

# UC Irvine

## 2016 Conference Proceedings

### Title

John Locke's Hands: The Tools of Embodiment in *An Essay Concerning Human Understanding*

### Permalink

<https://escholarship.org/uc/item/2xq2r74j>

### Author

Wirkus, Jessie Leatham

### Publication Date

2018-01-08

Peer reviewed



**John Locke's Hands: The Tools of Embodiment in *An Essay Concerning Human Understanding***

Proceedings of A Body of Knowledge - Embodied Cognition and the Arts conference  
CTSA UCI 8-10 Dec 2016

**Jessie Leatham Wirkus**

My subject today is John Locke's 1689 *Essay Concerning Human Understanding* in which Locke famously repudiates the doctrine of innate knowledge, arguing that all knowledge comes from experience. In Locke's system, all ideas enter the mind through two types of experience: first, sensation channelled through the body's senses, and second, reflection upon mental operations. The ideas generated by sensation and reflection are stored up in the mind which Locke variously figures as a cabinet, a camera obscura, a room, etc. These stored ideas serve as the building blocks of knowledge and can be associated and compounded in myriad ways. This fairly standard summary of Locke's theory of the acquisition of knowledge demonstrates how Locke's theory of knowledge hangs somewhat uncomfortably between the embodied and the mental; or, put another way, for Locke, gaining knowledge is an intrinsically embodied act, while the knowledge or ideas that are gained belong to the mental realm. Knowledge is gained by being in the world, touching, seeing, tasting, interacting. At the same time, knowledge is a mental artifact: ideas are stored in a mind like a cabinet, carefully filed for future recall, and fundamentally separate from the objects that elicited them. For many, probably most proponents of embodied cognition who read Locke, the tension between embodied learning and mental knowledge is hardly a tension at all. Locke is a representationalist; he is routinely mentioned amongst those in the tradition of representationalist thought which "runs from Augustine through Descartes to today's computational cognitive scientists" (Chemero 43). Daniel Hutto and Erik Myin mention Locke specifically in *Radicalizing Enactivism*, writing that the idea that cognition necessarily involves content (a hallmark of representationalist thought) "has dominated mainstream philosophical and scientific thinking, in one way or another, since the days of Descartes, Hobbes, and Locke" (xviii). In my presentation today, I won't be able to

wholly extract Locke from that tradition, but I will question the totalizing view we have of his philosophy holding to a representational theory of mind. I'll do that by looking at Locke's writing on solidity, where Locke argues we learn what solidity is through our daily handling of objects. This section allows us to carefully consider the relationship Locke presents (and does not present) between hands and mind, experience and idea, the embodied and the abstract.

Hutto and Myin—one example among many—look back and see a tradition of representational thought they want to break with; part of my argument today is that that tradition may not be as totalizing as they and others present it, particularly in the long eighteenth century (1660-1800), my home area of study. To understand how Locke is not a merely a representationalist, I'd like to turn for a moment to a Jonathan Kramnick, a literary scholar with whom I share a goal to recover alternative cognitive models available in the long eighteenth century (1660-1800). However, I'm arguing against Kramnick too because he also places Locke solidly within the representationalist tradition, sandwiched between Thomas Hobbes (1588-1679) and David Hume (1711-1776). Hume summarizes the popular representationalist ideas of his day when he writes in the 1739 *A Treatise on Human Nature*, “'tis universally allow'd by philosophers, and besides is pretty obvious of itself that nothing is really ever present with the mind but its perceptions or impressions and ideas, and that external objects become known to us only by those perceptions they occasion” (qtd. in Kramnick 316). Hobbes and Locke contribute to this “universal” notion, Kramnick argues, as they both “oscilat[e] between worldly engagement and perceptual seclusion” (316). Against this main stream, Kramnick makes a case for what he calls dissident and counter-current anti-representational perceptual theories which he finds in the writing of poets John Dyer and James Thomson, philosopher Thomas Reid,

and novelist Laurence Sterne. Though Locke's influence on that list of writers and their perceptual theories is a question for another day, Locke's broad influence on philosophy and literature of the eighteenth century is one reason why I believe Locke deserves a more nuanced accounting.

