

Fernando Vidal: *Performing Brains on Screen*, Amsterdam: Amsterdam University Press, 2022, 258 pp., € 116.99 eBook, €117.00 hardcover.

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Brains, Ectobrain, and the Construction of a Subgenre

Performing Brains on Screen charts the ways in which popular culture, especially the cinema, reflects our beliefs about personal identity and science. Its particular focus is on the thesis that personal identity is reducible to the brain. Strangely, even though this thesis is the cornerstone of so many stories, it is often undermined by their *dénouement*.

Ch. 1 opens by distinguishing between two types of film about the brain: (1) brainfilms, in which a brain makes a visual appearance and so is one of the characters in its own right, and (2) brain-and-memory films, in which a person's identity is inextricably tied to their memories, but those memories are explicitly tied to the physical brain (such that a memory transfer becomes the functional equivalent of a brainfilm's brain transplant; 14-15). This is a useful way of dividing up the corpus, and lends itself to some memorable further distinctions—e.g. between severed heads, ectobrain (typically brains-in-vats), and transplants.

This chapter is particularly concerned to critique the 'deficit model' of science communication, according to which entertainment should aim to educate scientifically illiterate popular audiences and thus requires works which accurately reflect current scientific thinking. Vidal argues that we should not fall into the trap of thinking of films in these terms; their aims are primarily ludic and economic. They may reflect the popular understanding of brain science or cultural anxieties about personal identity, but we should approach them on their own terms, not as educational resources.

Ch. 2 convincingly shows that the pulps of the 1920s and 1930s (called "scientifiction" at the time) established the conventions governing subsequent brainfilm narratives, from the mad scientist to the evil, throbbing ectobrain, as well as plots centred around the themes of personal identity and continuity. It features exhaustive and exhausting summaries of the plots of some 60 of these pulps—including, most memorably, the story of a human brain transplanted into an *Elasmosaurus*. Nonetheless, this detailed historical focus marks this chapter as the book's most valuable, especially for philosophers interested in the mechanics of genre formation, since it condenses the vast primary and secondary literature on the origins of science fiction. I, for one, have often wondered about the strange intermingling of paranormal and scientific phenomena in the science fiction of the sixties and seventies, and Ch. 2's extensive literature review goes a long way towards supplying an answer. In short, the genre's early authors and audiences were enamoured with the human intellect's power to change the world; and since, as the saying goes, any sufficiently advanced technology is indistinguishable from magic, they gleefully opted for a liberal blend of magical causality and scientific idiom, interspersed with ads for work in the nascent telecommunications industry.

Ch. 3 focuses on American B-movies from the 1950s to the 1970s, which prominently feature the brains in vats familiar from philosophical thought-experiments. While it may be tempting to think that these films were influenced by the outlandish thought-experiments of philosophers, Vidal shows that the chronology (unsurprisingly) suggests the reverse. Indeed, all of the basic ectobrain plots and

motifs can be found in the scientifiction pulp literature, whereas Vidal traces analytic philosophy's brain thought-experiments back to Sydney Shoemaker's *Self-Knowledge and Self-Identity* (1963). Vidal quite rightly observes that although the ectobrain of mid-century cinema are often described as 'disembodied', they are nothing of the sort—they are, in fact, "repulsively enfleshed" (88). They may live outside the head, but they nevertheless remain material objects which are depicted as the locus of personhood. Brains, he argues, are unique in this respect: while some films have focused on the heart, eyes, or face as the key to personal identity, there are comparatively fewer films about these other organs.

Ch. 4 tackles the recurring motif of brain transplantation as the key to personal survival. An impressive number of brainfilms and stories suggest transplantation as a means of achieving immortality by shedding an increasingly senescent body for one filled with youthful vigour. Here, Vidal picks up on a fascinating tension. On the one hand, brainfilms are committed to the materialist thesis that a person just is their brain; on the other hand, they seem to entirely ignore the fact that brain matter must decay over time along with the rest of the body. The result is that brains are imbued with the erstwhile powers of the Christian soul: they mature over time but do not deteriorate, and can possess new bodies (130, 138, 150). This (presumably) unintended dualism helps to explain the prevalence, in so many of the transplantation pulps and films canvassed in Chs. 2 and 3, of power struggles between transplanted brain and donor body—between old human brain and new human body (allografts), human or animal brain and body (xenografts), or between duelling brains in a single body (semigrafts).

