Noë states the main idea of this book early and with admirable clarity: perceiving is a way of acting, something that we do rather than something that is done to us. This is not an original claim, as the epigraphs from Goethe and Merleau-Ponty show, but it remains a controversial one; and it is the controversy that justifies another philosophical exploration. Noë's theory of perception has much in common with Merleau-Ponty's phenomenological approach, particularly in its attention to embodiment. But there is a subtle shift from embodiment to enactment, and the difference makes a difference. It moves Noë closer to J. J. Gibson and Goethe than to Merleau-Ponty; and his attention to the interplay among these theorists, as well as his critical assessment of their work, is an important contribution. Another too often overlooked theorist of vision, George Berkeley, also has a role to play here. One effect of all these influences is to shift the emphasis in perceptual theory from vision to touch.

Specifically, Noë maintains that perception is touch-like, and that visual perception is misunderstood when it is understood via a photographic model. In the end, he says that visual perception is more like painting than photography, and I will return to this. For now, what is most important is the shift from the photograph, which encourages an emphasis on representation and modeling, toward an action that is not necessarily representational. To perceive, he says, you must be in possession of sensorimotor skills. In this regard, it is surprising that Noë doesn't cite Piaget, whose cognitive theory, especially as articulated at the end of his life, was entirely focused on construction (enactment) of cognitive structures that begins in sensorimotor activity. The omission is not a fatal one, but the connection could be fruitfully explored, especially where Noë criticizes computational approaches.

In Noë's estimation, perceptual theory made a wrong turn when it conceived of thinking as something that happened inside the head. Perception is not a process confined to a brain that acts like a computer. It is an enactment of a relationship that defies sharp demarcations of "internal" and "external." Noë cites Ballard's observation that there is no need to construct an internal model when what would presumably be modeled is right there (24). Rather than thinking in terms of an internal model (like a snapshot) constructed for reference, Noë proposes that we think of a process in which reference is made continuously to a continuously changing world of which the perceiver is a part (again, strikingly reminiscent of Piaget's equilibration of cognitive structures).

Historically, Noë maintains, Descartes abandoned the idea that the retinal image functions as a picture (45), and that is an important move, not always taken into account by theorists since. The critical point,
which should be obvious but isn't, is that "perceptual experience is directed to the world, not to the brain" (72). Noë is intrigued by the transparency of perceptual experience (what Grice described as its "diaphanous" character), partly because this transparency makes it singularly problematic for theorists to turn our attention to it. When we "look" at it, we look through it--which, in general, is exactly how it is supposed to work. The glass becomes the focus of our attention only when there is something wrong with it--or when we make a conscious decision to attend to it.

Noë speaks of virtual presence, the difference between what is on his desktop and what is "virtually" there because of its virtually instant accessibility. It is interesting that, to the extent that he is speaking of a computer "desktop," nothing is present "on" it except pixels activated or deactivated in patterns that we perceive as icons in a graphical user interface. (All that is "really" present is hardware that responds in more or less predictable ways to electronic impulses.) And the interface is with "information" stored digitally in patterns determined by units that are either on or off. For most of us, though, the patterns--whether on "local" media or "remote" servers--are of little interest (and should, in fact, be so transparent as to be invisible). What is of interest is the world--or some part of it to which we direct our attention with the aid of our tools. In this regard, the analogy works reasonably well. The world's presence to us (and our presence in the world) is mediated by layers of (ideally) transparent processes that are not, strictly speaking, representational. We might say that all presence is virtual--and the challenge for theorists of perception (and designers of graphical user interfaces) is to understand the transparent processes that make presence possible.

This returns us to the photographic model of visual perception. One could argue that visual experience presents the scene in exactly the way that a photograph does. A photograph has nothing in common with what it represents, but it causes us--makes it possible for us--to see what it represents. The difference between a photograph of a mountain and a mountain is analogous to the difference between a visual field and what we see. Or perhaps we should say that the visual experience presents the scene in the way a photographer does in the act of photography. And this supports Noë's shift toward enactment. A photograph is part of a complex process that includes the photographer, the camera, the scene present to both, the developing process (digital or chemical), the presentation of what is developed, and the perceiver--all to make the "scene" present. (On this count, I think of Donna Haraway's discussion of "seeing" the moons of Jupiter in Simians, Cyborgs, and Women: The Reinvention of Nature.) This is the rationale for Noë's comparison of visual perception to painting. But I think it also highlights the extent to which the problem is not the photographic model in visual perception but the limitation of the model to the product without attention to the process.

Noë's shift from vision to touch is an attempt to move our understanding from "all at once" to "an activity of skillful exploration" (164). Seeing, like touching, is always from here, though our experience of it may not make this apparent. Here, Noë is sympathetic to J. J. Gibson's concept of the "ambient optic array," which insists that what we "see" is how things look from here in these conditions. Perception is local, but it is also enacted. It is a matter of "the skills needed to make one's way" (135).

Noë's discussion of painting is one of the most interesting aspects of his work. He speaks of "catching experience in the act of making the world available" (176). What pictures do, he says, is "construct partial environments" (178). This is true, I would say, whether we are talking about painting or photography. "What a picture and the depicted scene have in common is that they prompt us to draw on a common class of sensorimotor skills" (178). It is not that we use those skills to view the picture or envision the scene it depicts but that we must have the skills in order to envision the scene.
Noë describes picture making as a way to illuminate experience (179): "the world as a domain of facts is given to us thanks to the fact that we inhabit the world as a domain of activity." Abstract knowledge does not simply supersede concrete; and it is properly "higher" only to the extent that it is necessarily constructed on a foundation of activity. That activity forms judgments that are the condition, Noë says, for concepts: "concepts can enter into an experience not so much because they are judged, by the possessor of the concept, to apply, but because their possession is a condition on the having of that experience" (187).

Noë's grasp of the history of perceptual theory and current controversies that dominate it are impressive, and the clarity with which he presents them makes the book a useful introduction for students as well as scholars in search of a good road map. His argument for an enactive theory of perception is articulate, and one of the things that makes it most persuasive is the care with which he considers criticisms and counter arguments. In that respect, the book is a model of how to conduct an argument--clearly articulating a position, advocating it as forcefully as possible, and listening to criticisms and alternatives along the way, modifying the argument as appropriate.

Noë's conclusion, well-supported, is an important one, a guide to research as well as philosophical speculation: "an account of consciousness as a natural phenomenon will be a tale, not about the brain, but about our active lives" (231).

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