

A COMPARISON OF *PSYCHOLOGY: AN ELEMENTARY TEXTBOOK* BY
HERMANN EBBINGHAUS WITH MODERN INTRODUCTORY
TEXTBOOKS †

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Few modern psychologists are aware that Hermann Ebbinghaus (1850-1909) contributed to psychology as an author of introductory textbooks. Two textbooks were published during the final years of his life - the two-volume (*Principles of Psychology*, 1897; 1902; 1905; 1908a; 1911; 1913; 1910; 1919b) and the briefer *Abriss der Psychologie* (*Outline of Psychology*, 1908b; 1909; 1910; 1911; 1912; 1914; 1919a; 1920; 1922; 1932). The first volume of *Principles* was originally published in 1897. Unfortunately, only a part of the second volume was published before Ebbinghaus died in 1909. Posthumous extension and completion of the work was undertaken by Ernst Dürr (1878 -1913) and subsequently by Karl Bühler (1879- 1963). The *Outline of Psychology* was first published in 1908 (Shakow, 1930). Table 1 lists a partial bibliography of both the *Principles* and the *Outline* (see Table 1).

The main focus of this paper will be on the *Outline*. This work was highly popular as an introductory text. On the average, more than one new edition appeared every two years, following the first publication. The last edition, the ninth, was printed in 1932. Originally, the *Outline* had been written for Hinneberg's *Kultur der Gegenwart*, which also included contributions by Wundt, Eucken, Lipps and Riehl. It was published on its own by Veit and Company in Leipzig (Shakow, 1930).

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There is evidence for a very positive reception of the Outline. In Germany, the authoritative "Dünnhaupt's" guide to scientific literature for university students -Dünnhaupts Studien- und Berufsführer (1922) - recommended it, as well as the Principles, as standard textbooks of general psychology (Giese, 1922). Also in Germany, Richard Pauli, author of a popular textbook on experimental psychology, characterized the Outline in 1930 as "the briefest presentation of associationist (views) in psychology" and evaluated it as "excellent" (1930, p. 30). He regarded the Principles as "suitable for more demanding expectations" (1930, p. 23).

Shortly after the first publication, the Outline went into numerous French and English translations (Boring, 1957). In the United States, Max Meyer (1873 - 1967), then professor of psychology at the University of Missouri, translated and edited the Outline for American students, entitling the work, Psychology : An elementary textbook. In the preface, Meyer predicted that the book would "commend itself through its brevity and the excellent proportions of the material selected" (1908c, p. iii). Also he stated that he "became interested in this book because of the fact that the author has succeeded in keeping entirely free of all fads, and has presented only that which is generally accepted by psychological science" (1908c., p. iii).

An additional source of the acceptance of the Outline comes from a copy of the Meyer translation which was found in the personal library of the prominent American psychologist, Karl Dallenbach (1887-1971), (Note 1). The volume bears the inscription, "Karl M. Dallenbach, Ohio State University, (1915)". The book appears to be carefully underlined and contains numerous favorable comments in Dallenbach's handwriting regarding the textual content. Phrases such as "good explanation" appear frequently throughout the pages. While no record of any position statement made by Dallenbach regarding the work has been found, there is evidence that he had a deep admiration for the author. When Dennis in 1954 minimized the contributions of Ebbinghaus due to his small number of publications, Dallenbach responded in the American Psychologist (1954):

"One may be accurate... and still demonstrate that Ebbinghaus' published work is surprisingly small for a man of his stature and reputation." (p. 266)

From these diverse sources of the positive evaluation of the Outline of Psychology, the conclusion is that it was respected as an introductory textbook. For this reason, it was decided to compare it with recent introductory texts in the hope of assessing some of the changes which have occurred in psychology since the beginning of the century.

