kitten fails to catch its tail means that the tail goes faster than the cat.

And this brings us back to our starting place. A cardinal number is not merely the name of a correlation process, but it is the name of a closed correlation process applied to elements that are logically possible together. In giving up these two essential connotations the transfinite loses a part of the essence of number and has no claim to the name unless we wish to use the name *cardinal number* for difterent sorts of arrangements of elements, or, in other words, for qualitatively different collections.

If the analysis of this paper is correct, mathematicians have committed the fallacy of converse accident in their generalization of the concept of number, and only the finite numbers are legitimate. Such success as has been attained must, therefore, be explained through the correctness of a limited aspect of the theory of the transfinite, *i. e.*, the study of the relations of ordinal types. The difficulties of the theory, a most marvelous budget of paradoxes, vanish under such limitations. In fact, some such limitation has already been suggested for this very reason, although explanation of it, other than the need of avoiding contradiction, has not been given.⁷ However, the scope of this paper will not permit us to touch upon the paradoxes of the transfinite.

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DISCUSSION

ULTIMATE HYPOTHESES IN PSYCHOLOGY

IN his very interesting discussion of "ultimate hypotheses in psychology," published in this JOURNAL August 13, Professor Tawney seems to me to overstate the divergence of my view from his. His teaching (in an earlier paper,¹ which, however, he here cites with approval) that self-awareness is a constituent of all consciousness is, I think, the essence of my contention that the self is basal fact of all consciousness (and not merely of consciousness at its higher levels). In the paper just published in this JOURNAL Dr. Tawney makes this "vague self-awareness . . . identical with the immediate experience of value." I question the expediency of the identification, but this may be a difference of terminology only.

In comment upon Dr. Tawney's criticisms of my conception, I have two points to urge. In the first place, I wish that he would

⁷Cf. B. Russell, Proceedings of the London Mathematical Society, Series 2, Vol. IV., Part 1, pp. 29-53.

"" Feeling and Self-awareness," Psychological Review, Vol. IX., pp. 570 ff.

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attempting, philosophically, to explain the fact that consciousness is both subject and object—that I am conscious of myself as conscious. Thus, it is altogether likely that the object of psychology must receive treatment unlike that meted out to the physicist's object. Does not Professor Tawney run a risk of ignoring a real distinction if he confines psychology too closely to the categories of the physical sciences?

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REVIEWS AND ABSTRACTS OF LITERATURE

Ethics. JOHN DEWEY and JAMES H. TUFTS. New York: Henry Holt & Co. 1908. Pp. xiii + 618.

If this is not the ideal text-book in ethics for which we have been waiting so many years, it is, at least, a very good substitute for it. Certainly no more valuable fruit of the recent ethical revival has been produced than this, nor one which will itself produce more future good, for it is bound to be but the first of a new type of texts. It marks the end of the abstract, speculative treatises and the beginning of the positive studies of established human values. The moral life is presented as a reality about which there can be no more question than about the reality of the physical life, and, indeed, as that in which the latter finds its completion and explanation. Theories and systems are strictly subordinated to the facts and are not presented until the facts are clearly given. No student can rise from the study of this book feeling that he has been engaged with questions of purely academic interest. On the contrary, he can not but realize that it is the origin and solution of the problems of his own life with which he is here concerned. Reality is the dominant note of the book.

To produce this effect the genetic method and the new materials furnished by economics and sociology have been freely used. In the first of the three main divisions of the book we have a sketch, somewhat needlessly detailed and perhaps complex, of the development from group action to reflective morality and of the most important factors in the process. As illustrating this, outlines of the Hebrew, Greek, and modern developments are given, the last of which presents excellent material for discussion. A final chapter brings out the continuities and contrasts of primitive group action and individual morality, together with a suggestion of the vices and problems arising from the development.

Part II., which is Mr. Dewey's contribution to the work, contains the analysis and interpretation of the reflective moral life, the growth of which Part I. has traced. The first three chapters discuss the moral situation, in which the individual is compelled to choose consciously between conflicting ends: the problems which arise for practise and theory as a result of such choice: and the types of ethical theory based upon

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