

An Experiential Phenomenology of Novelty: The Dynamic Antinomy of Attention and Surprise

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> Context • In earlier joint work with Varela and Vermersch, we began the elaboration of a methodological and epistemological framework for a practical experiential phenomenology. **> Problem** • I here wish to update and further develop that earlier work. **> Method** • I present the framework of a practical, as distinct from a conceptual-theoretical, phenomenology. I update that framework, arguing for a shift in emphasis from consciousness to vigilant attention. I offer a still preliminary investigation of the important phenomenon of surprise. I link these results with ongoing scientific research conducted by myself and others. **> Results** • Attention-as-vigilance is a key operator of experience. Attention has an antinomic dynamic with surprise. **> Implications** • Attention and surprise are key participants in the generative process of the experience of novelty. Elaboration of this thesis enables the further development of practical, first-person methodologies. **> Constructivist content** • This paper outlines certain key features of first-person, lived experience, and elaborates a method for linking these results directly to ongoing scientific research. **> Key words** • Practical phenomenology, attention, vigilance, surprise, experience, novelty.

Introduction

The phenomenologist Edmund Husserl invented the “*epochè*”¹ as a method for dismantling metaphysical constructions, and put forward a strong experiential claim: “coming back to the things themselves.” He thus aims at promoting a logic of experience capable of putting explanations, argumentations and general discourses in the background, because these latter often account more for our *representation* of experience rather than for the very singularized lived experience itself.

The founder of phenomenology, however, very rarely gives indications about *how* to concretely come back to such an experiential individualized level of reality: how to explore one’s own experience, how to cultivate such an intimate presence to myself, what inner gestures and practical tools are to be put to work. The main challenge of our joint work *On Becoming Aware: A Pragmatics of Experiencing* (Depraz, Varela & Vermersch 2003) has been to offer an operative description of

the concrete move of the *epochè* as a process of becoming aware through the exemplified dynamic of three inner gestures that are organically correlated: suspension, conversion as re-direction, letting-go as welcoming. In this paper, as in that joint book, the phenomenological method that results is presented as it is performed, and not just described.

A decade later – the necessary time for “digesting” such a pioneering work – I realize that the concrete operative experience of such a practical performance of *epochè* is less a case of “consciousness,” even in its dynamic of “becoming aware,” than *attention*, understood less as a formal function or as an inner state than as a processual lived quality of vigilance, or again, as an “augmented” presence (Depraz 2013a). It is the main point I want to make in this contribution, after having unfolded the methodological and epistemological framework that underlies it (Depraz 2013d). Now, while going through such research, led by a de-centering of concern from consciousness to attention as vigilance, I have just begun to understand that attention as a key operator of the experiential phenomenology is nothing without its intimate other, which disturbs, intrigues and troubles it: I

mean “surprise,”² which is, at a closer look, the very mobile tissue of our experience as a dynamics of experiencing.³

In short, here is my contention, which I will demonstrate in this contribution: attention and surprise are the two concrete experiential key operators of an antinomic dynamic of a circular processual kind that also contributes (as we will see) to interrupting the linear temporal successive rhythm of “before” and “after.” Strikingly enough, “attention” and “surprise” are both quite common and ordinary words that are immediately understandable by everybody: they straightaway confront us with specific situations and ordeals where it is not possible to “be all talk.” They do so far more interestingly so than “consciousness” and “ex-

2| About such a hypothesis, see the ongoing Emphiline EMCO ANR Project I lead at the Husserl-Archives (ENS/CNRS), entitled “La surprise au sein de la spontanéité des émotions: Un vecteur de cognition élargie” (2012–2015).

3| Charles Sanders Peirce is probably the philosopher who provided the most acute account of surprise as coextensive to experience itself. On this matter, see “About phenomenology” in Peirce (1994).

1| In this paper, I will retain the standard French manner of accenting the word “*epochè*,” rather than the semi-Anglicized usage, “*epoché*.”

perience,” which both remain philosophical “*gros mots*,” overly situated at the theoretical level of phenomenology.

