

## THE HEADLESS WOMAN ILLUSION AND THE DEFENCE OF MATERIALISM

By D. M. ARMSTRONG

REDUCTIVE materialists have argued that mental images are nothing but brain-processes<sup>1</sup> or that sounds are nothing but vibrations in the air. To this it has been objected that mental images certainly do not *seem* to be brain-processes, and sounds do not *seem* to be vibrations in the air, so that reductive materialism is committed to holding that our ordinary experience of mental images and sounds involves an illusion. This is taken to constitute at least some difficulty for reductive materialism.

The response of the materialists has been a wavering one. Sometimes they have denied that ordinary experience points away from materialism. Ordinary experience, they have claimed, is completely neutral between materialism and anti-materialism. This is the point of J. J. C. Smart's "topic-neutral" accounts of the having of sensations. But sometimes materialists are inclined to admit that our ordinary experience has, as it were, an anti-materialistic bias (*e.g.* Smart at other times). So much the worse, they then conclude, for ordinary experience. Such a course requires some faith in *other* arguments for materialism.

It has occurred to me that the "headless woman" illusion may be a useful model, whose employment will overcome the appearance of strain in the materialist case here, and explain materialist waverings.

To produce this illusion, a woman is placed on a suitably illuminated stage with a dark background and a black cloth is placed over her head. It looks to the spectators as if she has no head. The spectators cannot see the woman's head. But they gain the impression that they can see that the woman has not got a head. (*Cf.* 'I looked inside, and saw that he was not there.') Unsophisticated spectators might conclude that the woman did not in fact have a head.

What the example shows is that, in certain cases, it is very natural for human beings to pass from something that is true: 'I do not perceive that X is Y', to something that may be false: 'I perceive that X is not Y'. We have here one of those unselfconscious and immediate movements of the mind of which Hume spoke, and which he thought to be so important in our mental life.

It can now be suggested by the Materialist that we tend to pass from something that is true:

<sup>1</sup> Actually, modern materialists usually argue that it is the *having* of a mental image that is to be identified with a brain-process. But, for simplicity of exposition, let us omit this relative detail here.

I am not introspectively aware that mental images are brain-processes

to something that is false:

I am introspectively aware that mental images are not brain-processes.

Again, we pass from something that is true:

I do not perceive by hearing that sounds are vibrations in the air  
to something that is false:

I perceive by hearing that sounds are not vibrations in the air.

Does ordinary experience, then, involve the illusion of the truth of anti-materialism? The Materialist can now admit that it does involve such an illusion, but urge that the illusion is no more than the illusion involved in the "headless woman": the taking of an absence of awareness of X to be an awareness of the absence of X.

Perhaps the case of the "headless woman" also indicates one psychological attraction of Operationalism and other doctrines which are reluctant to admit unobserved entities.

*University of Sydney*