

THE ENACTIVE APPROACH AND PERCEPTUAL SENSE

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Perceptual life is in constant flux. In normal vision, for example, we continually redirect our gaze within the object. We investigate its various views and visually explore its details. As we do so, we retain in our experience past views, and these together with the present view condition our sense of what to expect in the object as our experience continues to unfold. So, as we move from the rear of a white house along its side toward the front of the house, we implicitly and, as it were, automatically expect the front to be white, and we are surprised if it is not.

Perception, moreover, is an extraordinarily rich phenomenon. I do not perceive only the sensible properties of the house. I see a building whose paint is peeling in some areas and which needs repainting, a building which is susceptible to storm damage, which is designed to provide shelter and comfort, which, as my childhood home, has sentimental value, and which, as an investment, has financial value. Perception is tied into all the ways in which we can experience an object. And all these ways involve the apprehension of features that are not themselves directly sensible but that contribute to the significance the object has for us. We apprehend, for example, the causal *significance* of the object having a particular property or the functional and practical *significance* of the object having a particular set of properties or the axiological *significance* of an object having particular non-axiological properties. While our perceptual experience is tied to our judgments, valuations, interests, desires, and choices and cannot be reduced to merely sensible experience, it is nevertheless important to note at the same time that

these rich perceptions and more complicated experiences necessarily involve sensible appearances. While perception can involve much more than sensibly appearing and much more than a sensory significance, it always involves at least that. We, at the least, perceptually apprehend the object in its sensible appearances, appearances that make up part of the significance the object has for us.

This brief description points to four interconnected areas on which we might reflect in order better to understand perception: sensory appearances; the role of bodily activity in generating sensory appearances, perceptual sense, and perceptual presence. This paper shall consider each of these in turn. My approach will be phenomenological, relying especially on Husserl's famous 1907 course on the perception of material things ([1907] 1973b; 1997), but I shall also consider some recent work in psychology and the philosophy of mind that takes into account the role of the body in perception, especially Alva Noë's *Action in Perception* (2004).¹

1. *Sensory appearances.*

Perception—it is by now a commonplace to say it—involves the apprehension in a flow of varying appearances of a spatially individuated object having a multiplicity of sensible and other properties. In the perception of the house, what we perceive is the house, but what we directly *sense* is a side or aspect of the thing, e.g., the front of the house whose external walls are white. Considered objectively, the appearance is the *appearing* of the object to a subject. The momentary appearance of the object from a certain side or under a certain aspect is referred to the object itself, which object transcends any single appearance (or any set of appearances). “Appearance” in this sense refers to those sides, aspects, moments, and qualities of the object

that momentarily manifest themselves in a perceptual phase (Husserl [1907] 1973b, 49, 145; 1997, 42, 121–22). On the other hand, “appearance” for Husserl also denotes the presenting of the side of the front of the house in perception. The appearance, in this subjective sense, is referred not to the object but to the perceiving act that presents the object from a certain side or under a certain aspect (Husserl [1907] 1973b, 49, 145; 1997, 42, 121–22). The appearance, therefore, in Husserl’s thought, is something both subjective, the complex of presenting contents contained in any perceptual phase by virtue of which the perception apprehends the sensible appearance of the object, and something objective, the particular manner in which the object shows itself. Husserl explicitly accepts this ambiguity, saying, “The meaning of the word “phenomenon” is twofold because of the essential correlation between *appearing* and *that which appears*. ‘Φαινόμενον’ proper means ‘that which appears’ and yet it is predominantly used for the appearing itself, the subjective phenomenon...” (Husserl 1973a, 14; 1999, 69).

How does Husserl come to this view of appearances? The cases that are of special interest for our present purposes are those in which an *unchanging* object is presented in *differing* appearances and those in which *different* objects are presented by an *identical* sensory appearance. The first kind of case involves the variation of sensory appearances in changes, say, of illumination.² For example, the white wall of the house darkens as a cloud passes before the sun and brightens again when the cloud no longer blocks the sun. The second kind of case arises, for example, when we mistake a wax figure for a human and then discover our mistake. The merely sensible appearance does not change but our sense of the object does.³

Husserl claims that there must be features of the perceptual experience that account for these cases, and he distinguishes the perceptual apprehension itself from its sensation-contents or, as

he also calls them, presenting contents (Husserl [1907b] 1973, 45–46; 1997, 39). In the first example, then, the perceptual apprehension and its objective correlate—the house whose exterior wall is white—remain constant while the apparent color of the wall varies as a consequence of differences in illumination. Since there is no real change in the object, Husserl claims that the apparent change in color is due to a change in the sensory contents inherent to the perceptual experience. Even while noting the apparent change, we continue to see the house as uniformly white. We are at once perceptually aware of both the apparent or phenomenal properties of the object—I shall call them A-properties—and its real properties, although we are not thematically focused on the A-properties. Our attention, as it were, goes right through the variation in A-properties in grasping the house as having a constant color.