It is easy to see why Locke is placed in the representational camp; he's placed there because he's always talking about those very mental, very representational things—*ideas*. We're all familiar, I think, with what an isolated mental realm of cognition fueled by representations looks like, but I want to start with a section of the *Essay* where Locke insists on mentally separate ideas so we can see what that representational thought looks like in Locke and, more importantly, so we can see that the disconnect that emerges between experience and idea that contributes to a sense of the idea's shortcomings in explaining the nature of knowledge, specifically that knowledge isn't always abstracted into a mentally secluded, abstract idea. One place Locke makes explicit the divide between idea and experience is where he describes simple ideas that come through particular senses:

Though the Qualities that affect our Senses, are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet 'tis plain, the *Ideas* they produce in the Mind, enter by the Senses simple and unmixed. For though the Sight and Touch often take in from the same Object, at the same time, different *Ideas*; as a man sees at once Motion and Colour; the Hand feels Softness and Warmth in the same piece of Wax: Yet the simple *Ideas* thus united in the same Subject, are as perfectly distinct, as those that come in by different Senses. (2.2.1)

On the one hand, the disconnect between experience and idea has served to reinforce the isolation of Locke's mental realm; on the other hand, the disconnect between the ideas an object engenders and our more holistic experience of the object goes to show how Locke's ideas fall short of describing the *experience* of an object, or what it is like to get to know a piece of wax. This passage puts the experience of an object—an instantaneous and blended experience of qualities—at odds with the ideas that the object engenders in the mind. However, there are places in the essay where Locke is hard-pressed to separate the idea from the experience. We'll turn to one of these moments shortly. These are the places where I think we can see Locke ease away from representational thought and maybe even anticipate certain principles of embodied cognition.

Before we turn back to the *Essay*, I'm going to start my discussion of what we could call Locke's embodied cognition by teasing out some of the kinship between Locke's thought and Alva Noë's *Out of our Heads: Why You are Not Your Brain, and Other Lessons from the Biology of Consciousness*. As Noë's title suggests, Noë argues that consciousness does not happen in the brain, nor is consciousness simply a function of neural activity. Noë's interest in breaking our accounts of consciousness free from the brain echo arguments Locke makes about the limited amount of information knowledge of the body's structures brings. In a 1668 essay, "Anatomia," Locke lays out the limits of anatomical knowledge, forcefully arguing that structures do not reveal causes, providing, instead, only surface knowledge. In doing so, Locke breaks with a long tradition of reading bodily structures (the hand is a popular point of focus within these traditions) as metonymic evidence for deeper causes—from the movement of the soul to the genius of the body's designer. When Noë argues that consciousness is not reducible to the brain, he, like

Locke, looks beyond the structures and systems of biology to focus instead on embodied experience. For Noë consciousness can't be explained in terms of anatomy or physiology. As Noë puts it, "You can no more explain mind in terms of the cell than you can explain dance in terms of the muscle" (48). Instead, Noë writes, "Consciousness isn't something that happens inside of us: it is something that we do, actively, in our dynamic interaction with the world around us" (24). Because of Locke's commitment to worldly engagement, Locke aligns well with these basic claims of embodied cognition: consciousness is akin to action within an environment, an enmeshing of mind, body, and world. All of these things contribute to a human understanding which cannot be understood as purely mental.

I'll turn now to Locke's section on solidity, the first section devoted to a single, simple idea. Locke cannot elaborate on all simple ideas, so this first section both explains solidity and serves as a kind of model for how sensuous experience furnishes us with particular simple ideas. Within this model, we'll see Locke describe solidity in two ways. In some places we'll see a fair deal of "idea" language, language that directs us back to a mental representations, including invitations to imagine abstract, almost mathematical situations. In other places, Locke will direct his reader directly to her body, and her experiences in her body. Though Locke often begins discussions of solidity with idea language, those discussions almost always end with an appeal to a knowledge that seems to reside in the body itself or in embodied experience. Towards the beginning of Locke's section on solidity he comments on solidity's omnipresence: "There is no Idea," Locke writes, "which we receive more constantly from Sensation, than Solidity" (2.4.1). We feel solidity almost constantly because we are embodied. We feel it because we have "body"—body broadly defined, meaning substance and extension—in a world filled with other