Method

Materials

The 1908 translation by Max Meyer of the Outline of Psychology by Hermann Ebbinghaus was used for the present study. Entitled Psychology: An elementary textbook, the work was intended by Meyer to serve primarily as a textbook for the beginning student. He described it as a "free" translation of the original. Changes included condensations in the discussions of the anatomy of the nervous system and an elimination of Section 4, which Meyer thought redundant. There are additions to the original text which include questions to guide the reader, as well as three figures which were the property of Meyer.

Seven recent texts, with current editions published between 1978 and 1984, were selected from a collection of introductory texts for comparison. They are: An introduction to psychology by Atkinson, Atkinson and Hilgard (1983); Psychology today: An introduction by Bootzin, Loftus and Zajonc (1983); Psychology: Behavior in perspective by Buss (1978); Psychology by Darley, Glucksberg, Kaim and Kinchla (1984); Basic psychology by Gleitman (1981); Psychology: The frontier of behavior by Smith, Sarason, and Sarason (1982); and Psychology: Principles and applications by Worchel and Shebilske (1983). These books are popular texts used in beginner courses today.

Procedure

The procedure consisted of first, preparing a list of twenty conceptually-broad general psychology topics which are covered by most textbooks. This was derived from the tables of contents of the 1908 Meyer translation and the seven recent publications. The Thesaurus of Psychological Index Terms (American Psychological Association, 1982) was used as an additional source of important topics. Next, each text was examined and the number of pages devoted to each of the twenty topics was recorded. That number was then converted to percentages to allow a comparison between texts. The results were then organized to be displayed in a table.

Results

Psychology: An elementary textbook, translated and edited by Max Meyer, published in 1908 by D. C. Heath & Company in Boston, was 215 pages in length, with 209 pages containing textual material. Figure 1 is a reproduction of the Table of Contents of that volume. The work contained 17 illustrations prepared from line drawings. The text was divided into five subdivisions: introduction (24 pages, 11% of the text), General Psychology (23 pages, 11% of the text), The Special Facts of Consciousness (64 pages, 30% of the text), Complications of Mental Life (69 pages, 32% of the text), and Highest Accomplishments of Consciousness (30 pages, 14% of the text).

The recent texts were found on the average to be 60% longer than Ebbinghaus text. Summary data concerning the topical content of the textbooks examined are found in Table 2.

Data are given concerning the extent of coverage of each of twenty major topics for each of the texts examined. Comparing the content of the Ebbinghaus text with that of recent texts, it was found that the list of topics which comprise 100% of recent texts make up 65% of the Ebbinghaus text. This subject matter is largely contained in Chapters 1, 2 and 3 of the Ebbinghaus text. Another significant finding is that history of psychology comprises 12% of the historical text, but only 1%, on the average, of the modern texts. Other findings are that sensation and perception cover 19% of the Ebbinghaus text and 10% of the modern texts; the cognitive areas -memory, language and thinking- cover 17% of the Ebbinghaus text in comparison with 11% of the modern texts; and learning covers 1% of the historical text and 7% of modern texts. Interestingly, some areas are equally represented in the Ebbinghaus and modern texts. Physiological psychology comprises the 6% of the Ebbinghaus text as well as of the modern texts. Also, emotion and motivation comprise 10% of the Ebbinghaus text and 11% of the modern texts. Finally, the applied areas of psychology, comprising 48%, on the average, of modern texts, are not at all represented in the Ebbinghaus text.

Discussion

There is considerable overlap between the topical content of the Ebbinghaus text and modern introductory texts. In fact, the full topical content of a first semester of a typical introductory course is well represented in the Ebbinghaus text. Additionally, many of the subheadings in Chapters 1, 2, and 3 of the Ebbinghaus text (see figure 1) do not differ in substance from those considered in

modern texts. Differences do exist, however, between the Ebbinghaus text and modern texts. The categories comprising 65% of the historical text comprise only 45% of modern texts. In today's books, these areas also represented in the Ebbinghaus text would be found under physiological, experimental and cognitive psychology. The remaining 35% of the Ebbinghaus text would be subsumed under philosophy, history of psychology and systems of psychology and would not be introduced to the student until he would have reached advanced status.

