this line of reasoning. I am leaning more towards the latter, namely that something is not quite right with the assumptions in the reasoning regarding the intentional nature of moods and emotions. Colombetti shares my concerns and offers a way out by suggesting reconceptualising intentionality. Those philosophers who do not deny the intentionality of moods, suggest that the object of their intentionality is generally “everything”, or “the world”. Colombetti argues that it is phenomenologically inadequate, as it is hard if not impossible to imagine how an experience could be directed towards *everything* in the world. In contrast to that, non-intentionality of moods implies a self-enclosure, a detachment from the world. Again, it seems rather impossible for a mood not be directed to the world somehow, even in the case of ‘darker’ moods, such depression, where it is reported to feel “alienated, isolated, or cut off from the world”. These reports do not inform us about self-enclosure, but indeed an openness to world, which in this case offers very little possibilities to the depressed person, nevertheless, these reported experiences are directed toward the world. (Colombetti 2014 pp. 79–82) It seems that there must be a layer even prior, even further down in affective experience in which moods and emotions are embedded, a primordial layer that serves as a background condition for every other experience to occur.

Existential feelings

There are certain feelings that do not easily fall into the categories of either emotion or moods, somehow precede them, which describe a sense of how one finds herself in the world, a sense of “belonging to world”, a “feeling of being”. For these feelings, Matthew Ratcliffe invented the term *existential feelings* (2005), stating that they ought to be distinguished from a wider range of affective phenomena. He illustrates them by showing some examples form the hits of a Google search for ‘the feeling of being’: ‘unworthy’, ‘empty’, ‘watched’, ‘powerful’, ‘at one with life’, ‘real’, ‘disconnected from the world’, ‘part of the real world again’, ‘abandoned’ (ibid.). He argues that existential feelings refer to a neglected yet distinct aspect of experience and defines them as “variants of a non-localized, felt sense of reality and belonging, something that all intentionally directed experiences and thoughts presuppose.” (Ratcliffe 2019 p. 2)

There are two main characteristics of existential feelings that distinguish them from other types of experience. First, they are not localised *feelings,* under which Ratcliffe means bodily experiences. He also uses ‘body’ in a relational sense, i.e. the body *through which* one experiences the world. Second, they constitute “a sense of how one finds oneself in the world

as a whole" (ibid. p. 3). In developing this second aspect, Ratcliffe drew on Heidegger's notions of *Stimmung*, 'mood', and *Befindlichkeit*, 'moodedness', 'attunement'. This sense of 'belonging to the world', or lack thereof, is importantly understood along *possibilities*, what the world offers to the subject, which, as Ratcliffe argues, inherently entails an anticipatory character to the existential feelings, a future directedness (ibid.). This directedness however is not to be understood as intentionality, as it refers more to the temporal orientation of existential feelings, which, according to my understanding, is not a classical part of intentionality. This – at least the part that existential feelings are not intentional in the classical sense – is confirmed by Colombetti, who writes,

> Like Heideggerian moods, existential feelings are not object directed (Ratcliffe calls them "pre-intentional") but rather backdrop experiences against which specific intentional states such as emotions take place, and which make emotions possible in the first place. As Ratcliffe (2010) also puts it, existential feelings, as background conditions of possibility for specific object-directed emotions, are "deeper" than the specific emotions. (Colombetti 2014a p. 81)

How, then, do existential feelings relate to other affective phenomena that do not belong to the traditionally conceived emotions and moods? Ratcliffe argues that by adopting a more dynamic comprehension of feelings, we can better understand this relationship. Here he refers to the anticipatory nature of existential feelings as to what the world has to offer to the subject in the future that creates an obscurely felt, unlocalised pre-reflective background texture for other emotions. He compares existential feelings here with vitality affects – understood as a "permeating experience and activity without being explicitly acknowledged or remarked upon" (Ratcliffe 2019 p. 9) – acknowledging the similarities insofar as both are concerned with "feel" and "being alive", with a clear difference while Stern is more interested in the "dynamic aspect of experience", Ratcliffe's focus is on "background feelings".

He closes his thoughts by proposing three ways in which his theory of existential feelings could be further refined. First, developing a clearer and more comprehensive taxonomy of emotions, moods, and feelings. Second, clearing out the relationship between feelings and conceptual thoughts by synchronic and diachronic analyses. Third, elaborating on the notion of different types of access for a phenomenological treatment of experience. (Ratcliffe 2019 p. 14) While I agree with these three points as further directions, I would like to point out two important aspects that the theory of existential feelings and even this list is lacking.

The first regards Ratcliffe's second point, clarifying the relationship between feelings and conceptual thoughts. In this topic, Eugene Gendlin has already developed a highly sophisticated and incredibly insightful philosophy, what he calls the *philosophy of the implicit*, based on, among others, Heidegger's phenomenology and his long practice as somatic oriented psychotherapist (Gendlin 2018). His notions of the *implicit* and *explicit*, as well as the *felt bodily shift*, I believe, account precisely for what Ratcliffe means should be clarified. I assume however, Ratcliffe might not have read these works, as – according to my knowledge – he only refers to a phenomenologically less detailed work by Gendlin, written more as a practical description, handbook, of his method in somatic oriented psychotherapy, called *Focusing* (1981).

The second point I wish to highlight is that the theory of existential feelings lacks any ontogenetic aspects, without which it is hard to build a comprehensive phenomenological account, especially one dealing with such primordial layers of experience as Ratcliffe's, where one would expect a genetic account as to how we come to have such feelings. Sheets-Johnstone calls this an *adultist perspective* and criticises its prevalence in contemporary phenomenological works that fall short on carrying out a "regressive enquiry" – to use the Husserlian term – and therefore bypass constructive phenomenological considerations (Sheets-Johnstone 2014).[22] I share Ratcliffe's view insofar his existential feelings and Stern's vitality affects do resemble in that both of them play a deeply fundamental, primordial role in the constitution of experience and how we find ourselves in the world. Consequently, since Stern's account is deeply developmental, I hope my phenomenological treatment of his work in the next part can enrich the theory of existential feelings in this crucial perspective.

Enactive affectivity

Having seen Aristotle's views on affects as well as some phenomenological thoughts on affectivity, we shall now return to Colombetti's enactivist thesis: the deep continuity of mind, life, and affectivity. In her words,

[22] Husserl's disciple and assistant, Eugen Fink, coined the term *constructive phenomenology* in his *Sixth Cartesian Meditation* (Fink 1995).

> In the enactive approach, this activity of sense making is the mark of cognition. What I add to this idea is the point that the activity of sense making is simultaneously also affective. (Colombetti 2014a p. 2)

One of the main aims of the enactive approach – and of a contemporary generation of phenomenologists – is to *naturalise phenomenology* (Petitot, Varela, Pachoud, & Roy 1999). As mentioned in chapter three, it is – according to Thompson – the circular attempt to inform biological and mind sciences about phenomenology and, in turn, phenomenology needs to understand and interpret the biological and cognitive scientific basis of experience. A prominent branch of this investigation is neurophenomenology. However, I find the term 'neurophenomenology' deeply troublesome. It implies as if there was only one single biological tissue involved in the constitution of experience – at least which is worth to be the subject matter of naturalising phenomenology – and this is the neural tissue. It is a picture that I would want to avoid from the same distance as traditional Cartesianism. It leaves out all the other tissues – essentially the majority of the body – which in fact stands in contradiction to the enactive conception of the body, which is to be understood in terms of autopoietic processes involving each and every cell of an organism. Indeed, as Colombetti points out, (as of 2014) "existing [neurophenomenological] studies have been limited to an investigation of lived experience and brain activity, with no consideration for bodily activity." (2014a p. 135) Such a neural tissue dominated naturalised phenomenological view becomes particularly problematic when it comes to accounting for affectivity. However, enactivism and the project of naturalising phenomenology do not exhaust in neurophenomenology.

Colombetti argues precisely along this line and rejects the tenets of affective science largely on the basis that it focuses only on the nervous system. She says this view results in a shallow conception of affectivity that leads her to "reclaiming the broader and deeper notion of affectivity". For this, she coins the term *primordial affectivity* that is "not meant to depend on the nervous system alone. Rather, it is enacted by the whole organism, and indeed even by organisms that lack a nervous system." (Colombetti 2014a p. 21) She grounds her notion on primordial affectivity in the enactive conception of the body.

> The body of the enactive mind is thus not just the perceiving and acting body but the living body, and as such it includes, for example, the viscera, the circulatory system, the immune system, and the endocrine system. These dimensions of the body are all seen as contributing to the kind of mind one has (although, as I explain later, even unicellular organisms can be said to have a

> mind from the enactive perspective). Such a comprehensive notion of the body is especially relevant for a study of affectivity. (Colombetti 2014a p. xv)

We will see in the last part how certain movement and somatic oriented psychotherapies work with the exact same assumptions regarding the nature of affectivity without them knowing anything about enactivism.

Primordial affectivity is conceptualised as a simultaneously cognitive-affective phenomenon and, similarly to existential feelings and vitality affects, it falls outside the classical categories of moods or emotions. Further similarities among these three concepts are that they all are pervasive and they need not be conscious.

Conclusion

This chapter began by discussing Aristotle's notions of animation, body and affects, who– from a western intellectual historical point of view – is considered to have laid down the foundations of non-dualist thinking for which this thesis continuously argues. It then carried on considering phenomenologically important aspects of affectivity, with a focus on those aspects that are central to the phenomenological understanding of vitality affects in particular. This phenomenological vocabulary building extended to the bodily nature of emotions, the degree of intentionality in emotions and moods, as well as the crucially relational characteristic of affectivity.

We have discussed the notion of existential feelings, which is – despite the obvious differences – probably one of the closest conceptions to vitality affects in the phenomenological literature regarding the primordial depth from where they contribute to the constitution of experience. The differences lie not only in the fact that, in contrast to existential feelings, vitality affects are much more concerned with the dynamic qualities of experience, but in that vitality affects are concerned with not only the bodily bases of the constitution of experience, but also with the bodily bases of the constitution of the *self*. Moreover, crucially, the theory of vitality affects accounts for the ontogenesis of these two – the constitution of the body and the self – whereas the theory of existential feelings remains in an adultist position.

Affectivity as conceptualised in Colombetti's enactive approach, has provided us with a naturalised account for the Aristotelian non-dualist view: that there is a deep continuity of life, mind, and affectivity. Colombetti's account takes seriously that affects do not only emerge from neural activity, but in fact they are an interplay between all the organs and tissues in the body, the self, and the world that is full of other affective bodies.

6. The reception and treatment of vitality affects

Infant and child psychologist Colwyn Trevarthen, in his obituary for Stern, celebrates him as

> a psychiatrist who explored our infantile selves in relation, and brought knowledge of the origins of loneliness and sadness, comfort and joy. (…) His revolutionary thought greatly expanded understanding of the impulses of human nature [that] changed the theory of psychotherapy. (…) For dancers and dance therapists, Dan is a prophet and ally. (…) That last book [the *Forms of Vitality*] is a bible for all art therapies. It praises the essential rhythms of life and gives them a central role in consciousness and well-being of human bodies and minds, and in our artful communities." (Trevarthen 2013)

Despite his fame and recognition in these fields and indeed his groundbreaking work on intersubjectivity and affectivity that are highly relevant to phenomenology and philosophy of mind, there is strikingly little attention payed towards him in the mind sciences.

Essentially, there are two ways in which vitality affects appear in mind sciences. On the one hand, there are studies specifically focusing on vitality affects. These works, however, most often either lack a properly interdisciplinary approach that could be paired with Stern's rich interdisciplinarity, fail to treat the developmental aspects of the phenomena, or do not recognise the deeply relational, intersubjective nature of vitality affects. On the other hand, there are texts – mostly from the phenomenological literature – whose subject matters are albeit centred around a similar aspect of experience to what Stern coined as vitality affects yet Stern is either not recognised at all, or mentioned only briefly without much elaboration. Hence, my claim is that the links between these texts and Stern's account have not been established in a satisfactory manner. The only exception from both of these categories can be found in the works of Katalin Vermes and her treatment of vitality affects. Her highly sophisticated and comprehensive integration of phenomenology and psychoanalysis with Stern's model of the early organisation of the self in general and with vitality affects in particular is richly informed by decades of experience as a dance and movement therapist.

