

HOW LUDWIG BECAME A HOMUNCULUS

Jonathan Harrison

Jonathan Harrison teases our minds with two short stories . . .

The story so far.¹

Dr. Smythson, an eminent but unscrupulous neurologist, finds a highly intelligent brain (the owner of which he christens 'Alfred Ludwig Gilbert Robinson', or 'Ludwig' for short) in a dead and mutilated body. He decides to keep Ludwig's brain alive in a case – not a vat, as in an apocryphal but more successful version of this story invented by Hilary Putnam. While his brain is there, Dr. Smythson contrives, by means of an endocephalic electro-hallucinator, to give Ludwig a totally consistent hallucinatory experience that is so systematic that it is indistinguishable from reality. He supplemented this by producing in Ludwig illusions of his actually making any movement he tries to make in response to the hallucinations the electro-hallucinator induces. Later he uses Ludwig to replace the brain in the splendid body of Marcus, a famous but rather stupid athlete.

The story now continues . . .

How Ludwig became a homunculus

The reader will not be surprised to hear that what now appeared to be Marcus did not live for long in his happily married state. Despite the excellence of his wife and the beauty of his children, Marcus could not overcome a hankering for the more varied and interesting life that Dr. (now Professor) Smythson had provided for him while he was in his case. In a desperate attempt to make enough prize money to enable him to recapture something of his former happiness, Marcus took anabolic steroids before an

important race, and was suspended from competitive athletics for the rest of his life. Shame, frustration and boredom made him take to drink, and he died in a car accident while driving under its influence. Instead of driving the car, he drove its steering column through his chest.

Professor Smythson was able to rescue Ludwig, whose brain was only temporarily damaged by the alcohol, and not at all by the accident, which had destroyed only his heart and lungs. Smythson put the brain of the person who we shall again call Ludwig, back in his case, as he thought that he might be able to use it in a further experiment.

Ludwig himself, both when he was embodied as Marcus, and when he was in his case, naturally enough took the immediate objects of his experience to be the front surfaces of material things, things which, when they were what he seemed to see when he was in his case, were in fact totally non-existent. But Smythson thought he knew better than Ludwig. Though he was to change his view later, he then thought that what Ludwig supposed were the front surfaces of things were in fact modifications to a region in Ludwig's brain that, though it did not look like a television screen, would, had it been linked to eyes, have enabled Ludwig to see things just as if it had been one. (Modifications to its screen were isomorphic with what in a normally embodied person would have been images on this person's retina, but a retina was something that Ludwig did not have.) This view was widely disliked, but Smythson had never been the man to allow a desire for cheap popularity to deflect him from any purpose less worthy than that of satisfying his obsessive craving for knowledge, and disseminating its fruits.

The book in which Smythson published his account of what happened to Ludwig was, despite its great merits, severely criticised, mostly on the ground that, if vision involved seeing images on anything like a television screen, there would have to be a homunculus inside people's heads, sitting on an armchair and watching the screen. Those few physiologists who had actually looked inside the brain believed that there was no such armchair.

Since Smythson thought that his theory did not lead to any such absurd conclusion, he decided to bring about the discomfiture of those who did, not by producing an imaginary counter-example, but by using his unique scientific and technical expertise, which other neurologists envied, but could not emulate, actually to create a person who really did view the world by means of a television screen within the perimeter of his body. For Smythson to accomplish what he expected would be the (alas metaphorical) annihilation of his opponents, he thought the thing to do would be to put Ludwig into a head, find him a pair of eyes, and create a set that would enable him to watch television. As he was not able to find an organic head strong enough to hold even a tiny television receiver, it was necessary for Smythson to create a metal one especially for Ludwig, a relatively simple task for a man of Smythson's knowledge, ability and access to funds, which the importance of his work made him feel justified in misappropriating. Because of Smythson's unrivalled knowledge of engineering, the artificial head he created was not as large as one might have supposed it would have to be in order to hold Ludwig's brain and eyes, as well as a tiny receiver, upon which Ludwig's eyes were firmly to be fixed. Smythson put Ludwig in front of the receiver, with what were now his eyes – ordinary organic ones that Smythson had found for him in a way that I would prefer not to reveal – focused upon its screen. (Ludwig did not need an armchair, since he did not have anything to put in it.)

Smythson next linked Ludwig (or Ludwig's brain, for he had a brain rather than was one) to the artificial body that Smythson now provided for him in such a way that afferent cables transmitted the impulses that would have moved the limbs of an ordinary organic body in fact moved the limbs of the half organic, half artificial object Ludwig now inhabited, and Ludwig was able to control this body's movements just as any other person controlled his organic body. With his deep knowledge of brain physiology, his consummate skill as a surgeon, and his command of the best

technicians in the world, Smythson then set out to overcome the deficiencies of an ordinary television set, two of which I shall mention.

