

Enactive Intentionality

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ABSTRACT: Though Noë is concerned to emphasize that perceptual experiences are not per se internal representations, he does not really say why, and he is fairly quiet about what he takes intentionality and representation themselves to be. Drawing on a subsequent paper (Noë (forthcoming)), I bring out and criticize his in fact radically negative view of those fundamental mental capacities.

1. Introduction

In Ch. 1 of his insightful and provocative work, Noë puts forward the main tenets of his "enactive" theory of seeing:

- (A) Touching, not seeing, should be the paradigm of perceiving; when we investigate our surroundings by touch alone, we do that "not all at once, but through time, by skillful probing and movement" (1); we should assimilate seeing to touching in that regard. (i) Perceiving is "a way of acting..., not something that happens to or in us. It is something we do" (1). (ii) In particular, it is not the hosting of an internal representation of the environment, conceived as a structure in the brain that itself has intentional content (2, 29)—nor, a fortiori, need the brain do work to build up such a representation given only impoverished retinal input, and so much the worse for mainstream cognitive science.
- (B) "Mere sensation," in particular the reception of visual information, does not suffice for visual experience. For example, though "experientially blind" patients are not entirely blind and host rudimentary "visual impressions," they do not see "in anything like the normal sense.... They have sensations, but the sensations don't

add up to experiences with representational content" (5; cf. 16). That is because they fail to "understand" those sensations, in the following sense:

(C) Perceptual experience has its content in virtue of our bodily skills: "To be a perceiver is to understand, implicitly, the effects of movement on sensory stimulation" (1). Noë makes it clear that that "is" is meant as constitutive, not merely causal or "instrumental": "[O]ur ability to perceive not only depends on, but is constituted by, our possession of this sort of sensorimotor knowledge" (2; cf. 12). (Various appropriate qualifications are issued: the "knowledge" is not propositional, but may consist only in a bodily skill or in a primitive "expectation" (119); the relevant movements must be "self-actuated" (13); etc.)

Four further key claims emerge in Ch. 2:

- (D) So-called "amodal" seeing is a matter of specifically visual presence, not merely of thinking or inferring, even though its objects are not "actually perceived" (61). (The whole tomato is visually present to us, though of course we actually-see¹ only a small portion of the tomato, the rest being hidden from view and only "present as absent"; likewise the cat partially occluded by a picket fence.)
- (E) Amodality is more widespread than you think: (i) Unattended visual information, as in change blindness, should be assimilated to it (62). (ii) The experiential features usually attributed to "filling in," such as the "unbroken" area neglected by one's blind spot, or the unfoveated Marilyns in the famous Warhol painting, are really only "present as absent" also (56, 68-9). (iii) Perceptual constancies, such as the perceived size and circularity and color of a tilted and moving plate, are amodally seen, not actually-seen. (iv) We do not actually-see even all the *facing* surface of the tomato. Indeed, we do not actually-see even much if any of its color (Ch. 4).
- (F) Amodal perception consists only in "access" to the relevant environmental features through the usual sensorimotor skills. The features are "available." "My sense of the perceptual presence, now, of that which is now hidden behind a slat in the face, consists in my expectation that by moving my body I can produce the right sort of 'new cat' stimulation.... Our perceptual sense of the tomato's wholeness—of its volume and backside, and so forth—consists in our implicit understanding (our expectation) that movements of our body to the left or right, say, will bring further bits of the tomato into view" (63).
- (G) Perceptual experience is "transparent" in one current sense of the term: "When we try to describe it, we see through it, as it were, to the world.... [It] presents itself to us as a mode of awareness of *the world....* [W]e misconceive phenomenology if we think of it as concerned with the structure of the visual field" (72).