Research on vitality forms and vitality affects

The present work is not concerned with the reconciliation of the empirical works carried out mostly in the realm of scientific realism on the one hand, and the theoretical, constructivist, phenomenological considerations on the other hand. To put it more simply, I do not attempt to

explore the 'objective' neuronal bases of the subjective phenomenon of vitality affects. Therefore, I only briefly point to some empirical research on vitality affects. These include an fMRI study looking at 'vitality form' recognition in adult (di Cesare et al. 2014), a behavioural study on similarly vitality form recognition with autistic participants (M. J. Rochat et al. 2013), a longitudinal infant behavioural study on the forms of vitality (Español et al. 2015), as well as a review article on the neurobiological perspectives discussing the role of mirror neurons in vitality forms and affects (Ammaniti & Ferrari 2013).

Interestingly, it seems to me there was a wave in experimental research after the publication of Stern's last book, the Forms of Vitality (2010) – this book must have triggered some thoughts in researchers. Nevertheless, my focus will remain on vitality affects as conceptualised by Stern in his 1985 book.

Stern's own conceptual development: vitality affects – vitality contours

As pointed out in the first chapter, Stern himself was developing his own interpretation on vitality affects: Køppe et al. identified three main stages of Stern's conceptual development (2008).

Later on, for example, Stern introduced the term 'vitality contours', to denote something similar as how he defined vitality affect in 1985 (Stern 2014). Where he explains the relationship between vitality affects and vitality contours. He writes that the concept of vitality contours are " a larger phenomena that includes but is not confined to [vitality] affects." (ibid. p. 70) With the term vitality contours, he places an even more emphasis on the temporal dynamics, which can also be inferred from the fact that he almost interchangeably uses it with 'feeling flow patterns'. He furthermore writes: "vitality contours apply to all activities that have a characteristic intensity-time course: gestures, body movements, facial expressions, and internal phenomena such as affects and thoughts." (ibid. p 71) Here he seems to have narrowed down his original notion of vitality affects to only "internal" qualities, which dichotomy in 1985 – as I showed in detail in chapter four – he often did overcome. At the same time, the concept of vitality contours has overtaken the semantic field of vitality affects in its original formulation as long as the original conceptualisation of vitality affects encompasses both "internal" and "external" features, such as gestures and expressions. Once again, we will nevertheless stay with this original conceptualisation of vitality affect.

Perceptions and interpretations by contemporary phenomenologists

As pointed out earlier, there is no comprehensive phenomenological work on vitality affects – with one exception discussed in the next section. In this section, I will thus outline where and how the concept of vitality affects is mentioned in philosophical arguments, mostly in the context of briefly being compared to other related notions. These are obviously all recent works by contemporary phenomenologists who interpret Stern's ideas. What it means is that here I will not reach back to phenomenological works prior to Stern and see what the first two generations – that is Husserl's and Merleau-Ponty's generation – said about similar aspects of experience as to what vitality affects denote.[23]

Let us begin with contemporary works already discussed in this thesis. I have already remarked on the similarities and differences between Stern's vitality affects and Ratcliffe's existential feelings. They are in fact often mentioned together as closely related concepts with Damasio's 'background feelings', Colombetti's 'background bodily feelings', as well as Gendlin's 'felt sense' (Barile 2014; Colombetti 2009, 2014a; Petitmengin 2007; Ratcliffe 2019; Slaby 2012). For now, let us see what Colombetti has to say about vitality affects.

A response to Colombetti's critique

She brings the theoretical construct of vitality affects in her argument as one of the few exceptions that go beyond the narrow conception of affectivity and gets close to her notion of 'primordial affectivity', yet, she argues, still falls short in some respects (Colombetti 2014 pp. 21–22). While Colombetti recognises the dynamic, bodily aspects of the concept with the change in degree of felt arousal and hedonic tone of such dynamics and even the ever-present nature of vitality affects that stands in contrast to categorical affect, she barely acknowledges their fundamental ontogenetic role in the constitution of the self. She writes, vitality affects

> appear to be intrinsic to our bodily existence. As such, although they are most apparent in the prelinguistic experiential world of infants (Stern's primary

[23] Although it was put forward differently chapter four – indeed the other way around –, essentially that was the subject matter of that chapter: looking at the extent to which Stern's ideas are phenomenological. It was not comprehensive in a sense that I only compared Stern's ideas to that of Husserl's, but we can say, how I phrase it now, that we were looking for already existing phenomenological concepts related to Stern's work.

> focus), they are presumably still present in adult experience and will come to the fore in some activities more than others. (ibid. p. 21)

Even though it is literally a correct interpretation, it largely underestimates the significant constitutional role that vitality affects play in experience and in the self both in developmental terms and in adult life too.

She criticises Stern not explaining why he considers vitality affects affective, arguing the he only wrote "the are definitely feelings and belong to the domain of affective experience." (ibid. p. 22) Nevertheless she admits that they are. She argues, however, that vitality affects fall short of her concept of primordial affectivity for three reasons. First, "vitality affects are not conceptualized as affective as well as cognitive sense-making phenomena; they are primarily feelings of one's body." (ibid.) Second, "vitality affects are feelings, whereas primordial affectivity need not be so." (ibid.) Third, Stern does not discuss whether vitality affects can be applied to animals or not, then she adds "the fact that vitality affects are feelings implies that only organisms capable of conscious experiences will enjoy them". (ibid.) Whereas, so does the argument go, her enactivist concept of primordial affectivity "appears even before the simplest form consciousness" (ibid.)

As much as Colombetti, unlike many scholars in cognitive science, has shown to have a highly sophisticated phenomenological understanding of bodily feelings (Colombetti 2011, 2014a; Colombetti & Ratcliffe 2012) – as we will presently see it in the beginning of the next part – these observations appear to have been made hastily. Granted, it can be justified that for her, Stern's wording was not sufficiently explicit regarding the affective nature of vitality affects, although this has never occurred to me as an issue. However, as I hope it will be clear in the next, ontogenetic part, vitality affects do play precisely a sense-making role in the infants' experience, in the constitution of their social world, even though the term 'sense-making' itself might not appear in Stern's vocabulary. Regarding the other two points that vitality affects are primarily bodily feelings, which implies that they need to be conscious, I disagree with the inference in the argument. First, I deny that every feeling needs to be conscious. For example, pre-reflective feelings are neither conscious, nor unconscious, but they are just becoming conscious (Petitmengin 2007). Second, if vitality affects were indeed always conscious, then probably this concept would not have been picked up by a range movement and somatic oriented psychotherapies as one of their central elements to work with (Vermes 2011). Vitality affects are indeed often below the level of consciousness, they structure our experience from a deep layer hiding below conscious experience. My disagreement with

Colombetti nevertheless nicely lays out the structure for the rest of the thesis insofar as in the next part we will turn to ontogenetic perspectives followed by a discussion on therapeutic applications and perspectives.

Slaby's connection to self-feeling

Jan Slaby also mentions vitality affects and existential feelings as both closely resembling ideas to an almost forgotten term from early phenomenology, called *self-feeling (Selbstgefühl)* (Slaby 2012). He describes this concept as one that can be traced back as the ancestor of what is termed today as self-esteem or self-confidence, with the difference that, on the one hand, self-feeling encompasses also the opposite of what we might call today as self-esteem, on the other hand, it also includes "a very basic bodily, postural, organismic dimension – basic feelings of vitality or "vital tonality" of a person's existence" (ibid. p. 153). What is really appealing to me in this comparison is the range of dimensions in experience Slaby assigns to the concept of self-feeling and with it to vitality affects. Such a range which I miss from both Colombetti's and Ratcliffe's account. Slaby writes,

> This ground-floor dimension of self-feeling was thought to be closely entwined with the more elaborated, higher level, concept-informed and often trait-related forms of self-feeling. Is the basic dimension of felt vitality (feelings of energy, strength, freshness, weakness, fatigue, etc.) capable of instantiating contents that reflect more complex facts about a person's situatedness in the world? (ibid.)

His answer is not even that important presently, rather we should appreciate that the notion self-feeling includes such a wide range as "ground-floor" and "higher level, concept-informed" dimensions of experience, which is indeed characteristic to vitality affects too.

Suggestions for the felt dimensions of vitality affects

Another context in which vitality affects are conversed is the felt dimension of experience. Ratcliffe's reasoning on existential feelings, as his argument consists of an important dimension that is worth considering with regard to vitality affects (Ratcliffe 2019). The way in which existential feelings are *felt*, he distinguishes between pre-reflective, background feelings, and more pronounced, salient feelings in the experience. He argues this difference does not different feelings in kind. Furthermore, he claims that despite these felt categories in the experience being the same kind, not all existential feelings are felt similar in kind. For this,

he introduces another dimension, the 'phenomenological access'. According to Ratcliffe, they can vary in "degrees of insights into their nature". Based on this, although there is no clear boundary between them, yet, one can speak of "accessing the feeling itself, recognizing it through its pervasive effects, and somehow inferring its presence." (ibid. p. 13)

This dimension can not only elucidate my differing views with Colombetti on the conscious nature of bodily feelings, but it will serve us a suitable framework too in discussing vitality affects, as they can differ precisely along these dimensions in experience both through ontogenesis, and in a therapeutic process. Ratcliffe, in this forthcoming paper mentions that his proposed concept of *phenomenological access* needs further clarification. I hope applying this to vitality affects will contribute to this clarification.

The connection to the felt meaning and to the sensus communis

Apart from Katalin Vermes – whose work this thesis, in a sense, aims to complement with – the closest the treatment of vitality affects gets to my interpretation and approach is that of Claire Petitmengin's. Insofar as she too treats vitality affects as a foundational source of thoughts, and organising principle of experience which can be researched with micro-analytic second-person interviews. In her paper, *Towards the Source of Thoughts: the Gestural and Transmodal Dimension of Lived Experience*, she argues that the profound, pre-reflective bodily dimension of experience – from which all thoughts originate – is gestural, rhythmic, and transmodal, which dimension she largely identifies with vitality affects (Petitmengin 2007). She too connects Stern and Gendlin precisely the way I will discuss them in the last part, introducing them thus:

> this dimension has only been recognised and explored by a handful of researchers (…) the work of researchers who have studied this dimension and its function explicitly, either in the therapeutic process (Eugene Gendlin), or in the infant's development (Daniel Stern) (ibid. p. 54-55)

Talking about the dynamic, gestural character of this profound dimension, she uses almost as synonyms Gendlin's *felt meaning* and Stern's *vitality affects*.

Furthermore, both Petitmengin and Vermes recognise the similarities between the way in which vitality affects are felt in an amodal fashion and Aristotle's remark on the nature of the 'sensus communis', or 'common sensibles' as Vermes (Vermes 2011) and Petitmengin (2007) call it, respectively. The Aristotelian insight into the unity of the senses, not only a unity of the so-called 'five modalities', but the 'sixth sense' that enables us – through an intersensoral,

intersubjective capacity – to connect with other animate beings and with the whole universe. (Vermes 2011) It has only been forgotten due to the fact that the "excessive rationalization since the seventeenth century has simplified this Aristotelian tradition and isolated human senses and human persons as well." (ibid. p. 2) The Sternian vitality affects do precisely what the Aristotelian sensus communis does. They connect our senses and enable us to connect with others on a pre-symbolic, pre-reflective level. To use Merleau-Ponty's term, vitality affects give the overarching 'style' of experience that connect our sensory modalities with our movements: the way we walk down the street, greet an old friend, brush our teeth, pack for a holiday, prepare for a meeting, reach for a glass, leave home, pick up a phone, wait for a result at a doctor, or sit in a comfortable armchair. All these examples have a particular quality of feeling that is deeply characteristic for everyone, a certain style how one does each. Each is lived with a certain vitality affect as a subjective quality that amounts to a unified experience of all the classical five sensory modalities and the dynamic kinaesthetic experience of our movements. We can easily recognise a friend doing these, or even easily imagine how a friend we know well would be in these situations, precisely because vitality affects are the principal medium through which we relate to others.

Phenomenology meets psychoanalysis

This leads me to qualify my claim that I consider Vermes to be the only exception whose interpretation and treatment of vitality affects alone is phenomenologically utterly sensitive and highly sophisticated; recognises its fundamental dynamics and constitutional role in experience as well as its central constitutional role in the – early and adult – organisation of the bodily self; treats it as a deeply relational phenomenon; encompasses both developmental aspects and therapeutic implications; and finally, considers vitality affects as the ultimate experiential connecting medium through which we are immersed in our intersubjective, interpersonal space.

In her book, *The Ethos of the Body. The Interrelation of the Experience of the Body and the "Other" in the Philosophy of Merleau-Ponty and Lévinas*[24] (Vermes 2006), she integrates Merleau-Ponty's and Lévinas' philosophy of the body along the Sternian model of the

[24] The title in English is my translation, as it is published in Hungarian.

organisation of the self, in particular, along vitality affects, thereby connecting phenomenology with psychoanalysis.

