

Husserl's hyletic data and phenomenal consciousness

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Abstract In the *Logical Investigations*, *Ideas I* and many other texts, Husserl maintains that perceptual consciousness involves the intentional “animation” or interpretation of sensory data or *hyle*, e.g., “color-data,” “tone-data,” and algedonic data. These data are not intrinsically representational nor are they normally themselves objects of representation, though we can attend to them in reflection. These data are “immanent” in consciousness; they survive the phenomenological reduction. They partly ground the intuitive or “in-the-flesh” aspect of perception, and they have a determinacy of character that we do not create but can only discover. This determinate, non-representational stratum of perceptual consciousness also serves as a bridge between consciousness and the world beyond it. I articulate and defend this conception of perceptual consciousness. I locate the view in the space of contemporary positions on phenomenal character and argue for its superiority. I close by briefly arguing that the Husserlian account is perfectly compatible with physicalism (this involves disarming the Grain Problem).

Keywords Hyle · Qualia · Time-Consciousness · Representationalism · Sense data · The grain problem · Husserl · Phenomenal consciousness · Intentionality

Introduction

Husserl held that perceptual consciousness involves the “marriage” of sensory matter (or “hyletic data”) and intentional, animating form.¹ Suppose I suddenly feel a

¹The account, in one form or another, can be found in many of Husserl's works, early and late. See Gallagher (1986) for extensive references. See Mulligan (1995) for a detailed treatment of the account primarily as it appears in the *Logical Investigations* and *Thing and Space*. For more diachronic views, see Sokolowski (1970) and Mooney (2010).

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pressure encircling my arm. I might, depending on the context, immediately take these tactile data to present “someone grabbing my arm.” If so, I would be spontaneously “animating” them with this intentional or noematic content and paying little or no attention to the varying felt pressures themselves. These “felt pressures” are the sensory matter or hyletic data of this perception. Hyletic data, on the Husserlian view, do not themselves intentionally aim at or represent anything. But they are “brought to life” or imbued with intentional content, and thereby we see, hear, taste, smell, or feel them to present objects or states of affairs.

These data are supposed to account for what is literally *presentational* about perceptual experience; they are what differentiate *seeing*, say, a dog, live and in the flesh in front of you, from merely thinking of one. But we know of their difference from representational content not only because thoughts and perceptions with the same intentional objects are different, as the latter are presentational and the former are not. We know this also because the same hyletic data can be animated in a variety of ways. That is, their intentional correlates can differ while they remain the same. The exact same distribution of felt pressures encircling my arm, to continue the example, might, in quite different circumstances, be animated as the application of a tourniquet.

But this difference from representational content and this “inertia” should not immediately be taken to mean that hyletic data can, in principle, be animated in any way whatsoever. Husserl thought that there must be some sort of analogy or resemblance between the hyletic data fields, like the visual color spectrum, and the properties their animation allows us to represent, like the proper surface colors of physical objects.² But synesthesia and the use of certain perceptual prostheses and techniques, like the use of forms of echolocation by the blind,³ raise difficult and unresolved questions about the relationship between hyletic data and the range of ways in which they can be animated, questions we will not attempt to resolve here.

Husserl maintained that there is good *phenomenological* evidence for hyletic data, even though we are not normally paying any attention to them as such. Although we do not objectify them prior to reflection, we are nevertheless conscious of them—we experience them. Experience itself is not normally objectified or attended to; nonetheless, experience is always experienced, it is “lived through” (*erlebt*).⁴

One classic phenomenological way of getting at this idea is by contrasting the way in which we experience physical objects with the way in which experience our experience of them.⁵ The physical object is given to us over time via a sequence of profiles. We see the selfsame object from a multitude of positions. For every such position, we “live through” a different array of kinesthetic and hyletic data that we do not normally objectify or pay attention to. Different shades will flit across the surface of the object as one walks around it; its outline, *qua* appearance, will undergo the variations studied objectually in projective geometry; it will take up more or less of the visual field; one will have to crane the neck, squint, tilt the head, etc. The physical object gives itself ever inadequately through this multiplicity of profiles or adumbrations (*Abshattungen*).

² See, e.g., §17 of *Thing and Space* (Husserl 1997, pp. 46–47).

³ See, e.g., Thaler, L. et al. (2011).

⁴ See Shim (2011, pp. 201–202), de Warren (2009, pp. 114–115), and Zahavi (1999, 54 ff) for references and some discussion of this claim.

⁵ See, e.g., §41 of *Ideas I* (Husserl 1982, pp. 86–89; Sartre 1994, xlviff).

This connects directly to time-consciousness. As I walk round a table, I retend (retain in “working memory”) the just-past profiles of the table and protend (hold in “working anticipation” and “emptily intend”) the upcoming profiles. And indeed, to see it as a table is to implicitly regard each profile as one of a series of more or less definite actual and possible adumbrations of the table—these are the “horizontal contents” that help to distinguish perceptual content from mere thought content.⁶ In the normal case, these anticipations are satisfied, and I am given no reason to revise my “perceptual hypothesis” that this is indeed a table I am seeing, though Husserl would not put it that way. If I were to make an explicit prediction about the underside of the table and were to look underneath and see what I predicted I would see, then, as Husserl would say, I would find a perception that *fulfills* a judgment and is perceptual evidence for the truth of my claim.⁷

By contrast, no profile gives *itself* through further profiles, though we do indeed experience them. And the profiles existentially depend on experience in a way that physical objects do not. A physical object is given as *continuing to be* even if no one is looking at it. But my visual profile on the object is gone as soon as I close my eyes. And though the profile I get when I open them again a second later may be similar, it is a different token if only because of the passage of time. Profiles on objects, unlike the objects themselves, are, so to say, token-experience bound. They must be experienced to *be* and they are not, strictly speaking, repeatable, though, evidently, they do admit of various similarities to each other. Husserl held that these profiles on or adumbrations of an object generally fluctuate with fluctuations in hyletic data (see *Ideas I* §97; Husserl 1982, pp. 237–238). Although we may consistently animate them as the visual presentation of the family dog, they are flowing through us moment by moment and disappear as we finish living them through. In a certain sense, their *esse* is *percipi*, but the *percipi* is a nearly Heraclitean river. It is intentionality that allows us to get beyond this flux, but the price of intentionality is the perpetual possibility of error, hence the appropriateness of speaking of “perceptual hypotheses” even in the best of cases.

