

DICTIONARY  
OF  
PHILOSOPHY AND PSYCHOLOGY

INCLUDING  
MANY OF THE PRINCIPAL CONCEPTIONS OF ETHICS, LOGIC, AESTHETICS,  
PHILOSOPHY OF RELIGION, MENTAL PATHOLOGY, ANTHROPOLOGY,  
BIOLOGY, NEUROLOGY, PHYSIOLOGY, ECONOMICS, POLITICAL  
AND SOCIAL PHILOSOPHY, PHILOLOGY, PHYSICAL  
SCIENCE, AND EDUCATION

AND GIVING  
A TERMINOLOGY IN ENGLISH, FRENCH, GERMAN, AND ITALIAN

WRITTEN BY MANY HANDS

AND EDITED BY

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WITH THE CO-OPERATION AND ASSISTANCE OF AN INTERNATIONAL  
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## EDITOR'S PREFACE

### I.

It may be well, before proceeding to define the scope and present some of the features of this work, to indicate the objects which were entertained in preparing it. It may be said, in general, that two purposes are combined in it, which may be distinguished without attempting to decide which was more important in the execution: first, that of doing something for the thinking of the time in the way of definition, statement, and terminology; and second, that of serving the cause of education in the subjects treated.

As to the former of these intentions, the details of the contents of the work, as described below in this introduction, may give some preliminary light; especially in the way of securing judgment from the reader on what is attempted rather than on what is not. In all attempts to improve terminology or to settle the meanings of terms, one finds oneself in the presence of such manifold pitfalls, that the assumption of failure is commonly made from the start. And this assumption is just, when made with reference to attempts of certain types. If one aims at securing the adoption of new meanings or of new terms, one is in most cases doomed to failure. If one presumes to settle arbitrarily the relative claims of conflicting usages, one's failure is wellnigh as sure. If one attempts to reach a consensus of authoritative opinions, that does not succeed, for the minority may after all be those who establish the future course. So evident is all this that it requires some hardihood to set out on such an undertaking at all; and the chance of coming off with reasonable success seems to be in proportion to the unimportance of what is attempted.

We have, therefore, essayed none of these things. Our task has not been to originate terms or to make meanings; not to enlarge our vocabulary or to suppress synonyms. We are, on the contrary, undertaking a more moderate and, withal, a more reasonable task,—a task which, as regards the use of terms, is twofold: to understand the meanings which our terms have, and to render them by clear definitions,—this on the one hand; and to interpret the movements of thought through which the meanings thus determined have arisen, with a view to discovering what is really vital in the development of thought and term in one,—this on the other hand. So much may be said without presenting a dissertation on the philosophy of language, or suggesting the outline of a would-be science of Semantics. In most cases, the success of this attempt depends upon the state of discussion of the subject-matter, here or there. Often we have found, for instance, that there were real distinctions, which closer definition availed to disclose, justifying both of two usages, or making it plain that one of them rested on a misapprehension. Again, it often happens that an older term has been wrested from its place by a mistaken assertion of novelty by a writer uninformed, or by its indiscriminating use with a meaning slightly at variance with the earlier. These instances may be taken as typical of the sorts of ambiguity and irrelevancy which the student of this subject is constantly meeting, and which may often be cleared away by concise and authoritative definitions.

Authoritative, it should be said: for despite the fact that authority may not keep usage true, nevertheless it is often authority which makes usage false; and

it is the part of authority, once definitions and discriminations are reached, to establish and maintain them. Hence, in this work, authority is invoked; not merely the use of authority as representing the highest ability in the matters taken up, but also bare authority as a force,—what would be called by Professor Durkheim the social force of 'constraint.' This has been argued recently by Professor Tönnies, in his discussions of the theory of terminology and its reform, and acted upon by Lady Welby in her efforts to convene conferences of eminent men. Indeed, the idea of the former writer, to the effect that an International Academy for Scientific Terminology might have an important function, is in so far quite correct. We, in this work, are not an Academy, of course, but we are an international committee. Not to dwell upon the excellent work of individuals in the several departments, we may recall the fact that the American Psychological Association has a newly appointed committee on terminology; and that the neurologists have been aiming to do something, both in Germany and in the United States, by similar committees. Despite the independence of single writers—often of the highest position—who will not conform to what committees do, this would seem to be a way of making progress, however slowly, at any rate so far, as it succeeds, by sharply defining the alternatives of usage and, in so far, making ambiguity less likely. We do not expect that our recommendations will have more success than may be realized through such general processes and social influences; and that some of our preferences will turn out unwise is not only likely, but quite certain.

As to the other purpose spoken of above—the pedagogical—that is more properly the object of a dictionary than of any other work not a textbook, because it aims to state formulated and well-defined results rather than to present discussions. The fulfilment of this function has given form and set limits which might not, from other points of view, have seemed altogether most desirable. We may mention in this connection especially the shorter bibliographies appended to most of the articles. These are planned to furnish to the student, who is not yet the practised man of research, leaders and first guides to the literary sources. Such a person would be lost in the maze of titles given in the bibliographical volume (iii), as in a general index he always is. Furthermore, the criticism of the scope of the work should have before it the knowledge of this pedagogical purpose; for the introduction to a large subject—philosophy, indeed, is the largest subject—must needs include various details of knowledge of other branches of science and information, and of methods, preliminary to its proper task. It is for this pedagogical reason that a glossary of the nervous system furthers the treatment of psychology for the beginner, that definitions of physical terms aid the student of the moral sciences, and that accounts of the latest biological discoveries serve the worker in social philosophy. And this quite apart from the legitimate question of the scope of philosophy itself: indeed, the consciousness of the necessity of meeting the pedagogical demand has relieved the Editor of undue anxiety as to this last-suggested matter. For he has been able to say: 'This or that might possibly be excluded, if we held to a strict understanding that only the materials of these and those problems were to be included; but it cannot be omitted from a work which aims to fit the student to approach the problems, as well as to explain to him the possible solutions of them.'

## II.

The subject-matter of the Dictionary is Philosophy and Psychology. These disciplines are what we set out to treat. By philosophy is understood the attempt to reach statements, in whatever form, about mind and nature, about the universe of things, most widely conceived, which serve to supplement and unify the results of science and criticism. It is necessary to say criticism, as well as science, because

all the thought which defines, estimates, devises methods, and sets categories for science,—which, to use a comprehensive term, 'justifies' knowledge and life,—together with all the ways of coming into relation to things other than by knowledge,—all this is involved with the matter of science. If there is a dispute about the function of philosophy, it arises, we take it, through two main ways of regarding the problem of philosophy: of which the one makes philosophy a rethinking and deeper formulating of the results safely come to by science; and of which the other makes philosophy the criticism—in Herbart's phrase, the 'rectification'—of the conceptions upon which science proceeds, and upon which, with all its values and interests, rests life no less than knowledge. The one assumes knowledge, and aims to systematize it; the other criticizes knowledge, and aims to idealize it. The one begins with facts, with things as they are, and aims to understand them so thoroughly that one insight will cover them all; the other lays claim to the insight, the ideal, the universal, and says: 'Whatever things may seem to be for science and for experience, *this* is what, for good and all, they really are and mean.'

However inadequate this distinction may be to reflect the ways of approaching the world in the name of philosophy, it may illustrate our undertaking. We are treating both of the philosophy that is science, and of the philosophy that criticizes and transforms science with a view to the demands of life. In either case, however, the data of science, broadly conceived, are there with their claim. It is one of the safest sayings of philosophy, at the close of the outgoing century, that whatever we may become to end with, we must be naturalists to begin with,—men furnished with the breastplate of natural knowledge. We must know the methods as well as the results of science; we must know the limitations of experiment, the theory of probability, the scientific modes of weighing evidence and treating cases. Lack of these things is the weakness of many a contemporary writer on philosophy. Such a one criticizes a science which he does not understand, and fails to see the significance of the inroads science is making into the territory which has so long seemed to be exempt. Note the application of biological principles, in however modified form, to psychological facts; the treatment of moral phenomena by statistical methods; and the gradual retreat of the notion of purpose before the naturalist, with the revised conception of teleology which this makes necessary. And these things are but examples.