Now, according to a spontaneous common sense understanding, attention and surprise are considered as two opposed phenomena. I am surprised by the sudden popping up of my young daughter at the coffee shop where I am sitting when she comes out of school. This is because, even though I was awaiting her, I was then lost in my thoughts, namely in complex organizational tasks linked to the University of Rouen. I startle when I see her! I had not expected her to arrive, that is, I had not *paid attention* to her arriving at that very moment. Conversely, I am extremely careful when cycling on the countryside roads surrounding my village near Lac Léman so that I am not caught by surprise when I see cows crossing the road as they come back to the stable at around 6 p.m. In short, these quickly-described lived situations show that I am all the more startled when I am not paying attention, and conversely that the more I am being careful, the less I will be surprised. But interestingly enough, these examples also reveal something other than what I first used them for. More than strictly opposed to each other in the sense of excluding each other (in the formal logical sense of an alternative, as if the first one could not survive as long as the other exists), it appears that both phenomena are intrinsically, organically linked like weighing scales: if my attention diminishes (is less heavy), my surprise will be higher (will be heavier), and inversely. This means that the one cannot exist without the other: they need each other while “graduating” each other. They are co-determined into a dynamic experiential antinomy of co-intensifying generativity. In short: no surprise without attention and no attention without surprise. Both phenomena are participants in the unique process of the generativity of experience and articulate it as their two main temporal rhythmic segments. This seems such a strong – partly counter-intuitive – hypothesis (at least according to an immediate understanding) that I will do my best to convince you of its crucial relevance in this contribution.

I will proceed according to the following steps: first, I will present the methodological and epistemological framework of an experiential practical phenomenology – as distinct from a standard conceptual theoretical phenomenology – and its possible transposition into the first- and third-person scientific contemporary debate; second, I will investigate the relevance of the key operator of experience, attention as vigilance; third, I will present the hypothesis of the antinomic dynamics of attention and surprise *via* a rough, still preliminary presentation of the originality of the phenomenon of surprise.

A general framework for an experiential practical phenomenology

In this first step I aim at presenting three historical-personal stages of the growing interest in a rigorous first-person phenomenology, one which is able to catch up with its *native* experiential claim even whilst one is practically *performing* it. Such a phenomenology needs to be distinguished from a theoretical conceptual one: the method of the latter is hermeneutical and its object primarily textual; the former takes a specific lived situation as its singular (each time different) object, and its method of accounting for it is of a descriptive kind. Having made such a clear-cut distinction between both, it is crucial to insist on their close cooperation. Far from being autonomous, they both historically and heuristically need each other and grow from each other. However, I am skeptical about Husserl’s well-known metaphors of the twin girls and of the incestual link between phenomenological psychology and transcendental phenomenology. To

my mind, such an image carries with it an understanding of “relation” that is based on a “con-fusional” link and on the potential ambiguity of perversion. On the contrary, the clear-cut distinction I contend exists between psychology and phenomenology aims at creating another kind of relationship, based on the clear knowledge of their methodological and ontological difference and offering the opportunity of a rational and pragmatic “engagement.” If I had to suggest a metaphor for the relation between a first-person experiential and a third-person conceptual phenomenology, I would favor the image of the “couple” dynamic, that is, the structure of “*alliance*” rather than the one of “*parenté*,” to use Lévi-Strauss’ anthropological categories. I would choose this metaphor in order to stress the idea of two liberties choosing to engage rather than two subjects linked by a natural common-rooted “*appartenance*” (belonging).

A first pioneering thrust: Experiencing *épochè*

With *On Becoming Aware*, our primary goal is to stop talking and writing about the phenomenological method and to put it into practice, that is, to show how to experience it concretely. Now, experiencing the act of reducing obviously requires coming back to the experience of a singular individual subject, able to account for what he or she concretely does and lives.