Hyletic data, and the acts that animate them, survive the phenomenological reduction.⁸ If something survives the reduction, it is *immanent* or *really inherent* in consciousness.⁹ These “immanent data” are not among the transcendent objects—the objects of representation—that get excluded or “placed in brackets.” They are part of the “phenomenological residuum” and thus part of the proper subject matter of Husserl’s transcendental phenomenology. One thus attempts to study the hyletic data and the patterns of animation, regardless of the existence of the objects and states of affairs the animations aim at. The point of such a study need not be directly epistemological or metaphysical. It can be, among other things, to get us to think about consciousness at the appropriate level of generality and abstraction.

⁶ On this, see, e.g., Hopp (2011, pp. 54–55) (and throughout) and Barber (2008).

⁷ See, e.g., Hopp (2011, Chap. 7).

⁸ See, e.g., Føllesdal (2006).

⁹ We leave to the side any metaphysical or particular categorial interpretation of this. See Drummond (2007, p. 107).

In section 85 of the First Book of the *Ideas*, Husserl writes:

We find such concrete really immanent Data [color-Data, touch-Data, tone-Data, algedonic data, etc.] as components in more inclusive concrete mental processes which are intensive as wholes; and...we find those sensuous moments overlaid by a stratum which, as it were, “animates,” which *bestows sense*...a stratum by which precisely the concrete intensive mental process arises from the *sensuous, which has in itself nothing pertaining to intentionality*. (*Ideas I*, §85; Husserl 1982, p. 203; emphases original)

In the same section, he introduces the terminology of sensuous *hyle* and intensive *morphe* and sums up the view as follows: “*The stream of phenomenological being has a stuff-stratum and a noetic stratum*” (Husserl 1982, p. 207, emphasis original).

The “stream of phenomenological being” is just the stream of consciousness as “purified” by the phenomenological reduction. The “stuff stratum” is just the layer of hyletic or sensory data. And the “noetic stratum” includes those *acts* of sense or meaning bestowal whereby we animate the sensory data *as* being presentative of some particular transcendent object or state of affairs in some particular way. The noetic and hyletic components are “really inherent” or “purely immanent” in consciousness (cf. *Ideas I*, § 97; Husserl 1982, pp. 236–237). And while the animating “activity” is really inherent in consciousness, the noema itself, *qua* object-as-presented, is not. The object is transcendent to consciousness, a putative unity revealed through a multiplicity of experiences. And, indeed, there may actually be no such object—nonetheless, it is *what* we aim at or represent.

I take the somewhat unpopular position that this model is basically correct. And I believe that Husserl’s estimation of the descriptive appropriateness and ultimate limitations of the model is spot on. In this paper, I am to motivate and articulate this conception—or what I take it to be—and to defend it from some of the usual sorts of objections. I also want to get at its abstract core, for I believe that, at some level, all theories of perceptual consciousness must embrace *some* version of the *hyle* doctrine. I do not believe that Husserl ever abandoned this picture in its essentials.¹⁰ I think he only developed a more

¹⁰ Michael Madary (2010, p. 161, n. 11) writes, “Especially in the earlier works, Husserl wrote as if sensations can be devoid of intentional content unless they are ‘animated’ (*beseelen*) through an interpretation (*Auffassung*)...For a number of reasons, mostly having to do with Husserl’s work on time-consciousness, the received interpretation of Husserl is that he ultimately rejects non-intentional sensations.” Madary refers to Sokolowski (1970), Gallagher (2003), and Zahavi (2005), among other secondary sources. My own view is that Husserl never abandons the idea that hyletic data themselves are nonintentional. He just develops a more sophisticated view of their organization and relation to time-consciousness and the lived body. See, e.g., Gallagher (1986). One must distinguish the claim that hyle could occur without any accompanying animation at all from the claim that they themselves are intentional, and this issue from the issue of whether or not the form-matter distinction applies at the ultimate level of constitution in time-consciousness. Sokolowski (1970, pp. 110–113) argues that, by 1916, Husserl had come to accept the idea of sensations with no accompanying intentional animation (what Sokolowski calls “non-intentional sensations”); he goes on to argue (e.g., pp. 210–211) that, in the later period, Husserl comes to regard sensations as already possessing “anticipations of sense,” though he still speaks of “pure sensation which precedes objectivation.”

sophisticated, sensitive, plausible and appropriately limited version of it.¹¹ But this is not meant primarily as an exercise in Husserl exegesis, for I regard the view, or some close variant of it, as a live option.¹²

Some motivating examples

The phenomenon of so-called perceptual constancy, which applies to shape, size, color, and faces, was one of Husserl's favorite motivating examples for the *hyle* doctrine.¹³ We might perceptually represent our car to be a cobalt blue sedan, for example, and persist in "seeing it this way" even at night, even in odd street lighting, etc. In each case, an artist would have to use quite a different set of shades of watercolors, say, to paint the "same-colored car" in the different settings. The Husserlian view is that in visual perception, these different shades are actually "sensed colors" or "something like color"; they are "hyletic moments of the concrete mental process" (*Ideas I*, §97; Husserl 1982, p. 237).¹⁴ They *vary* but the object represented—in this case, the putatively objective *color of the car*—stays the same. And "seeing the same-colored car" across these immanent variations in sensed color is understood as animating them in just the same way. Different *hyle*, same *morphe*.

My favorite type of example is discussed by Husserl in some detail in section 21 of *Experience and Judgment* and several other places.¹⁵ He discusses seeing a figure in a

¹¹ In this regard, I am not alone. See Mooney's (2009) very useful discussion of the development of Husserl's view from the period of the *Investigations* to the "transcendental period." The discussion also illustrates how different interpreters (in this case, Mulligan 1995 and Cobb-Stevens 1990) can end up emphasizing very different aspects of Husserl's accounts and thus end up with very different views, either emphasizing the "non-conceptual" element (Mulligan) or making Husserl into an experiential conceptualist (Cobb-Stevens). As Mooney (35) summarizes it, "To be constituted fully in lived experiences, a perceived object must count as a conceptualised unity of cognition. This being said, the transcendental period is distinguished by an archaeological uncovering of non-conceptual syntheses." I will not enter into the conceptual vs. non-conceptual perceptual content debate in this paper, partly because I think the debate is, as Hopp (2011, p. 130) puts it, "a mess" and partly because it is enough to say, in this context, that the having of sensory hyletic data, no matter how they get organized or conceptualized, is not fundamentally a matter of exercising any concepts. This is a more important issue for Hopp because he does not accept the hyle doctrine and prefers an account in terms of what he calls *intuitive* nonconceptual content; hence, he must motivate his account by delving into the "messy" literature on nonconceptual content. See Hopp's (2008, 2011, 206 ff). Hopp's general discussion of conceptual vs. nonconceptual content (see Hopp 2011, Chap. 5) is one of the clearest in the literature that I know. In the Husserlian context, see also Barber (2008) and Shim (2005). I will also leave aside the issue of the connection between static and genetic phenomenology and their relation to the hyle doctrine. See, e.g., Steinbock (1995, p. 265).