We can schematize this intentional structure. Where “*P*” stands for the perceptual apprehension, “*C*” for the sensation-contents, and “*O*” for the object, and where the subscripts “*WW*,” “*w*,” “*g*,” “*A-w*,” and “*A-g*” stand, respectively, for white wall, white sensation-contents, gray sensation-contents, apparent white, and apparent gray, then for the appearance of the white wall as white, we have $P_{WW}C_w \rightarrow O_{WW \text{ as } A-w}$, and for the appearance of the white wall as grayish after the sun disappears behind the cloud, we have $P_{WW}C_g \rightarrow O_{WW \text{ as } A-g}$. On the other hand, in the wax figure/human example, and where “*H*” stands for human and “*F*” for wax figure, it is the perceptual apprehension that changes—from seeing a wax figure to seeing a person—while the purely sensory content of the experience remains constant. By virtue of the change in perceptual apprehension, the seen object also varies. In this case the difference of structure in the intending perceptions can be represented as follows: $P_F C_x \rightarrow O_F$ and $P_H C_x \rightarrow O_H$.

On this model of perception, the sensation-contents are “animated” by the perceptual apprehension, thereby bringing an object with both its A-properties and real properties to presentation. The perceptual object is encountered as an object having particular sensory qualities only by virtue of the presence in the perceptual act of a complex of sensation-contents whose function is to present the merely sensible appearance of the object. This apprehension/contents-of-apprehension schema underlies the distinction, on the side of the perception’s intentional content, between the “object which is intended” and the “object as it is intended”—to use the words of the *Logical Investigations* (Husserl [1900–1901] 1984, 400; 1970b, 578). The basic distinction is one between the intended object as an identical, presumptively existent whole and its appearances, i.e., the partial, perspectival, and relative views of it given in individual perceptual phases. The object as presently seen from a certain side, therefore, is the object’s appearance. And the object is seen in a certain way, according to Husserl, precisely because it is presented through particular sensation-contents that inhere in the perceptual act.

I have argued elsewhere against this notion of presenting contents,⁴ and I shall merely summarize that argument here. Husserl gives a number of examples of the kind of variations that produce such changes in appearance: (1) the object, as in our example, changes its appearance in changing illumination (Husserl [1913] 1976, 230; 1983, 296; 1952, 41–42, 48, 59; 1989, 45, 51, 64); (2) the object changes its appearance when the perceptual medium changes, for example, from air to water (Husserl [1900–1901] 1984, 419; 1970, 591; 1952, 60; 1989, 65); (3) the object changes its appearance when real changes of the perceptual organ interrupt its normal functioning as a perceptual organ (Husserl 1952, 68; 1989, 73); and (4) the object changes its appearance

when changes of the perceiver's psychic state occur, e.g., when the percipient changes from a cheerful to a melancholic state (Husserl 1952, 75; 1989, 79).

What is to be noted in all these cases is that there is no sufficient reason to say that sensation-contents inherent to the perceiving act have been isolated and varied in these examples. Indeed, to say so violates Husserl's own methodological prescription regarding what he calls eidetic variation. Eidetic variation involves the attempt to think away a part of an object. If we cannot think it away without changing the nature of what we are investigating, then we have isolated an essential moment. In the present cases, Husserl does not vary sensation-contents (as if they could be discovered phenomenologically in reflecting on our perceiving experiences). He claims instead that sensation-contents vary as a result of the variation of these other factors. However, to assert that sensation-contents vary as a function or effect of these changes is merely to express a presupposition.

In the first two cases, it is the perceptual medium that is varied. In other words, certain "objective" or "environmental" conditions, i.e., conditions which are extra-subjective although necessarily involved in the perceiving experience, are varied. This variation, in turn, occasions a change not in the object itself but in the *appearance* of the object. Furthermore, Husserl explicitly compares the apparent effects of changes in the perceptual medium to the apparent effects of changes in the perceptual organ (Husserl 1952, 61; 1989, 66). Near-sightedness, far-sightedness, color blindness, tone-deafness, burnt fingers, and the like occasion changes in the appearance of the object, although there is no real change in the object itself. Real change in the perceptual organ, in other words, also occasions *apparent* changes in the object. And although Husserl does not make any explicit connection between the first two cases and the fourth or

between the third and the fourth, it is clear that he feels that any kind of change in the “total psycho-physical subject” is capable of occasioning apparent changes in the object, precisely because the appearing world and its perceived objects are correlated with the subject and with the conditions under which the subject’s perception occurs (Husserl 1952, 75; 1989, 79).