As soon as you draw attention to the concrete way of performing an act, here the act of phenomenological reduction, you cannot simply refer to it in general, as if we already knew what it is made of. You need to

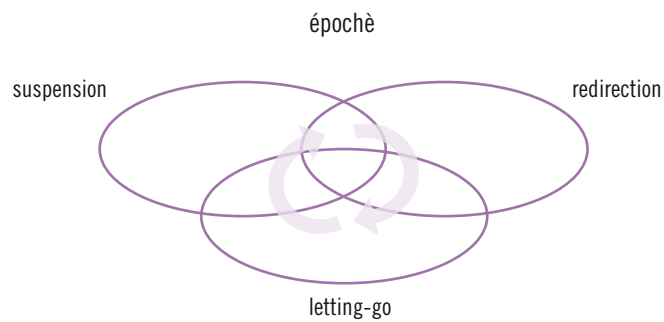


Figure 1: *Épochè* (after Depraz, Varela & Vermersch 2003: 73).

go into details, that is, as expected of a philosopher, to “analyze” it, to differentiate it into segments and components. In the case of a philosophy oriented toward practice, that is, toward experiencing and performing, such an analysis cannot remain formal: it will unavoidably be made of lived contents and of dynamic processes.

We therefore recast the act of Husserlian *epochè* into its experiential pragmatics and analyzed it into three organically correlated inner operationalizable gestures: suspension, redirection and letting-go, as is shown in Figure 1.

Epochè is thus concretely experienced in its three main phases: I suspend my “realist” beliefs and prejudices about what appears to me as being truly the state of the world and thus break with the “natural” attitude and question it; I redirect my attention from the exterior, the “object,” to the interior, the modal quality of my living and acting; I welcome what happens without controlling it, thus opening up the possibility of unexpectedness and novelty (Depraz, Varela & Vermersch 2003).

Though such a pioneering experiential thrust remains for me totally unique and untrespassing, insofar as it definitely establishes the experientiality of the phenomenological method and also already hints at attention as redirection and at surprise as novelty, it still remains – I would say now – too “meta”-practical and structural. In short, practicing *epochè* while operating its three articulated gestures and referring to seven structural examples (elicitation, meditation, writing, heartprayer, psychoanalysis, experimental depth perception, philosophical workshop) in order to show its being put into practice in different fields, is crucial as a first step toward the becoming experiential of phenomenology, but in no way sufficient.

We now need to go beyond such a meta-practice of *epochè* and its only structural exemplification and enter into the very concrete texture of the dynamics of experience. How?

Entering into the introspective elicitation methodology

While immersing ourselves into a finer and more detailed method of experiencing and describing, we are able to contact a truly individual, specific, lived situation.

Such a method exists and it has its own effective rigor. It was founded by Pierre Vermersch (1994) under the name: “elicitation interview” (*entretien d'explicitation*). It was carried on and developed further by Claire Petitmengin (2009, 2011). It was then further unfolded by Vermersch with a new method of elicitation as “self-elicitation” (*auto-explicitation*), which, for example, emerged from 2006 onwards in the framework of a small research group around the “*sens se faisant*,” where I myself first experienced the possibility of first-person self-explicitating, nevertheless having difficulties, on my side, with the form of the second-person “elicitation interview.”⁴

What does the elicitation technique consist of? As a working embodied introspective methodology, it amounts to:

- 1 | re-living (not remembering from afar nor reconstructing);
- 2 | first-personally describing (not explaining nor arguing); and
- 3 | analyzing an individual, specific, lived experience while identifying it through embodied contents and processual dynamics (not in the formal way of universal and necessary static categories).

It offers the most adequate empirical matrix and methodology for a truly experiential phenomenology, strongly aware of its lived and specified practical rootedness.⁵

With such a method, first-person descriptions become available and we are able to discover out of them recurrent features,

4 | For this new way of “elicitating,” see an example in Depraz (2009b) and a detailed presentation in Vermersch (2012).

5 | I do not mean here that all prior phenomenology has somehow been “non-experiential,” nor that this is the first time first-person descriptions have become available. But I would contend that (1) the founders of phenomenology and even contemporary developers of an experiential approach to the phenomenological method, such as Elizabeth Behnke, Ed Casey, Don Ihde and Maxine Sheets-Johnstone, even if they are experience-oriented, do not do not make use of a rigorous method such as the one used with the elicitation interview: they often use daily examples, but with no specific method for such a use, (2) the elicitation interview is the only technique I know that opens the way for a truly first-person description.

as well as *hapax logomena* (unique and specific occurrences). The specificity of this experiential method is double-oriented:

- 1 | Contrary to the Husserlian eidetic variation – from which it retains the move of extracting invariants and the interest in irreducible singular variables as leading threads – it is not *a priori* but empirical, thus allowing discoveries and new phenomena – in short, episodic “surprises”;
- 2 | But contrary to the inductive move characteristic of empirical science and philosophy, which remain “fascinated” by generalizations from the facts, that is, by the myth of an objectivity obtained in abstraction from any subjective account, the elicitation method sticks to subjective lived singularities. In short, to “*hapaxes*,” which it does not consider as mere noises but as proper intrinsic components of objectivity itself.