¹² For a recent book that marries analytic philosophy of perception and Husserlian phenomenology in just the right way, see Walter Hopp's (2011) *Perception and Knowledge*. This book really shows us how it is to be done.

¹³ See, e.g., *Ideas I*, §97; Husserl (1982, p. 237). Madary (2010) is good discussion of this issue in Husserlian and contemporary philosophy of perception contexts. Shim (2011) is also an excellent discussion of this and related issues. See also Hopp (2008).

¹⁴ I surmise that the reason Husserl liked the phenomenon of color constancy in particular was that these fitting colors do not seem to have even a putative place to reside. In case of shape constancy, for example, the quasi-ovoid appearance of a coin held to the eye at a certain angle does not, so to say, float freely from the coin itself. In contrast, the dancing colors on the surface of the cobalt blue sedan have no home in the world of objects. They are not taken as properties of the car or of anything else.

¹⁵ Husserl (1973, 91–96) cf. esp. Part 2, §8 of *Analyses Concerning Passive and Active Synthesis*; Husserl (2001, pp. 72–75).

store window and at first thinking that one is seeing a man, perhaps a store employee. Then, one starts to suspect that it is a mannequin. Husserl points out that for a time one effectively suspends judgment. One can interpret the appearances in two ways. And as one continues to look and approach the *man-or-mannequin*, one is keen to find clues that will determine one's judgment to go in one direction or the other. But *while* one is in this process of "gathering more data," the competing interpretations are both hovering in the air, so to speak. One does not commit to either one.

Husserl notes that once you come to the conclusion that it is, say, a mannequin and not a man, your conclusion "by a regressive ray" immediately comes to reconfigure your interpretation of your just-past experience: "Ah, it was a mannequin all along!" you find yourself suddenly thinking. Something similar applies in cases of corrected misperception as well.

Thus, evidently, at *some* level, the construing of the appearances as *of this* or *of that* is one thing, and *the appearances themselves* another.¹⁶ Concluding that one was aware of a mannequin all along, or that one is seeing only a mirage and not a pool of water, does not literally reach back in time and change the prior appearances that one was animating differently or suspending the animation of. The same profiles were at play whether the interpretation of them changed or not. The fact that profiles and systems of profiles can come apart from their animations is our phenomenologically intuitive evidence that hyletic data do not demand a unique intentional animation. And this is perhaps still more grippingly evident in the case of random dot stereograms.¹⁷

Random dot autostereograms in fact provide us with a nice analogy for the whole Husserlian model. The dots here are analogous to the color-data, tone-data, etc.; seeing the dots as presenting an object (e.g., a pyramid or dinosaur) is analogous to the intentional animation of the data. This even illustrates the interplay between effortful, goal-directed attention and spontaneous "seeing-as" nicely: one is "trying" to see something 3D in the dots, but one does not necessarily know what will "pop out." And then, suddenly, "there it is," a dinosaur or pyramid, etc. And it is manifest that the noematic correlate of the animation is entirely irreal. It is not only the case that there is no dinosaur or pyramid there, there is no 3D object there at all. On the view considered, all perception, considered immanently, is fundamentally like this. The analogy is so close because the (illusory) perception of 3D objects in a random dot stereogram is actually just an instance of the more general phenomenon, though the "dots" are generally anything but random.

In all the cases considered, we see that hyletic components can remain type identical or even token identical in the case of uncertain perception and corrected

¹⁶ Shim (2011) argues quite convincingly and richly (if somewhat unsurprisingly) that Husserl is not a strong representationist about sensory content because he "...believes the cognitive content of a perceptual episode can vary despite constancy of sensory qualia [hyle]" and that Husserl is also opposed to weak representationalism because the kinesthetic hyletic data (discussed in depth in *Thing and Space*) could undergo change despite constancy of representational content. On this latter point, the level of detail you are concerned with is important. Manifestly, the view is that I aim at, say, the same tree across a flux hyletic data as I walk around it. But if we are concerned with exactly *how* the tree is appearing in detail at each moment of the flux, there will be a difference. cf. *Ideas I*, §97; Husserl (1982, p. 230), "...any changes of the hyletic content of the perception...must at least result in what appears becoming objectively 'other', whether in itself or in the orientation in which it is appearing, or the like."

¹⁷ See, e.g., Julesz' classic *Foundations of Cyclopean Vision* (Julesz 2006).

misperception, while the intentional animation differs. This implies that the hyletic components are not to be identified with the intentional correlates aimed at via animation, or, if you prefer, that narrow phenomenal content is not to be identified with objectual representational content.

In defense of the Husserlian model

Quentin Smith (1977) once argued that the sensory hyle are phenomenologically inaccessible in effect *by definition*, since, in order to see them aright, one would need to separate them from *all* intentional animation and, at the very same time, *animate* them, see them *as* hyle. However, the very possibility of animating them *now* as presentative of an object and *then* as themselves hyle only shows that there is something that remains relatively stable across different animations, something not tied to a particular animation. And this is *exactly* the sort of phenomenological evidence for hyletic data that we have been discussing. They do not have to appear as utterly free-floating data. We have to get at them by reflective abstraction. But this does not mean we know about them only by inference or that they are constructed by theory or conceptualization.

