

# *Embodiment and Phenomenal Qualities: An Enactive Interpretation*

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ABSTRACT. I argue that an older debate in phenomenology concerning Husserl's notion of hyletic data can throw some light on contemporary debates about qualia and phenomenal consciousness. Both debates tend to ignore important considerations about bodily experience and how specific kinds of bodily experience can shape one's consciousness of the world. A revised and fully embodied conception of hyletic experience enriches the concept of enactive perception.

## I. INTRODUCTION

Although both enactive and extended conceptions of cognition suggest that the mind is not simply "in the head," and that cognitive processes are distributed over brain, body, and environment, there are a variety of disagreements between these approaches. Extended mind theorists defend a functionalist account of cognition and downplay the role of the body (e.g., Clark 2008), and they argue that cognition and action can involve mental representations (e.g., Clark 1997; Clark and Grush 1999; Rowlands 2006; Wheeler 2005). In contrast, enactive theorists argue for radical embodiment (e.g., Thompson and Varela 2001) and defend an anti-representationalist view (e.g., Gallagher 2008; Hutto and Myin 2013; Thompson

2007). There are also debates about how to define the boundaries, or lack of boundaries, involved in cognitive processes (e.g., Di Paolo 2009; Wheeler 2008). Another recent disagreement that has come to the surface concerns phenomenal qualities or the ‘what it is like’ character of consciousness.

In regard to phenomenal consciousness, the enactivists challenge the traditional and internalist views of qualia. Thus, Noë (2004, 227) contends that in general “what determines phenomenology is not neural activity set up by stimulation as such, but the way the neural activity is embedded in sensorimotor dynamic.” Despite the fact that Clark (2008) voices approval of Noë’s emphasis on embodied skills as opposed to qualia, Clark (2009, 963) backs away from endorsing a strong externalism about consciousness, and excludes phenomenality from his claims about extended mind. He rejects the idea that consciousness, “our qualitative mental life (the elusive ‘what-it-is-likeness’ that seems to characterize a subject’s experience)” could be distributed over brain-body-environment, and specifically rejects suggestions made by Cosmelli and Thompson (2010), Noë (2004), and others, for an enactive account. He concludes, “as things stand, there are no good reasons (of a dynamical, enactive stripe) to endorse the vision of an extended conscious mind” (Clark 2009, 964). In this regard he cites and sides with Jesse Prinz (2009), who also rejects accounts that attempt to show how phenomenal consciousness might be essentially embodied.

The claim that consciousness extends into the body is only marginally more plausible than the claim that consciousness leaks out into the world. We have never found any cells outside the brain that are candidates as correlates for experience. Such cells would have to co-vary with conscious states in content and time course. Every component of the body that we can experience is represented in the brain, and when the corresponding brain areas are damaged experience is lost. Conversely, bodily experience can continue after the body is damaged, as in the case of phantom limb pain. There is, in short, little reason to think the correlates of experience extend beyond the cranium. (Prinz 2009, 425)

This corner of the debate is focused on questions about how we can understand the causal and constitutive mechanisms that explain how the what-it-is-like aspect of consciousness is generated. That is, the issue at stake concerns the vehicles (neural vs. nonneural processes) of phenomenal consciousness or qualia. On the internalist view, neural processes constitute qualia; nonneural processes, at best, are causal contributors. In another corner, however, there are questions about the very existence of internal phenomenal qualities, and in this regard it might be thought that enactivists should side with the anti-qualia arguments of someone like Dennett.

In this paper I want to argue that while some functionalists, like Clark, may lean toward an internalist conception of phenomenal consciousness, and others like Dennett may lean toward a neo-behaviorist interpretation (i.e., there just are no qualia), the enactivist does not have to follow either of these options. To make this

case I want to suggest that debates about phenomenal qualities or qualia in the philosophy of mind can be informed by a parallel debate in phenomenology concerning “hyletic data.” My contention is not that the concept of hyletic data is identical to the concept of qualia, but that there are parallels between the two concepts, and parallel arguments made against the two concepts. Moreover, without denying a certain conception of an experiential ‘what it is like’, the debate about hyletic data can move us toward a more enactive-phenomenological (vs. functionalist-behaviorist or functionalist-internalist) position within the debate about phenomenal qualities.