We have aimed, therefore, to present science—physical, natural, moral—with a fullness and authority not before undertaken in a work of this character. In the selection of the topics, in the form and length of treatment, in the bibliographical lists, this emphasis will be found throughout. Furthermore, the newer advances in scientific method have been made the subject of longer articles, as a reference to the topic Variation—where the statistical treatment of biological phenomena is explained—or to the topic Probability, will show. Both these topics are becoming of especial importance to the psychologist, the moralist, and the student of life.

An additional and more positive reason for the wide inclusion of science is to be found in the present state of psychological studies, of which more is said below. As to philosophy proper—the discipline which calls itself by that name—certain of our aims should be clearly defined, especially on the side of their limitations. In the first place, this work is not, and does not include, a history of philosophy. The writers, one and all, approach their topics from a historical point of view; this is one of the distinguishing features of the work. They trace historical movements when this is necessary for the exposition or justification of the definitions made or the usages recommended; and the history of thought is comprehensively illustrated through the selection of topics over the whole vocabulary of philosophy. Yet no one of these things has been made an end in itself; rather have we aimed at truth to history, and fair appreciation of the spirit of historical research. More particularly, also, is it the history of

conceptions rather than that of terms that has concerned us. Lexicographical and linguistic determinations are largely foreign to our task. Meanings, with their historical development, together with the terms which have expressed them and their variations,—these are the essentials of our quest.

And secondly, we have subjected ourselves to another very definite and evident limitation on the side of exclusion. It would be useless to attempt in any compass, short of an independent work as large as this, to make a Dictionary of Greek and Scholastic Philosophy. It should be done; it is much needed: but we have not attempted it. We include special articles on Greek and Latin Terminology, with select glossaries of representative terms; and it will be found that many of the finer distinctions of scholastic as well as of ancient thought are brought out in connection with the terms which in our modern vocabulary express or represent them. Yet when all is said, the student of scholastic thought, as of Greek thought, will find so many gaps that it is only just to our limited purpose to warn him of them in advance. It is a change which has come into the subject,—this facing of philosophy towards science and modern life, instead of towards logic and ancient life,—and in consciously accepting the change we accept as well the inevitable criticism it will bring upon us.

As to the prominent place given to psychology, no further justification of it is required than the statement that this is what we set out to do,—to prepare a work devoted to philosophy and psychology. The association of these two subjects is traditional and, as to their contents, essential. Psychology is the half-way house between biology with the whole range of the objective sciences, on the one hand, and the moral sciences with philosophy, on the other hand. The claim to this place laid by psychology to-day is no more plain than is the proof of it which the results in this department of research make good. The rise of experimental and physiological psychology has caused the science to bulk large towards the empirical disciplines, as it always has towards the speculative; and the inroads made by psychological analysis and investigation into the domains where the speculative methods of inquiry, spoken of above, were once exclusively in vogue, render permanent and definite the relation on that side as well. In biology, in sociology, in anthropology, in ethics, in economics, in law, even in physics, the demand is for sound psychology; and the criticism that is making itself felt is psychological criticism. How could it be otherwise when once it is recognized that science is the work of mind, and that the explaining principles by which any science advances beyond the mere cataloguing of facts are abstract conceptions made by processes of thought?

It will be found, therefore, that it is upon the psychology of this work that most of its lines converge; and it is in its psychology that many of the hopes of its producers centre. That the psychology be found less adequate than it might be,—that is only to be expected; that it be found less adequate than it should be,—that is the judgment we wish most of all to escape.

## III.

Coming now to more particular features of the work, we may make certain explanations. The Editor has had responsible charge and, in the negative sense of control, nothing in these volumes is outside of his responsibility. He has used this responsibility freely. He has assigned and reassigned articles, supplemented articles, rewritten articles, rejected articles. But it has been his universal rule—departed from only in cases of trivialities or of cosmic obstacles like those of time and space—to exercise these prerogatives under the checks and controls supplied by the board of consulting editors. This board has been an indispensable part of the Dictionary organization. Certain of the members have read the

articles of one another and of the other writers, either in manuscript or in proof; they have passed and repassed suggestions, criticisms, and emendations; they have laboured on definitions, equivalents, literature, with a patience and self-denial which leads one to accept Aristotle's high estimate of philosophers. Accordingly there is hardly anything in the work which has not the support of a group of men of the highest authority. This should be remembered by the single writer or student who finds this or that point unsatisfactory. He is one; we are many. And this, the co-operative feature, has been a leading—if not the leading—methodical feature of the work from its first inception.

It has been the especial function of the consulting board to supply the recommendations as to foreign equivalents for all the terms defined in the work. This undertaking, while extremely difficult, has been on the whole gratifyingly successful. Of course, the developing state of philosophical terminology makes conventions ineffective, notably as between different languages,—to say nothing of the artificial character of convention as such in matters linguistic; but it is our hope and belief that in this feature, thanks to the enormous pains and toil devoted to it by our consulting editors and contributors, we are making a measure of gain for international science and philosophy. The thanks of all readers of the book are due in the fullest measure—not at all to underthank any of the others—to Professor Morselli and Professor Flournoy, members respectively of the Italian and French committees.

As to the preparation of the articles, more specifically, the plan has been as follows. Two authorities determined upon the terms in a given department in the first instance, and divided the topics between them. As their work advanced, they exchanged their manuscripts for suggestion and consultation. After this, the important articles were submitted to other authorities also especially versed in these topics. Passing then through the hands of the editor, the copy went, in those cases in which matters of detail remained still unsettled, to one or other of the consulting editors for his opinion and counsel, and to the foreign boards for their revision, and especially for the consideration of the foreign equivalents and the supplementing of the select literature lists. Further than this, the proofs have gone both to the authors—in most cases of joint authorship to all of the authors—and to the foreign editors. Of course, after all this, much has remained for the Editor to decide, notably in the matter of collation and selection; and he has been obliged to use his best judgment. Wherever he has been mistaken, it has been not because the view adopted was not well supported, but because there were alternatives, both or all of which had good support. And he wishes to say to the collaborators, one and all, that wherein their contributions are not just what they might desire, this is not by reason of arbitrary rulings of the Editor, but by reason of general adjustments, in which each authority is recognized in his own sphere—the Editor no more than others—and so far as possible consulted. This is the more to be said, seeing that it has not been possible in each case to state the alternatives in the text, or to indicate the authorities pro and con by name. Yet in cases of important emendation second proofs were sent to the writers. So far, however, as actual authorship goes, the writers' names are in all cases appended. The distribution of responsibility in cases of joint signature conforms to the rules which follow.

When an article is signed by one set of initials only (A.B.C.), the author is responsible for the whole article, except the recommendations as to foreign equivalents; these, though possibly the same as those originally suggested by the writer of the article, are nevertheless inserted as recommendations of the board of consulting editors. In cases in which a recommendation of a distinctly original or novel usage is due to any one of the staff, or is taken from a printed authority, the source, whether personal or public, is indicated, in connection with the term



recommended, in the form: Evocation (P.J.). When lacking this indication, a topic-term is itself due to the writer who signs the article, e.g. Autotelic, signed (J.M.B.).