Unfolding a practical philosophical methodology: Experiential reading and writing

Beyond formal apriorism and factual empiricism, phenomenology is truly and intrinsically “experiential.” But as a philosophy it deals with texts, not with empirical data. My main activity as a philosopher-phenomenologist consists of reading and writing texts; so I need to radically unearth phenomenology’s genuine provenance from the lived unique experience of a singular subject. Phenomenology’s truth-validity ought to be two-fold: its logical coherence ought to come *through* its first-personal experiential authenticity. Such an experiential lever needs to be put to work at two different but related levels in order to provide an adequate reformation of philosophy such that it operates with embodied concepts:

- 1 | rather than rigidly opposing conceptual *a priori* descriptions and experiential singular ones, an experiential phenomenological philosophy, properly understood, will undertake a comparative work between both conceptual and experiential levels, the aim of such a comparison being to bring about new, more complex and more embodied categories;

2 | such a comparative generative process of producing categories requires a different way of reading and writing phenomenological philosophical texts: through what I call an “experiential reading and writing,” I suggest embodying the text while unearthing the singular experience it refers to, but which is never explicit. While reading, I understand what I read by implicitly referring, for myself, to a particular experience I never mention; while writing, each author has in mind a particular experience he or she never indicates for fear of not being “objective.” With experiential reading and writing, I aim at unearthing this lived embodiment of the text and thus delivering an “embodied understanding” (Depraz 2008a, 2009a, 2013c, 2013d).

We are concerned here with a practical philosophical methodology, the challenge for philosophical phenomenology to be one that avoids becoming *either* a sheer “third-person phenomenology,” that is, a set of texts and a network of *a priori* concepts that are logically coherent but not related in any sense to a singular specified experience *or* a text that is a sheer experiential draft: a lever for achieving an experience in the framework of first-person introspective methodology. Hence *neti, neti...* (“neither this, nor that...,” a Sanskrit expression common in Hinduism). If we want phenomenology to be a full-fledged first-person phenomenology, which is its native aspiration, we need to check to what extent a conceptual argumentation “speaks” to me: concepts are not merely logically coherent, they call for a specific experience, and the goal is to see how they are able to resonate with a personal experience within me. While explicitly unearthing such a personal experience, I make the concept live in me: I truly achieve a first-person phenomenology when I read and write philosophical texts *with an experiential attitude*. In what follows, I will give two examples of such a way of reading while dealing with the themes of attention and surprise, thanks to an extract from Husserl’s *Lectures about Passive Synthesis* (2001) on the one side, and from Adam Smith’s *Lectures on Astronomy* (1962) on the other.

Attention as vigilance: The key operator of experiencing

Attention is a crucial phenomenon for an experiential phenomenology because it is *two in one*: an experience and a method at the same time. Each time I experience something, I am using attention as its operator: any activity (perceiving, talking, imagining, remembering) is achieved along with a certain *degree* of attention. In short, it is not a separate tool, but the very tissue of such an experience. It is the “*curseur*” (a French term; i.e., the accompaniment, or concomitant) of my presence to any event, be it inner or outer.

Whereas *epochè* can be formally isolated as a technical method of phenomenology and while “consciousness” appears too global to be precisely identified as a concrete tangible operator, attention is an ordinary and intrinsically graduated experience we unceasingly have daily: I listen carefully to a friend who talks to me about his aged mother; I let my eyes wander away while sitting in the train that goes to Rouen. I name this unique capacity of qualifying my presence to any phenomenon “vigilance” and, in that respect, “vigilance” is the very core or heart of attention. I suggest that with attention as vigilance, we integrate *epochè* and “consciousness” as preliminary experiential and methodological steps, but that we also take a step beyond these two.