It could be argued that general psychology was narrowly conceptualized at the beginning of the century. The basis for this position lies in the fact that a major part of the content in modern introductory texts is devoted to the applied areas of Psychology, in its developmental, social, personality and clinical domains. The trend to inclusion and expansion beyond the traditional fields, however, was already predictable at the time of Ebbinghaus. Edward Titchener (1868-1927) felt he was the last bastion for "pure" science at the time of his monumental address at the celebration of the 20th anniversary of the opening of Clark University, in 1909, when he said:

My own standpoint, which is that of pure science, or the desire for knowledge without regard to utility, is in all likelihood shared only by a small minority of the audience. (1910, p. 405-406)

To Ebbinghaus, the impetus for the channeling of psychology beyond its traditional well-spring was recognized with more tolerance. In Psychology: An elementary textbook, he wrote:

At no time, indeed, has the practical importance of psychology, its great usefulness in education, psychiatry, law, language, religion, art, been more strongly felt, or given rise to more numerous investigations than at present. But it is now recognized that, here as elsewhere, it is more fruitful for the true and lasting advancement of philosophical ends, instead of always thinking of advancing them, to forget them for the time, and to work on the preliminary problems as if these preliminary problems were the only ones existing. (1908, p. 24)

Major advances in knowledge have occurred in all domains of psychology since the time of Ebbinghaus. Before an assessment of progress can be made, however, an evaluation of change in the understanding of the basic phenomena of psychological science, those "preliminary problems" is required. In a recent issue of the American Psychologist, Gentner and Grudin cautioned that progress in

psychology is related to psychologists' understanding of "the theoretical frameworks in terms of which they construe the phenomena they observe" (1985, p. 191). This means not only ability to "see through the metaphors of our time" (p. 191). The divergent schools of psychology which have developed in this century teach the student of psychology to do this well enough. According to the authors, the real challenge to determining progress lies in the fact that "our own frameworks remain to be evaluated" (p. 191) From this perspective, it is questionable whether or not our modern introductory textbooks provide a more salutary basis for construing the fundamental nature of psychology than did the Ebbinghaus text. Modern elementary texts provide a broad general overview of the field. But it appears the Ebbinghaus text attempted a more compelling exposition of the complexities inherent in psychology, through a consideration of its history and theoretical structures, than do contemporary texts.

It would be of interest for future work to examine the Outline of Psychology, as well as the Principles of Psychology, in their original editions. Additionally, it would seem appropriate for these works to be compared with other historical introductory texts as part of the effort in psychology to trace and see beyond its own frameworks.

Note 1

The volume of Psychology: An elementary Textbook by Hermann Ebbinghaus which bears the inscription, "Karl M. Dallenbach, Ohio State University, 1915" is in the Private Collections Department of the Harry B. Ransom Center at the University of Texas at Austin.

SUMMARY

For this study, Psychology: An Elementary Textbook (1908) was used for comparison with recent introductory textbooks. The comparison showed considerable overlap between the topical content of the Ebbinghaus text and texts of today. However, the categories comprising 65% of the Ebbinghaus text comprise only 45% of modern texts. Implications of this difference are also discussed.

RESUMEN

En el presente artículo se compara el Abriss der Psychologie de Ebbinghaus, en la traducción al inglés en 1908 por Max Meyer, con siete textos introductorios actuales publicados entre 1978 y 1984, a partir del porcentaje de espacio dedicado por todos ellos a un conjunto de veinte tópicos psicológicos habitualmente recogidos en los manuales contemporáneos.