So much is by now fairly familiar.³ Any number of complaints can be and have been raised. In particular:

- (1) What justifies Noë's strong claims of constitutivity? Why not say just that all the skillful probing etc. are *nomically* required for perceptual experience? (Block (2005), Clark (2006), Prinz (2006).)
- (2) Noë's category of "bodily skills," "sensorimotor knowledge" etc. is fairly motley; as revealed in his various examples, it comprehends a number of prima facie different phenomena. Can it be unified?⁴

- (3) Are phenomenally different experiences always distinguished by distinctively sensorimotor routines? There are apparent counterexamples (Prinz (2006)).
- (4) Why should we accept (B)? Certainly there is a difference between "mere sensation" and normal visual experience, but what is supposed to show that the mere reception of visual information is devoid of representational content?⁵
- (5) The transparency doctrine (G), though defended by some, is emphatically rejected by others.⁶
- (6), a huge one: How general are (A-ii) and (C) supposed to be? (F) is plausible because amodal seeing, even if a kind of seeing, is not actually-seeing, and so a merely dispositional account seems entirely appropriate; and (E) extrapolates (F)'s plausibility to more of what is considered ordinary perceptual experience. But, so far as has been shown, there remain the core instances of actual-seeing. If Noë means to suggest that (A-ii) and (C) comprehend those as well, that is shocking and, to say the least, requires more argument.⁷

But I shall not dwell on any of these existing objections. My concern in this paper is with intentionality, and with Noë's views on representational content itself. Besides (A-ii) above, Ch. 3 offers further strong claims on that topic:

- (H) Perceptual experiences have dual content. The tilted plate both looks circular and looks elliptical (though it does not look *to be* elliptical) (78). When you see two similar trees one of which is nearer to you, they look the same size, but also one looks larger than the other "in the sense that it takes up more of your visual field" (79). (Notice that the relevant contents are, on their face, mutually incompatible.) Corresponding to the duality of content, an experience can be veridical or not along either dimension of its content (168).
- (I) The (alleged) ellipticality of the plate and the largerness of the nearer tree, content properties as said in (G), are "perspectival properties" ("P-properties") (83). They are not mental; in fact, they are real properties of the object perceived. (The plate is perceived as being circular, and/but it is perceived also as: looking elliptical from here. And it objectively has the latter property, in that an elliptical shape would be needed to occlude it on a plane perpendicular to the line of sight, whether or not any perceiver was occupying the relevant vantage point.)
- (J) Though real properties of the object, P-properties are perceptually prior to the object's ordinary worldly properties. (We encounter the plate's circularity in or by encountering its elliptical apparent shape, and not vice versa; the circularity is not actually-seen.) However:
- (K) "[P]erception, according to the enactive approach, is direct and noninferential.... In actively encountering the way in which how things look varies with movement, we *directly* encounter how things are" (85).
- (H)-(K) are worthwhile views, and as will be seen, I am myself quite sympathetic to each of them. But even collectively, they do little if anything to flesh out (A-ii), for—notice—they are quite compatible with the contrary mainstream thesis that perceptual experiences are internal representations. That thesis is a corollary of two more basic and very widely accepted doctrines: that an intentional mental state or event is a brain state or otherwise a state or event internal to its subject, and that intentionality is representation. How, then, does Noë think of intentionality and representation themselves?

A look through his index turns up surprisingly little. "Intentionality, 116, 189." "Representation, internal: *See* Internal representation." The latter references are mainly to Noë's denials that perceptual experiences are internal representations (but, n.b., Noë never denies either that *there are* internal representations or that some of them sometimes figure in perception). There is no entry for "Veridical," nor for "Nonveridical" or "Misrepresentation," except that under "Perceptual experience" there appears the subentry, "veridicality, 168."

116: Noë equates the intentionality of perceptual experience with "the fact that experience always presents the world as being some way to one." 168 has been quoted above under the dual content claim (H). 189: "Perceptual experience presents things as being thus and such. It has content. It is *directed toward*, it is *about* the world.... [I]ts content is always at least *as of* the world" —Of course, but this is said only in the context of arguing the thesis defended most prominently by John McDowell, that all perceptual contents are conceptual rather than nonconceptual. We have nothing as yet in support of (A-ii).

