tion of a memorial or sensory after-image—an interpretation that is completed some seconds after the exposure of the objects has ceased? Dr. Hylan brings strong evidence in favor of the second theory, that has been held by James, among others.

On the assumption that the perception is a successive counting of the objects retained in what Fechner calls the 'memorial after-image,' we can understand why fewer complex than simple objects can be perceived at a single exposure. It is merely that the recognition time for the complex is longer, as Cattell has shown, and that consequently fewer recognitions can be made in the time that elapses before the image fades. The explanation is made the more convincing by a series of experiments with letters on backgrounds of different shades of gray. It was found that where there was least contrast between background and letters fewest letters could be recognized. The images in this case would, of course, fade most quickly. More ambiguous evidence to the same effect is furnished by the fact that, as a rule, those subjects for whom the memorial after-image was longest could see the greatest number of objects at a single exposure.

The frequently stated fact that, with practice, sensations at first distinct tend to fuse into a single whole was confirmed in this investigation.

If we accept Dr. Hylan's conclusion that in all cases where several distinct objects are apparently seen at once or are seen with a very short exposure there is really a separate successive act of the attention for each object, we are apparently driven back to the Wolffian doctrine that the mind can perceive but one thing at a time. It can not be doubted that the evidence presented makes strongly for this interpretation. It must be added, however, that Dr. Messenger makes an equally strong case for the statement that when the group is small or very familiar there is an immediate association between the perception and the numeral without counting. And this interpretation is also in harmony with the results that Dr. Hylan obtained in a series of recognition reactions to disparate stimuli. In either case we have not simultaneous recognition of many objects, but either successive counting in a memorial after-image, or the recognition of the several elements as a single object with the numeral attached. W. B. PILLSBURY.

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The Refutation of Idealism. G. E. MOORE. Mind, October, 1903, pp. 433-453.

Mr. G. E. Moore is among those who believe that there is too much dogmatic slumbering in the camp of the idealists. The latter are accustomed to assume that their 'spiritual' interpretation of the world is supported cumulatively by many arguments, whereas their whole case rests upon one crucial argument. This argument, which Mr. Moore proposes to refute to the total discomfiture of idealism, is summed up in the proposition, 'esse est percipi.' The refutation of the argument is stated (1) dialectically and (2) analytically. 1. The above proposition is a tautology unless *percipi* adds something to *esse*. The important question, then, is that of the inseparability from *percipi* of x, or that in *esse* which exceeds *percipi*. But there is no self-evidence attaching to such a proposition, nor any ground for it, save in such a psychological interpretation of experience as permits the distinction of x from *percipi* to lapse again.

2. Such is the case with the idealist who deliberately reduces object of experience to content of experience. His contention is briefly as follows: One finds blue, e. g., as a subject of discourse, in one's sensation But it is impossible to differentiate blue from the content of of blue. the sensation of blue. Hence blue as other than the quality or attribute of my sensation of blue has no meaning. The idealist regards the object of awareness as a part of the awareness, since he can not differentiate it therefrom. Mr. Moore contends that this confusion contradicts the meaning of awareness. To be aware is to be aware of something; that is, the awareness and the 'something' are two distinct factors of the situation. Every consciousness, if this term is to mean anything, must be regarded as superadded to its object. It can never, therefore, itself give evidence of its indispensableness to that object. Consciousness is a specific term and can not be regarded as coextensive in its connotation with the term being.

Apart from its prolixity and obscurity this article suffers from a more serious defect. The idealistic fallacy, the author remarks, 'is due to the fact that though philosophers have recognized that *something* distinct is meant by consciousness, they have never yet had a clear conception of *what* that something is.' 'My main object in this paragraph,' he adds, 'has been to try to make the reader *see* it; but I fear I shall have succeeded very ill.' And this estimate of his success is not too modest. The paragraph in question demonstrates that the sensation factor common to sensation of blue and sensation of yellow is separable from these objects, and that it signifies some 'unique relation' in which each stands. And there we are left.

But this deficiency does not invalidate the main contention of the article. It is difficult to see how the refutation of the definition of being in terms of consciousness can be regarded as other than successful. Subjective, though not Platonic, idealism rests upon this principle and can not survive it. There remains the realist's more serious task, the reinterpretation of that category of subjectivity whose ontological use he discredits. RALPH BARTON PERRY.

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Ethics a Science. E. B. McGILVARY. Philosophical Review, November 1903, pp. 629-648.

The writer states the difference between a science and an art; science is knowledge, while art is skill in production. An art is often called a science, and a science is often called an art. This mistake has been made in the case of logic, and it is made when ethics is defined as the art of correct conduct. Morality is the art in which various persons