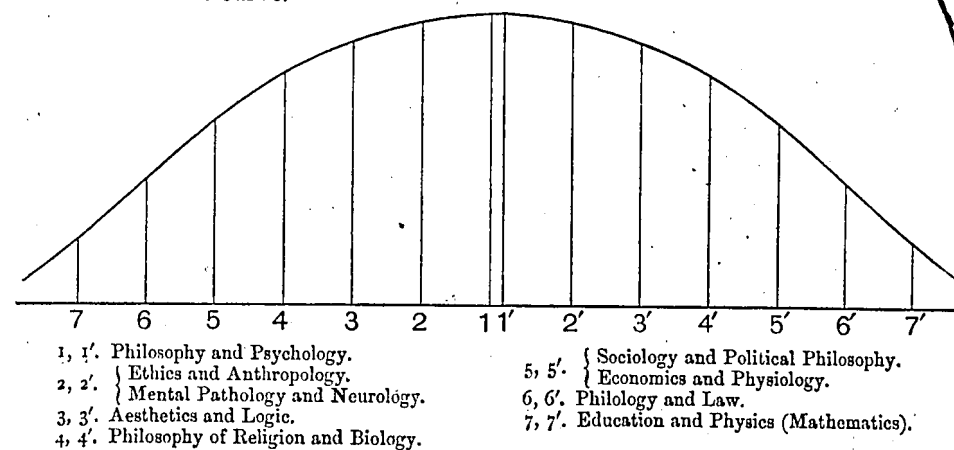
In cases of actual joint authorship of an article or part of an article, two cases will be found: either—and, where possible—each contributor's initials are added to his section of the article, or the two sets of initials, joined by a hyphen, are set at the end, thus: (A.B.C.—X.Y.Z.). In most cases this form of signature indicates that the article was originally written by A.B.C. (the signature standing first), but has undergone more or less important modification to meet the criticisms or suggestions of X.Y.Z. In many cases the contribution of X.Y.Z. is decidedly less than that of A.B.C.; but in all cases it was judged sufficient to justify the citing of the article as the product of the two writers together. The articles by President and Professor Herrick are all of joint authorship, and are signed (H.H.).

Another case is the signature by two persons with a comma—not a hyphen—between them: (A.B.C., X.Y.Z.) This indicates that the article was written by A.B.C. and accepted without alteration by X.Y.Z., who thus adds the weight of his authority to it. This feature has not in general been deemed explicitly necessary, but is limited to cases of positive teaching on disputed points or of topics about which combined authority is considered, for any other reason, of great importance. A case in point is the article on Heredity, in which positive views are expressed over and above the scientific definition. Throughout the range of topics in general psychology many such double signatures will be found. In this latter subject, a detailed and prolonged series of conferences has led to the formulation of a series of definitions and expositions to which two of the writers at work have found it possible to add their joint signatures in one or other of the two forms here explained. And the experimental psychology has been treated with equal care.

The treatment is primarily, as has been said, that of a dictionary; not that of an encyclopedia. The articles are of three sorts: first, concise definitions; second, such definitions with the addition of certain historical and expository matter, running to several hundred words; third, articles called 'special,' on topics which seemed, in view of either of the general purposes set forth above, to call for extended treatment. These last are of encyclopedic character, varying in length from 1,000 to 5,000 words. Important movements in the history of philosophy, the general divisions of the topic Philosophy itself, and select subjects in all of the general departments of science, have this special treatment. In most cases these select articles have the further justification that they are written with a view to gathering into a general presentation and *résumé* many of the subordinate topics treated in a more detached way in their respective places. The article Vision may be cited in illustration both of the nature and we trust also of the utility of this feature.

A closer examination of the relative importance given to each of the departments represented—whether calculated from the average length of the articles or from the entire space devoted to the subject—will show that there is a more or less logical and intentional adjustment about the central subjects Philosophy and Psychology. The figure given below presents in a rough way an idea of this adjustment. The vertical ordinates 1, 2, 3, &c., vary in length from the centre outwards in both directions. It will be seen that Mental Pathology and Anthropology, for example, have generous treatment; this for the practical reason—apart from other justification—that the topics have not been well written up for the student of philosophy and psychology, and that the sources are scattered and relatively unavailable. In these and other subjects the intention has been to emphasize what the student of philosophy ought to know, rather than what he does know. On both sides the curve sinks rapidly, and terminates with departments in which relatively few terms are treated, and these in the briefest

form. Of course, the actual relations of the several departments are but roughly indicated in this curve.



Biography is not made a prominent feature—quite the reverse. Only the outstanding biographical facts are recorded, which any reader of philosophy should know, or know where to find, if he is to be educated. Seeing that the volume of bibliographies is arranged by authors' names, the titles of their works are not given in the biographies; and seeing that in the articles on the important movements of thought the names of prominent thinkers are given, separate accounts of authors' views are not generally attempted. There has resulted, therefore, simply by reason of this incidental division of the material commonly put under the biographical heading, a certain meagre look to the biographies, which is sure to strike the reader.

The bibliographical feature, on the contrary, has been given excessive pains and care. The plan is to include the best references—both magazine articles and select books—under the topic in each case, even though in many instances this repeats the entries of book titles made in the volume (iii) of general bibliographies. Yet the fact that the titles of all such independent publications are given in full, and with date of publication, in the separate volume devoted to it, makes it unnecessary that the same details should be given in the select lists. Thus some inconsistency in the details of citation (as of dates), and some lack of uniformity in the references to editions, will be found in the select lists. They have been printed very largely as originally sent in by the writers, except that abbreviations have been reduced to the form given in the lists tabulated at the beginning of this volume (i). When the writers include dates of publication, these are allowed to stand, although they are also given in Vol. iii; for whatever saves the reader time and trouble is, in so far, good, and consistency should not be made a fetish. The place of publication, however, has not been given in the select lists except in departments, notably Neurology, which are not represented in the general bibliographies. The writers' direct responsibility for these select lists is, however, not the same as for the articles; for the Editor and his associates have taken a free hand in supplementing and completing them. The references in the volumes (i and ii) of text, made in the form 'see BIBLIOG. A, 1, c,' are to the general bibliographies of Vol. iii.

As to the general bibliographies, an editorial word may well be added; to the effect that the Editor's responsibility for these is not the same as for the matter in the other volumes. It was not a part of the original plan to compile such extensive bibliographies; and it was only by the good fortune that Dr. Rand had them already largely prepared that we were able to secure them. This fact

made it impossible for the editorial management to bring them entirely within the scheme of execution of the whole. So far as possible, they have been made an intrinsic part of the work, and in their terminology and general character they maintain its form consistently. But the actual results, as respects relative fullness, the division of topics, the form of citation, &c., were determined independently in the first instance, and to change them in a material way would have been to make the lists over. They are, therefore, in a sense supplementary to the Dictionary. The same sort of statement may be made also regarding their quality; they have not been through the same forms of criticism, and are, therefore, more largely the independent work of one man.

In regard to future bibliographies, we may say that it is intended to continue the issue of the *Psychological Index* in its present form both as a part of the *Psychological Review* and as a supplement to this Dictionary. The issues beginning with that of April, 1901 (No. 7), incorporate certain changes in classification made by arrangement with the foreign journals *Zeitschrift für Psychologie* and *Année Psychologique*, which publish the same lists,—changes which make the *Index*, as respects both terminology and divisions, identical with the scheme printed in this work under the topic Psychology. This scheme of classification, resulting as it has from the long experience of professional workers, and gradually improved by international co-operation, is recommended to librarians and bibliographers generally. Other bibliographical annuals are the excellent lists printed by the *Archiv für systematische Philosophie* and the *Revue Néo-Scholastique*.

## IV.

In matters of lexicography, use has been made, by permission, of both the *Century* and the *Standard Dictionaries*; in the derivations the *Century* has generally been followed. The rules of composition and orthography of the Clarendon Press, for which Dr. Murray, editor of the *New English Dictionary*, is largely responsible, have been adopted, except in certain specific matters, and the results are thus in general accord with the recommendations of this last-named work. Indebtedness should also be acknowledged to Eisler's *Wörterbuch der philosophischen Begriffe*, which by reason of its plan of giving large numbers of quotations (though mainly from German authors), and its comprehensive scope and recent appearance, has been more available than any other Dictionary of Philosophy proper. Other indications are made by the individual writers themselves of the sources found by them respectively to be most available; and very frequent reference will be found to the good but unfortunately fragmentary *Geschichte der philosophischen Terminologie* of Professor Eucken. Useful earlier books which, in this feature or that, cover our territory, and on which we have drawn, are Noack's *Philosophie-geschichtliches Lexikon* (1879), used especially for biographical material; Krug's *Encyklopädisch-philosophisches Lexikon* (2nd ed., 1833); Franck's *Dictionnaire des Sciences philosophiques* (1844), which contains, in the preface, a historical note on earlier attempts at Dictionaries of Philosophy; and the *Vocabularies* devoted to particular authors, certain of which are named in the articles on the terminology of the great philosophers (Kant's, Hegel's, Greek Terminology, and Latin and Scholastic Terminology). Additional references to the sources of Scholastic usage are to be found in the article on Patristic Philosophy and in that on St. Thomas.