I’ll start by outlining the debate about hyletic data, a concept that arises in Husserl’s analysis of consciousness. I’ll then rehearse the various criticisms advanced against this concept by later phenomenologists, including Gurwitsch, Sartre, and Merleau-Ponty, and I’ll point out the similarities with the debate about qualia. Next I’ll indicate what I think both sides of the debate miss, and I’ll offer an enactive interpretation of the concept of hyletic data that applies equally to the concept of phenomenal consciousness.

## II. THE CONCEPT OF HYLETIC DATA IN HUSSERL

There is a terminological change in Husserl’s early work from the vocabulary of ‘sensation’ (*Empfindung*) to the vocabulary of *hyle* (hyletic data), which is the Greek term for ‘material’. For Husserl ‘hyle’ signifies the formless content that has the potential to receive form. He gives a number of examples: “color-data, touch-data and tone-data, and the like . . . sensuous pleasure, pain, and tickle sensations, and so forth, and no doubt also sensuous moments belonging to the sphere of ‘drives’” (1982, 203). Hyletic data are not something that we are directly conscious of, but they are aspects of consciousness in some way. Hyletic data are thus not physiological happenings. Rather, by themselves hyletic data are meaningless, experiential elements of consciousness that are not directly perceived, *normally*, although reflection may grasp them. Also, although not normally perceived, there is a sense in which they can be directly ‘apprehended’.

Husserl provides eight principles to guide our understanding of hyletic data.<sup>1</sup>

1. Hyletic data are contents in the schema: apprehension—content of apprehension (*Auffassung-Auffassungsinhalt*). For simplicity I’ll refer to this as the *noetic schema*. The idea is that hyle becomes informed or interpreted by certain noetic apprehensions that have various intentional characters. Husserl explains:

We find such concrete data of experience as components in more comprehensive concrete experiences which as wholes are intentional, and this in a way that these sensuous moments are overlaid by an ‘animating,’ sense-bestowing stratum . . . . Sensuous data present themselves as

material for intentional formings or sense-bestowings at different levels (1982, 203–4).

A conscious act, such as perception, is based on a pre-reflective performance of the apprehension-content schema. But neither the hyletic data, nor the animating apprehensions themselves are perceptual objects; they are rather the operative and necessary conditions that constitute properties of the perception of an object.

2. Although hyle is the *sine qua non* of appearances it does not need to be animated or endowed with meaning by an apprehension (e.g., 1982, 204). Thus it seems that there are some hyletic data—a surplus—that are not in the noetic schema. There are more hyletic data than enter into our cognitive processes. This seems consistent with contemporary neuropsychology, which holds that more stimuli than are required for conscious purposes are registered on the physiological level. Only those relevant to an intentional project may be incorporated at the level of consciousness (see Marcel 1983).
3. Hyletic data are nonintentional, but enter into the intentional structure of consciousness. Husserl calls them real (*reell*) components, constituents, or moments of consciousness that are in some manner “present” in consciousness.

For all lived experiences divide into these two fundamental classes: the one class of lived experiences consists of acts which are ‘consciousness of’. These are lived experiences which have ‘reference to something’. The other lived experiences do not. The sensed color does not have a reference to anything.” (1982, 203)

Hyletic data have no intrinsic meaning. Noetic apprehensions bestow meaning on these data. Hyle is “irrational stuff without any sense, though, of course, accessible to rationalization” (1982, 208).

4. Hyletic data are pre-reflective lived experiences that can be grasped only abstractly in reflection. Husserl calls this a ‘hyletic reflection’ and claims that it involves an abstraction of hyle from its role in the noetic schema. That is, hyletic data are abstractions. In this respect, he warns, reflection can “generate new phenomena” and transform its object.
5. Hyletic data compose a constantly changing flux of sensed material. Although the object as it is experienced can in some cases remain unchanging and identical through time, the hyletic substructure is constantly changing. For example, a noematic color that remains unchanged throughout a changing perceptual consciousness “is adumbrated in a continuous multiplicity of color sensations” (1982, 237).
6. Hyletic data are always members of a sense-field or sense-Gestalt (Husserl 1970, 453; 1973, 73).

Precisely considered, the visual data belonging to the object and universally to any perceptual object, have a hyletic unity of lived experience, the unity of a closed sensuous field-form (*Feldgestalt*). (1977, 154)

Any attempt to reflectively abstract particular data tends to disrupt the unity of the hyletic Gestalt.