Reflecting the reactions of many to the view, Gustav Bergmann once wrote "...I, for one, find the whole doctrine absurd, if only because I am not acquainted with those amorphous entities [sensory hyle]" (in Bergmann 1964, p. 212). Bergmann takes Husserl to be claiming that the hyle are brute, amorphous givens and then knocks that claim over, never realizing that this is a misunderstanding of the view. We do not ever need to see them outside of all perceptual organization; all we need is variability of animation with similarity of hyle. And in order to plausibly deny that this is at least *prima facie* evidence for them, one would have to deny that there are systematic similarities that remain while the animations change. Of course, there are ways of saving these appearances without the hyle doctrine, and this will be briefly discussed later.

These two objections are related to a third type of objection. Although the objection had been raised earlier, in 1929, Aron Gurwitsch criticized Husserl's hyle doctrine on the grounds that the claim that sensory qualities can remain constant no matter their intentional animation is equivalent to a version of the Constancy Hypothesis, which had been conclusively shown to be false by the work of the Gestalt Psychologists.¹⁸ Here, Gurwitsch most likely has in mind not the version of the Constancy Hypothesis according to which there is an invariant conjunction between objective stimuli and sensory qualities but rather something like what Kevin Mulligan calls an "intellectualist" version of the hypothesis according to which "...sensations are simple and qualitative and display no structure[, which latter]...is introduced by interpretation or judgment" (Mulligan 1995, p. 191).

¹⁸ The "Phänomenologie der Thematik und des reinen Ich" appeared in 1929 in *Psychologische Forschung*, XII; its English translation is in Gurwitsch (1966). This objection gets elaborated and reiterated in Gurwitsch's *The Field of Consciousness* (1964, pp. 265–273). On the history of this "common but mistaken" objection to Husserl, which apparently originated with Scheler, see Mulligan (1995, pp. 186–191 and 230n32 and n33). See also Hopp (2008, pp. 237–239) and Dreyfus (1982).

The phenomena explored and made famous by the Gestalt Psychologists, such as the Vase-Faces figure of Rubin, seemed to Gurwitsch to undermine Husserl's form-matter analogy entirely. In the vase-faces case, it is not as if we have some sort of mental clay that now gets the shape of a vase and later gets the shape of faces—but remains the same clay. It is rather, according to Gurwitsch, as if you simply replaced the clay of the vase with faces made of different clay altogether.

However, Gurwitsch's analysis rests on a misunderstanding of Husserl's position. It is *precisely* Husserl's view, on my reading anyway, that in animating the sensory hyle one way versus another, the whole form-matter complex appears differently. Husserl did not hold the view that the intentional form does not modify the way in which the hyle appear in the lived moment, and I do not believe he would deny that intentional form may even, in some cases, modify the relations of hyletic elements as such. But one must be careful not to construe this as an "intellectualist" version of the Constancy Hypothesis. Husserl does not think that judgment or interpretation *introduces* structure into an otherwise completely unstructured "array" of hyle.¹⁹ Rather, the preanimation structures inherent in the hyle constrain what animations are possible, but the very fact that animations sometimes do fluctuate while the hyletic data remain type (and sometimes token) identical is sufficient to ground the distinction.²⁰

Indeed, what is arguably most important here is that, in all such cases, one can be aware of the various similarities between the two form-matter complexes, no matter the subtle context- or animation-dependent differences. When you shift from vase to face, phenomenal white remains phenomenal white, and phenomenal black remains phenomenal black. From shift to shift, there will be degrees of similarity ranging from the type identity of token hyletic components to their generic similarity. In some shifts (e.g., in "revealing" the Checker-Shadow Illusion), for whatever reason, the type identity of hyletic components ends up being precluded while generic similarity is still possible. Hyletic data tokens are tokens of definite, determinate, repeatable characters. And their similarities and differences as such are not a *product* of animation, though, in some cases, *that* this or that type of hyletic token is instantiated may well be *partly* (but *only partly*) a function of how the tokens are animated.²¹

Thus, even if we were to accept Gurwitsch's holistic ontology of sensory qualities (see Chudnoff, this issue), it remains the case that we would need *something like* the notion of sensory hyle—as long as our holism is not so extreme and implausible that we deny that there are nevertheless determinate, qualitative similarities, and differences between different perceptual episodes. We do not make these similarities and differences; we find them. And it matters not one whit if the quality instances that maintain these resemblance and difference relations have holistic or atomistic instantiation conditions.

¹⁹ Immediately after the quote in the text, Mulligan (1995, p. 191) writes, "...this is not Husserl's view. ...[S]ensations, according to Husserl, are of qualities and of spatial forms. It is by virtue of this that they belong to fields. The creatures imagined by Husserl who enjoy only visual sensations but no interpretive content would enjoy structured sensations in fields. It would be with them as though they were aware of rich arrays of qualitative discontinuities and coloured expanses. They would simply lack representations of...aspects of organization, of experiences as of tables and chairs."

²⁰ cf. Føllesdal (1982, p. 40).

²¹ This could be something akin to perceptual "filling in." See, e.g., Thompson *et al.* (1999).

Systems of determinate similarities and differences that we find in experience we can codify into sensory spectra and “hyletic fields” by reflective abstraction. From that abstract vantage point, it is quite easy to see the generic animation independence of these spectra or fields.²² At this level of abstraction, we can, following Sokolowski (1970, pp. 198–199) and others, speak quite generally of the element of “facticity” in perceptual consciousness.²³ This term captures nicely the fact that, ultimately, we find and do not make these particular systems or fields.

The representative worries of Smith, Bergmann, and Gurwitsch are related, in one way or another, to the worry that Husserl is committed to something like an utterly amorphous given. But apart from the element of facticity involved in sensory content—something not even the most rabid conceptualist can intelligibly deny—Husserl's view was that hyletic data come to us in the context of a pre-given order and are, as it were, primed for intentional animation. As he says in *Experience and Judgment*:

A field of sense—a field of sensuous data, optical, for example—is the simplest model in which we can study this structure. Although a field of sense, an articulated unity of sensuous data—colors, for example—is not given immediately as an object in experience, for colors are always already “taken” in experience as colors of concrete things, as colored surfaces, “patches” on an object, etc., still an abstractive turning-of-regard is always possible, in which we make this apperceptive substratum itself into an object. This implies that the sensuous data brought into prominence by abstraction are themselves already unities of identity which appear in a multiform manner and which, as unities, can then themselves become thematic objects.... (*EJ* §16; Husserl 1973, pp. 72–73)

Moreover, we need not imagine, as Bergmann and others have, that a Husserlian must be committed to the existence of some sort of transcendental ego behind the scenes, so to speak, taking care of the mess, putting this quality trope here and that one there.