As in the case of most works of this kind, it has been found impossible to keep all the threads equally taut as the manufacture has proceeded; and certain evidences of this will be open to the eye of the careful observer. In particular, it has been found advisable to keep the 'polls open' as long as possible in the matter of recommendations as to equivalents, &c.; and in order to do this, the term Terminology has itself been made a topic in its alphabetical place. Under

various sections of that article—'German,' 'French,' &c.—discussions are to be found of certain terms which present difficulty. The recommendations therein made will not, be found—unless there be especial declaration to that effect—to contradict those given respectively under the main English topics. They serve the rather to supplement them, and to settle points left indefinite or undecided in the earlier pages. Indeed, the resource which this procedure makes available is openly resorted to in many instances. Further, the development in the plan of the Dictionary made incidental changes necessary in one or two departments—e. g. the expansion of certain subjects after articles upon them had already been written. The Editor recognizes particularly the goodness of Principal Lloyd Morgan and Professor Titchener for permitting this in connection with certain of their topics.

After these explanations, no doubt some one will say that this is not a Dictionary of Philosophy; and if it would help matters to call it rather a 'dictionary for philosophers,' to that there would be no objection. What we care to make plain is that we do not wish to be considered as having prepared a work in support of any academic view of philosophy, but rather as having wished to present materials and definitions which workers in philosophy and science generally might find useful and reliable.

## V.

Obligations of so extensive and manifold a character, extending over seven years, have been contracted by the Editor and his associates, that only a general declaration of habitual and generous gratitude can reach all to whom it is due. In particular, speaking for themselves, the contributors desire to thank each of those who have given advice to them or made suggestions. The department of anthropology extends more specific thanks to Professor F. Boas, of Columbia University. The Editor finds himself, apart from his great obligation to the consulting editors, grateful to those contributors of special articles who have generously given their work without financial compensation. Some of the longest and most important articles in the work have thus been given without recompense. To Professor Warren he owes thanks for unreckoned and unstinted aid in many matters; and to Mrs. Baldwin, who collated the corrected proofs and gave much general assistance.

During the progress of our work we have lost the presence and active aid of Professor Henry Sidgwick, from whose active co-operation we gained much, and to whose counsel we had learned to look. He gave his time ungrudgingly to the criticism and revision of the articles in ethics, at the same time requesting that what he did should be counted as editorial, and so should not be set off with his name. The writers in ethics, as well as the Editor, who sought his advice in many matters besides, feel in an especial way the loss of his masterly thought, and miss his genial and kindly personality. He illustrated at its fullest the spirit of judicial inquiry and fair criticism which the rest of us have aimed to make the ideal of our work; and his going is a loss not only to us, but to the whole philosophical world.

The Editor finds it a peculiarly pleasant task to acknowledge the many personal, no less than professional, courtesies extended to him during his year of residence at Oxford for the printing of the Dictionary at the Clarendon Press. Of the personal, it is not here the place to speak; but for the very unusual arrangements to meet his needs and to facilitate his work made by the Librarian, the late Sir Henry Acland, and the other authorities of the Radcliffe Library,—extending to the liberal purchase of books which he required,—and by the Controller of the Press in the many ways in which the resources of such a great institution may be made more available,—for these things he is sincerely grateful. It may

be taken to show, perhaps (not in any way to intimate that this sort of thing is unusual in Oxford and in England, or on this side of the water in the case of men from the other side), that the idea of international co-operation which the Dictionary embodies extends not alone to the tasks in hand, but finds confirmation in a large spirit of recognition and encouragement. The Cambridge people, with the lamented Henry Sidgwick and with James Ward at their head, responded in the same spirit; and it may not be judged a violation of the proprieties of a preface to suggest to any literary Christian who is bearing a pack—say an editorial pack, which is the heaviest of all—that if he go to Oxford or Cambridge he will find his 'yoke made easy and his burden light' in a very material way. While being so personal, the Editor may also be allowed to extend the reference to his own University, and to thank President Patton and the Board of Trustees for the leave of absence for a year, granted expressly for the prosecution of this work.

Finally, the Editor must express verbally his apologies for the evident shortcomings of the book. No one man, of course, could compass the field mapped out for the Dictionary; the present Editor least of all. He has been the mouth-piece of his collaborators in their respective specialties, and the work is as much theirs as his. His opinion has counted only as one among many; it has been sacrificed oftener probably than that of any one else; and it has changed time and again, as the consultations have advanced. May the future Dictionary of Philosophy profit somewhat by our labours, and if it profit also by our mistakes, that will be no less a point of justification for our endeavour.

It is intended to issue the remainder of the text—completing the alphabetical treatment of topics—together with full indices of Greek, Latin, German, French, and Italian terms, in Vol. ii, and to devote Vol. iii exclusively to the general bibliographies. Short prefatory notes are to be found at the beginnings of Vol. ii and Vol. iii.

Readers are requested to send to the Editor, at Princeton, New Jersey, U.S.A., corrections or suggestions of alterations of any sort, with a view to the possible issue of another edition, if the sale of the work should justify it. And to those who adopt the recommendations of the text it may not be too much to suggest that a note be printed in their publications saying that they follow in whole or part the scheme of terminology recommended in the Dictionary. Editors of journals often find uniformity of usage desirable on the part of their contributors; and in case the Dictionary system prove an advance in the matter, it would seem but fair recognition of the work and encouragement to the publishers, who have generously taken upon themselves the cost of publication and the payment of the contributors, to request their writers to conform, so far as may be possible, to the usages here suggested. The recommendations of foreign equivalents have been made in part to meet the urgent needs of translators—a need which the most competent are the first to feel—and in cases in which the renderings here given are followed, it may not be improper to ask that a note be printed to that effect. The same suggestion in kind may be made also concerning the lists of Abbreviations immediately following the Table of Contents; they have been prepared on the basis of earlier schemes, and in a conservative spirit.

THE EDITOR.

PRINCETON UNIVERSITY,  
June, 1901.