The context in which this integration is carried out is in a discussion on the dual origin of bodily responsivity (Vermes 2006 pp. 159–167). She shows, based on Merleau-Ponty and Lévinas, that *perception* and the feeling of *vitality* are not separable dimensions of bodily sensibility, instead they form a dual root of bodily responsivity in intersubjective relations. This is where she turns to Stern and modern psychoanalysis, saying that Stern coined the term vitality affects precisely to denote this phenomenological layer. Vermes endorses concepts that at first sight are opposing, or at least have blurry semantic boundaries, which resonates more with an Aristotelian thinking style. She describes vitality affects thus.

> Vitality affects present such a primordial layer, 'primordial pattern' of bodily communication, of which it is impossible to tell whether – regarding their nature – they are emotions or perceptions. Instead, they are feelings, affects, as well as perceptive and responsive structures, all at once. As if we were at the common bodily roots of emotion and perception. (ibid. p 164, my translation)

She emphasises that this deep layer of experience has *form* rather than *content*, and therefore are not connected to particular emotions. Her wording *form* might be a reference to the dynamic contour that vitality affects have as they unfold in time. Her claim is that this vital texture, this primordial layer of bodily sensibility where feeling, perception, moral aspects, comprehension, and knowledge are all inextricably interwoven, are captured in the Sternian theory as well as are thematised both by Merleau-Ponty and Lévinas (ibid. p. 164).

Consequently, she arrives to vitality affects from discussing the deeply intersubjective experience of our bodies, not from an isolated sense of self, this is what makes her interpretation of vitality fundamentally relational, which I attempt to argue for.

What is remarkable is that one can feel through the texture of her writings the first-person experience of these deep phenomenological layers that she has as a dance and movement therapist. She examines the therapeutic applications of vitality affects, primarily drawing on Husserl's and Merleau-Ponty's insights (Vermes 2000, 2011, 2018; Vermes & Incze 2012).

Conclusion

I have shown that although Stern is recognised by a handful of contemporary phenomenologists, his work generally has not received the attention in mind sciences that would compare to the importance of what he has contributed to our phenomenological

understanding of the structure of experience. In the brief remarks that the discussed philosophers make acknowledging his insights, the depth of his thoughts are not adequately conveyed in their entire complexity. I argued that Vermes stands alone as an exception in the literature who has provided the most comprehensive and all-encompassing interpretation of Stern's vitality affects. The task is thus clearly laid out for the rest of the thesis. To follow the sophisticated insights Vermes has made regarding the nature of vitality affects and explore their role throughout the ontogenesis of infants' experience and in therapeutic applications, while integrating other phenomenological considerations we have covered in this chapter as well as integrating the enactive way of thinking we have covered earlier.

Summary of Part II

This part served as laying down the ground work for understanding the essential role of affectivity in our lives.

Chapter four provided a close read in Stern's work showing the resemblance of Husserl's and Stern's thinking, in the attempt to find out whether in the centre of our entire enquiry – the concept of vitality affects – was indeed formulated as part of a phenomenologically relevant and proper theory. My answer was affirmative – Stern's model of the early organisation of the self in which vitality affects were introduced is a phenomenologically highly interesting and insightful work.

Chapter five parted from Stern and in a way, it was a continuation of Part I, as far as the main concern of Part I was to ground the *body* in *life* and to clarify the ontological and epistemological presuppositions of different concepts of the *body*. Building on these findings – and to complement Part I – the main concern of chapter five was to ground *affectivity* in *bodily life* and to clarify the ontological and epistemological presuppositions of the concept of *affectivity*. As part of this process, we examined certain phenomenological characteristics of affectivity.

Chapter six has brought us closer back to Stern and reviewed how vitality affects appear in contemporary works. It also covered other, related concepts and discussed their similarities and differences, from which we have gained several important viewpoints to think about when scrutinise the phenomenology of vitality affects.

There is no true duality for the child;
this notion belongs to the adult's thoughts.

Maurice Merleau-Ponty

III. THE ONTOGENESIS OF BODY-MIND SPLITS

The stage is now set to delve into the ontogenetic aspects of affectivity with a sound grasp of what I mean by body and by affectivity. It is a deeply intricately topic with many mutually interdependent processes in it, therefore one needs to be particularly careful here. This is why we will approach the subject matter with keeping in mind two opposing yet deeply interconnected directions. On the one hand, we will be looking at how vitality affects constitute, organise, and shape the sense of bodily self approximately in the first two years of life. On the other hand, we will consider how, in turn, the sense of bodily self – at various stages of organisation during the early ontogenesis of human life – enables phenomenological access to vitality affects. These two opposing directions may be better conceived as going around in a circle: the former process influences the latter and conversely, the latter influences the former, going round, for they co-create one another.

What is of particular concern in Part III, is the question whether how this circular phenomenological, affective process constructs splits in the experience of our body, splits that comprise of an objectification of the body in the experience. I call this the *body-mind split*. Why are body-mind splits interesting and important? Because these initial splits in the infants' experience that develop later into a fully-fledged dualist conception of the self. Identifying these initial splits in the experience between body and mind brings us to the headwaters of the Cartesian conception of the self. Consequently, understanding the fine-grain phenomenological nature of these early splits can help us better understand the nature of body-mind dualism, as well as the prevalence of such Cartesian views in our culture.

Furthermore, the genesis of subjectivity and intersubjectivity is also profoundly grounded in this circularity between vitality affects and the sense of bodily self, therefore gaining a better understanding of these circular ontogenetic processes comes hand in hand with a deeper understating of the nature of intersubjectivity.

Nevertheless, as it was mentioned in the introduction already, I will not embark upon making any ambitious inference from the phenomenological description of the body-mind splits to the social and cultural processes that construct and maintain the Cartesian understating of the self as a sociocultural phenomenon, for it would point way beyond the scope of this work and my abilities. Instead, I leave this immensely complex issue to Michel Foucault (2012), Judith Butler (2011), and other constructionist, deconstructionist, and feminist philosophers.

The structure of Stern's developmental theory

Stern's model of the early organisation of the self proposes a hypothesis as to how infants' experience their social world. In his model, vitality affects, although an important one, is just one of several factors that play a role in the constitution of one's interpersonal world. In this part, however, we will focus solely on the role of vitality affects in his theory. While the present thesis is greatly indebted to Stern – his theory has admittedly given me the initial thoughts from which the whole thesis has been developing and it has indeed remained central in my focus – in a way, I employ his theory only insofar as it provides a framework for my argument about the infants' evolving sense of bodily self in which the body-mind splits occur. To put it differently, I will present his tenets of the infants' experience with a particular focus on the role of vitality affect as I interpret them, without elaborating on his model in its entire complexity.[25] Having said that, let us have a brief look at the structure of Stern's theory.

Stern was revolutionary with his model in 1985 since he reached for an era to study which had been neglected or overviewed both by developmental and clinical psychologists, namely, the preverbal era of infants, especially the first two months of life. It was even considered to be unscientific to study this preverbal era by several developmental and psychoanalytical schools. In contrast to this, the basic assumption of Stern's theory is that "some senses of the

[25] In presenting Stern's theory, I primarily rely on his book *The Interpersonal World of the Infant* (Stern 1985). As a secondarily source, I also use Katalin Vermes' unpublished teaching material on the subject in the Hungarian Psychodynamic Movement and Dance Therapy training course.

self do exist long prior to self-awareness and language" (Stern 1985 p. 6). What he means by *sense of self* is important. By 'sense' he refers to "non-self-reflective awareness", as "direct experience", not as "concept". By 'of self', he means "an invariant pattern of awareness that arise only on the occasion of the infant's actions or mental processes. An invariant pattern of awareness is a form of organization." (ibid. p. 7)

> A crucial term here is "sense of," as distinct from "concept of" or "knowledge of" or "awareness of" a self or other. The emphasis is on the palpable experiential realities of substance, action, sensation, affect, and time. Sense of self is not a cognitive construct. *It is an experiential integration.* (ibid. p. 71, my italics)

He contrasts it with the verbalizable self that had been studied earlier, commenting on the nature of the preverbal sense of self thus: "This organizing subjective experience is the preverbal, existential counterpart of the objectifiable, self-reflective, verbalizable self." (ibid.)

The four senses of the self

Stern distinguishes four senses of self, four different kinds of invariant patterns of non-reflective awareness. According the Stern, development occurs in 'leaps and bounds', there is a qualitative difference between each stage, a new *kind* of experience the self and other. Thus, each stage describes a domain of *self experience* as well as a domain of *social relatedness* which are inherently interrelated. The first is a sense of an *emergent self*, characteristic for the first two months, then a sense of a *core self* that forms the experience of self and other from two to six months, third is a sense of a *subjective self* from seven to fifteen months, after which a sense of a *verbal self* develops.[26]

Each sense of self opens up a qualitatively whole new world of social relatedness, a domain of emergent relatedness, a domain of core relatedness, a domain of subjective relatedness, and a domain of verbal relatedness, respectively.

In the earliest period of life, the infant is busy relating a wide range of different experiences. In this task, both the world and the self are emerging, hence the name the emergent sense of self. Stern maintains that the infant can experience not only the result of this emergent

[26] The subsequent passages that introduce the four senses of self are mainly based on Stern (1985 pp. 26-34).

organisation, but also the *process*, the *'coming-into-being'* of organisation. Some kind of integration between various experiences do happen innately, some do not. During this period the infant does not yet have a fixed, constant sense of self. It occurs only from time to time that suddenly affects, perceptions, sensorimotor events that are elicited in social interactions in the infant, come together as relating and integral experiences, in which moments the sense of self does emerge for a fleeting moment, from these integrated experiences.

Once these moments get connected and form a continuous experience of a coherent self, the sense of a core self develops form around two months. This includes the experience of the wilful, physical entity that has a history and a characteristic affective life. This organised sense of a core self includes self-agency, self-coherence, self-affectivity, and self-history. The sense of a core self is the foundation of a bodily self, a body ego. It operates deeply pre-reflectively, in a layer of experience that is hard to verbalise as adults. The domain of core relatedness opens the possibility for the infant to experience herself and mother as physically separate agents who do have distinct affective experiences.

At around seven months of age, the infant goes through another leap in the ontogenesis of her experience, which is marked by the discovery of other minds. Stern calls it the sense of a subjective self. Its new organising principle opens up the possibilities for intersubjectivity. Not only does she know at this stage that others have their own subjective inner lives, but that she can also choose to share how own inner states or hide from others. This in in fact Stern's operative definition of intersubjectivity: deliberate sharing of experiences (joint attention, intentions, affective states) about events and things.

In the beginning of the second year, at around fifteen months, when the infant has gained sufficient experience and knowledge, they start rendering them in symbols which then can be conveyed by language. This new experience, this new organisational principle marks the formation of the sense of a verbal self with which the domain of verbal relatedness opens essentially endless possibilities for interpersonal happenings.

Stern departs from the prevalent, traditional structure of developmental theories that conceive of the different stages of development as sequential phases taking over one another, like that of Piaget's model. For psychoanalysis, developmental stages are centred around clinical problems an infant faces in certain phases in life whereby once a problem is solved by the infant, the organising characteristics of that particular phase is then either lost, or get integrated into the subsequent phase (ibid p. 29). In contrast to these views, Stern developed a layered model, in which each new sense of self develops on the top of the already existing ones. This means that the previous senses of the selves are continuously there, albeit in a less

formative and less salient way than the one currently dominantly form and organise the experience. What is more – and this is crucial both for Stern and for us – that each sense of self continues its role in the constitution of experience throughout the whole life of the subject. As Stern puts it

> Once formed, the domains remain forever as distinct forms of experiencing social life and self. None are lost to adult experience. Each simply gets more elaborated. (p. 32)

He illustrates the idea that all the four senses of self remain simultaneously in the adult's experience with an eloquently written example of making love.

> Making love, a fully involving interpersonal event, involves first the sense of the self and the other as discrete physical entities, as forms in motion-an experience in the domain of core-relatedness, as is the sense of self-agency, will, and activation encompassed in the physical acts. At the same time it involves the experience of sensing the other's subjective state: shared desire, aligned intentions, and mutual states of simultaneously shifting arousal, which occur in the domain of intersubjective relatedness. And if one of the lovers says for the first time "I love you," the words summarize what is occurring in the other domains (embraced in the verbal perspective) and perhaps introduce an entirely new note about the couple's relationship that may change the meaning of the history that has led up to and will follow the moment of saying it. This is an experience in the domain of verbal relatedness. (ibid. p. 30)

The sense of emergent self is so hard to even talk about it that Stern discusses it another paragraph. He says it is present in the example, if one 'gets lost in' the other's eye in a way that it does not appear as belonging to the ore other, but is blurred in an experience somehow larger less distinct than the core self and core other.