Among other shortcomings, the screen of an ordinary television set is an inset within a background of ordinary veridical experience of things in the vicinity of the person watching it, demarcated by mahogany sides from the reality surrounding it, which enables this person to tell that the images he sees *are* on the surface of a television receiver. It is also impossible, with an ordinary set, for the viewer to control what he sees on it by means of muscles in the front of his head. The first deficiency Smythson overcame by first modifying Ludwig's eyes so that they could see only objects extremely close to them, and then positioning a minute screen so close to his eyes that he could see nothing but the screen. The second deficiency he overcame by providing Ludwig with a set of muscles, that allowed him to focus a camera, which could be situated just in front of Ludwig's screen, on whatever it was in its vicinity that he wanted to see.

It must be said in Smythson's defence against the charge of deceiving Ludwig about what he was in fact seeing that what in Ludwig's case he would have seen if he could have seen the things that surrounded the screen was not a sitting room, which is what one usually sees, but only a conglomeration of brain cells, and seeing these would not have been much use to Ludwig, and might have seriously upset him. (It would certainly have upset me.) And as a result of Smythson's supreme technological expertise, the resemblance between the images that Ludwig saw on his screen and what other people saw with eyes was so great that it might have been more appropriate to say that he saw things with his screen rather than that he saw things on it. (Ludwig himself, of course, did not know that he did not have any eyes.)

Finally, Smythson covered the entity that was now Ludwig with latex foam, cleverly painted so as to be indistinguishable from the original Marcus, whom Smythson had

decided to resurrect. Ludwig, who was not much interested in what went on in his inside, so long as it worked, was easily deceived into thinking that his body had not perished as a result of the accident, and that, like any other person, he still had limbs and a trunk of flesh and blood.

Smythson returned what was again Marcus to what was arguably still his wife who, like the loving woman she was, had never allowed herself to believe that her husband was really dead. But fond though she was of him, she was disappointed by his sexual prowess, and the marriage did not last; Smythson had not found it desirable to supply him with an artificial penis. He had been brought up a Catholic and, still a half-believer, was not sure whether sexual intercourse without the possibility of procreation wasn't wrong. Indeed, he was not sure that, even with an artificial penis, Ludwig would be able to have what would in the case of a normal person be called 'sexual intercourse', rather than be guilty of some abominable perversion.

Smythson was disappointed by the reception given to his account of his experiment. There was so much ephemeral work published that hardly anyone read his report. And Smythson's opponents still argued that, if men and women did not see material objects directly, but saw only images on a screen, they would be shut off from any knowledge of the external world, and ignored the fact that Ludwig got on very well without such imaginary contact. (Smythson wondered why, if his opponents were right, they spent so much time watching their own television sets, although these were much inferior to Ludwig's.) Smythson's critics refused to acknowledge the apparently obvious conclusion that while Ludwig did not see material objects 'directly', whatever 'seeing them directly' might mean, he nevertheless obtained a vast amount of knowledge from images on the surface of the television screen that he was now forced to watch for the whole of his waking life. Indeed, since his television was a great improvement on eyes, he was actually better off than those self-styled realistic philosophers who claimed that they were in direct contact with things as they were.

Ludwig had not, over the years, entirely lost the interest in Philosophy that he had had when living in his case, but his enthusiasm fully returned when he ceased to be subject to the demands of competitive athleticism. Since what he read was no longer confined to the narrow selection of books and articles to which Smythson had been disposed to give him access, he became familiar even with views which his mentor disapproved of. About homunculi, indeed, he occupied the camp directly opposite to that held by Smythson. Though Smythson held that we saw reality by means of physical representations, for he held that what represented reality was on the surface of the retina, or perhaps in the visual centres of the brain. Ludwig himself retained the same opposition to any form of representative theory that he had at the time when his experience when he was in his case was entirely hallucinatory. He held that if people did not see things 'directly', but saw only representations of them, there would have to be a homunculus viewing these representations on something like a television screen in people's heads and nothing, he thought, could be more absurd.

Jonathan Harrison is Emeritus Professor of Philosophy at the University of Nottingham. This piece can also be read on his website, www.jonathanharrison.info

Note

¹ 'A Philosopher's Nightmare or the Ghost not laid', *Aristotelian Society Proceedings*, 1966-7. Reprinted in Arthur J. Minton and Thomas A Shipka (eds.), *Philosophy Paradox and Discovery*, second edition (McGraw Hill Book Company, 1982); in my *A Philosopher's Nightmare and Other Stories*, University of Nottingham Monographs Series. 1986; and in John R. Smythies and John Beloff (eds.), *The Case for Dualism* (Charlottesville University Press, 1989). I am indebted to Keith Bradbury for reading this paper and making many useful comments.