7. Hyletic data are said to be already there and always available. They are pre-given for the conscious apprehension that animates them. The apprehension is the “animation” of the preexisting datum of sensation. “In the moment in which the apprehension begins, a part of the datum of sensation has already elapsed and is preserved only in retention” (1991, 115). This is nicely captured by William McKenna (1982), who describes his experience of suddenly becoming aware of *having been* smelling the aroma of pasta sauce, which did not at first register as such. For him this olfactory sensation only became interpreted when he apprehended it as such; before that, however, it was not absent from his experience.
8. Hyletic data are somehow related to the human body. In regard to this final point, Husserl provides a developing and sometimes ambiguous series of thoughts on the relationship between hyletic data and the human body. Husserl, working as a phenomenologist, had discounted any theory concerning a physical performance of the body in perception or any kind of apprehension. Thus, he could write:

Hyletic data are data of color, data of tone, data of smell, data of pain, etc., considered purely subjectively, therefore here without thinking of the bodily organs or of anything psychophysical. (1977, 166–67)

Husserl specifically cautions against confusing hyletic data with perceived objective properties. Moreover it is precisely in the perception of one’s own body that this distinction can be made clear. E.g., in the case of a toothache, “the perceived object is not the pain as it is experienced [lived through], but the pain in a transcendent reference as connected with the tooth” (1970, 866). It is clear, then, that hyletic data do not belong to the body-as-object, that is, as it appears to consciousness, but in some way serve in the constitution of the experiencing body (the body-as-subject).

### III. THE CRITIQUE OF HUSSERL’S THEORY

Herbert Spiegelberg (1965, I, 148) reports in his historical account of the phenomenological movement that “Husserl never seems to have felt satisfied about the status of the hyletic data.” Other phenomenologists have expressed their dissatisfaction with Husserl’s theory, including Gurwitsch, Merleau-Ponty, and Sartre. Both Gurwitsch (1966) and Merleau-Ponty (1962) consider hyle to be an abstraction and deny the existence of a noetic schema:

There is no hyle, no sensation which is not in communication with other sensations or the sensations of other people, and for this very reason there is no *morphe*, no apprehension or apperception, the office of

which is to give significance to a matter that has none. (Merleau-Ponty 1962, 405)

For Merleau-Ponty, perception is primary and the *hyle-morphe* distinction is the result of abstraction.

Pre-reflective experience is a unity that is already perceiving, a field that is already perceived . . . . When I consider my perception itself, before any objectifying reflection, at no moment am I aware of being shut up within my own sensations. (1962, 241, 405)

Husserl anticipated these objections. He also warned of the dangers of an objectifying reflection, and, as we've seen, he would agree with Gurwitsch and Merleau-Ponty that hyletic data are always members of a sense-field and that they have an intentional unity precisely in perception. Two further objections, however, count against Husserl's theory. First, Gurwitsch and Merleau-Ponty reject the apprehension-content (noetic) schema. Second, and following from this, the "simplest sense-given available to us" is a sense-field that is "already charged with a meaning" and is not dependent on apprehensions to bestow meaning on it (Merleau-Ponty 1962, 4). This is precisely what it means to be in a field—that there is a specific "belonging," a particular significance defined by the field. Accordingly, sense experience is already intentional; "to sense is to intend qualities" (Merleau-Ponty 1962, 4). Such qualities are not sensations, "they are the sensed (*sensibles*), and quality is not an element of consciousness, but a property of the object" (1962, 4).

The claim against Husserl is that, to put it in Husserl's terms, consciousness is entirely noetic and intentional. There are no meaningless hyletic data to be found floating in the stream of consciousness. Husserl, despite his own warning about reflection, had confused hyletic data with sense qualities that belong to the perceived objects and are only intentionally in consciousness rather than *really* contained as components of mental processes. Husserl could say that he would "no longer confuse [hyletic data] with appearing moments of physical things—coloredness, roughness, etc." (1982, 203), only because he had reflectively abstracted hyletic data from a perceptual process that is always intentionally implicated in-the-world (Merleau-Ponty 1962, 226).

Jean-Paul Sartre levels similar criticisms at Husserl's theory. According to him, Husserl had attempted to bridge the Cartesian dualism of consciousness as *res cogitans* and the world as *res extensa* by introducing into pure noetic consciousness the elements of hyletic data. For Sartre, if hyle is anything, it is transcendent to consciousness and therefore complicates rather than resolves the dualism (1956, lix). According to Sartre, if hyle were to have the *officium* or duty of importing reality into consciousness, it would need to possess the character of resistance. But, such resistance is lacking because consciousness transcends hyle without even being conscious of it. The result is that hyle fails to explain anything and itself becomes problematic.