A critical remark to Stern

Stern himself discusses the significance of these senses of the self in the clinical practise as well as what can go wrong if any of these senses of self do not develop in a typical way. Yet, even such a brief introduction to Stern's model would not be complete if it did not include the criticism it has received. I briefly mention here only one aspect that in fact concerns the present thesis too. Historian and psychologist Philip Cushman criticises Stern's theory on the basis that it presents the senses of the selves in an idealised way without reflecting on the cultural

embeddedness of his thesis itself. In other words, Stern fails to acknowledge that his theory is also a cultural construct with all the describes senses and feelings in it. (Cushman 1995 p. 284) Such a critique does concern the present work too and this is partly the reason why I explicitly stated in the beginning of the chapter to leave out this dimension from the thesis while acknowledging its importance. However, recognising the limits and shortcomings of the present work is essential and it is certainly one of them.

Before we proceed and delve into the specific ontogenetic details of the infants' experience about their bodily self where I identify two splits in their experience, I shall elucidate on what I precisely mean by 'body-mind split', by the 'objectification of the bodily self in the experience' to gain a fine phenomenological understanding on the nature of such splits in the ontogenetic context.

7. Phenomenological clarifications on the nature of the body-mind splits

As I am trying to ground the ontogenesis of the self in bodily affectivity, in vitality affects, in this part, looking at the ways in which the body can feel and be felt, with a particular focus on the experience when the body is objectified, feels distant from us. It brings us to the topic of pre-reflective and reflective bodily self-awareness (Colombetti 2011, 2014a Chapter 5; Colombetti & Ratcliffe 2012; Gallagher & Zahavi 2016; Legrand 2007; Legrand & Ravn 2009; Petitmengin 2007). We shall acquire a vocabulary that allows us to discuss the fine-grained details of various bodily feelings. For this, let us go back to the source of this phenomenological scrutiny and turn to Husserl once again.

Reaching for the Husserlian vocabulary

The basic terminological distinction in phenomenology regarding the body as it appears in experience is the *Körper-Leib* distinction.[27] Leib is the first-person, pre-reflective, lived body, *through which* we experience the world, whereas Körper denotes the third-person, thematic

[27] Husserl introduced the phenomenological distinction of Körper and Leib in 1914 or 1915, according to the 13th Volume of the Husserliana (Husserl 1973 p. 57). In Merleau-Ponty's terminology, they are *corps objectif*, 'objective body', and *corps propere* or *corps vécu*, 'proper, lived, or phenomenal body' (Merleau-Ponty 2002).

experience *of* the body as an object. The classic example to illustrate the difference is the two hands touching each other. If I touch an object, then my hand is obviously the 'touching', and the object is the 'touched', so in this example my hand is present here as a lived body, a Leib, *through which* I perceive the world.[28] It becomes more intricate if I touch *my own* hand. Does it then become one clearly the 'touching', and the other the 'touched', one being the Leib, the other being the Körper? Or are they both touching and touched at the same time? Merleau-Ponty maintains that one hand cannot be the touching and the touched at the same time, instead they alternate their roles – in a rather ambiguous way (Merleau-Ponty 2002 pp. 105–107). He calls this the 'double sensation' that is in fact an overarching characteristic to all experience of my body. This simultaneous duality of perceiver and perceived is however inextricable from intersubjectivity (Ratcliffe 2013 p. 139). Ratcliffe further argues that once the hands are not just pressed against one another, but start moving and rubbing each other, then the Merleau-Pontian interpretation does not hold any longer (ibid).

It is not to say that endorsing conceptual ambiguity is something to necessarily reject, yet it seems that the Körper-Leib distinction in itself does not offer much room for a sophisticated and precise phenomenological account dealing with the fine nuances of bodily experience.

When Husserl elaborates on the natural and transcendental reflection in the Second Cartesian Meditation, he distinguishes between noetic and noematic poles in the transcendental-phenomenological reflection (Husserl 1960 § 15). In the transcendental reflection, Husserl attempts to overcome the subject-object metaphysical dichotomy by focusing on the concepts of intentionality and constitution. In this context, he finds that the dimension of intentionality in transcendental experience has two poles, the *cogito* and the *cogitatum*. *Noema* refers to the 'cogitatum' pole, to which the cognisor's experience is directed at, where the intentional act points at, the 'object pole', if you wish. It is the content of experience, or yet in another wording, the 'object-as-it-appears'. It in fact appears simply as the 'object' in the natural attitude, outside of transcendental analysis. In contrast to this, *noesis* is the intentional act itself, the 'ego pole' that constitutes the experience in the transcendental-phenomenology reflection, the 'object-as-it-is-intended'. As Husserl puts it, noetic description

[28] Already this is not as obvious phenomenologically as I formulated here, but for the sake of argument, let this be sufficient for now. However, see detailed analyses on the phenomenology of touch by Ratcliffe (2012, 2013).

"concerns the modes of the cogito / itself, the modes of consciousness (for example: perception, recollection, retention)". (Husserl 1960 p. 36)

The situation becomes particularly interesting and tricky when we are dealing with bodily awareness and bodily feelings, in which case the intentional act itself is directed onto itself. Noema and noesis overlap. The experience *of* my body is at same time the body *through which* I experience my body. Elucidate this circularity is the holy grail of phenomenology.

Can we put these two pairs of concepts together to build the foundation for a systematic approach to bodily feelings?

A phenomenological taxonomy of bodily feelings

The answer is affirmative, in fact such a systematisation of bodily feelings has already been carried out (Colombetti 2011, 2014a Chapter 5; Colombetti & Ratcliffe 2012). These works offer a similar view, yet the present section adopts only the taxonomy found in *Bodily Feeling in Depersonalisation: A Phenomenological Account* by Colombetti and Ratcliffe (2012), for this account operates with the technical terms of noetic and noematic, which terms I find important to use in this discussion. They distinguish three main categories of bodily feeling: noematic bodily feelings, noetic bodily feelings, and existential feelings.

Noematic bodily feelings are thus those bodily feelings in which the body is the object of awareness, in other words, the body is on the 'object pole' in experience, these are feelings *of* the body. Yet, in these feelings, as they argue, the body is not necessarily *objectified* in the experience. To account precisely for this distinction, they introduce two subcategories, depending on whether the Leib or the Körper is meant by the body.

In the first subcategory, those feelings belong where the body is present as an intentional object of awareness, in other words, where the lived body, the Leib, is the object of awareness. They bring examples such as when one realises one's nervously shaking hand holding a glass at a party, or when deliberately taking a deep breath to calm down. In these examples, even though the object of the experience is the body, it is the body through which one experiences the world, the lived body, not a physical object. Therefore, the body is an intentional object of experience *without being objectified*.

In contrast to this, there are those noematic bodily feelings in which the Körper is the object of awareness. In this subcategory, the body is 'scrutinised' as a physical object, as a 'thing-

like' entity.[29] Illustrative examples for this include when one is scrutinising the wrinkles of one's hand, observing the size of one's belly in the mirror, or measuring one's waistline. These bodily feelings are when one's or other's body is the object of experience in an objectified way.

Further distinctions can be made in both kinds of noematic bodily feelings based on whether are pre-reflective or reflective, voluntary (proprioceptively scanning through my body) or involuntary (a cramp in my leg grabs my attention). They argue that reflective has a connotation of a voluntary act, and pre-reflective as an involuntary act.

The second main category consist of noetic bodily feelings. It is when we aware of our lived body, the body '*through which'* we experience the world. Recall the touching hand example, Leib is the feeling, seeing, touching body, whereas Körper is the felt, looked at, touched body. We are dealing with the Leib here, when the body is felt as "that through which something else is experienced". Touch is an illustrative example that they bring. When we run our hand through a texture, we neither experience our hand as an object, nor does it disappear form our experience. Instead, we experience it as an organ of perception through with the texture is felt. They argue noetic bodily feelings can greatly vary in terms of their conspicuousness. In this longer example is illustrated in what way noetic bodily feeling are felt pervasive, yet in the background.

> Take a situation in which one is sitting in a delayed train proceeding very slowly, just before a flight. In this context, one is not paying attention to one's body, but is focusing on the world: one checks the time on the watch, looks out of the window to gauge the speed of the train, and listens to the conductor's announcements. However, even though attention here is immersed in the world, the whole experience has a quality of urgency characterized by a sense of tightness and confinement. The body is not attended to, but is not absent either, for it contributes to the quality of the experience (one of anxiety, in this case) in the form of a "background" awareness of a tense and constrained body. (Colombetti & Ratcliffe 2012 p. 147)

On the one hand, this description strikingly resembles a description of Gendlin's felt sense, we will come back to it later in the last part of the thesis, nevertheless, Colombetti herself

[29] Colombetti & Ratcliffe here borrow the term 'scrutinizing attitude' from Legrand & Ravn (2009). They, in turn, quote Merleau-Ponty who describes this attitude as 'analytical attitude' (Merleau-Ponty 2002 p. 262).

acknowledged that her notion of background bodily feeling is close to Gendlin's felt sense. On the other hand, their last remark on noetic bodily feelings resembles the relational nature of vitality affects: "the intensity of bodily feeling manifests itself as the intensity of the situation" (ibid.).

Colombetti & Ratcliffe do not mention this, but 'mathematically speaking', there is a fourth combination. So far, we have seen three: the Leib as a noematic feeling, the Körper as a noematic feeling, and the Leib as a noetic feeling. The fourth combination is the Körper as noetic bodily feeling, meaning that the body as a physical, thing-like entity is the ego pole and constitutes experience. In a way, they come really close discussing this condition, but somehow it is never phrased explicitly. In an intersubjective context, this resonates well with the Sartrean experience of shame. In his famous example for this, Sartre describes a situation when one is peeking through a key whole and suddenly hears the creeping sound of the stairs behind him, realising that he himself is being watched too. In this experience, one is alienated from one's body, a body that is seen by the Other as an object, as a Körper, through which he was peeking through the keyhole. (Sartre 1943 Part III, Chapter 1)

Their last, third category is existential feelings, which we have discussed this concept in length already. Hence now, I will just point out that in this paper they emphasise that existential feelings are neither noematic, nor noetic, rather they could be better described and 'prenoetic' and 'preintentional'. Another rather transcendental remark, which is important from the perspectives of vitality affects, in presenting existential feelings is that "descriptions of body and world are often interchangeable – 'I feel strange,' 'my body feels strange,' and 'the world seems strange' can be different ways of referring to the same experience." (ibid.)

Conclusion

While Colombetti & Ratcliffe have put forth this taxonomy of bodily feelings to gain a more refined understanding of the range of different depersonalisation experience, in the following three chapters I will utilise this taxonomy to be able to describe the body-mind splits in the infants' experience with a phenomenologically precise vocabulary. In turn, the rest of Part III. can also be considered as a contribution to Colombetti's and Ratcliffe's account insofar as I will point to the ontogenetic origins of hopefully each phenomenological category they identified in their taxonomy.

8. Before the splits

The subsequent three chapters – the rest of Part III – will follow a similar structure. Each chapter begins with presenting Stern's views on the developmental stages – with a special focus on the role of vitality affects – that correspond to the way in which I divide the ontogenesis of infants' experience. These are the following. I consider Stern's first two senses of the self, the sense of an emergent self and the sense of a core self, an era where the infants' experience does not yet consist of an objectification of the self, a body-mind split. This era is the subject matter of the present chapter. Chapter nine discusses the happenings in the infants' experience, which I call the *preverbal body-mind split*, that corresponds with the emergence of the organisation principle that Stern identified as the sense of a subjective self. Chapter ten covers the phenomenal description of the *verbal body-mind split* which corresponds to the changes in experience that is brought about by the emergence of Stern's sense of a verbal self. After presenting Stern's views on the particular senses of selves in each chapter, I will compare and connect his views with ontogenetic phenomenological considerations, primarily relying on the views of Merleau-Ponty, Husserl, Vermes, and Sheets-Johnstone. The two splits will also be evaluated according to the taxonomy of bodily feelings introduced in the previous chapter.

The sense of an emergent self

The further we part form our adult way of experiencing the world, the harder it is to imagine 'what it is like', to relate to it and to theorise about it. Discussing the experience of a newborn in their first two months is to take this task to extremes. It is no wonder that Stern likens this challenge to that of explaining the first seconds of the universe after the big bang.