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# ABBREVIATIONS

## I. ABBREVIATIONS OF TERMS OCCURRING IN TITLES OF JOURNALS AND OTHER PUBLICATIONS

Abhandl.	= aus, an.	Cent.	= Century.
Abstr.	= Abhandlung.	Centralbl.	= Centralblatt.
Abth.	= Abstract.	Chir., Cirug.	= Chirurgial, &c.
Acad., Accad., Akad.	= Abtheilung.	Chrét., Christ.	= Chrétienne, Christian, &c.
Addr.	= Academy, &c.	Cien.	= Ciencia.
Adv.	= Addresses.	Circ.	= Circulars.
Aesth.	= Advancement.	Cirug.	= Cirugia.
Ak.	= Aesthetic, &c.	Clin.	= Clinical, &c.
Alien.	= Akustik.	Co., Comp.	= Company.
allg.	= Alienist.	Comm.	= Commission.
Amer.	= allgemein.	Comm'r, Comm'rs.	= Commissioner, &c.
Anat.	= American.	Commun.	= Communication, &c.
angew.	= Anatomy, Anatomical, &c.	Compar.	= Comparative.
Ann.	= angewandt.	Cong.	= Congress.
Anthropol.	= Annals, &c.	Contemp.	= Contemporary.
	= Anthropological, Anthro-	Contrib.	= Contributions.
	pology, &c.	Corresp.	= Correspondenz.
Anthropom.	= Anthropometry.	Crim.	= Criminal, &c.
Antiq.	= Antiquities.	Criminol.	= Criminology.
Antol.	= Antologia.	Crit.	= Critical.
Anz.	= Anzeiger.	Cyc.	= Cyclopaedia.
Aphor.	= Aphorismen.		
Arb.	= Arbeiten.	d.	= de, der, &c.
Arch., Ark.	= Archives, &c.	Descrip.	= Descriptive.
Archaeol.	= Archaeological, &c.	deutsch.	= deutscher, &c.
art.	= article.	Devel.	= Development(al).
Assoc.	= Association.	Dict.	= Dictionary, &c.
Auf.	= Auflage.	Dis.	= Disease.
Augenh.	= Augenheilkunde.	Diss.	= Dissertation.
Ausg.	= Ausgabe.		
		Eccles.	= Ecclesiastical.
Beitr.	= Beiträge.	Econ.	= Economics, Economy, &c.
Belg.	= Belgique, &c.	ed.	= edited, edition.
Ber.	= Bericht.	Educ.	= Education, &c.
Berl.	= Berliner.	Electr.	= Electric, &c.
Bib.	= Biblical.	Electro-biol.	= Electro-biology, &c.
Bibliog.	= Bibliography, Biblio-	Encyc. Brit.	= Encyclopaedia Britannica.
	graphical, &c.	Eng. trans.	= English translation.
Biblioth.	= Bibliothèque.	Enseignem.	= Enseignement.
Biog.	= Biography, &c.	Entomol.	= Entomology, &c.
Biol.	= Biological, &c.	Entwickelungsmech.	= Entwicklungsmechanik.
Bk.	= Book.	Ét.	= Étude.
Bl.	= Blatt.	Eth.	= Ethical, Ethics.
Bost.	= Boston.	Ethnol.	= Ethnology.
Brit.	= British, Britannica.	Exam.	= Examination.
Brux.	= Bruxelles.	Exper.	= Experimental, &c.
Bull., Boll.	= Bulletin, &c.	Explan.	= Explanatory.
C. R.	= Comptes Rendus.	f.	= für.
Cal.	= California.	Fasc.	= Fascicule.
Canad.	= Canadian.	Filos., Filoz.	= Filosofia, &c.
Cathol.	= Catholic, &c.	Fortn.	= Fortnightly.

## II. ABBREVIATIONS OF TERMS

xix

Fortsch.	= Fortschritt.	Mém.	= Mémoires.
Fr.	= French.	Mens.	= Mensuel, -elle.
Franç.	= Français.	Ment.	= Mental, &c.
Freniat.	= Freniatria.	Met., Mét.	= Metaphysics, &c.
		Meth.	= Method.
Gaz., Gac.	= Gazette, &c.	Microg.	= Micrographic, &c.
Geb.	= Gebet.	Microsc., mikr.	= Microscopy, Microscopical,
Gen.	= General.		mikroskopisch, &c.
Geneesk.	= Geneeskunde.	Mitth., Mitt.	= Mittheilungen.
Geol.	= Geology, &c.	Mo.	= Monthly.
Ger.	= German.	Mod.	= Modern, &c.
gerichtl.	= gerichtlich.	Monatsbl.	= Monatsblatt.
ges.	= gesamt.	Monatsh.	= Monatsheft.
Gesch.	= Geschichte.	Monatssch.	= Monatschrift.
Gesell.	= Gesellschaft.	Monog.	= Monograph.
Gior.	= Giornale.	Mor.	= Morals, Moral.
		Morphol.	= Morphology, &c.
H.	= Heft.	Münch.	= Münchener.
Habil.	= Habilitationsschrift.	Mus.	= Museum.
Handb.	= Handbook, Handbuch.		
Handwörterb.	= Handwörterbuch.	N. S.	= New Series.
Heilk., -hk.	= Heilkunde.	N. Y.	= New York.
Hist.	= History, &c.	Nat.	= Natural.
Höp.	= Hôpital.	Natnl.	= National.
Hosp.	= Hospital.	Natural.	= Naturalist, &c.
Hypnot.	= Hypnotism, &c.	Naturf.	= Naturforscher.
		Naturv.	= Naturwissenschaft.
I, Ist.	= Istituto.	nederl.	= niederländisch.
Icon.	= Iconoclast, Iconography,	Néo-Scol.	= Néo-Scolastique.
	&c.	Nerv.	= Nervous, &c.
imman.	= immanent, &c.	Nerven.	= Nervenheilkunde.
Inaug.	= Inaugural.	Neurasth.	= Neurasthenia, &c.
Inebr.	= Inebriates, Inebriety.	Neurol., Nérol.	= Neurology, &c.
Inq.	= Inquiry.	Neurot.	= Neurotomy, &c.
Insan.	= Insanity.	Nic.	= Nicomachaeus.
Inst.	= Institute, Institution, &c.	No.	= Number.
Int.	= International.	Norm.	= Normal.
Intermed.	= Intermediaire.	Nouv.	= Nouveau, &c.
Interpret.	= Interpretation.	Nov.	= Novum.
Introd.	= Introduction.		
Ital.	= Italian.	Ocul.	= Oculiste, &c.
		Offenb.	= Offenbarung.
J.	= Journal.	Ohrenh.	= Ohrenheilkunde.
Jahrb.	= Jahrbuch.	Ophthal., Ottal.	= Ophthalmology, Ophthal-
Jahresber.	= Jahresbericht.		mic, &c.
Jahrg.	= Jahrgang.	Org.	= Organum.
Just.	= Justinian.	Orific.	= Orifical.
		Osp.	= Ospedale.
k., kgl.	= königlich.	Osteol.	= Osteology, &c.
Kantstud.	= Kantstudien.	Otol.	= Otology, &c.
klin.	= klinisch.		
krim.	= kriminal.	Pad.	= Pädagogik, &c.
Kriminol.	= Kriminologie.	Pathol., Patol.	= Pathology, &c.
krit., Krit.	= kritisch, Kritik, &c.	Pedag.	= Pedagogy, &c.
		Per.	= Perception.
Lab.	= Laboratory.	Phar.	= Pharyngologie.
Lanc.	= Lancetiana.	Philol.	= Philology, &c.
Laryng.	= Laryngoscope, Laryngo-	Philos.	= Philosophy, &c.
	tomy, &c.	Phys.	= Physical.
Laryngol.	= Laryngology, -ist, &c.	Physiol.	= Physiology, &c.
Lect.	= Lectures.	Pogg.	= Poggendorff.
Legisl.	= Legislation.	Policl.	= Polyclinic, &c.
Lehrb.	= Lehrbuch.	Polit.	= Political.
Lfg.	= Lieferung.	Pop.	= Popular.
Linn.	= Linnæan.	Pract.	= Practical.
Lit.	= Literary, Literature.	prakt.	= praktisch.
		Prof.	= Preface.
Mag.	= Magazine.	Pres.	= Presidential.
Med., Méd.	= Medicine, Medical, &c.	Presb.	= Presbyterian.
Med.-Chir.	= Medico-Chirurgical, &c.	Princ.	= Principles.
Med.-Psychol., &c.	= Medico-Psychological, &c.	Proc.	= Proceedings.