The only basis for concluding that it is sensation-contents that vary is to think that all the features of perception must be accounted for in terms of what is really inherent in the act. That is the position of Husserl’s first analyses of intentionality in the fifth investigation of the first edition of the *Logical Investigations* where he still conceives his project as a descriptive psychology. But in the transition to phenomenology, and, in particular, in the introduction of the phenomenological reduction, which *leads* our attention *back* to the experience in which an object is presented (whether or not that object exists), Husserl includes the intended object just as intended within the scope of a properly phenomenological reflection. This opens the door to appealing both to the more fundamental notion of appearance as the *object’s* appearing and to considering as contributing to the perceptual appearance all those aspects of the world that affect the perceiving relation, including the worldly subject and, given the natural belief inherent to perception, the presumptively worldly object as well as all the relations into which each enters.

What are properly isolated in Husserl’s variations, therefore, are not sensation-contents, but medial and subjective conditions of perception, variations of which occasion changes in the appearance of the object. Husserl calls the sphere of relationships between appearances and such medial or subjective conditions the “sphere of psycho-physical ‘causality,’ or, better, ‘conditionality’” (Husserl 1952, 64; 1989, 69). Husserl’s use of the category of causality is, in other words, essentially equivocal. There is, first of all, the category of real causality that applies

to causes that bring about real changes in an object as their effects, whether these be changes of position, shape, quality, or the like. The second is the category of psycho-physical “causality” that applies to those conditions that bring about changes only in the *appearances* of an object as their “effects,” e.g., changes in apparent size, apparent shape, apparent color, and the like.

Psycho-physical conditions, therefore, affect only the sensible appearance of the perceived object to the perceiver. Changes in this appearance are conditioned by changes in the system of psycho-physical conditions, that is, by changes in the perceptual medium or changes in the physical or psychic state of the perceiver.

If the variations claimed to isolate sensuous contents presenting an appearance of the object do not, in fact, do so, and if, on the other hand, they do isolate a system of psycho-physical conditions, then the claim available to Husserl is that the system of perceptual conditions is in general a necessary constituent of the perceptual correlation. We can, therefore, unambiguously understand the sensible appearance as the object’s appearing to a perceiver under the present set of psycho-physical conditions, and any change merely in the sensory appearance of the object is a change in the conditions under which the object is perceived.

There are, however, certain conditions that establish themselves as “normal,” such as seeing in daylight (Husserl 1952, 59; 1989, 64). The “falsity” or non-veridicality of an appearance, its misleading character, is the result of variance from these normal conditions (Husserl 1952, 61; 1989, 66). Such anomalous appearances are overcome by the establishment of a harmonious perceptual experience that “corrects” the anomalous appearance. Such corrections can occur within the same continuous perceptual appearance or they can occur on the basis of other perceptions by the same sense. If, however, the organ is permanently damaged or some other

permanent anomaly exists, the correction can occur on the basis of perceptions by other senses or at the level of intersubjective encounter (Husserl 1952, 67ff.; 1989, 71ff.). The psycho-physical system of conditions itself has no presenting function although it conditions the appearance.

2. *Bodily activity.*

Our perceptual experiences are extended in time, comprising several phases in which we, for example, scan our eyes over the object or approach the object for a better view, or cup our ear while turning our head to the source of a voice. Even in the shortest of visual perceptions, for example, and even when there seems to be no activity on our part, there are saccadic and microsaccadic movements of the eye. As Noë (2004, 13), citing the research of several psychologists,⁵ points out, the retinal receptors lose their receptive power without continuous movements of the eye, and images stabilized on the retina fade from view. The saccadic motion, in brief, is necessary for the maintenance of the visual appearance. In the more extended perception of the house with its white external walls appearing differently as clouds occlude the sun, what attracts our attention is that we experience a constant color in the variations of appearance, but this is possible, as is true in the case of saccadic movements, only to the extent that within the single perceptual experience we can account both for the multiplicity of phases and for their unity. Such an account would involve, among other things, Husserl's theory of time-consciousness and his account of association, although I shall not develop those here. I turn instead to his account of kinaesthetic sensations, an account that, along with the notion of direct perception and environmental conditions developed in the previous section, relates directly to the contemporary enactive approach.

Husserl claimed that “visual contents alone do not in general suffice to serve as apprehensional contents for visual spatiality and for materiality” (Husserl [1907] 1973b, 159; 1997, 135, translation modified), and the same is true, he said, for “tactile contents and tactile spaces.” In addition to visual and tactile sensations, Husserl says, we must also consider the *motivating* role of kinaesthetic sensations—and, more fundamentally, the bodily activities of which they are the awareness—in generating the manifold of appearances characteristic of perception. Nearly a century later, Noë echoes this claim: “To see is not just to have visual sensations, it is to have visual sensations that are integrated, in the right sort of way, with bodily skills” (Noë 2004, 4). I do not mean to suggest that there is a historical connection between Noë’s views and early phenomenological views, although Noë is certainly aware of the relevant thought of Husserl and Merleau-Ponty.⁶ Rather, I am interested in the philosophical connections between the two positions.