There are very distinct, qualitative changes occur at the age of two months in the infant's life, which is "almost as clear of a boundary as birth itself." (Stern 1985 p. 35) The pace of sensorimotor learning speeds up, direct eye-to-eye contacts begin to happen, all in all the infant becomes overtly much more sociable besides many physiological changes. Traditionally, the phase preceding this – the first two months – were considered as a "presocial, precognitive, preorganised life" (ibid.). Stern departs from this view, suggesting that the infant can experience not only the product of an organisation, an already organised sense of self, but in fact the *"process of emergent organisation",* the *"coming-into-being of organisation"* as well. (ibid. p. 45) Precisely this experience of emerging organisation is what Stern calls the emergent sense of self.

Importantly, however, he maintains that infants do *not* experience *non-organisation*. He is deeply insightful in the way how intuitively he grasps the improper adultist position that developmental and clinical psychologists often take when theorising over infants' experience and how brilliantly he sees the way in which an 'infantist' position should look like when enquiring into infants' experience.[30] He writes:

> can infants also experience non-organization? No! The "state" of undifferentiation is an excellent example of non-organization. Only an observer who has enough perspective to know the future course of things can even imagine an undifferentiated state. Infants cannot know what they do not know, nor that they do not know. (ibid. p. 46)

This remark serves as an excellent counterexample to what Sheets-Johnstone criticises about contemporary phenomenologists falling short on taking only an adultist perspective, as was discussed earlier (Sheets-Johnstone 2014).

What is this organisation then, which the infant experiences the beginning of its formation? Stern – and this is crucial – points to the body. The body is the first organisation with its coherence, actions, inner feeling states, and memory (Stern 1985 p 46). The body is sensed as the first refence point of any kind in the infant's life. In this claim, we can witness the foundation of what Merleau-Ponty calls the *bodily self*. Once this organisation is formed and consolidated, it will create the sense of a core self. Until then, however, *while* it is forming, this process of coming-into-being of organisation constitutes the sense of an emergent self.

Mostly it is a diverse range of experiences the infants perceive. Let us take an example. The infant experiences vehement up and down movements in the chest, alternating coldness and warmth in the lips, wetness on the temples, five-fingered things coming in and out on the two sides of the visual fields, and discontinuous loud noise. Then two warm pressing patches on the back, a sudden fall of the organs and arms, warmth around the whole body, dropping pitched soft sounds, and now the organs are moving left and right while the whole body is moving slowly up and down. These diverse and individual sensations, perceptions, occasionally come together at once for a fleeting moment to form an integral experience that it is the infant himself who is desperately crying, heavily breathing, his chest is jumping, his tears

[30] The word 'infantist' is my creation – I have not seen this word in the literature. It is intended to be the antonym for 'adultist' in the context of infant research and constructive phenomenology.

are dropping down on her temples, and flourishing with his hands. In such short moments it can also come together that it is the mother picking him up by grabbing him with her warm hands, and holding him closely to her chest, rocking left and right with a calming voice while the mother breathing too. These are the moments when the organisation emerges, a sense of a core Self and a core Other is forming, a sense that certain experiences come from him – and these in fact are just different experiential aspects of the same crying – while others come from the Other. In the first two months, however, these moments are indeed only fleeting, barely showing themselves – emerging – then this integral experience disintegrates once again.

Now, what are the processes involved in the constitution of the sense of emergent self? Stern identifies three main processes: amodal perception, physiognomic perception, and vitality affects.

The infant does not yet perceive the world in terms of modalities such as sounds, touches, or sights. Instead, in terms of intensities, shapes, and temporal patterns. It is called *amodal perception*, the first such constitutive process. Amodal perception refers to the infants' capacity to transfer perceptions between sensory modalities (ibid. p. 51). For example, absolute light intensity and absolute sound intensity seem to correspond in the infants' experience. Stern suggests, in contrast to Piaget, that this permeability is not based on an a posteriori association, but in fact they can integrate without any prior experience. The example here that Stern takes is the 'seen breast' and the 'sucked breast' are integrated already for the first time of experiencing them, in other words, there never is an experience for the infant that the two kinds of breasts are unrelated (p. 52). This processes of how experiences of different modalities integrate into one consistent experience constitutes the sense of an emergent self.

The second proposed process is called *physiognomic perception*. It is a different system, which, in my view, is slightly even contradictory to the claims of amodal perception described above. According to this view, the directly perceived amodal qualities are experienced as categorical affects. Such as, simple lines, a single colour, or a smell is perceived as having categorical affect. Consider, for example, these very simple lines in the brackets: (‿), (‾), (↘↗). One readily perceives them as happy, sad, and angry, respectively. Sterns comments on this:

> Affect acts as the *supra-modal currency* into which stimulation in any modality can be translated. This is a kind of amodal perception too, since an affect experience is not bound to any one modality of perception. (ibid. p. 53, my italics)

The constitutive role of vitality affects in the sense of an emergent self

According to Stern, the third process involved in the constitution of the sense of an emergent self is vitality affects. By now, we have a sound grasp on vitality affects I believe, so here I will focus on their particular role in this early period of life. However, at this point, one can quickly look back at chapter one to have a refreshed impression on vitality affects as presented there (especially pp. 11-12) – the examples and initial descriptions taken from Stern in chapter one are in fact mostly from his discourse on vitality affect in the context of the emergent self where he introduces his notion for the first time in his book.

Stern writes, "affective and cognitive processes cannot be readily separated". (ibid. p. 42) In this thesis, I have argued in length from various different angles in favour for this claim as an overarching ontological-epistemological stance – in fact, I have challenged whether they are separable at all. Nonetheless, for those who did not accept my arguments that were presented in support for this claim, its veracity is even more undeniable when it comes to infants' early experience.

Vitaly affects are the main organising processes of experience, they create organisation in the experience in this period. Stern maintains that infants do not perceive over acts as such what adults would call an 'act'. (ibid. pp. 55-56) Such as opening the fridge or changing the diaper, etc. Instead, they perceive the happenings around them in terms of the vitality affects they express, the temporal dynamics of the events as they unfold in time, the vitality contours as Stern calls them in his later works. Everything is perceived in terms of vitality affects regardless of the adultist modality of the percept. What they perceive is the dynamic qualities of events. In Stern's words, "these elusive qualities are better captured by dynamic, kinetic terms, such as "surging," "fading away," "fleeting," "explosive," "crescendo," "decrescendo," "bursting," "drawn out," and so on" (ibid. p. 54). Experience is organised along these qualities, where vitality affects act as a bridge not only across modalities – or as Stern puts it, as a 'supra-modal currency' – but also across (categorical) affective and cognitive, body and mind, to use the traditional dichotomies.

The three processes together, amodal perception, physiognomic perception, and vitality affects are different forms of global perceptions, whereby diverse experiences are yoked together accompanied by particular subjective qualities.

The domain of emergent relatedness that forms the structure the infant's intersubjective world is also conspicuously organised along vitality affects. In the vitality affective qualities of the mother, she is also sensed as an emerging Other, which is the other side of process how

the self is sensed as an emerging self. In attuning to each other along vitality affects begins to form a sense of self-invariants and other-invariants, which anticipates the formation of the subsequent sense of self, the sense of a core self. Before proceeding, here is a noteworthy ending remark by Stern on the nature experience in the sense of an emergent self:

> infants do not see the world in these terms (that is, in terms of our academic subdisciplines). Infant experience is more unified and global. Infants do not attend to what domain their experience is occurring in. They take sensations, perceptions, actions, cognitions, internal states of motivation, and states of consciousness and experience them directly in terms of intensities, shapes, temporal patterns, vitality affects, categorical affects, and hedonic tones. These are the basic elements of early subjective experience. Cognitions, actions, and perceptions, as such, do not exist. All experiences become recast as patterned constellations of all the infant's basic subjective elements combined. (ibid. p. 67)

The province of the sense of an emergent self – where vitality affects still form experience in a salient manner – remains the headwaters of the most fundamental bodily experience throughout our lives, the most fundamental affective layer in our interpersonal world, it remains an ever-present root of how we subjectively feel in our encounters with others and with ourselves.

The sense of a core self

Once the *process* of emerging organisation consolidates, the *product* of this organisation forms the sense of a core self. The infants thus experience themselves as integral, consistent, distinct bodies who have a sense of ownership over their actions, affectivity. They experience it along a temporal continuity with a sense of Other as distinct from themselves. At same time, the mother experiences the infant as more of a complete person, an integrated self from about two months. Stern categorises four aspects that together contribute to the sense of a core self. These are self-agency, self-coherence, self-affectivity, and self-history (ibid. p. 69-72). Note, that this self still operates pre-reflectively, outside of awareness.

Self-agency refers to the sense of authorship of one's actions, including a sense of non-authorship of the actions of the Other. It also provides the foundation to develop 'consequential relationships', which are expected experiential consequences of one's actions, such as if I turn my head left, objects in my vision go right; if I shut my eyes, it gets dark; or I suck my finger,

my finger gets sucked. Self-coherence is the sense of a "nonfragmented, physical whole with boundaries" as the spatial locus of the self. There is coherence in motion, in their temporal structure, coherence in forms. Self-affectivity is the subjective, "patterned inner qualities of feeling" that accompanies other experiences of the self. Self-history refers to the sense of continuity of the past and present, that while the experience might change, the self remains the same. (ibid.)

These four aspects of self-experience serve as self-invariants that the infant actively seeks to reinforce these experiences during the period of two to six months. As Stern puts it beautifully, "the intrinsic motivation to order one's universe is an imperative of mental life." (ibid. p. 76) Let us have a closer again at how affectivity, in particular vitality affects, shape the constitution of experience in this period according to Stern.

The circularity of vitality affects and the sense of a core self

As it was proposed in the beginning of Part III, we are concerned in this part with how vitality affects constitute the sense of the various selves, and conversely, how the given level of organisation of a certain sense of self allows a phenomenological access to vitality affects.

In the case of a sense of core self, the infant has already enough affective experience to be able to recognise characteristic constellations among proprioceptive and kinaesthetic experiences – such as facial movements, respiration patters, etc.; sensations of arousal contours; and emotion specific feeling qualities. Constellations consisting of these three kinds of experience form a higher-order invariant of self-affectivity.

Although Stern does not mention it as such, in fact, he might not even agree with this, yet my interpretation of the above description is that this new organisational principle, the sense of emergent self, has thus brought a new, more complex organisation into vitality affects themselves, precisely in the form of these newly recognised constellations of experiences. In this sense, vitality affects do develop along with the sense of selves.

The higher order invariant of self-affectivity can for example be observed when the infant does not even yet start playing with one of her toys, yet she already starts smiling by just barely seeing it. In such an event, we can witness the consolidation of these constellations. It is a testimony of the core self having a sense of a history, a continuity of affectivity. Once the four self-invariants get integrated, they form 'islands of consistencies', which are reference points in the organisation of experience.

How do, in turn, vitality affects constitute the sense of core self? We can find a fundamental role of vitality affects not only in the invariant of self-affectivity, but also in the other three, self-agency, self-coherence, and self-history. This is partly due to their remarkable robustness of vitality affects throughout a lifespan. Stern comments on this thus.

> Of all human behavior, affects perhaps change the least over the life span. The muscles that the two-month-old uses to smile or cry are the exact same ones that the adult uses. Accordingly, the proprioceptive feedback from smiling or crying remains the same from birth to death. For this reason, "our affective core guarantees our continuity of experience across development in spite of the many ways we change". (ibid. p 93)

Yet, it does not operate only on such huge time-scales as a lifespan. On the contrary, vitality affects contribute in the constitution of the most rudimentary form of *lived experience* that Stern calls an 'episode'. Episodes are formed with the integration of the four self-invariants, they are the basic units of experience: "a small but coherent chunk of lived experience". (ibid. 95) Affectivity is inseparable from experience on this organisational level too. As Stern puts it,

> there are no lived experiences that do not clump to form episodes, because there are rarely, if ever, perceptions or sensations without accompanying affects and cognitions and/or actions. There are never emotions without a perceptual context. There are never cognitions without some affect fluctuations, even if only of interest. (ibid.)

These episodes can get generalised, which provides an anticipatory nature of the moment-to-moment basis of lived experience. Stern elucidates it with an example of what he calls the 'breast-milk' episode. (ibid. pp. 95-97) Once the infant experiences a hunger that is followed by being taken to the breast, opening the mouth, beginning to suck and getting the milk. All this is of course accompanied by particular sensations from all modalities. This is one 'breast-milk' episode with its distinct affectivity, temporal dynamics. If a similar episode occurs several times, then the infant begins to form a *generalised breast-milk episode*, which is not the memory of one particular breast-milk episode, instead a generalised memory structure involving the integrated four self-invariants, the accompanied memory of the constellation of the islands of consistencies.