So what motivates (A-ii)? One late source is fairly obvious (Ch. 7),¹⁰ that the enactive view with its emphasis on constant, intricately close mind-world interactivity encourages not just content externalism but "vehicle externalism," or as it is often called, the "extended mind" thesis, that mental representations, i.e., the vehicles themselves, are not confined within heads but actually extend into the world.¹¹ But that is only to say that a perceptual experience is not an *entirely* internal representation. N.b., I am not dismissing the extended mind thesis as unexciting. On the contrary; the thesis would be fun to believe, though I am not persuaded by the arguments. But (A-ii) sounds as though what is intended is that the perceptual experiences are not really internal representations *at all*, which would also better befit Noë's penchant for radical claims.

A second source of motivation for (A-ii) is Noë's emphasis (following Bert Dreyfus, Rodney Brooks and Kevin O'Regan¹²) on the hideous computational profligacy of the *comprehensive system of internal representation* posited by orthodox cognitive science. The merest cost-benefit analysis suggests that Mother Nature would have done much better to "let the world be its own model," and design creatures whose representations would incorporate actual worldly objects and features rather than in-the-head simulacra of them. That is plausible (to say nothing of bare simplicity considerations). Noë: "Why do we need a picture at all? The world is right there, after all. We are *in the world*" (219). But that also has disturbing implications: The world is all real, all actual. So if the world serves as its own model and there are no "pictures," there are not any *false* pictures. And so, whatever nonveridical experience is, it is not false representation, not misrepresentation.

To discern Noë's real view of the matter, I think we must turn to "Real Presence" (Noë (forthcoming)), in which he is both more explicit and more radical. (I say it is his "real" view because (a) it is his current view, (b) it is compatible with everything he says in *Action in Perception*, and (c) "Real Presence" does not present it as overturning anything in the book, or even as innovating.¹³) Here are his pertinent claims there:

(L) Perception is not (really) representation at all, but actual direct and extensional contact with external objects. "Perceiving isn't representing, or even presenting; it is *enacting* perceptual content—that is to say, making contact with the world

through skillful exercise" (27). "Perceiving is a relation between the perceiver and the world. Perception is non-representational in the sense that perceivings, as I have urged, are not *about* the world, they are episodes of contact with the world" (41).

- (M) Nonveridicality is (indeed) not the incorrectness of a representation, but is our experience's seeming to have a content different from the content—if any—that it does have. In nonveridical perception we are not aware of the relevant contents; it is merely *as if* we are aware of them (28).
- (N) "This as if similarity needs explaining, and we can explain it: we draw on the same sensorimotor expectations in both cases" (28). What a nonveridical experience has in common with an indistinguishable veridical one is only the underlying sensorimotor dispositions. "It isn't that perceiving yellow and having the corresponding hallucination of yellow is a matter of being in the same state; it is a matter of acting, or being disposed to act, as if we were" (28). (And that is compatible with the fact that we cannot tell from the character of our own experience whether or not the things we seem to see are real.) 15

Now we know what is behind (A-ii).

Finally turning to criticism, I begin with (H), addressing the duality of perceptual content.

There is a rival explanation of duality that Noë does not consider alongside those he does. It is—ahem—mine: Layered Perceptual Representation (Lycan (1996, Ch. 7). An experience represents worldly objects by representing worldly features (actually instantiated or not) and certain more primitive worldly objects I call "shapes" (actual or not). The model here is that of deferred ostension: By pointing at a numeral chalked on a blackboard, I refer to a number; by referring to the number I refer to the department chair's office downstairs; and sometimes, by referring to that office I refer to the person, the chair himself.