The perceptual experience, for Husserl, includes not only the now discredited presenting contents but also kinaesthetic sensations, sensations of movement, although Husserl uses the term broadly enough to include all proprioceptive awareness. For Husserl, these two kinds of sensation are not essentially related. That is, they do not belong together by virtue of a generic or specific similarity. Rather, they are functionally related, and the functional relation is one of motivation. Changes in the flow of kinaesthetic sensations are said to motivate changes in the presenting sensations and, therefore, in the sensible appearance of the object.

Once again, however, we have reason to question this formulation. As the last quotation indicates, it is “through” the bodily movements that we get to the kinaesthetic sensations; the bodily movements are more fundamental. Moreover, once we abandon the view that all the

features of perception must be accounted for in terms of really inherent contents, we no longer need to postulate a motivational connection between two different kinds of sensations.

Instead, we should understand the K-systems, i.e., the system of possible movements of any particular sense-organ, and actualized K-processes as belonging to the domain of psycho-physical conditions. We should not, in other words, think that K-sensations motivate appearances in the sense of a new complex of presenting sensations; instead, it is the bodily movements themselves of which the K-sensations are the awareness that motivate new appearances of the object to the bodily and motile perceiver. So, while psycho-physical conditions, including K-systems and K-processes, are in general a necessary constituent of the perceptual correlation, there is no essential connection—no generic or specific unity—between any definitely determined set of conditions and a *single*, definitely determined appearance.

The connection between any definite set of psycho-physical conditions and a definite appearance is functionally determined only within the context of a particular perception. For example, there is no necessary connection between the presence of blue lights in a room and the appearance of a blue table. The table could, in fact, be blue and appear so in daylight as well, or a blue ostrich might just as conceivably appear in a room illuminated by blue lights. The only thing necessitated by the presence of blue lighting is that whatever visual appearance occurs will be conditioned by this lighting and that such conditioning will occur within the limits of a set of possible conditioned effects. For example, illumination with blue lights will not condition the apparent shape or apparent texture of the table. No definitely determined appearance must occur; only *a* conditioned appearance, but one of many possible ones, must occur. However, given some definitely determined correlation between a set of conditions and a definite appearance, if

one of the relevant conditions were to change in a significant way, certain apparent modifications of the object would necessarily and functionally result within the limits set by the range of effects that can occur when that condition is varied.

Similarly, the motivational connection is not rigidly between a determined K-situation and a determined appearance as if K_1 were always and everywhere associated with A_1 (Husserl [1907] 1973b, 177; 1997, 149). This indicates that any definite K-situation or K-process is always and only contingently connected with a determined appearance or manifold of appearances in a temporally extended perceiving act. The connection is necessary only between the kinaesthetic system in general and the entirety of the possible appearances of the object (Husserl [1907] 1973b, 180; 1997, 151). The K-situation of the eyes K_1^e does not once and always refer to the appearance A_1 . Given different bodily positions or a movement of the head or a different object, K_1^e might be associated with A_2 or A_3 . However, within any given concrete perceptual situation, as the perceiver actualizes a K-process, a *determined* manifold of appearances is generated. Thus, the K-process $K_1 \rightarrow K_2 \rightarrow K_3 \rightarrow K_4 \rightarrow K_5 \rightarrow K_n$ generates the connected manifold of appearances $A_1 \rightarrow A_2 \rightarrow A_3 \rightarrow A_4 \rightarrow A_5 \rightarrow A_n$.⁷

3. *Perceptual sense.*

The modifications of Husserl's position that I have recommended here bring the phenomenology of perception into a close alignment with certain features of Noë's enactive approach. The basic similarity can be noted in Noë's claims that (1) "we ought to reject the idea—widespread in both philosophy and science—that perception is a process *in the brain* whereby the perceptual system constructs an *internal representation* of the world" (Noë 2004, 2) and that (2) "perceptual

experience acquires content thanks to our possession of bodily skills. *What we perceive* is determined by *what we do* (or what we know how to do); it is determined by what we are ready to do....[W]e *enact* our perceptual experience; we act it out. To be a perceiver is to understand, implicitly, the effects of movement on sensory stimulation” (Noë 2004, 1; see also 66). Like Husserl, Noë is not interested in denying that sensory processes occur. One of the psychophysical conditions affecting perceptual appearances is the health of the sense organ, and this ought to be understood broadly enough to include those neurophysiological processes that are involved in the operation of any sense organ. But this does not entail that the sensory effects of those processes in the brain produce as their effect something called “presenting contents” or, in Noë’s case, an internal representation that acts something like a picture (Noë 2004, 45). Noë denies neither sensory stimulation nor the fact of internal representations (Noë 2004, 22–23). He does deny that internal representations are sufficient for perception just as Husserl denied that presenting contents are sufficient for perception and just as I deny that a sensory appearance without reference to bodily movement is sufficient for perception.