Since the infant's experience is formed in an interpersonal space, these generalised episodes also always occur in social interactions. Stern thus coined these generalised episodes RIGs,

'Representations of Interactions that have been Generalized'. Stern considers them as preverbal representations and suggests that these are elementary, preverbal forms of semantic memory. (ibid. p. 96) With this claim, he lays down the most rudimentary foundations for a view of language acquisition that is deeply embedded in bodily affectivity and in movement.

Intersubjectivity in the sense of a core self

Even though Stern does not operate with the term intersubjectivity when discussing the sense of a core self and the domain of core relatedness – I believe he deliberately reserves the term intersubjectivity for his discourse on the sense of a subjective self and its respective domain of intersubjective relatedness – yet, the organising principles of the core self and core other do raise issues deeply concerning intersubjectivity.

He asks the question that we have seen in chapter four Husserl had asked too: in a social experience, what makes the core self not merging together with the core other, not "dissolving into an other's semipermeable personhood"? (ibid. p. 105) My read on Stern's answer to this question lies precisely in the intersubjective *stimulation along* vitality affects, in the intersubjective *regulation with* vitality affects. Self and Other regulate one another through their arousal, activation contour, hedonic tone – by and large, through their vitality affects. There is a constant play with it in a social interaction, trying to align with the other, or the opposite, trying to misalign. The infants use their repertoire of RIGs to anticipate the Other. The proposed answer is that as Self and Other constantly regulate each other, even if there is a deep connection between the two, a feeling of connectedness – such as between lovers, dancers, or musicians – there will always be a greater mismatch in alignment with the Other than with oneself. This is why Self and Other ultimately cannot dissolve in the subjective experience, or only for very briefly, for I am more in tune with myself, with my own vitality affects than with the Other's. The lack of this experience can result in severe psychiatric conditions.

Having seen the main characteristics of how Stern describes the infant's experience in their first six-seven months and in what way vitality affects structure their experience, let us connect it with what phenomenologists say about this period. First, we will briefly examine some insights from the initial constructive phenomenological writings by Husserl and by Ludwig Landgrebe through their contemporary advocate's, Sheets-Johnstone's remarks. This will be followed by presenting Merleau-Ponty's tenets that are more influenced by developmental psychology.

Husserl's 'I cans'

Sheets-Johnstone emphasises Husserl's and Landgrebe's constructive phenomenological insight that *'I move' precedes 'I do' that precedes 'I can'*, in several places. (Sheets-Johnstone 1996, 2011b p. 199, 2014 p. 98, 2017, 2018 p. 12). I will show that this statement is in accord with Stern's developmental model. Two important aspects of Sheets-Johnstone's discussion on this insight, will be our guidelines.

First, she writes "The temporal sequence from "I move" to "I do" to "I can" in fact constitutes the three phenomenological insights that are the foundational stepping stones of agency. (Sheets-Johnstone 2017 p. 4) 'I move'. We come to the world moving. This is the beginning and indeed the mark of animate life. Ontogenetically speaking, movement is thus always with us as long as we are alive. 'I move' refers to the spontaneous movements infants execute. In contrast to that, the first signs of agency appear in 'I do' when there appears already a sense of ownership behind the move. First, there is 'the kicking' – I move, then there is the 'I kick' – I do. These two phenomenologically distinct stages, I argue, fit well with Stern's sense of an emergent self and sense of a core self. In the sense of an emergent self, when an organisation of a fixed self is just coming-into-being, the infants are only witnessing their own movements, their kicks, their breathing, their turning heads – they are witnessing 'I move'. Whereas with the sense of a core self, they already have their self-agency, an island of consistency, with which they begin to deliberately execute their movements. They are no longer witnesses of their own movements, instead there is a formed-forming sense of ownership behind their movements, a "tactile-kinaesthetic awareness", a sense of 'I do'. These 'I dos' evolve later into if/then relationships, or consequential relationships, into a growing collection of 'I cans' as Husserl described them. Grounded in the 'tactile-kinaesthetic body', infants learn how their movement affects their own experience and the environment. If I shut my eyes, then it gets dark; when the mother plays with the infant, if I do not pull my hand fast enough from my mother's hand, then my hand will be grasped, etc. This again, ties in well with Stern's sense of a core self and core other.

Second, she writes "an expanding repertoire of powers, or "I cans," Husserl's term for those foundational possibilities (…) are the epistemological cornerstone of our sense-makings." (Sheets-Johnstone 2011b p. 195) There is no epistemic process, no experience without movement, and for that, the ability of movement must and indeed does come first before any possibility of doing anything. As she puts it, "the ability to move oneself is foundational to any and all constitutive processes; the *ability* precedes the *possibility* of doing anything, that is, it

precedes any ‘I can’.” (ibid. p. 200) This is Landgrebe’s remark on Husserl’s ‘I cans’. In the experience that ‘I can’ move my head, on the bases of if/then relationships, there already is the assumption that I am able to move my head, the ‘I do’. It is in this sense when Sheets-Johnstone writes:

> There is no bridge to be crossed between thinking and doing. Concepts develop not only in the same sense that abilities and skills develop; they are coincident with the development of those abilities and skills — whether a matter of learning to speak or to read or to stand or to ski. To believe otherwise is to be oblivious of what is there in the experience of self-movement. (ibid. p. 196)

This view establishes the most rudimentary, ontogenetic foundation of the bodily, affective bases even of the so-called higher-order thinking that process can be captured as the mentalisation of affectivity or languaging experience, which will be the topic of the final part.

Syncretic sociability - Merleau-Ponty on the first six months

Merleau-Ponty has not published his views on child development in written form. His legacy on this matter is in the form of a transcript of a lecture series known as the *Sorbonne lectures*, held between 1949 and 1952 (Merleau-Ponty 2010a). In this section, some ideas from the lecture, titled *The Child’s Relation with Others* will be discussed.[31] In this lecture, as Vermes points out, Merleau-Ponty struggles to balance between his phenomenological views and his analysis of the psychological paradigms at that time (Vermes 2006 p. 75).

From a phenomenological point of view, Merleau-Ponty challenges the notions of the psyche and the body as they are conceptualised in psychology, arguing that the prevalent misconceptions make the child’s relation with others appear as a problem.

The basic assumption of the psyche in classical psychology is that accessibility to it is “given to only one person”, what constitutes the psyche is “something incommunicable,

[31] This lecture was originally published in English in William Cobb’s translation in *The Primacy of Perception* (Merleau-Ponty 1964). Recently, a book that covers the whole lecture series, *Child Psychology and Pedagogy. The Sorbonne Lectures 1949-1952,* was translated by Talia Welsh (Merleau-Ponty 2010a). I find the two translations – transcriptions if you will – at places rather different, therefore it is worth to read both. Moreover, shortly after this recent translation, Welsh published her own book on Merleau-Ponty’s views on developmental psychology (Welsh 2013b), these three books read nicely together.

therefore it is only open to introspection by a single individual. (ibid. p 114). In contrast to that, for Merleau-Ponty the consciousness is an opening to the world, therefore it is essentially accessible to others as well.

> My 'psyche' is not a series of 'states of consciousness' that are rigorously closed in on themselves and inaccessible to anyone but me. My consciousness is turned toward the world, turned toward things; *it is above all a relation to the world.* The other's consciousness as well is chiefly a certain way of comporting himself toward the world. Thus it is in his conduct, in the manner in which the other deals with the world, that I will be able to discover his consciousness (ibid. 116-117, my italics)

Furthermore, as he puts forth this reform of these concepts, he says, "a reform not only of the notion of the 'psyche' (…) but also of the idea we have of our own body." (Merleau-Ponty 1964 p. 117) He thus challenges the notion of the body as conceived of a "mass of utterly private sensations" (ibid.). Instead, he proposes that the body is a 'corporeal schema', "it is first and foremost a *system* whose different interoceptive and exteroceptive aspects express each other reciprocally" (ibid.) In effect, when he says that interoceptive and exteroceptive mutually express each other, he says that they are not two distinct worlds, but something rather more transparent. This is does pluck chords with Stern's question when he asked why the core self does not dissolve "into an other's semipermeable personhood". While Stern assumed already in the question, and in fact affirmed with his answer, that self and other do not merge together – or at least only occasionally, once there *is* a core self and core other –, Merleau-Ponty maintains that infants do begin their life with a sense of unity with others. He calls syncretic sociability. As Welsh puts it,

> Syncretic sociability is seen as a phase where the infant, due to an inability to organise her perceptual and tactile world, confuses herself with others. She has no subjectivity and hence no intersubjectivity, traditionally speaking. (Welsh 2013b p. 47)

This is where Merleau-Ponty's views and Stern's views part from one another, for Stern puts the formation of the kind of self – the core self – that constitutes a boundary between the self and other much earlier than Merleau-Ponty does (Vermes 2006 p. 75). Merleau-Ponty characterises the first six months where syncretic sociability dominates the experience, from which the process of individuation, isolation in fact happens throughout life, and is never finished. Whereas for Stern, the sense of a core self appears already at the age of two months.

However, as noted earlier, since Stern's model offers a layered structure of the senses of selves, which means that for him too, the experience that was dominant during the first two months as a sense of an emergent self continues throughout life, albeit in a much less accessible way. Which is to say that in this regard, Merleau-Ponty and Stern share the view that the most primordial experience as infants is with us for our entire life.

As Shiloh Whitney summaries,

> "The Child's Relations with Others" ultimately advocate the view that the advent of adult proprioception constitutes a reorganization of perception that distinguishes interoception and exteroception, with the distinction of self and other as a corollary development. (Whitney 2018 p. 3)

We will see in details how this reorganisation of perception happens in the following two chapters. But before that, let me point out some structural resemblances between Stern's first two senses of the self and the enactive understanding of the minimal self.

The enactive bodily self and Stern

Embracing Thompson's 'deep continuity of life and mind' thesis, at this point it is worth examining the resemblances between Varela's proposal "living is sense-making" and Stern's model of the earliest organisations of the self. The reason why this comparison is discussed here and not earlier is not solely out of the obvious reason, namely that by this point both of the theories have been introduced in this work. Rather, since this part is dealing with human ontogeny, with developmental psychological considerations, with infants playing and crying – by and large, with somewhat down to earth problems, we are probably more attuned to this language than that of enactivism, which in my view is comparably more abstract and conceptual. This might help resonating with the enactivist claims differently as if this comparison was presented in chapter three where enactivism was introduced, which I believe, required a different mindset to read that the present one.

Thompson elaborates on Varela's proposition, "living is sense making", collecting his claims in five points as follows (Thompson 2007 p. 158).

1. *Life = autopoiesis and cognition.* Every living system is both an autopoietic and a cognitive system.
2. *Autopoiesis entails the emergence of a bodily self.* A physical autopoietic system, by virtue of its autonomy, produces and realises an individual or self in the form of a living body, an organism.

3. *Emergence of a self entails emergence of a world.* The emergence of a self is also by necessity the co-emergence of a domain of interactions proper to that self, an environment, or Umwelt.
4. *Emergence of a self and world = sense-making.* The organism's environ-ment is the sense it makes of the world. The environment is a place of significance and valence, as a result of the global action of the organism.
5. *Sense-making = enaction.* Sense-making is viable conduct. Such conduct is oriented toward and subject to the environment's significance and valence. Significance and valence do not preexist "out there," but are enacted, brought forth, and constituted by living beings. Living entails sense-making, which equals enaction.[32]

Now, I am in no way claiming that for example the word 'bodily self' in the above proposal denotes the same as Stern's or Merleau-Ponty's notion of bodily self. Although, as we noted earlier, unlike Stern, Merleau-Ponty did influence both Varela and Thompson's writings. Also needs to be added that Thompson argues – precisely when discussing Merleau-Ponty's *The Structure of Behavior* – that one of the general characteristics of living structures is *individuality*, in a sense that is different from physical individuality, namely, in an autopoietic sense, that is, individuality is a "morphodynamic invariant through material change". (ibid. p. 75) In this sense of 'formal self-identity', Thompson notes, "an autopoietic system is thus an individual in a sense that begins to be worthy of the term *self*." (ibid.) However, I do not want to venture to draw here such deep parallels between this list presented and Stern's theory.

Rather, I only wish to point out the structural similarities between the two theories. Let me present Thompson's list again, but this time with my comments on Stern's approach at each point, providing a side by side comparison.

1. *Life = autopoiesis and cognition. Every living system is both an autopoietic and a cognitive system.*
   Stern also departs from the traditional view of psychoanalysis that conceives of the infants' development along clinical issues infants face, instead, he accentuates the infant's autonomy from the moment of birth.
2. *Autopoiesis entails the emergence of a bodily self. A physical autopoietic system, by virtue of its autonomy, produces and realises an individual or self in the form of a living body, an organism.*

[32] This list is quoted form Thompson (2007 p. 158) with slight modifications.