Actually the perceptual layering gets complicated, and in ways I cannot pretend to have well sorted out. By visually representing colors, edges, shapes and such, I represent persisting physical objects arranged in various ways and at various distances. (Those are Noë's two dimensions of content.) But further, by representing those objects, I represent things artifactually and socially characterized, such as shoes and desserts and gas stations; I do literally see such things, after all. I also see particular individuals such as Alva Noë or Mary Lycan. And on top of all that, there are the various phenomena lumped under the heading of "seeing as." How these further dimensions of content are related to each other, and which ones mobilize "concepts" of what kinds, are thorny questions indeed.

So, in the case of the plate and the first two dimensions, I say that vision represents an elliptical shape, and by doing so it represents a round plate-shaped object. (By doing *that*, it represents both a plate and the plate.) Likewise for color constancy: By representing the distant trees as blue, I represent their greenness; etc.

(For the record, I do not share Noë's judgment that in the first dimension the plate *looks elliptical*, even when we contrast that with looking *to be* elliptical and even though I maintain that vision represents ellipticality in the region. I agree with Austin that the plate itself always looks round and not elliptical. But this is a quibble.)

It is perhaps hard to hear the difference between my view as thus sketched and Noë's view, and indeed there is a lot we agree on. The main difference is that my view is firmly couched in terms of representation, and so Noë will have rejected it right there. By "content" he does not after all mean representational content; he means the objects and properties perceived, perceiving being in every case an extensional relation to an actual item. Thesis (L) is a radical claim, and intended as such.

Each of the two views has a particular counterintuitive consequence, and those consequences are different. (I think my bad consequence is probably worse than Noë's.) Noë's thesis (I), that P-properties are real properties of the objects perceived, means that the "looks" relation iterates: We see the plate's property of looking-elliptical-from-here. That may sound harmless—of course we see that the plate looks elliptical (granting arguendo that it does look elliptical in the first place); we do not hear it or smell it—but (I)'s implication is more ambitious than that: It is that in addition to the plate's shape, color, size, position and so on, the usual worldly features that it is vision's function to detect, we see a special relational property of the coin itself, the P-property of its looking-elliptical-from-here. The coin *looks to* look elliptical from here. Perhaps we can *introspect* that the coin looks elliptical from here; it seems wrong to say that we see any such relational property or that the coin looks to have it. (Noë himself says (133) that the notion of "looks of looks" is "probably not coherent," but I would not go that far.)

My own view's counterintuitive consequence is that we are always seeing physical "shapes" that do not really exist. In seeing the plate we represent (first dimension) an elliptical thing, but according to me the elliptical thing is not the plate, and it is nonactual, there being no real elliptical thing in the environment. Michael Tye (1996) finds this idea, that vision is perpetually beset by illusion, intolerable; I do not mind the illusion part at all myself, but I admit it sounds funny to say in the first place that when we see a tilted plate, our visual experience falsely represents there to be an elliptical physical object in addition to correctly representing a round one.

But (L) is the crux. Notice how truly radical a claim it is. It is not just the rejection of what Noë (Ch. 2) called the "snapshot conception" of visual experience, to deny that visual states are like photographs in their degree of detail. (We should all reject that.) It is not just the point, buttressed by the phenomena of change blindness and inattentional blindness, that our visual contents at an instant are meager and quite crude. It is not just that most of what we claim to see is really only "present as absent." It is not even just a denial that we host internal visual representations. (As before, Noë does not deny that we do.) It is that visual experiences do not per se represent *at all*, at any level. When Noë talks of their "presenting" "contents," he does not mean anything about representation.

In fact, (L) means that visual states are not even intentional in Brentano's sense. I take it to be definitional of an intentional state that it is *indifferent to actuality* in Brentano's way: The state is and would be the state it is and have the intentional object it does regardless of whether the object actually exists. According to Noë, a perceptual state requires the actual existence of its object, and so cannot be intentional in the foregoing sense. "[P]erceptual experiences are relations between a perceiver and the environment. Perceptual experience, on this understanding, is not intentional" ("Real Presence," 40).

In fact, on Noë's view a perceptual experience cannot be *nonveridical* in the usual sense of that term, stricter than what figures in theses (M) and (N), i.e., that of saying something false about the external environment. Rather, what we *misleadingly call* a "nonveridical" experience is a case of its seeming to have a content different from the content (if any) that it does have.