It is important to note that perception is possible without *actual* bodily movement. What Noë claims, and this is consistent with the phenomenological position, is that a certain kind of *skill* is necessary, a certain know-how that he calls sensorimotor knowledge (Noë 2004, 2; see also 10–11). Noë is clear that this knowledge is practical and not propositional in character (Noë 2004, 33, 66). Husserl’s phenomenology can, I believe, help us fill in some of the details of the nature of this practical knowledge.

Husserl’s theory of what he calls “habitualities” (Husserl 1963, 100–101; 1970a, 66–67) involves the claim that every new experience presenting an object with a new sense, especially

when that experience is evidential in character, produces in the subject an abiding conviction.

When, for example, I judge that *S* is *p* and the momentary judging act recedes into the past, the judgmental content remains active for me in a way that can inform subsequent experiences; after witnessing a stone breaking a window and judging that the thrown stone caused the window to break, I perceive stones as having the property “capable of breaking a window.” The conviction achieved in the judgment becomes, as it were, a “property” of the subject. The accumulation of such convictions or “properties” produces in me a certain “style” of understanding the world.

What I suggest here is that this notion of a “style” of experiencing is the kind of knowledge that is involved in the implicit practical understanding of the relation between bodily movement and changes in perceptual appearances, the kind of knowledge that Noë calls “sensorimotor knowledge.”

The analogy between Husserl’s habitualities and Noë’s sensorimotor knowledge is not perfect. Husserl has theoretical, emotional, and volitional habitualities in mind, and they all manifest a more advanced kind of knowledge than sensorimotor knowledge involves. Nevertheless, in the course of perceiving an object, we are aware not only of the object; we are pre-reflectively aware of both our perceiving and of the correlation between our movement and changes in perceptual appearances, which is, as we have seen previously, an essential component of the perceiving (cf. Drummond 2006). As our experiences become more numerous, we are pre-reflectively aware of certain patterns in this correlation of movement and appearance. And precisely to the extent that our perceptual sense of objects and of the objective world are confirmed and become habitualities, the pre-reflective awareness of this correlation becomes part of our habitual style of experiencing the world.

While this pre-reflective awareness and practical knowledge is not propositional, it is impossible in reflection to describe it without recourse to counterfactual propositions. So, having a perceptual style means that I am pre-reflectively and, as it were, “inductively” aware that “if I were to move my eyes to the left, parts of the right side of the visual field would disappear from view and new elements would enter the visual field on the left while the remaining contents in the field would move uniformly to the right,” or “if I were to move my eyes to the left, the object I was viewing would move toward the right side of the visual field.” Other examples include, “if I were to raise my head, objects at the bottom of the visual field would disappear and new objects would enter the visual field from above,” and “if I were to approach the object of my interest, objects in the visual field would increase in size and occlude one another in ways that could be reversed by retreating from the object.” The necessity to use counterfactuals in the reflective description does not negate the non-propositional character of the practical knowledge or habitual style that is at work when we are actually perceiving; it merely marks the divide between experience and reflection.

Insofar as our bodily activities are part of the set of psycho-physical conditions affecting perceptual appearances, they, like other psycho-physical conditions, have normal occurrences; there are “normal” *K*-situations and *K*-processes proper to perception. Our perceptions are governed by practical interests, and we seek a perceptual appearance that is “maximal” or “optimal” relative to those interests (Husserl [1907] 1973b, 125–29; 1997, 104–7). An optimal appearance depends upon the achievement of normal *K*-processes and the attainment of appropriate *K*-situations. In particular, an optimal visual appearance requires that the object be (1) susceptible to perceptual scrutiny by the perceiver, (2) given at the center of the visual field,

and (3) presented at a suitable distance from the perceiver. To be realized all three conditions involve bodily movements of the eyes, head, and whole body or (at least) the pre-reflective awareness of the significance of such movements for the perceptual appearance.

Insofar as perception apprehends individual objects in objective space, rather than simply a two-dimensional visual field, two kinds of *K*-activities are centrally important. The first is “distancing,” i.e., the movement of the body toward or away from the object of our perceptual focus such that its apparent size expands or contracts as does the apparent size of the other appearances composing the background against which the focused object is presented (Husserl [1907] 1973b, 206; 1997, 175). The *K*-activity of distancing is ordered toward achieving the correct distance from an object in order to attain an optimal appearance. Distancing might, therefore, involve moving either toward or away from an object that is too close to be well focused or too distant to be scrutinized with sufficient detail. As I approach or retreat from the focused object, however, the rate of expansion for different appearances within the field will be non-uniform. The various appearances in the field will invariably expand at different rates, for the perceiver’s approach toward one particular object placed in the center of the visual field and the differentiation between its central orientation and the orientations of other appearances motivate the expansion of the central appearance at a rate greater than that of those other appearances. This is true even when objects of the same apparent size and shape are at the same distance from the perceiver. So, for example, if a semicircle of trees of similar size and shape (as on a tree farm) fills the visual field of a perceiver standing at what would be the center of the full circle and if the perceiver then approaches one of the trees, it will expand at a rate greater than the other trees in the field.