From consciousness to attention

Why attention? Three main reasons are here at work. First, as I said, attention is a daily and ordinary experience and an easily understandable term, contrary to *epochè*, which results in a more complex and too radical experience and is also a “screen-concept,” that is, one that hides and hinders my spontaneous ability to understand. Second, attention is a concrete lived act, a focal accessible operation, whereas consciousness remains a global diffuse experience, a generic entity and a ‘big’ word. Third, and this is my hypothesis here, attention helps in refining *epochè* into a concrete daily process and a local first-personal function. Attention thus contributes to achieving the concretization of the *epochè* at work in *On*

Becoming Aware and the consciousness debate within the cognitive sciences.

From attention to vigilance

Why then refine attention into vigilance? Indeed, the popular virtue of attention lies in the fact that everybody understands it: it speaks to anybody. “*Soyons attentifs ensemble!*” (roughly, “Let’s pay attention together!”) is what you hear daily in the Parisian metro! However, the drawback of this virtuous advantage is its standard understanding (both school-laden and scientific) as concentration-focalization: this is quite a narrow view of attention. So, my main contention is to promote attention-vigilance against attention-concentration. Why? Because of the inner limitations of the attention-concentration experience and definition, which lie in four main, overly narrow features:

- 1 | It is a state.
- 2 | It is mental.
- 3 | It is individualistic.
- 4 | It is closed up.

Let us therefore shift to attention-vigilance, which is in turn characterized as:

- 1 | having a mobile and variable dynamics;
- 2 | being a receptive, temporal process of openness;
- 3 | being a generative embodied growth; and
- 4 | being a deeply relational vertical presence.

The four features of attention-vigilance

Attention-vigilance is therefore a “complex” phenomenon, which interweaves the above-mentioned four processes as circularly articulated to each other in the following ways:

- 1 | Its inner structural dynamics of modulation (mobility-variability-fluctuation) paves the way for an *augmented being* that is a more dense, stressed, *underlined* presence.
- 2 | Its genetic processuality of openness is a receptive, embodied, temporal, emotional one. It opens up a *lighter* being, that is, a never-awaiting but always *welcoming* presence.
- 3 | Its generative growth, which includes the different facets of evolution, development and training, brings about a

cultivated being, in short, a more plastic and *re-activating* presence. Such an exercising component potentializes formal division into a dynamic antinomy. Such a re-activating presence, through which you may re-live in a sometimes more intense way what you have already lived in the past (sometimes in a slightly inattentive way), strongly relativizes the standard entropic irreversibility of time and allows the very meaning of newness to emerge: fishes “live” when they swim upstream; the ability through cultivated attention to “swim upstream” (understood as to go back in time) is what makes us as living-human beings more intensively living-human.

- 4 | Its vertical ethical self-transcendence makes it possible to become a more *careful* being: a deeply *relational* presence.⁶

Thus, attention-vigilance is an organic embodied and embedded systemic gesture made of interweaved inner moves.⁷ But until now, the approach presented has stuck to the standard philosophical attitude: it has remained strictly conceptual.

6 | For more on such structural processes of attention-vigilance, see Parts II to V of Depraz (2013a).

7 | See here Part I of Depraz (2013a). In that respect, what I mean by “attention-vigilance” and its four main processual features accounts for an experiential dynamics that makes such preliminary distinctions as voluntary/involuntary (Descartes, James, Ricoeur), active/passive (James, Husserl, Merleau-Ponty) or controlled (endogenous)/automatic (exogenous) attention (Broadbent, Posner) highly metaphysical, formal and abstract. Such distinctions may appear pedagogically necessary to begin with, but they very quickly become quite problematic and insufficient (given the abstract dualism they reveal) with regard to the complexity of the dynamics of the phenomenon of attention. Such a dualistic framework is simply quite bare, be it because of metaphysical prejudices or due to too elementary hypothetical sub-personal mechanisms. I aim here and in my book at showing the relevance of the first-person perspective, which brings about a richer and more compelling first-person phenomenology.