As noted, Stern writes, “the first organisation concerns the body” for the sense of an emergent self, placing a similarly great emphasis on the bodily ground for a sense of self.

3. *Emergence of a self entails emergence of a world. The emergence of a self is also by necessity the co-emergence of a domain of interactions proper to that self, an environment, or Umwelt.*

   Stern equally stresses the indivisibility of the senses of selves and their corresponding domains of relatedness to others – one would not exist without the other. Moreover, each sense of self co-develops with its corresponding sense of other.

4. *Emergence of a self and world = sense-making. The organism’s environment is the sense it makes of the world. The environment is a place of significance and valence, as a result of the global action of the organism.*

   Colombetti defined affectivity as the lack of indifference. The world matters to the self precisely because it perceives along significances and valences, along affects. Stern’s model, as we have seen it, anchors the sense of self in bodily affectivity in the most primordial sense possible. Through vitality affects we make sense of the wold. With Sheets-Johnstone’s phrasing, the ‘epistemological cornerstone of our sense-makings’ is grounded in the acquiring of the if/then relationships of our ‘tactile-kinaesthetic body’.

5. *Sense-making = enaction. Sense-making is viable conduct. Such conduct is oriented toward and subject to the environment's significance and valence. Significance and valence do not preexist “out there,” but are enacted, brought forth, and constituted by living beings. Living entails sense-making, which equals enaction.*

   Stern’s theory is constructivist in a way that the infants brings forth their own world and autonomously maintain this process. As quoted earlier, Stern writes: “the *intrinsic motivation* to order one’s universe is an imperative of mental life.” (1985 p. 76, my italics)

The resemblance is at once striking and absolutely not. Striking because Varela and Thompson provide an overarching philosophical theory of life, cognition, and experience that is founded in the basic principles of biological life, whereas Stern accounts for early infants’ experience, which in comparison seems much more concrete and practical. Yet, it is not striking, for this comparison recalls biologist Ernst Haeckel’s famous biogenetic law, stating ‘ontogeny recapitulates phylogeny’. This, to me, describes the relationship between Stern’s and Thompson’s theory; where Stern accounts for the ontogeny of experience and Thompson – in a very loose, almost metaphorical sense – accounts for the phylogeny of experience.

Conclusion

This chapter covered how infants experience their world in the first six-seven months of their lives. In the initial period, they are only inhabiting their bodies, 'learning to move themselves', integrating fragmented pieces of experiences – the infant is essentially soaked in amodal experiences mostly in the form of vitality affects. Once the forming self invariants – self-agency, self-affectivity, self-coherence, and self-history – have coalesced into islands of consistencies in the experience, the sense of a core self and core other consolidate. In this period there is no body-mind split yet, these has not occurred any objectification in the experience of the body, as we cannot even talk about subject-object, a noetic-noematic dimensions of the constitution of experience, ego-pole and object-pole are only forming in this era, let alone any kind of reflexivity or reflectivity that would be necessary for objectification. Bodily experience has can thus be characterised as pre-reflective, pre-noetic and pre-noematic.

9. The preverbal body-mind split

From around the seventh-eighth month until with the beginning of language acquisition, infants go through another qualitative change in how they experience the world, their social interactions, and themselves. During this period, I argue, occurs the first split in their experience where an objectification of how they experience their bodies happens. Stern characterises this period as the formative phase of the sense of a subjective self, which in many respects corresponds with what Jacques Lacan calls the mirror stage. In presenting both accounts, I also attempt to focus on the role of vitality affects and to articulate what this split consists of phenomenologically.

The sense of a subjective self

This is the dramatic period when infants realise that they have their own inner life, their subjective experience, just like others do. It also comes with the realisation that they in fact can choose to share them or not with the other. Stern calls this that "it amounts to the acquisition of a 'theory' of other minds", the discovery that others have similar "mental states" (1985 p. 124). I would rather avoid these wordings because of the arguments I have presented in chapter four. Instead, I propose to say that this is the period where the formation of *analogical*

apperception takes place – this Husserlian terminology suites better the philosophical stance the present thesis is committed to.[33]

This change in the infants' ability gives them a "different presence", a "different social feel" in intersubjective situations. In the formation of the domain of intersubjective relatedness while the principles of core relatedness remain, the nature of relatedness radically transformed. Inner experience and overt behaviour separate, as Stern puts it

> Selves and others now include inner or subjective states of experience in addition to the overt behaviors and direct sensations that marked the core self and other. (ibid. p. 125)

In this additional layer, there appears an awareness of this separation, an awareness that enables the infants to choose to keep the subjective qualities of experience to themselves or to express as over behaviour. This new capacity is also a precondition for empathy as well as psychic and physical intimacy. Intersubjectivity thus creates a possible distance from others, as well as new forms of closeness, such as intimacy and empathy. As Stern remarks,

> In the present view, both separation/individuation and new forms of experiencing union (or being-with) emerge equally out of the same experience of intersubjectivity. (ibid. p. 127)

He borrows a working definition for intersubjectivity from Trevarthen and Hubley, "a deliberately sought sharing of experiences about events and things." (ibid. p. 128) Stern proposes three kinds of mental states in the intersubjective world that are relevant to share in this still preverbal era: sharing joint attention, sharing intentions, and sharing affective states. We will focus on the sharing of affective states.

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[33] It is difficult to always avoid the term 'mental states' and the like 'out of a philosophical commitment'. Furthermore, I doubt that it is useful if one takes it to the extreme. This loose description by Stern, 'working notion' on the experience of intersubjectivity, for instance, captures the essence of the situation and I would not want change its phrasing at all: "what is going on in my mind may be similar enough to what is going on in your mind that we can somehow communicate this (without words) and thereby experience intersubjectivity." (1985 pp. 124-125)

Affect attunement

We have already discussed affect attunement in chapter four, but only as a case study to discuss Stern's philosophical stance.

Affects continue to have a prime importance in the sense of a subjective self as well. Stern notes that "early in life affects are both the primary *medium* and the primary *subject* of communication" (ibid. p. 133) This bears indeed extreme importance: we open to our intersubjective world through our affectivity. They are in fact so pervasive in our mundane life, it is best to illustrate them with examples. Stern brings several examples, let me now quote one.

> An eight-and-one-half-month-old boy reaches for a toy just beyond reach. Silently he stretches toward it, leaning and extending arms and fingers out fully. Still short, of the toy, he tenses his body to squeeze out the extra inch he needs to reach it. At that moment, his mother says. "uuuuuh . . . uuuuuh!" with a crescendo of vocal effort, the expiration of air pushing against her tensed torso. The mother's accelerating vocal-respiratory effort matches the infant's accelerating physical effort. (ibid. p. 140)

Stern defines affect attunement as "performance of behaviors that express the quality of feeling of a shared affect state without imitating the exact behavioral expression of the inner state." (ibid. p. 142) He thus specifically distinguishes it from imitation, in that "imitation renders form; attunement renders feeling." (ibid.)

Examples, however, do not need to include infants to illustrate affect attunements. They happen to us every time we sit down at a table with someone for dinner. The way we grab and pull our chair, then the manner in which we lower ourselves as we are sitting down, all attuned with the other as we are doing it. In such subtle movements, we can feel if the other is tense, tired, or wants to say something, precisely because we are incredibly sensitive to nuances of different vitality affects. It does not need to involve vision, in fact, it is characteristically cross-modal. When we are waiting outside on the corridor for a friend who is in a room for examination at a doctor, just by hearing the way the door is opened as it makes a creaky sound, the dynamic qualities of the sound, we know if our friend has a good or bad news. We know it not only because we are sensitive to the others' vitality affects and hear it a cheerful leaving the doctor's room or a desperate leaving of the room. No, we feel it first in *our* body, as *our* vitality affects have changed hearing the door, there is a change in the felt sense of out body.

It is thus the dynamic, ever changing qualities of vitality affects that are being attuned to, those continuously present amodal subjectively felt inner qualities, such as intensities, warmth, activation contours, etc. (ibid. pp. 156-157).

Edith Stein's reiterated empathy

Stern argues that affect attunement is distinct from empathy. He says, whereas attunement happens out of awareness, in a pre-reflective way, empathy is mediated by cognitive processes. He considers empathy as consisting of four distinct processes: resonance of feeling state; an abstraction of empathic knowledge from the experience of the resonance; an integration of this abstracted knowledge into a response; a transient role identification. (ibid. p. 145)

However, the phenomenological notion of empathy is different from the psychological notion Stern uses. I propose that Stern's affect attunement comes close to what phenomenologist Edith Stein – another one time assistant of Husserl – calls reiterated empathy (E. Stein 1989).

Thompson points out the distinction between the phenomenological and the psychological concept of empathy (Thompson 2007 p. 386). According to him, psychology conceives of empathy as three affective and cognitive processes involving self and other. These are feeling what the other is feeling; knowing what the other is feeling; and responding compassionately to the other person. It is a similarly cognitively driven tenet on empathy to that of Stern's description. In contrast to this, phenomenology considers empathy as "a unique form of intentionality in which we are directed toward the other's experience" (ibid.). It thus involves experiencing the other in a particular way: the other is constituted in the experience as a Leib, a lived body, not as a mere physical entity, not as a Körper. As Stein writes,

> This individual is not given as a physical body, but as a sensitive, living body belonging to an 'I,' an 'I' that senses, thinks, feels, and wills. The living body of this 'I' not only fits into my phenomenal world but is itself the center of orientation of such a phenomenal world. It faces this world and communicates with me. (E. Stein 1989 p. 5)[34]

[34] In the English literature, there is no consent over the terms 'living body' and 'lived body', despite their central importance in phenomenology. Here, I read this translation in a way that Stein uses the term 'living body' in the sense of Leib, which, in my translation is the 'lived body', in other words in

This in itself is not sufficient yet to fully account for intersubjectivity, especially for a description of affect attunement. Stein points further and proposes what she calls reiterated empathy. Its structure resembles to the well-known example of theory of mind, which goes like this: 'I know that you know that I think that you believe, etc.' – only with empathy. I can "empathetically grasp your empathetic experience of me." (Thompson 2007 p. 393) In other words, if we adopt Thompson's phenomenological concept of empathy, then it can be understood as that I am directed towards the other's experience that is directed towards me. This iteration has created a circularity of intentionalities. Note, that there is no cognitive process involved in reiterated empathy. It can all be described by a series of analogical apperceptions – of which, as noted earlier, Husserl writes "is not inference, not a thinking act." (1960 p. 111).

Even though – as Bornemark (2014) points out – Stein's theory of empathy is a static phenomenological account, I ventured to discuss iterative empathy in the context of Stern's sense of a subjective self. If we accept this, then based on my claim that Stein's iterative empathy and affect attunement denote a rather similar experience, I argue that Stein's iterative empathy provides a phenomenological description to how Stern's affect attunement is constituted in experience.

The first body-mind split

Let us see, what bodily experience does the ability of reiterated empathy and affect attunement assume? I need to have a sense of my body not only as something perceivable by others as a Körper, but also as a Leib – precisely because the other has an empathic grasp on my subjectivity too. (Thompson 2007 p. 392) Similarly, affect attunement would not work, so to speak, if there was not present already in my intersubjective bodily experience itself that the other is also a subjectivity and that I am constituted in the other's experience as a Leib.

Thus, with the sense of a subjective self, the infants have acquired the ability to perceive their body in an intersubjective context *as seen by the other*, both as a Körper, and as Leib. In other words, the infants are able to experience their body as an object of the other's

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exactly the opposite way. She uses 'physical body' to refer to the Körper. Admittedly, it can be very confusing. (Similar confusions can be found around the notions of noetic and noematic.)

intentionality, in short, in an objectified way. *This is the first body-mind split in the infants' ontogenesis.*

Lacan's mirror stage

Another context in which the *preverbal body-mind split* can be captured is in the psychoanalytic literature. Originally, child psychologist Henri Wallon described an infant seeing herself first time in a mirror, which was taken up and further elaborated by Jacque Lacan, thus, the notion 'mirror stage' has been attached to Lacan's name (Lacan 2001).

Both Vermes (2006 pp. 76–80) and Whitney (2018) provide a treatment on the mirror stage in the light of Merleau-Ponty's critique as formulated in his lecture, *The Child's Relation with Others* (1964). As Whitney summaries,

> This identification [with the mirror image] at once alienates the child from his corporeal body in favor of the ideal unity of the image, and at the same time produces a sense of integrity and coherence in the body. (Whitney 2018 p. 9)

From Merleau-Ponty's discussion, Vermes focuses on the claim that the differentiations and diversifications in the sense of a bodily self is deeply and inseparably related to the differentiations in the infants' intersubjective relations during their psychogenesis – this approach is very much in accord with the Stern. The mirror stage stands as a crucial step in the gradual division of the inner experience of the bodily self and the outer image of the infant as seen in the mirror – yet the mirror stage does not occur without precedent.

