

implicated in creative thinking in the arts and the sciences.

It seems a probable conjecture that the great interest shown by these contemporary psychologists in 'imaging' is at least in part motivated by its apparent links with the broader connotations of "imagination" (19). My argument has been that if a pictorial theory of imagery is to be adhered to then these links must be severed; imagery becomes rather a dull topic, it will not help us to understand imagination or empirical knowledge. The fact that there is reason to believe in the reality of these links, conversely, gives us some reason to think that pictorialism must be false. We must now consider how quasi-pictorialism stands up as it has generally been presented, as a theory of 'imaging' alone. If it does not stand up then perhaps imagery is important after all.

§II.B.3 Are Quasi-Pictorial Theories Incoherent?

The idea that even 'imaging' involves mental pictures or copies of sensory impressions has come in for a great deal of criticism from twentieth century philosophers and psychologists. As we saw in §§I.B.2-3, J.B. Watson, in 1913, went so far as to cast doubt on the reality of the very phenomenon of imagery, and almost everybody, not only those directly adhering to the Behaviorist movement in

psychology, was reluctant to speak of imagery at all for some decades after this. We argued, however, that what really lay at the core of this 'great iconophobia' was not so much a conviction as to the unreality of the imaginal experience, or even necessarily as to its unimportance (iconophobias E and F), rather it was a dissatisfaction with the "picture in the head" type of theory implied by the vernacular term "image" (iconophobias M). The basic Behaviorist objection to speaking of "imagery" arises from a reluctance to imply that such entities as mental pictures might actually exist, and thus it is simply an aspect of a general methodological objection to mental entities in scientific explanation. But it is no longer widely agreed that materialist psychologists are constrained to make such a wholesale repudiation of mental entities as the Behaviorists thought (1). I have argued above that when construed after the fashion of the 'true' pictorial theory, as objects in the consciousness, mental pictures are thus objectionable to materialists. However, the image as postulated by the quasi-pictorial theory is not in consciousness in this sense; rather it is a physiological state of the brain (2*) of which we are conscious in much the same sense as we are conscious of external pictures of things (we do not need to know of its physiological basis to know it as an image of something, any more than we need to know that a photograph is composed of minute grains of silver to know it as a photograph of something).

The locus classicus for anti-pictorialism in modern

English speaking philosophy is surely Ryle's *The Concept of Mind*. Like the Behaviorist psychologists Ryle objects quite generally to the notion of self intimating entities in the mind {3*}, and this is no doubt what primarily inspires his animus against pictorialism. But however relevant this consideration may be to the views of Locke (or Lucretius), we should by now be clear that it has little to do with the imagery theory of Ryle's chief villain, Descartes. Also, in the previous section we saw that, although one of his arguments tells against pictorialism as a theory of imagination it does not directly refute it solely as a theory of 'imaging'. However, in chapter VIII of his book Ryle does provide arguments which are relevant to the quasi-pictorial theory of imagery as such. The most stressed of these arguments is that although it may seem initially plausible to draw an analogy between visualising something and looking at a painting, a picture, a likeness or copy of it (for both are ways of having an experience very like actually seeing it, but when it is not there), this plausibility disappears when we consider imagining in other sense modes, such as feeling, taste or smell {4*}. It would seem most odd to talk of smelling a mental image in the same way that we talk of seeing one, and there is good reason for this:

Ordinary language provides us with no means of saying that I am smelling a 'likeness' (...). So when I say that I 'smell' [i.e. imagine the smell of] the singed hoof, I have no way of paraphrasing my statement into a form of words which says instead 'I smell a copy of a singed hoof'. The language of originals and copies does not apply to smells. {5}

The corollary of this is supposed to be that, if we want a reasonably unified account of imagining, we had better not extend such language beyond its domains of obvious, literal application (i.e. paintings, photographs etc.) in the case of sights either.

Now this argument may do something useful to dispel the entrenched intuitive appeal of pictorialism but it can hardly, I think, stand as a **disproof** of it. I say this because the facts of "ordinary language" to which appeal is made would seem to be entirely contingent ones. Ordinary language has terms for visual likenesses because we have some very ancient technologies (painting, drawing and sculpting) plus a couple of newer ones (photography, television) for **making** visual likenesses. We do not have any developed technology for making likenesses of smells, tastes or feels, and so we have no words for such things. But as Matthews {6} points out in this connection, there is no reason to think that we **could not** have such technologies producing things which are just as much likenesses as in the visual case. Indeed, I doubt if there would be very great practical difficulty today in devising such technologies, for taste and smell at least, if we thought it worthwhile {7*} If we became familiar with technologies like these no doubt we would soon develop familiar language to discuss them, and this could be analogically extended to our imaginative life. This is already begining to happen (as Ryle admits) with the language of the fairly recent technologies of making sound likenesses. People do

sometimes talk of having records playing in their heads, or hearing mental tape recordings, although the metaphorical nature of these expressions is far more noticable than that of "seeing a mental picture". The question is: are they good metaphors? Ryle has not shown that they are bad ones.

There are other attempts by philosophers to show the impossibility or vacuity of pictorial theories of imagery, but I shall not discuss them in any detail here, for they seem to me at best only to go through against the 'true' pictorial theory (8*). I believe, in fact, that there can be no general argument for the impossibility of quasi-pictorial imagery. Whether our imagination does work quasi-pictorially depends on empirical at least as much as conceptual issues. Consider the possibility of someone fitted with a "TV-hood", an apparatus which suspends two miniature TV-screens before someone's eyes, with miniature cameras fitted behind them, so that the view seen is identical to what would have been seen without the apparatus (9*). Given a few refinements (like fixing the eyes' direction and focus and controlling the cameras' direction and focus by the nerves that originally did this for the eyes) it seems fairly clear that such a person could have essentially normal visual experience. Link a video tape recorder into the system and we have a rudimentary model of imaging. It is surely conceivable, albeit highly implausible, that such an apparatus could be instantiated biologically; there really could be eyes and little screens inside our heads, although it so happens

there are not {10*}. Similar set-ups, perhaps all employing the same 'tape recorder', could also be envisaged for the other senses. If our normal memory imagery were like replays of arbitrary bits of past experience (as was claimed to have occurred when Penfield {11} electrically stimulated the temporal lobes of his neuro-surgical patients) then such a system might well explain it.

What should be apparent, however, is that such a "TV-hood" apparatus, whether biological or artificial, would be almost entirely useless. At best the replayed images might provide a very cumbersome supplement to our memory, but they could certainly not account for its major functions (as 'Ideas' are supposed to do by the Empiricists) {12*}. How, for example, if such a 'tape' constituted our memory store, would one find the presently appropriate place on it {13*}? In general such an apparatus would not allow for the ways we can manipulate and use our imagery, either as known through common experience or as known through recent empirical research. It could not easily account, for example, for fantasy and dream images not drawn directly from memory, nor for such laboratory feats as mental scanning {14} or mental rotation {15}. We must now consider in detail some of these functions and properties of imagery, and consider how a sensible quasi-pictorial theory might account for them without losing either its essential nature or its coherence.