The antinomic dynamic of attention and surprise

I therefore need to complement my conceptual approach with an experiential one and, here, “surprise” will be the phenomenon that I crucially need and that will compel me to renounce the pure conceptual level of analysis. Why? The working hypothesis is that surprise is *the* experiential access to experience as novelty. In short, surprise goes hand in hand with novelty and compels the philosophical conceptual attitude to go beyond itself. Whereas conceptuality alone tends to favor a systematic closure, experiencing goes hand in hand with exploration and discovery. Therefore, surprise as novelty is a crucial lever in reforming the philosophical attitude into an experiencing one. So no longer “conceptualizing first!” but “experiencing first!”

However I will not play one level against the other. I will show that conceptualizing and experiencing belong to one and the same antinomic dynamic: they need each other. In that respect, they are embodied and concretely exemplified by the very similar antinomic dynamic that is at work between attention and surprise.

A twofold move builds such a dynamic: there is no surprise without (be it merely organic) tensed attention-vigilance towards it, but conversely, there is no attention without the irreducible reality of surprise. I will examine both moves more precisely in turn, even though they form the unique integrated view of attention-surprise I want to promote.

No surprise without attention-vigilance

In order to embody such an integrated dynamics, I need to go one step further and provide you, my reader, with a few invitations to *experience* various concrete situations. Otherwise I will stick to the comfortable conceptual level and will be self-contradictory with my own claims.

Therefore, for each of the above features characteristic of attention, let me offer you four specific “experimental-experiential” sets:

1. *Modulation* is maybe best exemplified by the historical experimental discussion between Wilhelm Wundt and his student

Oswald Külpe, who suggested contrasting hypotheses. Whereas Wundt contended that the modulational process is of an *intermittent* nature, Külpe on the other hand (and Husserl came to share his view) argued that modulation is a *fluctuating* process. In what sense? Among cognitive psychologists and neuroscientists, modulation has come to designate one main feature of attention, but it is presented mainly as being at the subpersonal level of neuronal processes. The lived reality of what the modulation of attention means for a subject is not described. The historical debate between Wundt, on the one side, and Külpe and Husserl, on the other, points towards the care needed to provide first-person descriptive features of modulation. Even though these thinkers did not reach agreement, such a debate is a good indication of the importance of a first-person description of the phenomenon, and indeed of the kinds of first-person features that are relevant.

2. *Novelty* compels experiencing/explicating surprise, as both a rupture within linear time and the creation of an *attentional relation* with what is unexpected. Such a complex articulation is for example shown by Adam Smith’s situated embodied definition of surprise:

“Wonder, Surprise, and Admiration, are words which, though often confounded, denote, in our language, sentiments that are indeed allied, but that are in some respects different also, and distinct from one another. What is new and singular, excites that sentiment which, in strict propriety, is called Wonder; what is unexpected, Surprise; and what is great or beautiful, Admiration. ... We are surprised at those things which we have seen often, but which we least of all expected to meet with in the place where we find them; we are surprised at the sudden appearance of a friend, whom we have seen a thousand times, but whom we did not imagine we were to see then.” (Smith 1962: 3)

3. *Generation*: experiencing/explicating the phenomenological analysis of pro-tention as retropropagation and reactivation reveals the non-linear character of time, which enables us to show the catching up with presence through attention. Concerning this attentional process, I give the reader an indicative example through experiential reading and writing. Husserl writes the fol-

lowing description in the *Lectures about Passive Synthesis*:

“While taking an *evening stroll on the Loretto Heights* a string of lights in the *Rhine valley suddenly* flashes in our horizon; it *immediately* becomes prominent affectively and unitarily without, incidentally, the allure having therefore to an attentive turning toward. That *in one stroke* the string of lights affects us as a whole is obviously due to the pre-affective lawful regularities of the formation of unity.” (Husserl 2001: 202, text attributes added by the author)

Through experiencing reading, the reader will focus on the first-personal situational indications (non-serif) and the singularized spatio- (italic) temporal (underlined italic) context and thus first-personally embody the situation.