It is indeed hard to imagine a literal ego entity doing this in some purposive fashion, since adopting any sort of intention whatsoever requires that there already be some distinctions, some similarities, differences, and relations to get a grip on. No ego can do anything without order, so it cannot impose order without there being a more ultimate order it does not impose. And if this cannot be supplied by consciousness itself, then it must be supplied by the world or by the points of contact between consciousness and the world.²⁴ As Husserl says in the lectures on active and passive synthesis:

...[E]verything that makes the accomplishment of the active ego possible is already prepared in passivity, and it stands under stable essential laws according to which the possibility of this accomplishment can be comprehended.

²² Note that we would have to accept this even if we were to embrace representationalism. We would then have to make a distinction between a generic perceptual representational layer (embedding generic and specific nonconceptual “ways” of representation, etc.) and more articulated or abstract “animating” layer.

²³ cf. de Warren (2009, p. 114).

²⁴ The only sense in which ego activity is involved at this level is that of *consent*, which, I would add, is itself not always under voluntary control. See Husserl (1973, p. 79).

Thus, the ego has a first, absolutely and necessarily constituted sphere of the in-itself, a first sphere of absolutely secure, true objectivity [*Gegenständlichkeit*] without which it is altogether inconceivable as ego. (*APS* §45; Husserl 2001, p. 261)²⁵

Thus, the passively pre-given sphere is prior to our animating activities, even if it takes some abstraction to see this, since spontaneous animating activity is what we do all the time and do so even at the lowest sensory level.²⁶

The mature Husserlian view is that the deepest level of organization is that of internal time-consciousness, and here, the form–matter distinction reaches a limit, since our fundamental experience of the internal differentiation of consciousness into hyletic, noetic, and noematic components is not itself a matter of animating any sensory data.²⁷ It is here that we reach another limit of what phenomenology can tell us. Phenomenology, even in its genetic variant, simply cannot offer an ultimate explanation of this primordial ordering and differentiation of the immanent components of consciousness, nor of sensory fields themselves,²⁸ the role of development in their normal actualization notwithstanding. What we do find here, however, is the deepest level, the very place where consciousness and the world itself form an “interface,” to speak somewhat metaphorically.

Interlude: hyle as bridge between consciousness and reality

Jaakko Hintikka points out that “...according the Husserl, there is an actual interface of my consciousness and reality...reality in fact impinging directly on my consciousness,”

²⁵ cf. §107c. of *Formal and Transcendental Logic* where Husserl (1969, p. 287) writes, “The constituting of Data in immanent time, a constituting that goes on with rigid regularity, is a continuous evidence, in an extremely broad sense; but it is anything but an active directedness of the Ego to them.”

²⁶ But it is worth recalling the experience of Sartrean nausea, and there are ways practicing the suspension of animating activity. A favorite method of mine is to (carefully) walk around one’s quarters while looking through binoculars. Every so often you will find some array of visual data that do not spontaneously identify. Try to hold that moment. Eventually, you might spontaneously resolve the data as *of a doorknob* or as *of a coffee cup next to a coffee pot*, etc., but with some repetition, you can capture these moments of perceptual nonanimation. Another sort of example occurs when you first turn on the radio and hear the first few seconds of a song (even a familiar one). For a few seconds, you have not identified (animated) the sounds you are hearing as *of* “Yellow Submarine” or what have you (cf. Appendix V of the lectures on internal time-consciousness, Husserl 1991, pp. 114–115). Some meditative practices are also useful in “suspending animations.”

²⁷ For example, “[T]he sensuous data, on which we can always turn our regard as toward the abstract stratum of concrete things, are themselves also already the product of a constitutive synthesis, which, as the lowest level, presupposes the operations of the synthesis in internal time-consciousness.... Time-consciousness is the original seat of the constitution of the unity of identity in general. But it is a consciousness producing only a general form. The result of temporal constitution is only a universal form of order of succession and a form of co-existence of all immanent data. But form is nothing without content.” *EJ* §16; Husserl (1973, p. 73). On the role his reflections on time-consciousness played in Husserl’s development, see Sokolowski (1970). I am following Sokolowski here, but I do not agree with him that the hyle-morphe distinction is retained in the later works *merely* as a pedagogical aid for beginners in phenomenology or that that was how Husserl conceived of the distinction in *Ideas I* (Sokolowski 1970, pp. 177–183). I agree with him that constitution at the level of inner time-consciousness cannot be understood in this way, but this does not mean the distinction has no proper sphere of literal application, even granting the shift toward genetic analyses.

²⁸ cf. Sokolowski (1970, pp. 191–193) and de Warren (2009, p. 114).

and that on Husserl's view, "[w]hat is immediately given to me will...at the same time be part of the mind-independent reality and an element of my consciousness. There has to be an actual interface or overlap of my consciousness and reality" (Hintikka 1995, pp. 82–83).²⁹ On this reading of Husserl, at the deepest level, in internal time-consciousness, mind-independent reality and consciousness are intertwined. The hyle on this view are the points of overlap, in effect like the shared wall between two rooms in a single house. In "living through" its hyle, consciousness finds its anchor in an representation-independent reality and also an anchoring basis for all its animating and judging activities. Why the hyle is conformed into heterogeneous sensory fields and why exactly some co-instantiations and arrangements of hyletic elements in a given field are possible and some are not are not something phenomenology itself can tell us, though it is certainly a good bet that this is not an arbitrary matter or a matter of the decisions or activities of any agent. All phenomenology can do here is to take us to this basis of all objectivations, this point where consciousness and the determinate world that cannot be identified with *presence to* coincide.