The phenomenon of non-uniform expansion is even more pronounced when the objects whose appearances are in question are not at the same original distance from the perceiver (although the fact of different distances is not itself recognized until we undertake the *K*-activity of distancing; it is merely the case that objects will have different apparent sizes). The non-uniformity of the expansion results in the phenomenon of concealment or disclosure (Husserl [1907] 1973b, 235; 1997, 199). This concealment occurs because as we approach the object its appearance so expands that it occludes part of the same or another appearance that is also in the visual field, i.e., one set of apparent qualities encroaches upon another set, the latter disappearing (at least in part) from the field. The reverse process of the disclosure of apparent qualities occurs as we retreat from the object.

The expansions and contractions of appearances and the concealments and revelations of apparent qualities make possible the transformation of our awareness of the visual field into an awareness of three-dimensional, objective space (Husserl [1907] 1973b, 236–38; 1997, 200–201). The phenomenon of expansion indicates the object's fixed position in a third dimension (i.e., after the two dimensions belonging to the visual field), namely, that dimension in which the perceiver approaches the object. Likewise, together the phenomena of non-uniform expansion and concealment or disclosure indicate the different distances of different objects from the perceiver.

The uncovering of this third dimension is not its addition to the two-dimensional field. Rather, it is the disclosure of depth, first of all, between the perceiver and the objects in the field, and secondarily, between near and distant objects in space. The appearance in the visual field always has an absolute depth with respect to the permanently positioned perceiver. Distancing

reveals that the relationship of depth is *relative* to the position of the perceiver, thereby introducing the relationships of “nearer to” and “farther than.” Thus, distancing uncovers a new dimension, one that indicates that the position of the object relative to the perceiver is not reducible to the position of its appearance in the visual field. Thus does *objective* space arise in perception, for the object has its own position in space relative to the perceiver. Furthermore, the fact that I am aware of my locomotive or ambulatory abilities entails an awareness that I who am here can be there where another perceiver viewing the object now is, and that I shall then see the object as he or she now does. The object, therefore, has its own position in space relative to *any* perceiver and this shows as well the intersubjectivity of objective space.

The second especially significant *K*-activity is “orbiting,” i.e., the movement of the body around an object such that there results an apparent turning motion of the object, specifically an axial rotation of its appearance and of the field presenting the thing in space. Distancing is insufficient for a complete sense of objective space, for space includes not only the sense of three-dimensionality, of subject-independence, and of intersubjectivity but also the sense of the space of an object (its volume or enclosedness). The *K*-activity of orbiting motivates a manifold of appearances in which the object manifests an apparent turning motion. This apparent turning motion can occur in arbitrary ways, but we need to consider especially the axial rotation motivated by an orbital movement around the object. Such orbiting motivates in the appearances the replacement of one part of the apparent qualities presenting the object by other (although perhaps similar) apparent qualities presenting the same object. That is, parts of the sensory appearance presenting the object are replaced—but not in the same place—by other, newly uncovered parts of the same concrete appearance. The part of the appearance replaced disappears

from the field because its place is taken by previously neighboring qualities while new qualities enter the field at the other side of the object's appearance (Husserl [1907] 1973b, 251; 1997, 213).

The fact that our movement around the object is orbital entails that the modifications of the appearance will be cyclical (Husserl [1907] 1973b, 249; 1997, 212). During the temporal extent of a perception, the flow of replacements and disclosures proceeds in such a way that there is presented a continuous manifold of two-dimensional appearances wherein the first appearance returns without any reversal in either the *K*-activity or the flow of appearances. The manifold of appearances in orbiting leads cyclically back into itself (Husserl [1907] 1973b, 250; 1997, 212). Since the orbiting can theoretically occur on any axis, it is the case that to each determined line of orbital movement around the object belongs a determined and closed or cyclical manifold of appearances. The actualization of the infinitude of such manifolds would result in the awareness of the complete bodily enclosedness of the object (Husserl [1907] 1973b, 250; 1997, 212–13). Of course, we could never complete in practice this last kind of orbital movements in an infinitude of planes, unless, perhaps, we were walking in outer space or swimming underwater. Nevertheless, we can approximate these orbitings by a combination of movements of the whole body (walking, bending over in various directions, turning at the waist, turning and craning the neck, squatting, and so forth).