In giving to the *hyle* both the characteristics of a thing and the characteristics of consciousness, Husserl believed that he facilitated the passage

from the one to the other, but he succeeded only in creating a hybrid being which consciousness rejects and which cannot be a part of the world. (1956, lix)

Sartre concludes that the concept of hyletic data is a pure fiction that “does not correspond to anything which I experience in myself or with regard to the Other” (1956, 314).

Similar conclusions have been reiterated by Quentin Smith (1977). He shows that if one takes Husserl at his word and follows his instructions concerning the reflective grasp of hyletic data, one is still unable to discover such data in consciousness. According to Husserl, one can reflectively intuit hyletic data by a process of abstraction from the sense-bestowing noetic schema of apprehension-content. Accordingly, the distinguishing mark of hyletic data is the absence of interpretation and meaning bestowed by the noetic schema. In that case, however, it is impossible to follow Husserl’s instructions systematically.

In fact, I am confronted with the destruction of my very project of intuition itself. I learn that the intuition of the hyle is an impossibility. For the sensation that I am trying to intuit cannot be intuited as being anything, for if it were intuited as a certain ‘what’, this ‘what’ would constitute an interpretation of the sensation. (Smith 1977, 363)

Smith offers the example of the hyletic whiteness supposedly involved in the perception of a white paper.

Since what is immediately given to my reflection is the color of *the paper*, I must try to exclude the apprehension of the white *as a property of the paper*. I must try to see a ‘raw white’. And to a degree it seems I can do this. I can hold the white before my mind and consider it as a ‘whiteness’. (1977, 365)

But is this an intuition of the hyletic datum of whiteness? Or rather, isn’t this just intuiting the white color of the paper that was given to my perception, but reflectively considering it in abstraction from its perceptual givenness. I have removed its objective meaning, and replaced it with a new meaning, the meaning of “a hyletic sensation,” a meaning that is posited by my reflective consciousness. Husserl’s descriptions of pure hyletic data are descriptions of quality-appearances. In other words, hyletic data turn out to be, as Merleau-Ponty, Gurwitsch, and others had suggested, sense-qualities that belong to the objective world and that appear intentionally in the noematic correlates of noetic acts.

Should we therefore accept the growing consensus that, since we are unable to reflectively intuit hyletic data, or since we seem to end up with objective sense-qualities anytime we try to do so, hyletic data simply don’t exist? Is this not an *argument ad ignorantiam*; i.e., since I have not been able to phenomenologically intuit hyletic data, they do not exist. The argument is similar to claiming that, since I have not been able to phenomenologically intuit my state of sleep, I do not sleep. It still seems possible that hyletic data exist (contra the critics) but (contra Husserl)

are simply not available to phenomenological intuition. In that case, however, the question becomes: what kind of evidence can there be for the existence of hyletic data?

#### IV. HYLE AND QUALE

Let me note that the kind of conclusion arrived at in this debate about hyletic data resembles the conclusion that a number of people have put forward in contemporary debates about the notion of qualia; that is, the qualitative or phenomenal feel of consciousness, or what Thomas Nagel (1974) calls the “what it is like” to experience something. Michael Tye (2000, 48) for example, states about qualia that there are “no such things as the qualities of experiences . . . they are qualities of external surfaces (and volumes and films) if they are qualities of anything.”

It is also clear that Husserl’s concept of hyletic data is related in some way to the question of qualia. Looking at the color red feels different from looking at the color green. Tasting chocolate feels different from tasting cauliflower. There are different qualitative features that seem to belong to experience itself in these different cases. Are hyletic data the same as qualia? They both seem to signify a sensation, for example, of redness or chocolate tastiness. Or is hyle supposed to be something that underpins qualia—something that enables us to experience the chocolate taste? If the concepts of hyletic data and qualia are not equivalent, there is at least some close parallel between them. Both hyle and quale are said to be a matter of pre-reflective or first-order (phenomenal) experience, and are reflectively/introspectively accessible. Both involve sensory experiences—color, sound, taste. Both are declared nonexistent in the same way: a matter of abstraction or mistaking objective/intentional qualities for internal or phenomenal. Indeed, once one gets rid of the noetic schema (as Gurwitsch and Merleau-Ponty want to do) there is not much difference between hyletic data and qualia.