It is very hard for me to suppose that perception is not representation. But the Argumentum ad Difficile Suppositio is not very convincing. Also, it becomes easier to think of perception as nonrepresentational once one gives up vision as the paradigm and concentrates, as Noë asks us to do, on touch. To take an intermediate example, it is controversial to maintain that smell represents (though I have argued at length that it does; Lycan (1996, 144-49)).

But here are four more substantive arguments for the claim that vision represents or at least is intentional. (1) When you have a visual experience, something looks a certain way—blue or square or nearby. But such looks can deceive; things sometimes look as they are not. The experiences are then nonveridical in the strict sense; they say something false about the external environment. (Ned Block (1990) and others have argued, unconvincingly to me, that "looks" has a second, purely qualitative and nonintentional sense in addition to its intentional one, but Noë himself everywhere rejects that claim (e.g., 82ff.) and I applaud him for it.)

- (2) Gilbert Harman (1990) offers the now familiar Transparency argument: We normally "see right through" perceptual states to external objects and do not even notice that we are in perceptual states; the properties we are aware of in perception are attributed to the objects perceived. Noë would never in life deny that (= (G)), but the point can be extended to the purely hallucinatory case: Suppose you are looking at a real red tomato in good light. Suppose also that you then hallucinate a second, identical tomato to the right of the real one. (You may be aware that the second tomato is not real.) Phenomenally, the relevant two sectors of your visual field are just the same; the appearances are just the same in structure. The redness involved in the second-tomato appearance is exactly the same property as is involved in the first. But if we agree with Noë that the redness perceived in the real tomato is just the redness of the hallucinated tomato itself; it is an intentional inexistent
- (3) My current visual state affords what Hintikka (1969) called "visual alternatives," any number of distinct possible worlds consistent with it. There is (at least a fuzzy) set of such worlds. But a set of worlds is a proposition, and a proposition is an intentional content.
- (4) Misperceptions directly and automatically produce beliefs having the same content. Granted, to say "having the same content" begs the question against (L), but how is Noë to express the obvious fact just defectively expressed? Also, to pick up a theme from Sellars, how could a nonintentional state *warrant* or justify a belief about the external world?

Of course Noë has heard all this before, and he is not convinced. He may say that each of the four arguments begs the question; when the thesis you oppose is radical

enough, it is hard for others not to beg the question against it. But what is Noë's argument *against* what seems so obvious?

One argument might be based on thesis (E), that we do not *actually-see* very much, not even much of an object's facing surface or even all of its color. All else is visually present only in that it is available: "The distinction between the given and the merely available is erased and we are left with the idea that perceptual awareness of an object with its stable properties is, in fact, a dynamic activity of skillful interaction with things around us" ("Real Presence," 27). And what we do actually-see must be actual. Therefore, Brentano's condition of indifference to actuality is not met; so seeing is not intentional.

I do not see any further argument in Noë's book or in the subsequent papers. He *puts forward* his claim (M) and its instances ("In the perceptual case we are aware of yellow; in the nonveridical case, it is merely *as if we are*" ("Real Presence," 28); but that brash claim is not explicitly defended. So let us evaluate the conjectural reasoning based on (E).

The most salient objection is to the assumption that what we actually see must be actual. Suppose (E) is right, and when I look at a tomato I actually-see only a small portion of its facing surface and only fleeting aspects of its color. But why must that vestige of actual-seeing be veridical? I do not see what would connect thesis (E) to the claim that we can actually-see only what actually exists. (Do not be misled by my repetition of "actually." The first "actually" means only, seeing as opposed to mere visual presence, not that "see" is a success verb.) Consider a case of total hallucination: I am lying on my bed in what is in fact pitch dark, but I am experiencing bright light and swirls of vivid color; perhaps they form apparent objects such as flames or faces or cubes of pink. On Noë's view, there is no content here, neither representational nor any other kind. There is nothing I am experiencing. It merely seems to me that there is. There is "no real experience" ("Real Presence," 53). Whyever should we believe that?