Ch. 5 explores the lengthy history of Frankenstein films, tracing their conversion into brainfilms. Mary Shelley's novel, of course, is about the creation of life and the effects of cruelty and abuse, and offers no details about the methods used by Dr. Frankenstein to create his creature. Universal's 1931 film transmogrified the original into the story of a mad scientist stitching together body parts and a criminal brain, resulting in a violent monster. Despite their transplantation subplots, Vidal argues that Frankenstein films, unlike the early scientifiction pulps, do not typically engage with science, technology, and society. They owe their brain subplot to commercial factors rather than to the loftier artistic and critical aims sometimes ascribed to brainfilms. Still, they are notable for popularizing the idea that the addition of a brain is the "final touch" that gives life to otherwise inanimate matter.

Ch. 6 concerns memory-films, especially those which explicitly represent memory as a brain process (so: largely from the 1980s on). Here, Vidal argues, is another point where cinema parts ways with scientific accuracy. Most films adopt a Lockean view of memory, such that it forms the core of one's personal identity. It comes as no surprise, then, that cinema has been overwhelmingly concerned with exploring the consequences of retrograde amnesia on people's sense of self—even though retrograde amnesia is exceedingly rare and closely associated with brain trauma, and even though the science of memory does not seem to bear out the Lockean thesis. At the same time, brainy memory-films tend to identify particular memories with particular locations in the brain, rather than in more dynamic neural connections—and yet their resolution typically requires lost or 'erased' memories to resurface from the unknown depths. Filmic memories, then, are discretely physically located but never destroyed.

Finally, Ch. 7 recapitulates the book's main observation, namely, that film is inextricably committed to reinforcing the view of the self as fundamentally embodied—even as so many films profess to locate the self in the brain alone, or in memory (which amounts to the same).

On the whole, *Performing Brains on Screen* spends much more time summarizing the plots of some 213 films and 60 Sci-Fi pulp stories than it does arguing for a substantive thesis. There is some value to doing so. On the research front, a catalogue of pioneering works in a genre and their inter-relations, such as that offered in Ch. 2, offers an important empirical anchor for philosophical work

on genre. On the teaching front, it can be useful to have a comprehensive guide to hundreds of cultural touchstones, and to have a sense of how they are all inter-related as well as of their relative scientific or philosophical accuracy.

That said, the book makes for an awkward teaching supplement. First, its cost undermines its value as a reference catalogue of resources for courses in film and philosophy or the philosophy of mind. Second, Vidal ultimately makes a strong (but largely implicit) case that educators and academics should be more cautious about our use of film as an illustrative resource. The problem Vidal identifies with the deficit model of science education is that it ascribes inappropriate aims to popular culture, and thus judges these works by inappropriate standards. Although cinema happily cloaks itself in the trappings of science and Big Questions, its production is largely driven by ludic goals and financial incentives. To the extent that it explores or reflects deep-seated social anxieties, then, it does so because that puts bums in seats. The fact that films so frequently seem to unwittingly undermine their own materialist commitments in the last act shows that film is not much of a remedy for an audience's scientific or philosophical 'deficits'. And while there is classroom value in highlighting these tensions, Vidal's hundreds of plot summaries also make it clear that most films about the brain are structurally and thematically so similar as to be more or less philosophically interchangeable: *Return of the Ape Man* (1944) and *Total Recall* (1990) do about as good—and as bad—a job of exploring the philosophy of mind as *Get Out* (2017) and *Eternal Sunshine of the Spotless Mind* (2004). Some, however, may be more fun than others.