Consider, for example, some of the common understandings of qualia that are rejected by Dennett in his famous essay “Quining Qualia” (1988). First, qualia are sometimes considered to be raw sensory experiences generated by external stimuli. One can see this idea in the inverted spectrum thought experiments which focus to a large extent on color; for example, the experiential redness of a red apple. One can also see this in Dennett’s Chase and Sanborn example, and the acquired taste of beer example, where what is at stake is the experiential taste of the coffee or the beer. Should we think that what we experience is anything other than the redness that belongs to the apple itself, or the tastiness of the coffee or the beer? Another common understanding is that we *apprehend* qualia, but that qualia remain neutrally the same as our apprehension changes over time. This is related to the idea that they are intrinsic—*independent of one’s dispositions to react to the world*—rather than relational. A further conception is that qualia can be isolated (abstracted) from

the rest of experience in some way. Dennett, in a way reminiscent of Smith's argument against hyle, argues against the idea

that we can isolate the qualia from everything else that is going on—at least in principle or for the sake of argument. . . . One dimly imagines taking such cases and stripping them down gradually to the essentials, leaving their common residuum, the way things look, sound, feel, taste, smell to various individuals at various times, independently of how those individuals are stimulated or non-perceptually affected, and independently of how they are subsequently disposed to behave or believe. The mistake is not in supposing that we can in practice ever or always perform this act of purification with certainty, but the more fundamental mistake of supposing that there is such a residual property to take seriously, however uncertain our actual attempts at isolation of instances might be. (Dennett 1988, 45)

Thus, on contemporary functionalist accounts of consciousness, qualia, and along with them, hyletic data, should be rejected. The properties of the thing experienced, e.g., the redness of the apple, should not be confused with a property of consciousness or with the physiological processes that generate consciousness. As Dennett puts it: “The properties of the ‘thing experienced’ are not to be confused with the properties of the event that realizes the experiencing” (Dennett 1988, 72).

## V. EMBODIMENT AND HYLETIC EXPERIENCE

On the one hand, the criticisms of Husserl's theory presented above are cogent in so far as they insist that hyletic data are abstractions and not to be found in experience as such. It also seems right to say that there is no hyle that is not in communication with other sensations. There is no isolated datum. Primarily, before any reflection, there is always a field or Gestalt, and the field is always, in a broad sense, a synesthetic one. On the other hand, the critics wrongly, I will argue, equate hyletic experience with objective or appearing sense-qualities, qualities that belong to the objective field and that appear only intentionally in consciousness. On this reading, *what it is like* becomes what *it* (the object) is like. The critics are motivated to identify hyletic data with transcendent sense-qualities because they cannot find hyletic data *in consciousness*. If it is right that neither *hyletic data* nor *qualia* are components of subjective consciousness pure and simple, does that mean that such phenomena must be placed in the objective or intentional order?

The problem with this view is that we would have to ignore a multitude of somesthetic experiences—experiences of the lived body (the body-as-subject). Such experiences, call them ‘hyletic experiences’, have a bearing on perception and other cognitive processes. Clear examples are phenomena such as pain or itch or tickling, etc., which Husserl himself listed as examples. Yet it is precisely these hyletic experiences associated with lived bodily processes that Husserl and his critics overlook.

They deal strictly with what could be called ‘exogenously originating hyletic experience’ associated with “external” perception. By ignoring examples of “somesthetic” hyletic experience, it turns out that Husserl defends, and his critics criticize a theory of hyle that is one-sided and inadequate to begin with.

It’s important to understand the scope and variety of the kind of experience at stake here. It is not just pain and itch. Consider the following incomplete inventory: Pain, with various qualifications, burning, prickling, itching, “crawling” of the skin, giddiness or light-headedness, faintness, throbbing, tightness, nausea, “lump in throat,” fullness, distension, tension, heartburn, tingling, the feeling of being smothered, palpitation, “cardiospasm sensation,” flutter, hollowness or emptiness, pressure, heaviness, soothing, sinking, hunger, cramp, swelling, “turning” of the stomach, erotic sensations such as orgasmic ejaculation and genital sensations, bowel sensations, “quiver,” sweating, limbs “asleep,” chills, pull, “pins and needles,” numbness, weakness, dirtiness, sensations of blocked openings, dizziness, “thickness” or slowness in movement, “flushing” (as in a blush), innumerable sensations associated with pregnancy, and sensations of warmth, coldness, etc.<sup>2</sup>