bodies. Furthermore, we understand body and solidity because we are embodied in specific ways, particularly with a sense of touch. Locke emphasizes the mode of our sensuous experience via our embodiment when he defines solidity in this way: “The Idea of Solidity we receive by our Touch; and it arises from the resistance which we find in Body, to the entrance of any other Body into the Place it possesses, till it has left it” (2.4.1). Or in other words, no two things with body can inhabit the same place at once. Though this description is especially definitional, relying on the concept of “Body” in its most general, abstract sense, Locke also points out that we humans experience solidity constantly through our sense of touch by virtue of the fact that our bodies press *against* things rather than pass into or through them. Solidity is the model for how our experience is shaped by the way we are in the world as solidity “seems the Idea most intimately connected with, and essential to Body, so as no where else to be found or imagin’d, but only in matter” (2.4.1).

As Locke continues to explain solidity, he emphasizes that we experience it because we have a body *in an environment*. It is as we navigate that environment that we feel and understand solidity. Locke writes, “Whether we move, or rest, in what Posture soever we are, we always feel something under us, that supports us, and hinders our farther sinking downwards” (2.4.1). Notice here that we switch from imagining solidity (as we do in the quote in the previous paragraph—solidity is “no where else to be found or imagin’d, but only in matter” (2.4.1)) to feeling it. We also experience solidity as we pursue goal-directed actions as simple as picking something up: Locke writes, “and the Bodies which we daily handle, make us perceive, that whilst they remain between them, they do by an insurmountable Force, hinder the approach of the parts of our Hands that press them” (2.4.1). To know solidity is to move one’s body, to handle objects daily—



the perception is in the action and “in the bodies we daily handle” (2.4.1). In the quotes I have presented thus far, Locke’s description of solidity moves from more abstract explanations (such as “the resistance which we find in Body, to the entrance of any other Body into the Place it possesses, till it has left it” (2.4.1)) to examples of the body in contact with other bodies, to a specific body in contact with a specific thing. Towards the end of the section Locke writes, “If any *one* asks me, What this Solidity is, I send *him* to his Senses to inform him: Let him put a Flint, or a Foot-ball between his Hands; and then endeavour to join them, and he will know” (2.4.6, my emphasis). Notice that there isn’t really any representational language here; Locke isn’t encouraging the man to think about holding a flint or remember the last time he did so. To hold a football or a flint in your hand is to know solidity. The knowledge of solidity might as well be in the hand, in the experience of holding, as in the mind.

These passages highlighting embodied experience point toward a specific aspect of that embodiment—our hands. In addition to holding a football or a flint between the hands to understand solidity, Locke’s explanation of solidity repeatedly circles back to the objects we handle. This verb, “to handle,” occurs repeatedly in the section, drawing us back to our experiences with objects, again, often at the end of more abstract descriptions of solidity. One such abstract, almost geometrical, description of bodies’ filling of space evokes “solid substances,” “bodies,” lines straight and parallel, but then concludes by circling back to the idea that we learn about body by experiencing the body of the objects we handle: “The *Idea* of it the Bodies, which we ordinarily handle, sufficiently furnish us with” (2.4.2). Reading Locke from a representational perspective, we might say that the sensory experience gained from handling objects gives the mind the ideas used to construct the abstract definition of solidity, and that such

ideas allow the mind to prime the hand to interact with solid bodies. However, Locke never really makes the second half of that claim—that ideas or the mind teach the hand how to interact with objects. On the topic of manual actions requiring cognitive processing and fine motor skills, Daniel Hutto argues that

with only rare exceptions, . . . [do] humans normally learn how to use their hands . . . by means of explicit, representationally mediated instruction, the rules for which only later becoming submerged and tacit. . . Far more plausible is the hypothesis that we become ‘handy’ through a prolonged history of interactive encounters—through practice and habit. An individual’s manual know-how and skills are best explained entirely by appeal to a history of previous engagements and not by the acquisition of some set of internally stored mental rules and representations. (233)

I think that Locke would agree. The whole point of Locke’s football example is that one need not be instructed in solidity via “explicit, representationally mediated” descriptions, just as one need not be explicitly instructed about how to hold an object. Our hands, know how to handle objects and they know it by doing, by picking the football up.