## I. ABBREVIATIONS OF TERMS

Prog.	= Program, Programmab-handlung.	Suppl.	= Supplement, &c.
Psych.	= Psychic, Psychical.	Surg.	= Surgery, Surgical.
Psychiat.	= Psychiatry, &c.	Syst.	= System.
Psychol., Psicol., &c.	= Psychology, &c.	System.	= Systematic, systematisch, &c.
Pt.	= Part.	Theol.	= Theology, &c.
Publ., publ.	= Publications, published by.	Therap.	= Therapeutic, &c.
Quart.	= Quarterly.	Thom.	= Thomiste.
Quest.	= Questionnaire, Questions.	Tijd.	= Tijdschrift.
Quind.	= Quindicinale.	trad.	= traduit.
R.	= Reale (Ital.).	Trans.	= Transactions.
Rdschau.	= Rundschau.	trans. (Eng. &c.)	= translation (English, &c.).
Rec.	= Record, Recueil.	Trav.	= Travaux.
Ref.	= Reference, Reformed.	Treat.	= Treatise.
Rendic.	= Rendiconti.	Trib.	= Tribune.
Rep.	= Report.	Trimest.	= Trimestriol.
Rep'r.	= Reporter.	ü.	= über.
Res.	= Research.	u.	= und.
Rev.	= Review, &c.	Uebers.	= Uebersetzt.
rev.	= revised.	Univ.	= University.
Rhinol.	= Rhinology.	Univl.	= Universal.
Riv.	= Rivista.	Untersuch.	= Untersuchungen.
Roy.	= Royal.	v.	= von.
S.	= Series.	Ver.	= Verein.
Samml.	= Sammlung.	verb.	= verbessert.
Schol.	= Scholastic.	Verh.	= Verhandlung.
Sci.	= Science.	verm.	= vermehrte.
Scient.	= Scientific.	Vocab.	= Vocabulary.
Sciol.	= Sciolism, Sciolistic.	vol.	= volume.
Sem.	= Seminary, Seminar.	Votr.	= Vorträge.
Semej.	= Semejotica.	Vorw.	= Vorwort.
Sent.	= Sentiments.	Vtj'sch.	= Vierteljahrsschrift.
Sitzber.	= Sitzungsbericht.	Wien.	= Wiener.
Skand.	= Skandinavian.	Wisc.	= Wisconsin.
Smithson.	= Smithsonian.	Wiss., wiss.	= Wissenschaft, wissen-schaftlich.
Soc.	= Society, Social.	Wochensch.	= Wochenschrift.
Sociol.	= Sociology.	Wörterb.	= Wörterbuch.
Span.	= Spanish.	z.	= zur, zum.
Specul.	= Speculative.	Zool.	= Zoology, &c.
spek.	= spekulative.	Zeit.	= Zeitung.
Sperim.	= Sperimantale (Italian).	Zeitsch.	= Zeitschrift.
Staatswiss.	= Staatswissenschaft.		
Stat.	= Station.		
Statist.	= Statistics, &c.		
Stud.	= Studies, Studien.		

II. ABBREVIATIONS OF TITLES OF JOURNALS  
AND OTHER PUBLICATIONS

Abhandl. d. k. sächs. Gesell. d. Wiss.  
 Abhandl. d. physiol. Gesell. zu Berlin  
 Abhandl. z. Philos.  
 Acad. R. Méd.-Chir. d. France  
 Addr. and Proc. Natl. Educ. Assoc.  
 Alien. and Neurol.  
 Allg. Päd.  
 Allg. Wien. med. Zeit.  
 Allg. Zeitsch. f. Psychiat.  
 Amer. Anthropol.  
 Amer. Natural.  
 Amer. J. Med. Sci.  
 Amer. J. of Insan.  
 Amer. J. of Ophthal.  
 Amer. J. of Physiol.  
 Amer. J. of Psychol.  
 Amer. J. of Sci.  
 Amer. J. of Sociol.  
 Amer. Med.-Surg. Bull.  
 Amer. Phys. Educ. Rev.  
 Amer. Presb. Rev.  
 Anat. Anz.  
 Anat. Hefto  
 Ann. Amer. Acad. Polit. and Soc. Sci.  
 Ann. Clin. de Bordeaux  
 Ann. d. Mal. de l'Oreille  
 Ann. d'Ocul.  
 Ann. d. Physik u. Chemie (or Wiedemann's Ann.)  
 Ann. d. Sci. Nat.  
 Ann. d. Sci. Psych.  
 Ann. de Microg.  
 Ann. de Philos. Chrét.  
 Ann. de Psychiat.  
 Ann. di Freniat.  
 Ann. di Neurol.  
 Ann. di Otol.  
 Ann. di Ottal.  
 Ann. of Otol., Rhinol., and Laryngol.  
 Ann. Méd.-Psychol.  
 Ann. Soc. Roy. d. Sci. Méd. et Nat. de Brux.  
 Année Biol.  
 Année Philos.  
 Année Psychol.  
 Année Sociol.  
 Annual Encyc.  
 Anomalo  
 Anthropol.  
 Antiq. Rom. Syntagma  
 Arch. Clin. de Bordeaux  
 Arch. d'Anat. Microsc.  
 Arch. d'Anthropol. Crim.  
 Arch. de Neurol.  
 Arch. d'Ophthal.

Arch. de Physiol.  
 Arch. di Psychiat.  
 Arch. f. Anat. u. Entwicklungsgesch.  
 Arch. f. Anat. u. Physiol.—Physiol. Abth.  
 Arch. f. Anat. u. Physiol.—Anat. Abth.  
 Arch. f. Augenh.  
 Arch. f. d. ges. Physiol. (or Pfüger's Arch.)  
 Arch. f. Entwicklungsmech.  
 Arch. f. exper. Pathol.  
 Arch. f. Gesch. d. Philos.  
 Arch. f. krim. Anthropol.  
 Arch. f. Laryngol. u. Rhinol.  
 Arch. f. mikr. Anat.  
 Arch. f. Ohrenh.  
 Arch. f. Ophthal. (or v. Graefe's Arch.)  
 Arch. f. pathol. Anat. (or Virchow's Arch.)  
 Arch. f. Psychiat.  
 Arch. f. Religionswiss.  
 Arch. f. syst. Philos.  
 Arch. Int. de Laryngol. et d'Otol.  
 Arch. Ital. d. Biol.  
 Arch. Ital. di Laringol.  
 Arch. of Neurol. and Psychopathol.  
 Arch. of Ophthal.  
 Arch. of Otol.  
 Arena  
 Atlantic Mo.  
 Atti R. Accad. d. Lincei  
 Atti Soc. Rom. di Antropol.  
 Beitr. z. Ak. u. Musikwiss.  
 Beitr. z. Augenh. (Deutschmann's)  
 Beitr. z. exper. Psychol.  
 Beitr. z. pathol. Anat.  
 Beitr. z. Psychol. u. Philos.  
 Ber. d. k. sächs. Gesell. d. Wiss.  
 Ber. d. Senckenberg. Naturf.-Gesell.  
 Berl. klin. Wochensch.  
 Bern. Stud. z. Philos.  
 Bibliog. Anat.  
 Biol. Centralbl.  
 Biol. Lectures  
 Biol. Untersuch. (Retzius's)  
 Blackwood's Mag.  
 Boll. d. Soc. di Natural. in Napoli  
 Boll. d. Policlin. Gen. di Torino  
 Boll. d. Soc. Lanc. d. Osp. di Roma  
 Boll. d. Soc. Med.-Chir. di Pavia  
 Boston Med. and Surg. J.  
 Brain  
 Brit. Med. J.  
 Brit. Quart. Rev.  
 Bull. Acad. de Méd.

Bull. Amer. Acad. Med.  
Bull. Johns Hopkins Hosp.  
Bull. Méd.  
Bull. Mus. Compar. Zool. Harvard Coll.  
Bull. Soc. d'Anthropol. d. Paris  
Bull. Soc. d. Méd. Ment. d. Belg.  
Bull. Soc. Franco-Belg.  
Bull. Soc. Roy. d. Sci. Méd. et Nat. d. Brux.  
Bull. Soc. Zool. d. France  
Bull. Univ. of Wisc.

Cathol. Univ. Bull.  
Cellule  
Centralbl. f. allg. Pathol. u. pathol. Anat.  
Centralbl. f. Anthropol.  
Centralbl. f. med. Wiss.  
Centralbl. f. Nervenh. u. Psychiat.  
Centralbl. f. Physiol.  
Centralbl. f. prakt. Augenh.  
Century Mag.  
Child-Study Mo.  
Cleveland Med. Gaz.  
Columbia Univ. Bull.  
Columbia Univ. Contrib. to Philos.  
Commun. all' Accad. Med.-Chir. di Napoli  
Compar. Embryol.  
Contemp. Rev.  
Corresp.-Bl. d. deutsch. anthropol. Gesell.  
Course in Exper. Psychol.  
C. R. Acad. d. Sci.  
C. R. Acad. d. Sci. Mor. et Pol.  
C. R. Soc. de Biol.