On this view, hyletic data *just are* the fluctuating overlap points of consciousness and the world (or brain—I would add) in which consciousness is embodied. If there is no consciousness, there is no embodiment either and vice versa. And this can be so even if these materials themselves have a hidden internal structure. Moreover, even if the hyle can only "live" as these overlap points, their qualitative characters are *not* ultimately determined by consciousness—this is their "inertia," their "facticity." Rather, the phenomenal character of consciousness is ultimately constrained by them. And though for any consciousness there will be one set or another of these elements, no specific ones, or even any from the generic qualitative fields we happen to know, are required. The having of hyletic components is *itself* an invariant structure of consciousness, but no particular "values for the variables" in that structure are invariant or necessary, and no particular type of hyletic field is necessary either, as far as we can tell.³⁰

"In giving to the hyle both the characteristics of a thing and the characteristics of consciousness," Sartre famously wrote, "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" (Sartre 1994, lix). Sartre, however, failed to comprehend that because of the determinacy and animation independence of the hyle, we know that they are not ultimately the products of objectivating consciousness or an ego. Indeed, they are *precisely* what facilitate a passage from consciousness to things in the world. Moreover, in the Sartrean context, the idea of the ultimate dependence of perceptual consciousness on the *en soi* is really the same phenomenological datum as what Husserl would describe in terms of the real inherence

²⁹ cf. de Warren (2009, p. 114), "...Husserl...characterizes hyletic content as an intrinsic *alterity*, or 'non-ego', *within the immanence of consciousness*. ...[T]he materiality of hyletic content, in terms of which consciousness lives through its experience of the world, can no longer be seen as a 'medium' or 'representation' in between consciousness and the world. On the contrary, this hyletic dimension of consciousness, when developed under the heading of genetic phenomenology and the theme of affectivity, designates the pre-given 'facticity' or 'situatedness' of consciousness in the world."

³⁰ In §6 of the *Formal and Transcendental Logic*, Husserl (1969, p. 30) writes, "...if we define the concept of form, as a principle, by the essentially necessary components of any rational subjectivity whatever, the concept *hyle* (exemplified by every 'Datum of sensation') is a form-concept and not what we shall define as the opposite of this, a contingent concept. On the other hand, there is no essential requirement that a judicatively cognizing subjectivity...be capable of sensing colors or sounds, that it be capable of sensuous feelings having just such and such a differentia, or the like...."

or immanence of the hyle. The point for both philosophers is that, in sense perception, consciousness “bumps up against” some element of facticity or inertia that is not ultimately the product of consciousness or of conceptual thought. To conceive of this “bumping” in an idealist fashion is just to put a certain metaphysical gloss on the phenomenon. To conceive of it in the Sartrean fashion is just to invert the gloss and make consciousness more like a monadic property of this inertial element. All, however, can agree on the datum. Thus, consciousness carries within it the seed of its distinction from its world, and yet it depends on that world. This means that the untenability of solipsism is already suggested at the most basic phenomenological level. And provided consciousness cannot be like the ventriloquist who forgets he controls the puppet and becomes offended by what it says, we can even say we know it to be false.

Ultimately, the claim that hyletic and noetic elements are “really inherent” or “immanent” in the flow of internal time-consciousness leads us to the idea that there is some absolute constitution of this differentiated flow, an “ulterior condition” that consciousness does not itself ground.³¹ At the deepest phenomenologically accessible level, there is a mode of awareness of these elements that does not itself fit the hylomorphic pattern, yet that mode of awareness comprehends these differentiated types of elements. Our sensitivity to this difference is manifest every time we distinguish *appearances of* from *attitudes towards*.

The central questions for proponents of this picture are these: How do hyle and noeses conspire to become noematic? That is, what is responsible for the “outward turn” of this immanent flow, for its intentionality? And, once that is answered, we may ask: How do the generically different types of hyletic elements acquire their different but sometimes overlapping presentative functions? In virtue of what are they “appropriate” for different kinds of perceptual animations and not others? For example, why are pain hyle tied to body locations and bodily damage? Could it have been otherwise? Why are color hyle tied (normally) to visual perception? And so on. We will not answer these questions here. Suffice it to say that certain types of hyletic structures may indeed be fit by their natures for certain types of representative and behavioral functions and not others—it is hard, for example, to imagine a complete inversion of pleasure and pain keeping all behaviors constant. Other types of inversions may be perfectly possible, but without knowing their innermost structures, we cannot say. On the question of the origin of intentionality, perhaps something like negation and existential quantification are all we ultimately need. And perhaps, we get negation from the internal differentiation of noetic and hyletic elements and existential quantification from presence, from the very *being* of consciousness.

Hyle, sense data, qualia, and representationalism

Although Husserl’s theory is not a sense datum theory, it is importantly similar to one.³² The difference is that Husserl thinks that animated hyle present one

³¹ See, e.g., Sokolowski (1970, pp. 195–201).

³² Shim (2011) is rightly concerned to differentiate Husserl’s view from sense datum theories, but from my point of view, concentrating on the differences can prevent one from seeing a more important similarity.

directly with the intentional object or state of affairs. And this is partly why some Husserlians defend versions of disjunctivism.³³ But following Hintikka (1995, pp. 93–98), I think that certain similarities are at least as important as the differences, if not more important. In particular, acquaintance with sense data in Russell is similar enough to the “living through” of the hyle in Husserl to merit reflection. For both philosophers, we are aware of these data in a way that is fundamentally different from representation, label it how you will. And the quantificational apparatus of the theory of descriptions is importantly similar to the apparatus of noematic intentionality and doxastic positing in Husserl. Furthermore, Husserl regards hyletic fields as bearing certain abstract similarity relationships to the properties they allow one to represent and not only in terms of projective spatial arrangement, though that is indeed one dimension of the similarity.³⁴

But is Husserl's theory like contemporary qualia theory, the view that consciousness has intrinsic, nonrepresentational, and physically irreducible properties ('qualia')? In one sense, yes.³⁵ In another sense, no. Yes, we are dealing with what are, in some sense, “intrinsic properties of consciousness,” as we would put it. At the same time, as argued, they live precisely in the boundary or interface between consciousness and world. However, there is nothing here that says we must regard them as ontologically irreducible and metaphysically intrinsic. The contemporary qualiophile typically imagines that consciousness is constituted by the instantiation of irreducible qualia instances. This is quite different from the version of the Husserlian view here expounded. Consciousness has a certain set of invariant structures (noetic, noematic, temporal, spatial-projective, reflexive, and unitive). These are not to be understood in hyletic

³³ The theory defended in Hopp (2008, 2011) is, in effect, what you get when you take Husserl's view and subtract the sensory hyle (see, esp. Hopp 2011, pp. 206–210). Instead of hyle grounding the *Leibhaftigkeit* (“bodily presence”) so salient in perceptual consciousness, it is the conspiracy of horizontal and “intuitive” contents, both forms of nonconceptual content, that do so. Hopp could be said to be defending a non-reductionist, disjunctivist (see Hopp 2011, 172 ff.) version of intentionalism. One wishes Hopp would say more about the nature of “intuitive” contents, but it seems clear that on his model, the having of this property of “intuitiveness” is what takes over the role of sensory hyle being constituted in immanent time-consciousness—showing up in the flow, so to speak. On the difficulty of fitting *Leibhaftigkeit* into a representationalist analysis of consciousness (and an attempt to do so anyway), see Pacherie (1999). On Husserl and disjunctivism, see Mulligan (1995, pp. 212–215).

