

the effects of soil, cultivation and manuring, seed rate, variety, time and methods of sowing, and size of grain are considered.

One can but regret that it is not followed by a chapter on quality, in which the effects of these factors on the milling and baking properties of the bread wheats is brought under review. Such a chapter would be peculiarly welcome to both wheat-breeders and millers, even if it did no more than summarise the scattered literature on the subject. It would, moreover, go some way to justify the statement on the wrapper of the book that it is "essential to . . . plant-breeders and millers." Prof. Percival will lay workers on both these subjects under a still greater obligation if such an addition is made when a new edition of this useful volume is called for.

R. H. B.

The Subjectivity of Psychology.

The Psychology of Everyday Life. By Dr. James Drever. Pp. ix+164. (London: Methuen and Co., Ltd., 1921.) 6s. net.

THE present generation is witnessing a sustained and persistent effort to raise psychology to the status of a science. Hitherto it has been a part of philosophy, and it is felt by psychologists that success depends wholly on their being able to detach it. There is something curiously instructive in the fact that the task is avowedly difficult. It is curious because the data of psychology are more immediate than any other data of science, and for that reason alone we should expect them to be the most easily known and the most susceptible to treatment. But the instructive thing is that this very intimacy of our relationship with the data militates against scientific treatment. All the trouble in regard to the matter arises from the fact that the objects of a science of psychology are more difficult to abstract from the subject of experience, more difficult to reify or set up with an independent status of their own, than are the objects of any recognised science, mathematical, physical, or biological.

This is obvious at once if we compare psychology with its nearest neighbour in the hierarchy, physiology. We have no trouble in presenting the functions of anatomical organs, and the processes of secretion, circulation, innervation, and the like, as objective. They are capable of mechanistic interpretation in complete detachment from anything which depends on the experience of the subject, although we are ready to acknowledge that without such experience the apparent purpose of the mechanism would be wanting. But when we try in the same way to present instincts, impulses, emotions, feelings, memory, wishes, trains of reasoning, we seem to be in a peculiar

difficulty, for it is impossible to avoid not merely subjectivity, but a certain vexatious personal and individual subjectivity. Yet there is no obvious reason for this, and the more we reflect the more we are driven to recognise that while we know as matter of fact that it is so, we do not know and are unable to imagine the reason why it should be so.

The difficulty goes back at least to Berkeley. It is quite easy to imagine perfect cubes and circles and other geometrical figures existing entirely independently of the mind which knows them and to found a science on the assumption that they may or do so exist. The same is true in some measure of all the physical and biological sciences. But a wish, a pain, a thought, absolutely refuse to be detached, and will not let us imagine an abstract existence for them independently of the subject. Now Berkeley's contention was that every object of knowledge is in the same case, and therefore the physical sciences have no advantage over psychology. This, however, gives no satisfaction to the modern psychologist, for whatever be the truth of Berkeley's doctrine he knows that physics and biology possess at least a *practical* advantage which is lacking to psychology.

The little manual by Dr. Drever, which is the occasion of this reflection, is an excellent classification and general survey of the nature of the entities with which the modern science of psychology is attempting to deal. What seems to qualify the author for his task is his thorough knowledge of the older and philosophical treatment of the subject, in particular with its treatment in books like Descartes's "Les Passions de l'Âme" and Malebranche's "Recherche de la Vérité." Dr. Drever is in thorough sympathy with the scientific end, and is working towards it, yet with full consciousness and complete understanding of its origin in philosophy.

H. WILDON CARR.

The Study of Earthquakes.

A Manual of Seismology. By Dr. Charles Davison. (Cambridge Geological Series.) Pp. xii + 256. (Cambridge: At the University Press, 1921.) 21s. net.

TIME was when the meaning of seismology was clear and unmistakable; it was the study of earthquakes, and by earthquakes was meant the disturbance which could be felt, and, when severe, caused alarm and damage. It was known that there was a central area where the earthquake was most severe, fringed by zones of decreasing violence, until a region was reached where it was insensible to the unaided senses, though still recognisable by suitable