Deutsch. Arch. f. klin. Med.  
Deutsch. med. Wochensch.  
Deutsch. med. Zeit.  
Deutsch. Rdschau.  
Deutsch. Rev.  
Deutsch. Zeitsch. f. Nervenh.  
Dict. de Physiol.

Edinburgh Med. J.  
Education  
Educ. Rev.  
Encyc. Brit.  
Et. publ. p. Pères Comp. d. Jésus  
Eth. Nic.  
Eth. of Nat.

Field Columbian Museum—Anthropol. Ser.  
Folk-Lore  
Fortn. Rev.  
Fortsch. d. Med.  
Forum  
Friedreich's Bl. f. gerichtl. Med.

Gac. Méd.  
Gen. Corresp.  
Gen. Meth.  
Gen. Morphol.  
Gesch. d. Aesthetik  
Gesch. d. christl. Eth.  
Gesch. d. Philos.  
Gior. di Patol. Nerv. o. Ment.  
Glasgow Med. J.

Handb. d. Physiol.  
Handb. of Mor. Philos.  
Handwörterb. d. Staatswiss.  
Hist. of Eth.  
Hygeia

Inaug. Diss.  
Inland Educ.  
Int. J. of Ethics  
Int. Med. Mag.  
Int. Monatssch. f. Anat. u. Physiol.  
Int. Sci. Ser.  
Intermed. d. Biol. et d. Méd.  
Intermed. d. Neurol. et d. Alién.  
Iowa Med. J.

J. Amer. Folklore  
J. Anthropol. Inst.  
J. Asiatic Soc.  
J. Boston Soc. Med. Sci.  
J. de l'Anat. et de la Physiol.  
J. de Neurol. (et d'Hypnol.)  
J. de Physiol. et Pathol. Gén.  
J. de Physique  
J. Int. d'Anat. et de Physiol.  
J. Linn. Soc.  
J. Amer. Med. Assoc.  
J. N. Y. Entomol. Soc.  
J. N. Y. Microsc. Soc.  
J. of Anat. and Physiol.  
J. of Compar. Neurol.  
J. of Educ.  
J. of Exper. Med.  
J. of Laryngol., Rhinol., and Otol.  
J. of Ment. Sci.  
J. of Morphol.  
J. of Nerv. and Ment. Dis.  
J. of Ophthal., Otol., and Laryngol.  
J. of Oric. Surg.  
J. of Pedag.  
J. of Physiol.  
J. of Polit. Econ.  
J. of Specul. Philos.  
Jahrb. f. Philos. u. spek. Theol.  
Jahrb. f. Psychiat. u. Neurol.  
Jona. Zeitsch. f. Naturwiss.  
Johns Hopkins Hosp. Rep.  
Johns Hopkins Univ. Circ.  
J. Roy. Statist. Soc.

Kansas Univ. Quart.  
Kantstud.  
Klin. Monatsbl. f. Augenh.  
Klin. Vortr. a. d. Geb. d. Otol. u. Phar.-Rhinol.  
Krit. d. prakt. Vernunft  
Krit. d. reinen Vernunft

La Nature  
La Parole  
Lancet  
Laryngol.  
Lects. on Met.  
Lehrb. d. Psychol.  
Linn. Soc. J. Zool.  
Linn. Soc. Trans.  
Lyon Méd.

Mag. Nat. Hist.  
Manicomio Mod.  
Manual of Psychol.  
Med. Jahrb., Wien  
Med.-Leg. J.  
Med. Mag.  
Méd. Mod.  
Med. Record  
Med. Times  
Mem. Amer. Acad. Arts and Sci.

Mem. Amer. Mus. of Nat. Hist., N. Y.  
Mem. Bost. Soc. Nat. Hist.  
Mém. Soc. d'Anthropol. Paris  
Mém. Soc. Zool. d. France  
Ment. Devel. in the Child and the Race  
Ment. Dis.  
Meth. of Eth.  
Mind  
Mitteil. d. zool. Stat. zu Neapel  
Monatssch. f. Ohrenh.  
Monatssch. f. Psychiat. u. Neurol.  
Monist  
Mor. and Legisl.  
Mor. Sent.  
Morphol. Arb. (Schwalbe)  
Morphol. Jahrb.  
Münch. med. Wochensch.

Nat. Sci.  
Nature  
Natur u. Offenb.  
Naturw. Wochensch.  
Neurol. Centralbl.  
New World  
Nineteenth Cent.  
Nördiskt Med. Arkiv.  
Norsk Mag. f. Laegevid.  
North Amer. Rev.  
Northwest. Lancet  
Nouv. Icon. de la Salpêtrière  
Nov. Org.  
Nuova Antol.  
N. Y. Med. J.  
N. Y. State Hosp. Bull.

Open Court  
Ophthal. Rec.  
Ophthal. Rev.

Päd. Monatsh.  
Pedag. Sem.  
Pediatrics  
Philos. Aphor.  
Philos. d. Gricchen  
Philos. Jahrb.  
Philos. Mag.  
Philos. of Educ.  
Philos. Rev.  
Philos. Stud.  
Philos. Trans. Roy. Soc.  
Philos. Zool.  
Physical Rev.  
Physiol. d. Geruchs  
Physiol. Optik  
Physiol. Psychol.  
Polit. Sci. Quart.  
Pop. Sci. Mo.  
Pract. Eth.  
Presb. and Ref. Rev.  
Presse Méd.  
Presse Méd. Belg.  
Princeton Contrib. to Philos.  
Princeton Contrib. to Psychol.  
Princ. of Econ.  
Princ. of Eth.  
Princ. of Psychol.  
Princ. of Sci.  
Princ. of Sociol.  
Proc. Acad. Nat. Sci.  
Proc. Amer. Acad. Arts and Sci.  
Proc. Amer. Assoc. Adv. Sci.

Proc. Amer. Med.-Psychol. Assoc.  
Proc. Amer. Philos. Soc.  
Proc. Amer. Psychol. Assoc.  
Proc. Cambridge Philos. Soc.  
Proc. Entomol. Soc.  
Proc. Manchester Lit. and Philos. Soc.  
Proc. Roy. Soc.  
Proc. Soc. Psych. Res.  
Proc. Zool. Soc.  
Progrès Méd.  
Przegląd Filoz.  
Przegląd Lekarski  
Psicol. Contemp.  
Psychiater  
Psychische Stud.  
Psychol. als Wiss.  
Psychol. Exper.  
Psychol. Arb.  
Psychol. Rev.  
Publ. Amer. Acad. Polit. and Soc. Sci.

Quart. Med. J.  
Quart. J. Microsc. Sci.  
Quart. J. of Inobr.

Real-Encyc.  
Rec. d'Ophthal.  
Rendic. R. I. Lombard.  
Rep. Brit. Assoc. Adv. Sci.  
Rep. Bureau Ethnol.  
Rep. Comm'r Educ.  
Rep. Smithsonian. Inst.  
Rev. Bleue  
Rev. d. Deux Mondes  
Rev. d. Quest. Hist.  
Rev. d. Quest. Scient.  
Rev. d. Rev.  
Rev. de l'Enseignem.  
Rev. de l'Hypnot.  
Rev. de l'Univ. de Brux.  
Rev. de Méd.  
Rev. de Med. y Cirug. Pract.  
Rev. de Mét. et de Mor.  
Rev. de Mor. Sociale  
Rev. de Paris  
Rev. de Psychiat., de Neurol. et de Psychol.  
Exper.  
Rev. de Psychol. Clin. et Thérap.  
Rev. Encyc.  
Rev. Gén. des Sci.  
Rev. Gén. d'Ophthal.  
Rev. Int. de l'Enseignem.  
Rev. Int. de Sociol.  
Rev. Méd. de la Suisse Romande  
Rev. (Mens.) de l'École d'Anthropol.  
Rev. Néo-Scol.  
Rev. Neurol.  
Rev. Pédag.  
Rev. Philos.  
Rev. Scient.  
Rev. Thom.  
Rev. Trimest. Microg.  
Riv. di Filos. Scient.  
Riv. di Patol. Nerv. e Ment.  
Riv. di Sci. Biol.  
Riv. Filos.  
Riv. Icon. Poliel. Gen. di Torino  
Riv. Ital. di Filos.  
Riv. Ital. di Sociol.  
Riv. Mens. di Psich. Forens., Antropol. Crim.  
occ.