From an enactivist viewpoint, the mind and hand form a “functional unit” (Gallagher 212); when Locke sends us to our hands to be informed we see a similar kind of functional unit. Gallagher writes, “On the enactive view, the brain is not composed of computational machinery locked away inside the head, representing the external world to provide knowledge upon which we can act. Rather, in action—whether reaching and grasping, pointing, or gesturing—the brain

partners with the hand and forms a functional unit that properly engages with the agent's environment" (212). This functional unit according to Gallagher functions holistically, not top-down (brain to hand) or bottom-up (hand to brain). If anything, Locke's descriptions of the ways we understand solidity almost seem to be hand to brain, certainly Locke's descriptions of gaining knowledge of solidity do not draw on already internalized rules, they draw instead on action in the world. As much as Locke at times encourages visions of "computational machinery locked away inside the head," he also formulates the relationship between sensation and idea so as to muddle the distance between them. When asked which occurs first, sensation or idea, Locke argues that they are coeval. We see the mind and hand as a functional unit most forcefully when Locke poses the following question late in the *Essay*: "My right hand writes, whilst my left hand is still: What causes rest in one, and motion in the other?" (4.10.19). Here, where Locke brings his own writing hand to the forefront, he meshes the manual and intellectual work of composing the *Essay*. Locke's question about his writing and resting hands does more than present the hand as a locus for thinking through the nature of the will and action; it reminds us that the hand, as it rests and writes is a participant in that thinking.

Locke concludes the section on solidity by commenting on how we learn simple ideas more generally: "the simple Ideas," Locke writes, "are such, as experience teaches them us" (2.4.6). If, Locke argues, one doesn't think the above suggestion to hold a football in one's hand a sufficient explanation of solidity, he writes, "I promise to tell him, what [solidity] is and wherein it consists, when he tells me what thinking is, or wherein it consists; or explains to me, what Extension or Motion is, which, perhaps, seems much easier" (2.4.6). Such a thing is a fool's errand, Locke writes, because "if beyond [experiencing simple ideas] we endeavour, by Words,

to make them clearer in the Mind, we shall succeed no better, than if we went about to clear up the Darkness of a blind Man's mind, by talking; and to discourse into him the Ideas of Light and Colours" (2.4.6). That, of course, is impossible (a point Locke will make later via Mollyneux's problem). Knowledge of solidity is knowledge found in the body, in action, in experience — something akin to know-how. Manipulating things in your hands, moving your body are experiences that meld or bridge the embodied and the mental.

When Locke is read as merely a representationalist, the idea and its mental isolation emphasized over experience and its joining of mind and body, we misread him. We also misrepresent several centuries of thought as a wasteland of representational cognition. Projecting such a shadow as Locke does over eighteenth century literature (perhaps especially criticism of eighteenth-century literature—my home areas of study), I am invested in if not wholly revising, adding some nuance to our view of Locke's sense of perception and cognition and his legacy in literary forms like the novel. Growing interest in eighteenth century theories of perception presented not only in philosophy but also in literature suggests that this is a rich and more contested period than we may have previously thought, an understanding of which may enrich our own enactivist theories.

## Works Cited

- Chemero, Anthony. *Radical Embodied Cognitive Science*. MIT, 2009.
- Gallagher, Shaun. "The Enactive Hand." *The Hand, An Organ of the Mind*, edited by Zdravko Radman, MIT, 2013, pp. 209-25.
- Hutto, Daniel D. "Radically Enactive Cognition in Our Grasp." *The Hand, An Organ of the Mind*, edited by Zdravko Radman, MIT, 2013, pp. 227-52.
- Hutto, Daniel D. and Erik Myin. *Radicalizing Enactivism: Basic Minds without Content*. MIT, 2012.
- Kramnick, Jonathan. "An Aesthetics and Ecology of Presence." *European Romantic Review*, vol. 26, no. 3, 2015, pp. 315-27.
- Locke, John. *An Essay concerning Human Understanding*. 1690. Edited by Peter Nidditch, Oxford, 1975.
- Noë, Alva. *Out of our Heads: Why You are Not Your Brain, and Other Lessons from the Biology of Consciousness*. Hill and Wang, 2009.