The orbiting activity necessarily involves some distancing of background objects and the consequent opening of a three-dimensional space. The orbiting thus encloses objects and their individual spaces while leaving intact the larger space in which these object with their individualized spaces take their place. Hence, the awareness of the spatially enclosed object and

that of an infinite, three-dimensional space are not separate. We are aware that the object takes its place in this larger space. Indeed, the awareness of the bodily enclosedness of the object entails the simultaneous awareness of the “empty” space between objects (Husserl [1907] 1973b, 257, 261; 1997, 219–20, 223), for we become aware of the object’s “outside” in becoming aware of its enclosing an “inside.” The mixture of the ambulatory activities of distancing and orbiting accounts, therefore, for the presentation of singular, spatially individualized, three-dimensional objects with their own shape, volume, and fixed position in space and, at the same time, the awareness of the full sense of an infinite, three-dimensional, objective space as the form that orders objects in terms of relative position and distance.

The manifold of appearances generated by our bodily activity must manifest certain phenomenal features in order for all the appearances in the manifold to be referred to the same object. There must, first of all, be an agreement of sense among the various appearances. The appearances must be similar with respect to their qualitative determinations, at least to the extent that there is a homogeneity, even if not a homospecificity, of content from one appearance to the next. Mere agreement of sense is insufficient, however, for the different appearances could be related to different objects. What is needed is, as we have seen, certain patterns of phenomenal continuity in the flow of appearances as motivated by particular bodily activities. When this condition is met, especially in the case of orbiting and distancing, we disclose an object as a spatial individual having certain sensible properties.

4. *Perceptual presence.*

Noë identifies the problem of perceptual presence as a problem about “how it is we can enjoy perceptual experience of unattended features of a scene” (Noë 2004, 59). He responds to this problem by pointing to a central feature of perception, namely, that it is a kind of virtual awareness characterized by the fact that it always involves presence in absence. The unattended features, aspects, and sides of a perceived object are “present *as absent*” (Noë 2004, 61). While I do not *sense* every part of the house, it is nevertheless the house that I see; in seeing the house and not merely its sensed side, the unperceived sides of the house are perceptually present to me.

What this requires, according to Noë (2004, 63), is that we have access to the unsensed sides of the house. Perceptual presence is a matter of accessibility, and the ground of the accessibility of the object is our possession of sensorimotor skills. Noë states the position clearly as follows:

In general, our sense of the perceptual presence of the detailed world does not consist in our representation of all the detail in consciousness now. Rather, it consists in our access now to all the detail, and to our knowledge that we have this access. This knowledge takes the form of our comfortable mastery of the rules of sensorimotor dependence that mediate our relation to the cat [behind the fence] and the bottle. My sense of the presence of the whole cat behind the fence consists precisely in my knowledge, my implicit understanding, that by a movement of the eye or the head or the body, I can bring bits of the cat into view that are now hidden (2004, 63–64).

This account is fine as far as it goes. The problem, however, is that we do not merely have the whole cat perceptually present; we have it present as an identical object given in a manifold of

appearances. The reference to the multiplicity of appearances motivated by our sensorimotor knowledge is too general to account for the sense and presence of the object as an individuated object, a spatial identity having its own position in space and having particular sensible features. The phenomenological description of the bodily activities must be richer and more closely coordinated with an account of the phenomenal results of the movement in order to provide an account of how the identical material thing is presented in perception.

Where Noë sees one analytic pair at work, namely, presence/absence, I see two analytic principles: presence/absence and identity/difference. These are not the same principle even though they interpenetrate one another. We can note the difference in the case of color constancy. Noë claims (2004, 128) that “the phenomenon of color constancy is a striking example of the phenomenon ‘presence in absence.’” We experience a uniformly colored wall, he says, even though differences in illumination and shadow cause the wall to vary in brightness across its surface. Noë’s claim is that we experience the presence of a uniform color that we do not see, and he thinks this uniform color is present to us in the same way as the house’s rear or the parts of the cat blocked from view by the fence (Noë 2004, 128).

But this seems to me clearly wrong. In seeing the wall I experience constancy in variation or identity in difference, not presence in absence. Perceiving sameness in variation within the actually sensed visual field is not the same as perceiving a present object with unsensed sides or failing to see occluded detail. It is simply false, I think, to say that the wall’s color is present as hidden or as occluded or as lacking detail. By hypothesis, I am aware of the apparent variations in color. But I also *see* a constant color. The wall’s color is there, right *in* its different appearances. The actual color of the wall is present, not absent, in its appearances. The sense

of the perception is that the wall's color is identically the same despite the variations in appearance. The perceiver sees the wall as uniformly white even as it appears grayish in part of the visual field by virtue of the shadow cast by the lamp shade and brilliantly white in another part by virtue of the direct illumination from the light bulb. A competent perceiver recognizes the identity of the color just insofar as she is aware of the apparent effects created by medial conditions (e.g., lighting), imperfections in the sense organ, the causal context in which she encounters the perceived object in its relations to other nearby objects, her interests and attitudes, and so forth, just insofar, in other words, as she is aware of the apparent effects of psycho-physical conditions. It is not that the color of the wall is hidden or absent from what is visible; in seeing the identical color, that color is seen as relativized to the physical, physiological, medial, and psychological conditions under which it is experienced.