I think we can also resist thesis (E) in the first place. There is a natural break, different from Noë's, between what is actually-seen and what is only visually present: It is marked by the set of worldly features that vision's function is to detect—principally color, shape, size, and orientation. If vision fulfills its function and detects those, then they are actually seen and not just visually present.

On this point, of course Noë does argue. First, as before, we do not actually-see all of an object's facing surface. Here he relies on the principle that we actually-see only what we attend to (62). I am sympathetic, myself, and I tend to share Noë's cognate exegesis of change blindness. But Fred Dretske (2005) has argued vigorously against the attention principle: The whole facing surface is right in front of us and reflecting light smack onto our retinas; of course we see it, even if we are not aware of doing so due (precisely) to lack of attention. (Noë's obvious reply is (B), that although there will have been visual "sensation," there will not necessarily have been sensorimotor "understanding" and so not real representational seeing; but it remains undefended that such sensation is nonrepresentational, and so Noë would need a further argument against Dretske.)

Second, Noë says we do not actually-see stable color, but only the color looks that objects present under various conditions of illumination and other "color-critical" factors. So far, this is analogous to his view of shape perception: what we see first and foremost is a P-property, but the stable property is visually present as well though not actually-seen. However, there is an ontological difference between colors and shapes; Noë (Ch. 4) defends a version of the distinction between primary and secondary qualities, in the form of a dispositional account of colors themselves. (It is a considerably subtler account than standard Lockean dispositionalism.) Though colors are objectively dispositional properties of physical objects, they are also intrinsically *looks*. I do not yet entirely understand this view, but I do not think its details matter to the present issue, that of whether stable colors are actually-seen.

Here there is no occlusion argument. An object's stable color is in no way *hidden* from view. Certainly there is an attention argument to be had; if the object's color P-properties vary constantly, we can only attend to a few of them at a time. And/or, someone might say, one cannot actually-see two distinct shades at once, and what one actually-sees is the P-property. But the latter argument would beg the question, since Noë and I agree that there are two simultaneous dimensions of content. Why can we not actually-see both the appearance shade and the stable color at once?

So far as I can see, Noë's extreme view of intentionality remains unmotivated. And/but, so far as I can see, it is independent of his enactive theory (A-i) and (B)-(K). (A-i) and (B)-(K) already constitute a bold and distinctive view; why reject Brentano in addition, except out of joi de guerre?

In closing, two further questions:

Noë holds, plausibly I think, that what constitute the visual presence of objects' real shapes and stable colors are the relevant sensorimotor dispositions and our implicit awareness of them. Suppose we agree about that. Then, why not take those relations over (whatever they are exactly) as a *psychosemantics* for the second dimension? Of course, a psychosemantics attaches to a representation and explains why and how the representation has the content it has, so my suggestion amounts to junking thesis (L). But as before, I do not understand why Noë is wedded to (L).

Finally, where does falsity of any kind come from? When we make an error about our own perceptual contents, as in thesis (M), is it due to faulty introspection? Then a lot more would have to be said about the nature of introspection and why it, unlike external-world perception, can produce false representations. Or does it not produce false representations? But then where do my false beliefs about my own content come from? And (cf. argument (4), above) why do I directly form false perceptual beliefs whose content does not match the actual content of my perceptual state?

On this point, Noë gives a piquant hint: Rather than assimilating perceiving to representational thought, as the mainstream representational view arguably does, Noë proposes "to assimilate thought and conceptuality to non-representational perceiving.... [T]houghts...are...episodes of *grappling* with the world itself" ("Real Presence," 47). It sounds as though the radical claims I have considered so far are only a prelude to an even more radical view to come.