³⁴ In §17 of *Thing and Space* (Husserl 1997, p. 46) Husserl says that here, “...the relation of resemblance means nothing else than that certain types of physical data [i.e., here hyletic data] are bound, according to their essence, to corresponding types of objective determinations: the physical datum of the type ‘sound’ cannot present an objective feature of the type ‘color’, the physical datum ‘color’ cannot present an objective feature of the type ‘warmth’, etc.” It may indeed be a matter of essence, but this is not something phenomenology can penetrate, in my view. That said, I think that Hopp (2008, pp. 229–232) is a bit unfair to Husserl on the resemblance of hyletic arrays to quality arrays in physical space. The resemblance relation only needs to be abstract or, if you prefer, the sensory “surface” need only be virtual. There are plenty of ways to encode geometrical information without making a literal, type-identical simulacrum of the space represented. We need to operate at a mathematician's level of abstraction while simultaneously being sensitive to the concrete phenomenological details. See Petitot (1999); Petitot does exactly this.

³⁵ cf. Shim (2011).

terms, even if, in a certain sense, these formal features themselves have a certain facticity to them. But on a very crude qualia theory, all of these features would just be regarded as more primitive phenomenal properties (time qualia, space qualia, self qualia, and so on), and this, at best, is simply crude.

The main advantage of qualia and sense datum theories, for all their differences in categorial ontology, resides in their ability to preserve, rather straightforwardly, a fundamental intuition about sensory qualities, and Husserl's theory shares this with both theoretical families. We might call this the *exemplification intuition*.³⁶ It is the sense that *something* must really instantiate these properties or moments; they are not mere fictions. But, in fact, *all* theories of perceptual consciousness are committed either to this intuition or to an analogue of it.

Realist representationalism³⁷ might seem to preserve part of the exemplification intuition directly, since, on this view, to perceive is to nonconceptually represent real physical properties. But since misrepresentation is always possible, one could, on this account, represent a nonexistent property instance. The representation, in that case, will of course be real, but the property instance represented will not be. In a way somewhat similar to the “absent first-order representation” thought experiment directed at higher-order representation theories of consciousness, the possibility of this form of misrepresentation (noninstantiation of the target property) brings into sharp relief the fact that it is not really in term of the representation of a property as such that realist representationalism could account for the phenomenology of sensory experience. In other words, it is not the obtaining of some relation to a proper instance that accounts for the phenomenology of the experience. It is not insofar as it relates to actually existing bodily damage that a pain state, say, has the phenomenological profile it does, since in cases of misrepresentation there is no bodily damage, but the phenomenology is the same. It is then, as is generally admitted, the “non-conceptual” way the state represents bodily damage that must account for the phenomenological profile. And then we are dealing with a bifurcationist theory in all but name: there is the representational content—the property represented; and then there is the qualitative content—the nonconceptual way. In this case, realist representationalism becomes, in the end, much closer to qualia theory than it would like to be, as we are aware of these “nonconceptual” ways but not via further representation of them; and making them their own representatives is, in a way, an admission of the very point. Thus, realist representationalism accepts an analogue of the exemplification intuition and is revealed as a sort of merely verbal redescription of the phenomenological data of interest.

³⁶ This is more commonly called the “Phenomenal Principle,” see, e.g., Fish (2010, pp. 5–6).

³⁷ See, e.g., Tye 2000. Note that here and in the discussion of fictionalist representationalism, I am only considering these as theories of qualitative phenomenal content and am leaving out the issue of subjectivity. One can, of course, marry a representationalist theory of qualitative phenomenal content with a higher-order or same-order (self-representationalist) theory of subjectivity.

In the case of fictionalist representationalism,³⁸ it is clear that it cannot be the property instances *per se* that account for phenomenological profile of the relevant representations, since those instances do not actually exist. We cannot account for that character in terms of nonexistent objects. Analogously, there may be something-it-is-like to think about Santa, but Santa himself had better not enter into the account of that cognitive phenomenology. The same goes for nonexistent sensory quality tropes. And we cannot account for phenomenal character in terms of *uninstantiated* properties, unless we embrace both Platonism and the view that perceptual consciousness is somewhat analogous to the intuition of mathematical properties—so that to see something blue is to think about the Form of the Blue. What is it then, for the non-Platonist fictionalist, that accounts for the fact that one seems to be presented with property instances that seem just thus-and-so? This will have to be accounted for in terms of *other* properties of the representational state, properties that one presumably has no phenomenological access to. Thus, we will find ourselves postulating, even if we cannot locate, real, nonrepresentational characteristics of the representations that account for their phenomenological profiles

Thus, we find that neither realist nor fictionalist representationalism can dispense with an analogue of the exemplification intuition. Some *real*, nonrepresentational characteristic of the sensory representations must ultimately ground the phenomenological differences between sensory experiences. And the fictionalist just embraces at the outset something the realist representationalist will have to embrace upon reflection: No relation to the property instances represented can account for the phenomenological profiles of sensory experiences. Contrary to initial appearances, the qualia, sense datum, and hyle theorists are the ones really applying Occam's Razor: The phenomenal properties are really instantiated whenever there is conscious sensory experience, *and* it is in terms of their instantiation, not the instantiation of *something else*, that we account for all differences in phenomenological profile (even if the notion of instantiation is too generic to tell us what acquaintance or "living through" is). Representationalists might have thought Occam was on their side, but this turns out not to be the case. The "nonconceptual ways" of the realist representationalists are, at the end to the day, just tantamount to qualia or sensory hyle.³⁹ And though the fictionalist can continue to hold that the properties represented are not instantiated, they must hold that perceptual consciousness has some *other* nonrepresentational properties in virtue of which it somehow correlates with these, and the model thus become inelegant indeed.