The situation is similar in seeing a circular plate that appears elliptical when viewed from my seat at the dinner table. The circularity is not absent; I see the circularity of the plate in the apparent ellipse. Here, however, what makes the difference is the reference to the bodily activity to be undertaken in order to see the plate optimally. To determine perceptually the shape of a plane surface, the perceiver ought to be at an appropriate distance from the object in order to see its surface clearly and completely, and she ought to be looking at it such that a line from her eyes to somewhere near the center of the surface would be perpendicular to the surface. Hence, in seeing the plate as circular in its elliptical appearance, there is an implicit reference to the body's ability to stand and bend over the plate or to pick up the plate and turn it so that it is the vertical plane. Either movement allows the perceiver to see the plate optimally, i.e., from a position perpendicular to the plane of the plate, a position from which its circularity would be manifest.

Because Noë believes presence as absence is fundamental to perception, he thinks that perceptual presence is “virtual *all the way in*” (Noë 2004, 216). Understanding perceptual presence solely in terms of presence/absence leads Noë to think of the object as the whole of its detail, a whole that is never attainable but is nevertheless accessible. But this points toward a kind of phenomenological phenomenalism that misrepresents our perceptual experience. There is a difference between having the identical object that presents itself in manifold ways and having the whole manifold of presentations. I have the object itself—actually, not virtually—in any one appearance of it or any set of appearances.

In our ordinary discourse, we speak of the transcendence of the perceptual object as its being “external” to the act, “outside” of the perceiver and independent of any subject and any apparent modification. Phenomenologically interpreted, that transcendence of the perceived is revealed in the identity-in-manifolds analysis that recognizes that we perceive more than we see, that the object is minimally seen as a spatially identical (i.e., enclosed) object in any single appearance along with the (unseen) appearances intimated by our sensorimotor knowledge. The overlapping character of the appearances is such that we can identify the *same* spatially enclosed object in a multiplicity of such appearances without implying either that there is some phenomenal similarity between *all* the appearances or that the object exists separated from its appearances.

The perceived object, then, is neither radically independent of its appearances nor reducible to any one of its appearances nor reducible to the organized sum of them. If the first alternative were true, no perceptual knowledge of the *object* itself would be possible. If the second alternative were true, then every single appearance of the thing would be not only a *direct* but an *immediate* presentation of the *whole* object. If the third alternative were true (as it appears to be

for Noë), the perceptual appearance would be nothing but a “part” of the thing (rather than a part or phase of its presentation). It would be impossible, for Noë, for the perception to grasp the thing actually without grasping all accessible appearances, so perceptual presence is only virtual. This, I think, falsifies the manner of perceptual presence wherein the object is actually present to me as an identity of appearances or, if you prefer, an identity in presence and absence. It is one and the same thing that is actually present in certain respects and absent in others.

NOTES

1. For present purposes, we note especially Bridgeman, Gemmer, Forsman, and Huemer 2000; Bridgeman, Kirch, and Sperling 1981; Bridgeman, Lewis, Heit, and Nagle 1979; Bridgeman, Van der Heijden, and Velichkovsky 1994; Clark 1999; Gallagher 2003; Gibson 1979; Hurley 1998, 2001; Hurley and Noë 2003; Noë 2001a, 2001b, 2002a, 2002b, 2002c, 2002d, 2003, 2005; Noë and O’Regan 2000, 2002; Noë and Thompson 2004a, 2004b; O’Regan and Noë 2001a, 2001b, 2001c; Thompson 2007; and Varela, Thompson, and Rosch 1991.
2. Husserl cites examples such as these in Husserl [1900–1901] 1984, 419; 1970b, 591, and Husserl 1952, 41; 1989, 44.
3. Husserl’s own example is that of the difference between a human and a mannequin; see Husserl [1907] 1973b, 45; 1997, 39; and 1972, 99–100; 1973c, 92.
4. I have presented this argument in greater detail in Drummond 1979–80 and Drummond 1990.
5. Cf. Ditchburn and Ginsborg 1952, Riggs *et al.* 1953, Krauskopf 1963, and Yarbus, 1967.
6. Noë cites Husserl 1997 and Merleau-Ponty [1945] 1962; 1964; [1948] 1973.
7. I have discussed Husserl’s account of the role of bodily movements in our perceptual awareness in Drummond 1979–80 and Drummond 1983.

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