4. *Relationality* is best illustrated by experiencing/explicitating the ethical experience of a strong empathetic resonance of the emergency psychiatrist with a person in a critical state. Here attention is essentially of an affective inter-subjective kind: the psychiatrist listens to the patient and hears her or his suffering. Through the resonance techniques first thematized by Mory Elkaïm (1989), the psychiatrist will listen to his/her own suffering, and rely on his/her own personal and family history as an inner felt indicator of what is needed and helpful for genuinely answering the suffering of the patient. Here attention is no longer a mental state, it is a highly-lived affective interaction between two persons.

No attention-vigilance without the reality of surprise

Now, “surprise” is commonly presented as synonymous with “unexpectedness”: I am surprised by your decision to stay in Paris during the summer; you had told me about a holiday-trip to Turkey, I did not expect you to be a summer Parisian! It is thus experienced as a rupture in the continuity of my sedimented experiences.

But contrary to such a common sense understanding,⁸ I suggest the dynamic an-

tinomic “working hypothesis”: there is no surprise without a quality of attention-vigilance that is time-embodied and relies on “awaiting.” In the line of Husserl’s “horizon d’attente” (*Erwartungshorizonte*)⁹ and of the French-Latin connection between “attention” and “attente” (waiting),¹⁰ surprise does not equate complete unexpectedness, but rather involves:

- 1 | an open awaiting, so that the time of surprise is a circular protentional dynamics that I elsewhere named “auto-antécédance” (Section II in Depraz 2001);
- 2 | a somatic cardiac and neural embodiment, where one key aspect of the lived body of surprise is the heart as the “body of the body” in its specific rhythm and variability (Depraz 2008b);
- 3 | an emotional-affective lived experience characterized by a polarity/valence (+/–) intrinsically associated to the moment of surprise (Varela & Depraz 1999); and finally
- 4 | the language of surprise is embodied as (a) an organic bodily expressive paraverbal language, (b) the expressions of the lived body itself and (c) the semantic and lexical verbal expressions of surprise (Depraz 2013b).

To synthesize a little, we have to deal with surprise via a multifarious dynamics, which needs to take into account at least four main components:

- 1 | time,
- 2 | body,
- 3 | emotion, and
- 4 | language.

and constantly surprised. ... But consider a case in which I am caught completely by surprise, as when someone close by, but out of sight, suddenly yells ‘Surprise!’ In this case, there is no anticipation of the event, even of the most indeterminate kind.”), with whom I here part company.

9 | See Husserl’s famous §21 in Husserl (1970). For more details, see Husserl (1999).

10 | In this connection, see the early Augustinian *attentio-attendere* (Saint Augustin 1993, Book IX, chapter 28: 397–400), and the more recent Bergsonian-Weilian references to attention as inherently linked to awaiting (Bergson 2009; Weil 1966).

Experimental work on attention-surprise

Such a double-sided antinomic dynamic of attention-surprise indeed slowly emerges from the threefold generative cross-disciplinary inquiry I pursue in the framework of the ANR Research program based at the Husserl-Archives, ENS, in Paris. What are these three approaches?

- 1 | The philosophical phenomenology of surprise, relying on texts and concepts but with emphasis on an experiential “reading look.”
- 2 | The third-person psycho-physiology of surprise, understood as startle, and its emotional implicit anticipation (primarily carried on by Thomas Desmidt at Tours/Inserm), to which I graft first-person elicitation interviews.
- 3 | The linguistic verbalisations in “spontaneous” enunciation contexts (primarily led by Pascale Goutéraux at University of Paris-Diderot), which are complemented again by first-person elicitation interviews that I am currently leading.

I have already broached the issue of the specific experiential reading I suggest for philosophical-phenomenological texts in order to explicitly unearth their embodied dimension. It gives rise to a comparative work between the third-person conceptuality of surprise and its first-person experiential embodiment.

In parallel, the psycho-physiology of surprise deals with three groups of subjects (25 in each group): (1) depressed, (2) in remission, (3) control. Each group is confronted with horror, erotic and neutral images. The experiments are guided by the hypothesis of hyporeactivity to surprise for depressed subjects (involving decreased heart beat, for example). The third-person measures in each group are compared to the first-person experiential criteria obtained through elicitation interviews of a sub-group of these three groups.