Can these examples, hardly mentioned or completely ignored by Husserl and his critics, be relegated to the transcendent objective order? Consider the experience of pain in the case of headache accompanying eyestrain. Even before the headache is identified or felt as pain, there is a connected bodily experience of something happening. In eyestrain one starts to experience difficulties in reading, or changes in the environment before one experiences the pain *as* pain. There is something it is like to experience the text one is reading as growing more difficult, or the light in the room as suddenly seeming inadequate, which is not reducible to objective properties of the text or the lighting. The light, for example, doesn’t change. Moreover, this qualitative hyletic experience does not disappear when it is consciously interpreted as headache; rather, this is precisely the time that it appears as what it is, a bodily pain. If I then reflect on this pain, in the way that I try to reflect on the whiteness of the paper, and isolate the qualitative hyle of painfulness, do I thereby intuit only an abstract property of my objective body? Is the pain that I experience a characteristic of the objective body in the same way that the redness that I experience is the redness of the apple? Does this mean that the pained or painful experience—the original hyletic experience—does not exist?

Here there is an important distinction between taking these phenomena as objective characteristics of the body-as-object—characteristics that I perceive as happening in or to my body, *versus* taking them as aspects of the body-as-subject—bodily experiences that have an effect on the way that I experience the world. Let’s stay with this last thought. If I am in pain, this affects the way that I experience the world. Again, the example of eyestrain is pertinent.

[W]hen the eyes become tired in reading, the reader does not perceive his fatigue first, but that the light is too weak or that the book is really boring or incomprehensible . . . Patients do not primarily establish which bodily functions are disturbed, but they complain about the fact that

“nothing works right anymore,” “the work does not succeed,” that the environment is “irritating,” “fatiguing.” (Buytendijk 1974, 62; see Sartre 1956, 332–33)

Likewise, I might have a pain in my leg, and accordingly, because of the pain, I perceive the mountain path as steeper than it is, or as too challenging. My perception, in the latter case is, we might say, “painful”—infected by pain which plays a pre-noetic role in perception—not as the object of perception, not as a property of my leg, or of the path, but as a subjective factor that shapes my perception.

Typically, in experience, there is not a simple, isolated somesthetic datum—there is rather a cocktail, a *mélange* of aspects that make up hyletic experience. My trek up the mountain results in a perception that is informed by a combination of my pain, my hunger, my feelings of dirtiness, fatigue, slowness, and kinesthetic difficulty, and even the weight of my backpack (Proffitt et al. 1995; 2001). The mountain path looks quite different and less challenging after a good night’s sleep, not because of certain objective qualities that belong to the path, but because of my bodily (hyletic) state. These hyletic aspects are qualifications on my perception—qualitative feelings that constrain my being-in-the-world in some specific way. There’s a difference in *what it is like* to be on the mountain path in the morning after a good night’s rest, and *what it is like* to be on the very same mountain path at the end of a long day of hiking. At the same time, these experiences are experienced not purely and simply, but are modulated by intentionality. My physical state may be felt as an overwhelming fatigue that is a barrier to any further climbing; or it may contribute to a feeling of satisfaction as I sip a glass of wine in front of the fire at the end of the day. My phenomenal experience, if not part of a noetic schema, is nonetheless not independent of my intentions and my making sense of my surroundings.

## VI. AN ENACTIVE INTERPRETATION

This mutual modulation between intentionality and hyletic/somesthetic experience means that how I perceive things is qualified by what I can do, which is itself qualified not only by the physical state of my body, but by *what it is like* to be in the particular state that I’m in. What Husserl (1989) calls the ‘I can’, and what Gibson (1979) calls ‘affordances’, are defined not simply by sensory-motor contingencies (Noë 2004), but also by prenoetic hyletic-somesthetic factors. It is not simply the fact that the size and shape of the thing, plus the fact that I can reach it with this hand, constitute the “grabbiness” of the thing—if my pain prevents or slows my reach, then it is not so grabby. This applies also to the more traditional examples of qualia—e.g., an experienced color is not simply an abstraction of the color of the object, purely felt in consciousness—the phenomenal felt quality of redness. I may see the redness of the red apple as even more red if I am hungry. Moreover, the

effects of the color environment are felt in the posture, muscle tonicity, and action possibilities of the whole body, as shown in cases of dysfunction of cerebellum or frontal cortex, when these effects are not integrated into an intentional situation or adjusted to certain tasks. These phenomena have been known for quite a long time.