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Notes

- 1. I shall use this hyphenated notation to acknowledge Noë's view that the whole tomato and the whole cat *are seen* albeit not strictly, optically seen. It is unclear to me whether Noë believes that the back of the tomato and the specifically occluded parts of the cat are themselves seen in that weaker sense.
- 2. They are "within reach," Noë says in a retroduction to his book, (2005), 422.
- 3. Also from Susan Hurley (1998).
- 4. This issue has been emphasized to me by Heather Gert and Dylan Sabo; also, Prinz (2006). Rowlands (2006) points out that an adequate characterization of "sensorimotor activity" had better not presuppose internal representation. Rowlands further argues that without presupposing representation, the enactive view will be unable to accommodate the normativity of perceptual experience. And Block (2005) raises an interesting dilemma as between the mere possession of "sensorimotor knowledge" and its exercise on particular occasions.
- 5. In fact, the very report that Noë quotes from Kohler's experientially blind patient K is couched in expressly representational terms: "Countless times I was fooled by these extreme distortions and taken by surprise when a wall, for instance, suddenly appeared to slant down to the road, when a truck I was following with my eyes started to bend, when the road began to arch like a wave, when houses and trees seemed to topple down, and so forth. I felt as if I were living in a topsy-turvy world of houses crashing down on you, of heaving roads, and of jellylike people" (8).
- 6. Probably the leading defender is Michael Tye, especially (2002), though Dretske (2003) holds the most radical version I know; see also Crane (2003). Lycan (2004) argues against transparency; and see Kind (2003).
- 7. There are indications that Noë means exactly that. "The content of experience, I would argue, is virtual all the way in.... [W]e cannot factor experience into an occurrent and a merely virtual or potential part. Experience is fractal, in this sense. At any level of analysis, it always presents a structured field that extends outward to a periphery, with elements that are out of view. There is always room, within experience, for shifts of attention" (134-35). "Pick any candidate for the [allegedly] occurrent factor. Now consider it. It is structured too; it too has hidden facets or aspects. It is present only in potential" (217). Sometimes the (?) point is put in terms of detail, as in: "all detail is

present in experience not as represented, but rather as accessible" (193; cf. 215), but here it is not clear whether "detail" is supposed to exhaust all content.

Is it possible that there is not ever any actual-seeing? The obvious dispositional analysis of amodal seeing is in terms of actual-seeing. If Noë wants to maintain that there is no actual-seeing, he must either argue that such dispositions are for some reason never manifested, or analyze amodal seeing in terms of a disposition to do some other thing. But the text presents no clear alternative.

- 8. Chris Peacocke's example, (1983), 12.
- 9. When visual, they are "looks" or "visual appearances" (84, 85, 113). In Noë (2005) they are called "aspects" (426). In Noë (forthcoming), a subsequent further retroduction to the book, they are called "appearance properties."
- 10. More extensively, see Noë (2005).
- 11. See, e.g., Clark and Chalmers (1998), Rowlands (1999), and Wilson (2004).
- 12. Dreyfus (1972/1992); Brooks (1991); O'Regan (1992).
- 13. Interestingly, Rowlands (2006) takes the opposite line on the book, saying that Noë's hostility to internal representation is "more apparent than real" (2).
- 14. "[T]he difference between seeing a yellow wall and experiencing a white wall as yellow (in the absence of the lighting conditions or whatever that would explain the yellow appearance) is comparable to the difference between...moving your hand along a surface, in a way that is guided by the contours of the surface, and moving your hand in the same way without the surface's guidance. This comparison points to what a perception and a corresponding hallucinatory experience would have in common: the exercise of the same bodily, sensorimotor skills" (31).
- 15. "The calling into play of these skills and expectations does not explain how one can be in a state of the same kind as that of genuinely perceiving when one is not; it is not meant to do that. What it is meant to explain is the occurrence of a distinct kind of state of consciousness—hallucinatory consciousness—which is such that we can be unable to tell it apart from the genuinely perceptual state. In hallucination, precisely, it seems to us as if we are in contact with situations and things, when we are not" (37).