Prior to the appearance of the Sternian sense of a subjective self, in the golden days of syncretic sociability "where the infant does not distinguish between herself and others or between herself and the world" (Welsh 2013a p. 45), their experience of themselves is fragmentary, lacking a unity. In this period, it is the mother who provides the infant a sense of coherence and unity that the infant is lacking in his own experience of himself. Thus, the infant experiences a unified sense of a self intersubjectively in the mother, in close and intimate interactions with the mother, with the core other. (Vermes 2006 p. 76) It is the mother's organised movements and vitality affects that provide a sense of organisation, comfort and safety to the infant in the constant tuning between the core self and core other. Already in this period, when the infant recognises himself in the mirror, it enables the infant to experience himself as a coherent whole – the Lacanian 'fragmented body' acquires a pleasing coherence. Yet, this recognition also comes with a division, an isolation between the fragmented body experienced from within and the unified, coherent, objectified image of the body. Moreover,

the mirror image of the body in fact gains autonomy and becomes the primordial representation of the self as seen by the other. This differentiation in the bodily experience, deeply embedded in an intersubjective context, is the foundation and precondition for any further reflection, abstraction, and symbolisation (ibid. p. 77).

Even though, the term used is 'mirror *image'*, for Lacan, and even more so for Merleau-Ponty, it is not primarily a visual recognition, but a 'affective recognition' (Whitney 2018 p. 14). It is along the dynamic, affective qualities along which the infants identify themselves in the mirror, not along a static visual image. The individuation – of which Merleau-Ponty maintains is never entirely completed in life – is driven by 'affective forces.' The experience of alienation in the mirror stage is not unlike (cf. ibid.).

There is a dramatic change in the experience of the mirror image that comes with the formative period of the sense of a subjective self.[35] As discussed, this is when the infant discovers that other bodies are also subjects, they are also *Leib*s, that others have their own mental lives too, consequently, they can always see me as I see myself in the mirror. In other words, my coherent mirror image is in fact more accessible to the others than to me. I only have a fragmented sense of myself, unless I look into a mirror when I can enjoy the coherent, unified image of me, whereas others always have access to this image, they can expropriate this image, they can reduce me to this objectified image of me. Thus, the other's gaze becomes dangerous: the infant begins to be afraid of strangers. (Vermes 2006 p. 77) The mother's intimate closeness can keep a balance between the fearful, reduced image of the infant by the other's gaze and the original, fragmented body. While the mother at once can also potentially expropriate the image of the infant too, due to the close affect attunement with the baby, she reassures the infant and can also give back the comfort in his own fragmented bodily subject to the infant. "Precisely the other's accepting look and bodily closeness contributes to the development of the infant's inner coherence." (ibid. p. 78)

Conclusion

With the infant's discovery of others as subjects and with the maturation of intersubjective experiences, a diversification of a sense of bodily self occurs. I call these qualitative changes

[35] Which also roughly corresponds to the 'nine-month social-cognitive revolution', as it appears in the cognitive developmental literature (Fonagy, Gergely, Jurist, Elliot, & Target 2002 p. 222)

in the experience that happen during this period before the advent of verbal life, the first body-mind split. If we recall the vocabulary used to describe the taxonomy of bodily feelings, we can say that the range of the infant's bodily experiences has expanded as follows. These bodily feelings become clearer if we include their intersubjective context.

First, the discovery of 'other minds' can now be rephrased in a way that the other's body appears as a Leib – a feeling, sensing, lived body – as the object of intentionality for the infant. In other words, the other appears as Leib in the infant's noematic experience.

Second, when the infants are affectively attuning with the other, I suggest, the infants experience their body as something that presents itself as a Leib to the other, since the other is affectively attuning with me as a living, feeling, sensing being, not a psychical, scrutinised body. Thus, I propose, the infant's experience in affect attunement assumes a sense of their lived body, their Leib, as noematic feeling, as the object pole for the infant's experience precisely because of the infants' ability of reflexivity in the intersubjective context.

Third, the change in the mirror stage can be described when the infants see their Körper in the mirror, their Körper appears as noematic bodily feeling – this is still the less dramatic aspect of this body-split. The most dramatic aspect is when the mirror image over dominates the fragmented bodily feelings and becomes more of a reality than the fragmented Leib as noetic feeling, consequently appears the Körper as noetic bodily feeling, the Körper *through which* the infant experiences the world – this radical change is driven by the others' gaze. This is the most severe aspect of the first body-mind split as formulated phenomenologically.

10. The verbal body-mind split

So far, what we have covered in this ontogenetic part was the preverbal era of infants' life. The second body-mind split is centred around the changes that verbal life brings about. Many aspects of it has already begun in the mirror stage that laid the foundations for the emergence of language. Let us first see how Stern describes this era.

The sense of a verbal self

The acquisition of language opens up a new world with unprecedented possibilities for intersubjective happenings. The sense of a verbal self – together with the new organisational principle, the domain of verbal relatedness – brings "new ways of 'being with' another" (Stern 1985 p. 162). Infants begin to build a narrative of their own life. But, Stern remarks,

> But in fact language is a double-edged sword. It also makes some parts of our experience less shareable with ourselves and with others. It drives a wedge between two simultaneous forms of interpersonal experience: as it is lived and as it is verbally represented. (ibid.)

Indeed, not only does "language cause a split in the experience of the self" (ibid. p. 163) between as it is directly lived and as it is verbally represented, but in fact those parts that become "less shareable with ourselves" are precisely those preverbal senses of the self – which have been dominating the subjective life of the infants up this point – that now get repressed by the verbal self and as a consequence, they become phenomenologically less accessible. This is the second body-mind split.

During the second year, as part of the capacity for language acquisition, the objective view of the self further develops, which started preverbally in front of the mirror as we have seen in the previous chapter. The boundaries become clearer between the kinds of self, which are called variously: 'categorical self' versus 'existential self'; 'objective self' versus 'subjective self'; or 'conceptual self' versus 'experiential self'. (ibid. p. 165) They start using 'I', 'me', 'mine' to refer to themselves, which is another indicator for the capacity of objectifying the self.

In contrast to the traditional view in developmental psychology that considered language acquisition as a drastic leap towards separation and individuation, Stern – while admits these aspects of language acquisition too – he asserts that language is also "in the service of union and togetherness" (ibid. p. 172). This, however, does not mean that he would deny the alienating effects of language.

The alienating effects of language – the suppression of vitality affects

How does the sense of a verbal self repress the first three preverbal senses of selves? In what way does it modify the preverbal experience of the infant? As Stern asks, "What might happen to the experience of amodal perception when language is applied to it?" (ibid. p. 176)

As we saw in chapter eight, the infant experiences the world in an amodal fashion, along physiognomic perception, and vitality affects. The question is thus how does this early type of 'global' experience as it is prereflectively lived fit with the verbally represented version of it? Stern's answer is that these two versions do not coexist well. Admittedly, there are times when language can capture our feelings, our affective states, especially in poetry, but mostly, language cannot bridge the gap between the global version of experience and how it is represented with words. This is precisely why this thesis begins with saying that it is hard to

define vitality affects, to put them in words. Because the experiences on the level of core and intersubjective relatedness – where vitality affects are in the conspicuous in the experience, them being the most formative principles of experience on those levels – are not linguistically accessible layers. Or as Stern puts it, they

> do not permit language sufficient entry to separate out a piece for linguistic transformation. Such experiences then simply continue underground, nonverbalized, to lead an unnamed (and, to that extent only, unknown) but nonetheless very real existence. (ibid. p. 175)

Stern brings an illustrative example of how the verbal version of experience modulates global experience, alienating the subject from the direct experience. Despite its length, let me quote it fully partly because of its importance and partly because it so eloquently written.

> Suppose we are considering a child's perception of a patch of yellow sunlight on the wall. The infant will experience the intensity, warmth, shape, brightness, pleasure, and other amodal aspects of the patch. The fact that it is yellow light is not of primary or, for that matter, of any importance. While looking at the patch and feeling-perceiving it (á la Werner), the child is engaged in a global experience resonant with a mix of all the amodal properties, the primary perceptual qualities, of the patch of light – its intensity, warmth, and so on. To maintain this highly flexible and omni-dimensional perspective on the patch, the infant must remain blind to those particular properties (secondary and tertiary perceptual qualities, such as color) that specify the sensory channel through which the patch is being experienced. The child must not notice or be made aware that it is a visual experience. Yet that is exactly what language will force the child to do. Someone will enter the room and say, "Oh, *look* at the *yellow* sunlight!" Words in this case separate out precisely those properties that anchor the experience to a single modality of sensation. By binding it to words, they isolate the experience from the amodal flux in which it was originally experienced. *Language can thus fracture amodal global experience*. A discontinuity in experience is introduced. (ibid. p. 176)

What is more, a similar event happens to the verbal version of experience as what happened to the mirror image of the self versus the sense of the fragmented body: the verbal version becomes dominant over the global, amodal, direct experience, the language version becomes the ‘official version’.

This leads to the suppression of vitality affects, as they seemingly lose their validity over verbal accounts – the infants get distanced from them. To paraphrase Stern, vitality affects are *no longer* the primary medium and the primary subject of communication. At the same time, it opens up the possibility for lying and self-deception. In language, the *what* has importance over the *how*, that stands in perfect contrast to vitality affects, in which it is all about the *how*, and much less so about the *what*. One can refer to the semantic content, the what, prosody is only secondary. One can say the opposite of how one feels, and that has primacy over *how* it was said. If one asks the other who has a grumpy face 'What happened? Is everything alright?' and reply is 'Nothing, I'm fine.', to which one can ask again 'Come on, you can tell me, what happened?', the other might cry out 'I said I'm fine!' with a very edgy style. This is just is silly example when one refers to the verbal version as the official version of experience when in fact their vitality affects, their bodily dynamics tell the opposite, yet, the language account is supposed to be taken by the others as official version.

Conclusion

The second body-mind split in the experience comes with the advent of language. While language puts the possibilities of intersubjective exchanges on a dramatically higher level, it fractures the amodal experience of the infant into modalities and into word. There become two separates realities for the infant, one pre-reflective, global reality and the reflective verbal reality. The latter can be shared in the extremely rich verbal intersubjective space. With these double realities, however, the sense of self splits too, into an objective self and a subjective self. Since the reality of the objective self gains dominance over the reality of the subjective self, vitality affects become supressed. While they remain fundamentally important in the constitution of the bodily self, they lose their overtly formative constitutive role in experience as they become phenomenologically less accessible.

Summary of Part III

In this part, Stern's model of the early organisation of the self was presented in greater details with a focus of how vitality affects contribute to the constitution of infant's experience, deeply embedded in an interpersonal space. We examined, how the diversification of the sense of the bodily self and the diversification of social relatedness co-create and co-facilitate one another. For this discussion, a phenomenological vocabulary was adopted by presenting a taxonomy of

bodily feelings in order to discuss these ontogenetic events phenomenologically more precisely.

Two body-mind splits have been identified. The first split corresponds with the formative period of the sense of a subjective self and with the mirror stage. In this split, I argued, that not only the Körper as noematic bodily feeling, but also, the Körper as noetic bodily feeling appeared first time in the ontogenesis of experience. These dramatic events mark the first objectifications of the body in human life. The second split occurs with the acquisition of language, in which the infant's reality – and with it, its bodily self – splits into two, a verbalised, objective reality and self, and a globally experienced, subjective reality and self.

Conclusion

I ended the first chapter on the note that vitality affects serve as a bridge between body and mind, which makes vitality affects an appropriate concept to examine the forming splits in experience between body and mind precisely because they do not fall in that very dualist framework. I spent most of Part I arguing for the continuity of subject-object, mind-life, and body-life-world – primarily against an objectified conception of the body to make space for a suitable treatment of affectivity in Part II. However, amongst the proponents of non-dualist views, there is a prevalent bad practice to point to Descartes and simply blame him for the body-mind dualism. My intention was that with the phenomenological analysis of the body-mind splits in Part III, I have provided a refined account which shows that the Cartesian understanding of the body, and the self is not only historically rooted, but some aspects of it are indeed ontologically deeply engrained in our experience.

My hope is that with my phenomenological treatment of vitality affects, I showed that

> "Our body and mind are not two, and not one."
>
> Roshi Suzuki

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