The gesture of raising the arm, which can be taken as an indicator of motor disturbance, is differently modified in its sweep and its direction according as the visual field is red, yellow, blue or green. Red and yellow are particularly productive of smooth movements, blue and green of jerky ones; red applied to the right eye, for example, favours a corresponding stretching of the arm outwards; green, the bending of the arm back towards the body. The privileged position of the arm—the one in which the arm is felt to be balanced and at rest—which is farther away from the body in the patient than in the normal subject, is modified by the presentation of colours: green brings it back nearer the body. (Merleau-Ponty 1962, 209; citing Goldstein and Rosenthal 1930)

What it's like to experience the color red or green is not just an abstract state of phenomenal consciousness—it is affected by, and it affects our postural readiness to act, which may be experienced as a feeling of discomfort or awkwardness, or alternatively, a feeling of extreme readiness pertaining to engaging in a particular action.

Whatever we call such phenomena—qualia, hyletic experiences, somesthetic factors—they delimit our perception and action possibilities, as well as our cognitive possibilities. A recent study dramatically demonstrates the importance of this fact (Dansiger et al. 2011). The study shows that the rational application of legal reasons does not sufficiently explain the decisions of judges. Whether the judge is hungry or satiated may play an important role.

The percentage of favorable rulings drops gradually from ≈65% to nearly zero within each decision session [e.g., between breakfast and lunch] and returns abruptly to ≈65% after a [food] break. Our findings suggest that judicial rulings can be swayed by extraneous variables that should have no bearing on legal decisions. (Dansiger et al. 2011, 1)

In one sense, such qualitative hyletic factors appear “extraneous” only if we try to think of cognition as something that is disembodied.<sup>3</sup>

To think about qualia or hyletic data purely in terms of phenomenal consciousness is surely an abstraction. To think of such things in terms of brain-body-environment, in the context of an embodied agent, enactively engaged in the world—suggests that we should not dismiss them as nothing at all, but ask what role such aspects of experience play in our perceptual and cognitive life. An enactive phenomenology would take these issues in just this direction; the ‘*what it's like*’ to experience X informs not just the know-how of cognitive abilities (memory, imagination, recognition) but also the know-how (or the “I can” or the affordances) of various action engagements with the world.

At the same time, these considerations suggest a richer enactive account, where not all important aspects of perception are reduced to what Noë describes as sen-

sory-motor contingencies or embodied skills, although these remain important aspects of enactive perception—an account that is not eliminative with respect to qualia. They rather suggest a reframing of the concept of qualia in terms of embodied, prenoetic processes. In this respect we can easily give up the odd vocabularies of qualia and hyletic data. But there is still *something it is like*. Not what *it* is like, but what *I* am like as I experience X—where ‘I’ means the embodied agent engaged in the world, rather than anything like pure consciousness.

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## NOTES

1. See Gallagher (1986) for a more detailed discussion of these principles.
2. This list is based in part on research on internal body perception in the fields of medicine and psychology (see, e.g., Mason 1961).
3. It may be right, of course, to consider them extraneous to the formal aspects of legal reasoning; but when we engage in such reasoning, we do so as embodied agents, and in that regard such things are not extraneous to the process.

## REFERENCES

- Buytendijk, J. F. J. 1974. *Prolegomena to an Anthropological Physiology*. Trans. A. I. Orr et al. Pittsburgh: Duquesne University Press.
- Clark, A. 2008. *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*. Oxford: Oxford University Press.
- Clark, A. 1997. *Being There: Putting Brain, Body and World Together Again*. Cambridge, MA: MIT Press.
- Clark, A. 2009. “Spreading the Joy? Why the Machinery of Consciousness Is (Probably) Still in the Head.” *Mind* 118: 963–93.
- Clark, A., and R. Grush. 1999. “Towards a Cognitive Robotics.” *Adaptive Behavior* 7 (1): 5–16.
- Cosmelli, D., and E. Thompson. 2010. “Embodiment or Envatment? Reflections on the Bodily Basis of Consciousness.” In *Enaction: Towards a New Paradigm for Cognitive Science*. Ed. J. Stewart, O. Gapenne, and E. di Paolo. Cambridge, MA: MIT Press.
- Danzigera, S., J. Levavb, and L. Avnaim-Pessoa. 2011. Extraneous Factors in Judicial Decisions. PNAS. First published online: [www.pnas.org/cgi/doi/10.1073/pnas](http://www.pnas.org/cgi/doi/10.1073/pnas).