## II. ABBREVIATIONS OF TITLES

Riv. Quind. di Psicol.  
Riv. Sperim. di Freniat.

Science  
Sci. of Educ.  
Scient. Amer. Suppl.  
Sci. Progress  
Semaine Méd.  
Semej. malat. ment.  
Sitzber. Akad. Wiss. Berlin  
Sitzber. Akad. Wiss. München  
Sitzber. Akad. Wiss. Wien  
Skand. Arch. f. Physiol.  
Social and Eth. Interpret.  
Sperimentale  
Stud. in Educ.  
Stud. Yale Psychol. Lab.  
Syst. Dis. Eye  
Syst. d. Philos.  
System. Theol.

Texas Acad. of Sci.  
Toledo Med. and Surg. Rep'r.  
Trans. Amer. Microsc. Soc.  
Trans. Amer. Philos. Soc.  
Trans. Canad. Inst.  
Trans. Illinois Soc. Child-Study  
Trans. Roy. Soc. Canada  
Trans. Roy. Soc. Edinburgh  
Trib. Méd.  
Tuke's Dict. of Psychol. Med.  
Twentieth Cent. Pract. of Med.

Univl. Cyc.  
Univ. Med. Mag.  
Univ. of Cal. Stud.  
Univ. of Chicago Contrib. to Philos.  
Univ. of Iowa Stud. in Psychol.

Univ. of Toronto Stud.—Psychol. Ser.

Verh. d. Berl. Gesell. f. Anthropol.  
Vocab. of Philos.  
Voprosi Philos.  
Vrach  
Vtljsch. f. gerichtl. Med.  
Vtljsch. f. Musikwiss.  
Vtljsch. f. wiss. Philos.

Weekbl. v. h. nederl. Tijd. Geneesk.  
West London Med. J.  
West. Reserve Univ. Bull.  
Westminster Rev.  
Wien. klin. Rdschau.  
Wien. klin. Wochensch.  
Wien. med. Presso  
Wien. med. Wochensch.  
Wisc. Geol. and Nat. Hist. Survey Bull.  
Wörterb. d. philos. Begriffe  
Wörterb. d. philos. Grundbegriffe

Zool. Anz.  
Zool. Jahrb.  
Zeitsch. f. angew. Mikr.  
Zeitsch. f. Augenh.  
Zeitsch. f. Biol.  
Zeitsch. f. Ethnol.  
Zeitsch. f. Hypnot.  
Zeitsch. f. imman. Philos.  
Zeitsch. f. kathol. Theol.  
Zeitsch. f. klin. Med.  
Zeitsch. f. Krim.-Anthropol.  
Zeitsch. f. Ohrenh.  
Zeitsch. f. päd. Psychol.  
Zeitsch. f. Philos. u. Päd.  
Zeitsch. f. Philos. u. philos. Krit.  
Zeitsch. f. physiol. Chemie  
Zeitsch. f. Psychol.  
Zeitsch. f. wiss. Zool.

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## ECONOMY — ECSTASY

modern writings will be found at the beginning of the successive chapters of HADLEY'S *Economics* (N. Y. and London, 1896); a fuller one in ANDREWS' *Institutes of Economics* (Boston, 1889); a very complete and good one in COSSA'S *Introduction to the Study of Political Economy* (trans. by Dyer; London, 1893).

**Economy** (in aesthetics): Ger. *Oekonomie-princip*; Fr. *principe d'économie*; Ital. *principio dell'economia*. The principle or law which asserts that the aesthetic value of any object, as a statue, or act, as dancing, depends upon the absence of all superfluous features or elements, and upon the presence of the essentials only.

The brothers Weber (*Mechanik d. mensch. Gehwerkzeuge*, in *Pogg. Ann.*, 1837) appear to have been the first to maintain, on the basis of experimental observations, that the physiologically correct, that which involves no wasted energy, is synonymous with the aesthetically beautiful. Spencer (*Essays, Scientific, &c.*, ii., 1892) has developed the principle of economy in a somewhat similar manner as applied to literary style and to physical grace. Avenarius, under the title *Princip des kleinsten Kraftmasses* (*Philos. als Denken d. Welt*, 1876), employs essentially the same conception as a basal philosophic doctrine. Fechner also accords the principle distinct importance (*Vor-schule d. Aesth.*, ii., 1876). It has been criticized by Bosanquet (*Aesthetics*, 1892) as essentially a restatement, with certain additions of a physiological character, of Aristotle's doctrine of the appropriate relations of the parts to the whole in a work of art. On this last point see HARMONY; for the bearings of the physiological considerations see RHYTHM. For applications of the principle of economy to painting and sculpture, see Hildebrand, *Problem d. Form* (1893). See also Ruskin, 'The Lamp of Sacrifice,' in *Seven Lamps of Architecture*.

**Economy** (logical principle of). A principle maintained by E. Mach that general concepts are merely an adaptation for the economy of mental process. That they have that effect was noticed by Locke.

**Ecstasy**: see MYSTICISM; and consult Eisler, *Wörterb. d. philos. Begriffe*, Ekstase.

**Ecstasy** (as a condition) [Gr. *ἐκστασις*, displacement]: Ger. *Ekstase*; Fr. *extase*; Ital. *estasi*. A condition of the nervous system and mind characterized by immobility, suspension of normal sensory and motor functions, and rapt concentration upon a limited group of ideas.

It is particularly characteristic of various forms of religious absorption. 'The symptoms are very much alike in all cases: after sustained concentration of the attention on the desire to attain an intimate communion with heavenly things, the self-absorption being aided perhaps by fixing the gaze intently upon some holy figure or upon the aspirant's own navel, the soul is supposed to be detached from the objects of earth, and to enter into direct converse with heaven; the limbs are then motionless, flaccid, or fixed in the maintenance of some attitude which has been assumed; general sensibility is blunted or extinguished, the special senses are unsusceptible to the impressions which usually affect them, the breathing is slow and feeble, the pulse is scarcely perceptible, the eyes are perhaps bright and animated, and the countenance may wear such a look of rapture, the fashion of it be so changed, that it seems to be transfigured and to shine with a celestial radiance' (Maudsley). Sensibility to external impressions is not always completely destroyed, but there seems an inability to break through the trance and respond to such impressions. At times there is nearly a complete forgetfulness of what has occurred during the ecstatic state, but usually the ecstatic can give some account of his vision and experiences; such reports have been influential in the shaping of religious doctrines both among primitive men and in historical religions.

The condition is closely related to HYPNOSIS (q. v.) and to CATALEPSY (q. v.), and as a rule ecstasy is not closely differentiated from trance except by the presence of a religious or supernatural absorption not found in TRANCE (q. v.). It is usually self-induced, and seems subject to contagion and the dominance of psychological motives. Ribot regards it as a typical form of extinction of the will. The insensibility to pain may be so diminished that severe tortures remain unfelt; martyrs dying at the stake may have been spared the anguish of their fate by the insensibility produced by religious ecstasy. Conditions of violence or of automatic movements connected with religious excitement are also described as cases of ecstasy; such are the 'jumpers,' 'shakers,' 'dancers,' 'flagellants,' &c. Cf. CONTAGION (mental), and also Hysteria, Epilepsy, Stigma.

**Literature**: MAUDSLEY, *Pathol. of Mind*, 70-3 and elsewhere; HAMMOND, *Diseases of Nerv. Syst.* (7th ed., 1881), 775-86. For cases see art. Ecstasy in Tuke's *Dict. of Psychol. Med.*, and Ribot, *Diseases of the Will*.