Hyle and the grain problem

By regarding the hyle as points in the shared boundary of consciousness and world, one can perhaps begin to see how the structures in the world come to configure consciousness. The changes and patterns manifest in the immanent

³⁸ See Brentano (1995, pp. 92–94). Brentano, of course, was also a kind of self-representationalist (see previous note). By "fictionalist representationalism" I just mean the view according to which sensory qualities are objects of representation but are never actually instantiated by anything.

³⁹ The same point is made in Kriegel (2002) and by others as well.

hyletic data are at the same time changes and patterns in part of the world. And any part of the world can be, in one way or another, in contact with any other part. Perhaps, this model can play a role in helping us understand how consciousness comes to be shaped by objects that are very distal indeed.⁴⁰ And perhaps, this could help us to further “naturalize phenomenology” and reconcile phenomenology and physicalism.

One might have thought that no Husserlian hyle theorist could be a physicalist because any such supposed combination of views would entail that the brain contains homogenous expanses of phenomenal reddishness, etc. However, the Grain Problem, as this problem is sometimes labeled, depends on taking sensory qualities to reveal all of their categorial properties to reflection. If they do not seem complex or relational on this view, then they are not. Our perception of them, on this understanding, is fully adequate. Since their *esse* is *percipi*, the idea goes, there must be nothing hidden in them. But if this sort of categorial completeness is false, then not seeming relational and not seeming complex are no bases at all for inferring that the properties are neither.

Indeed, it is perfectly compatible with the phenomenology that the properties are themselves highly complicated relational structures with respect to which we simply have a limited ability for reflective resolution or analysis. In this way, we can preserve everything we would like to say about the *phenomenology* of intrinsicity and simplicity, and yet have a thoroughly grainy *ontology*. It may seem like we are borrowing a page from the playbook of the realist representationalist here and driving a wedge between the phenomenal property itself and the way it appears, but this is not correct. Rather, it is just another instance of how we spontaneously transform the absence of appearance into the appearance of absence, as Armstrong (1968) taught us long ago. To take an easier example, it is probably the case that the stream of

⁴⁰ Is it not apparent that what we are doing in the cases of uncertain perception that Husserl liked to meditate upon is similar enough to evaluating competing hypotheses—hypotheses that themselves are candidates because of their prior probabilities—by gathering “data” guided by the predictions of the competing hypotheses and doing Bayesian updating as we observe how the observations turn out? At a certain point—as, say, we see that the “mannequin” is actually breathing—we cross a threshold and the (“subjective”) probability of one of our hypotheses shoots up to 1, for all practical purposes anyway. This gives us that sense of perceptual certainty, and the sense that our perception “fulfills” a certain thought—*this is a person in front of me*. Perhaps the tradition of phenomenological work on perception should be more explicitly married to the emerging Bayesian paradigm in cognitive neuroscience. See, e.g., Clark (2013), Colombo and Seriès (2012), Bubic et al. (2010), and Hospedales and Vijayakumar (2009). There is reason to think that Husserl himself would have had some serious misgivings about this essentially Helmholtzian construal of perception (see, e.g., Mulligan 1995, p. 170 and 229n27). But as a general rule in phenomenology, it is not legitimate to go straight from *not seeming P* to *not being P*. As long as we regard the hidden Bayesian machinery of perception (and its other neuro-computational underpinnings) as essentially causal, the phenomenologist should have no problem in accepting “unconscious inference” as a legitimate category. One can regard this as an “as if” intentional description of the relevant brain processes some of whose inputs and outputs may register in consciousness. On the view figured here, one of the functions of “constitution in internal time-consciousness” is to prime us to take what we perceive as fitting certain priors. At the deepest level, we cannot normally undo the assigning of 1 to the prior probability that there is a world of transcendent objects before us—recall that the *epoché* does not undo the positing character built into perception—though even this *can* be “monkeyed with” by certain sorts of damage and by certain pharmacological agents. At the higher and more concept-mediated levels of perception, this spontaneous priming will depend on learning and “sedimentation” of various kinds, much of which is only imperfectly accessible to conscious reflection.

consciousness in “not seeming discrete” is transformed into “seeming continuous.” The phenomenology of time-consciousness cannot, in principle, distinguish the cases. In the case of sensory hyle, “not seeming complex” could be transformed into “seeming simple.” We take the nonappearance of complexity to be the appearance of simplicity, and this is analogous to the time-consciousness case. There are good general reasons of thinking this is not unlikely.⁴¹

What positively appears of a sensory quality does indeed pertain to it; it is just that not every aspect of it appears. In particular, its categorial nature need not be completely accessible. It can be complex and relational without seeming so. And complexity is precisely what we would expect of a property that stands on the boundary of consciousness and the complicated world (and brain) in which consciousness is embodied.

Conclusion

I have defended a Husserl-inspired account of phenomenal consciousness at the sensory and not cognitive level. In particular, I have aimed at breathing new life into Husserl's often attacked distinction between sensory hyle and intentional animating morphe. I have argued that the distinction is well grounded phenomenologically, that it leads to more profound conception of the connection between consciousness and the world (and brain) it is embodied in, and that competing theories of phenomenal consciousness have, in one way or another, to admit the point that hyle theory respects from the outset. Finally, I have argued that one can accept this model and plausibly maintain a physicalist ontology provided one understands that the Grain Problem rests upon the utterly unwarranted assumption that all of the categorial properties of the sensory hyle should be accessible to reflection. Whether or not I have completely faithfully represented Husserl's own views (and their development) is of only secondary interest to me. I do hope, however, that this paper goes some way toward showing, directly or indirectly, that, as Dennett once said, “... Brentano and Husserl are not just valuable—they are essential authors in the philosophy of mind. Anyone today who wants to write on intentionality, perception, mental imagery or mental representation, for instance, ought to come to terms...with [them]” (Dennett 1979, p. 139).

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⁴¹ See my 2007 for a fuller articulation of the type of argument I am making here at the level of properties of consciousness. Here, I am extending the analysis to properties of properties of consciousness. One can hold that all apparent properties of consciousness are real properties of it without holding that all real properties of consciousness are apparent properties of it. Likewise, one can hold that all apparent properties of the properties of consciousness are real without holding that all real properties of the properties of consciousness are also apparent. This is enough to undercut the inference from not seeming complex to being simple and thus to disarm the Grain Problem.

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