- Dennett, D. C. 1988. "Quining Qualia." In *Consciousness in Modern Science*. Ed. A. Marcel and E. Bisiach. New York: Oxford University Press. 42–.
- Di Paolo, E. 2009. "Extended Life." *Topoi* 28(1): 9–21.
- Gallagher, S. 2008. "Are Minimal Representations Still Representations?" *International Journal of Philosophical Studies* 16(3): 351–69.
- Gallagher, S. 1986. "Hyletic Experience and the Lived Body." *Husserl Studies* 3: 131–66.
- Gibson, J. J. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton-Mifflin.
- Gurwitsch, A. 1966. *Studies in Phenomenology and Psychology*. Evanston, IL: Northwestern University Press.
- Husserl, E. 1989. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy—Second Book*. Trans. R. Rojcewicz and A. Schuwer. Dordrecht: Kluwer Academic Publishers.
- Husserl, E. 1991. *On the Phenomenology of the Consciousness of Internal Time (1893–1917)*. Trans. J. Brough. Dordrecht: Springer.
- Husserl, E. 1982. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*. Trans. F. Kersten. The Hague: Martinus Nijhoff [Original 1913].
- Husserl, E. 1977. *Phenomenological Psychology*. Trans. J. Scanlon. The Hague: Martinus Nijhoff.
- Husserl, E. 1973. *Experience and Judgment*. Trans. J. S. Churchill and K. Ameriks. Evanston, IL: Northwestern University Press.
- Husserl, E. 1970. *Logical Investigations*. Trans. J. Findlay. London: Routledge and Kegan Paul.
- Hutto, D. D., and E. Myin. 2013. *Radicalizing Enactivism: Basic Minds without Content*. Cambridge, MA: MIT Press.
- Marcel, A. 2003. "The Sense of Agency: Awareness and Ownership of Action." In *Agency and Self-Awareness*. Ed. J. Roessler and N. Eilan. Oxford: Oxford University Press. 48–93.
- Mason, R. E. 1961. *Internal Perception and Bodily Functioning*. New York: International Universities Press.
- McKenna, W. 1982. *Husserl's Introductions to Phenomenology*. Dordrecht: Springer.
- Merleau-Ponty, M. 1962. *Phenomenology of Perception*. Trans. C. Smith. London: Routledge Paul.
- Nagel, T. 1974. "What Is It Like to Be a Bat?" *Philosophical Review* 83: 435–50.
- Noš, A. 2004. *Action in Perception*. Cambridge, MA: MIT Press.
- Prinz, J. 2009. "Is Consciousness Embodied?" In *Cambridge Handbook of Situated Cognition*. Ed. P. Robbins and M. Aydede. Cambridge: Cambridge University Press. 419–36.
- Proffitt, D. R., M. Bhalla, R. Gossweiler, and J. Midgett. 1995. "Perceiving Geographical Slant." *Psychonomic Bulletin & Review* 2: 409–28.
- Proffitt, D. R., S. H. Creem, and W. Zosh. 2001. "Seeing Mountains in Molehills: Geographical Slant Perception." *Psychological Science* 12: 418–23.
- Rowlands, M. 2006. *Body Language*. Cambridge, MA: MIT Press.
- Sartre, J.-P. 1956. *Being and Nothingness: An Essay on Phenomenological Ontology*. Trans. H. E. Barnes. New York: Philosophical Library.
- Smith, Q. 1977. "A Phenomenological Examination of Husserl's Theory of Hyletic Data." *Philosophy Today* 21: 356–67.
- Spiegelberg, H. 1965. *The Phenomenological Movement*. The Hague: Martinus Nijhoff.
- Thompson, E. 2007. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Cambridge, MA: Harvard University Press.
- Thompson, E., and F. Varela. 2001. "Radical Embodiment: Neural Dynamics and Consciousness." *Trends in Cognitive Sciences* 5(10): 418–25.
- Tye, M. 2000. *Consciousness, Color and Content*. Cambridge, MA: MIT Press.
- Wheeler, M. 2005. *Reconstructing the Cognitive World: The Next Step*. Cambridge, MA: MIT Press.
- Wheeler, M. 2008. "Mind, Things and Materiality." In *The Cognitive Life of Things: Recasting the Boundaries of the Mind*. Ed. C. Renfrew and L. Malafouris. Cambridge: McDonald Institute for Archaeological Research Publications.