Finally, the linguistic verbalisations of surprise, above all enunciations and names, but also more spontaneously interjections, interrogative and exclamative expressions are obtained thanks to a group of 100 students of English linguistics confronted with aesthetic images (paintings triggering ad-

8 | This is the view of Shaun Gallagher (2005, “Consider what would happen if I had no protentional anticipation of what was to come. In that case I would be left to the mercy of chance



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miration, wonder, disgust, perplexity, etc.). This leads to specific descriptions and more concrete features of surprise (i.e., time, body, emotion, language), which enter into comparison (similarities, differences, contrasts) with the philosophical-phenomenological experiential conceptualization.

Concluding while looping the loop: Neurophenomenology revisited, put to work and extended

Finally, I would like to address explicitly the following question: To what extent is the neurophenomenology hypothesis revisited, indeed truly put to work and also extended, thanks to such a research program?

In order to succeed, the co-generative neurophenomenological program needs to be actually performed and not just sketched. But how can Francisco Varela's neurophenomenological research program of mutual generative constraints be tested? How can we check its relevance, show its limitations?

I would like to mention three different themes in the present research, which can inform us as we revisit neurophenomenology.

1 | A strictly twofold *categorical* theme:

- Attention-vigilance is a descriptive categorical-experiential refinement of the *époque* as described in *On Becoming Aware*, but it is here supple-

mented by its ineliminable dual of surprise.

- The antinomy of attention-vigilance and surprise is a more ecological reformulation of the dynamics of time present in Varela (1999).

2 | A strongly *experiential* theme:

- Through the central use of elicitation interviews as a rigorous descriptive and analytic tool extracting experiential invariants, in line with Petitmen- gin's own research program of over a decade, I am concerned with a structural comparison between third-person neuro- and physiological invariants of startle and first-person ones of lived surprise.
- I re-integrate textual philosophical phenomenology into a first-person phenomenology of experience by means of (1) extracting concepts from texts as experienced (via experiential reading and writing) and (2) comparing experiential invariants from elicitation interviews and *a priori* categories from philosophical texts, thus generating new categories.

3 | An *epistemological* theme:

- *Psycho-linguistics* opens the way for a truly experiential embodied language of surprise with specific linguistic and paraverbal markers: up to now the language dimension has always been underestimated, or at least awkwardly dealt with, in the neurophenomenology paradigm.

- *Psycho-physiology* brings about a crucial new complementary field besides neurodynamics:

- » There is direct access to first-person experience: I can spontaneously experientially feel my heart beating (not my neurons).
- » The psychological and gross physiological levels have a less subtle micro-timing than the neurological level, but are more easily mappable to lived subjective timing.

In sum, I would argue that neurophenomenology could not be *performed* in its initial framework, which compared speculative categories and neuronal invariants. The present framework shows what is required such that it can be performed: *a priori* philosophical categories that are experientially embodied; the complementing of neuro-dynamics with physiology and cardiology, which creates a far subtler continuity with the pre-conscious level of the elicitation techniques; and the latter itself being thoroughly used in order to extract experiential invariants of surprise. The time has come to create the experiential synergy that is needed for neurophenomenology to become an effective phenomenological epistemology.

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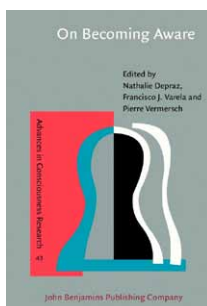
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OF RELATED INTEREST ON BECOMING AWARE

Edited by Natalie Depraz, Francisco Varela and Pierre Vermersch, this book searches for the sources and means for a disciplined practical approach to exploring human experience. The spirit of this book is pragmatic and relies on a Husserlian phenomenology primarily understood as a method of exploring our experience. The authors do not aim at a neo-Kantian a priori “new theory” of experience but instead they describe a concrete activity: how we examine what we live through, how we become aware of our own mental life. The central assertion in this work is that this immanent ability is habitually ignored or at best practiced unsystematically, that is to say, blindly. Exploring human experience amounts to developing and cultivating this basic ability through specific training. Only a hands-on, non-dogmatic approach can lead to progress, and that is what animates this book. John Benjamins, Amsterdam, 2003. ISBN 978–1588112163, 291 pages.