References

- American Psychological Association (1982). Thesaurus of psychological index terms. Washington, D.C.: Author.
- Atkinson, R.L., Atkinson, R.C. & Hilgard, E.R. (1983). An introduction to psychology (8th ed.). San Diego: Harcourt, Brace & Jovanovich.
- Bootzin, R.R., Loftus, E.F., Zajonc, R.B. (1983). Psychology today: An introduction (5th ed.). New York: Random House.
- Boring, E.G. (1957). A history of experimental psychology (2nd ed.). New York: Appleton-Century-Crofts.
- Buss, A.H. (1978). Psychology: Behavior in perspective (2nd ed.). New York: John Wiley & Sons.
- Dallenbach, K. M. (1954). Ebbinghaus' bibliography. American Psychologist, 9, 265-266.
- Darley, J.M., Glucksberg, S., Kamin, L.J. & Kinchla, R.A. (1984). Psychology (2nd ed.). Englewood Cliffs, N.J.: Prentice Hall.
- Dennis, W. (1954). Bibliographies of eminent psychologists. American Psychologist, 9, 35-36.
- Ebbinghaus, H. (1897). Grundzüge der Psychologie (Vol. 1, First section). Leipzig: Veit & Co.
- Ebbinghaus, H. (1902). Grundzüge der Psychologie (Vol. 1). Leipzig: Veit & Co.
- Ebbinghaus, H. (1905). Grundzüge der Psychologie (Vol. 1, 2nd ed.). Leipzig: Veit & Co.
- Ebbinghaus, H. (1908a). Grundzüge der Psychologie (Vol. 2, First part). Leipzig: Veit & Co.
- Ebbinghaus, H. (1908b). Abriss der Psychologie. Leipzig: Veit & Co.
- Ebbinghaus, H. (1908c). Psychology: An elementary textbook. (M. Meyer, trans.). Boston: D.C. Heath & Co.

- Ebbinghaus, H. (1909). Abriss der Psychologie. (2nd ed.). Leipzig: Veit & Co.
- Ebbinghaus, H. (1910). Abriss der Psychologie. (3rd ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
- Ebbinghaus, H. (1911). Grundzüge der Psychologie (Vol. 1, 3rd ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
- Ebbinghaus, H. (1912). Abriss der Psychologie. (4th ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
- Ebbinghaus, H. (1913). Grundzüge der Psychologie (Vol. 2, 2nd ed.) (started by Hermann Ebbinghaus, continued by Ernst Dürr). Leipzig: Veit & Co.
- Ebbinghaus, H. (1914). Abriss der Psychologie. (5th ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
- Ebbinghaus, H. (1919a). Abriss der Psychologie. (6th ed.) (revised by Karl Bühler). Leipzig: Veit & Co.
- Ebbinghaus, H. (1919b). Grundzüge der Psychologie (Vol. 1, 4th ed.) (revised by Karl Bühler). Leipzig: Veit & Co.
- Ebbinghaus, H. (1920). Abriss der Psychologie. (7th ed.) (revised by Karl Bühler). Berlin: de Gruyter.
- Ebbinghaus, H. (1922). Abriss der Psychologie. (8th ed.) (revised by Karl Bühler). Berlin: de Gruyter.
- Ebbinghaus, H. (1932). Abriss der Psychologie. (9th ed.) (revised by Karl Bühler). Berlin: de Gruyter.
- Gentner, D. & Grudin, J. (1985). The evolution of mental metaphors in psychology: A 90-year retrospective. American Psychologist, 40, 181-193.
- Giese, F. (1922). Dünnhaupts Studien- und Berufsführer (Vol. 2). Dessau: Dünnhaupt.
- Gleitman, H. (1981). Basic psychology (2nd ed.). New York: W.W. Norton & Co.
- Pauli, R. (1930). Psychologisches Praktikum. Leitfaden für experimentell-psychologische Übungen (4th ed.). Jena: Fischer.
- Shakow, D. (1930). Hermann Ebbinghaus. American Journal of Psychology, 42, 505-518.
- Smith, R.E., Sarason, I.G., Sarason, B.R. (1982). Psychology: The frontier of behavior (2nd ed.). New York: Harper & Row.
- Titchener, E.B. (1910). The past decade in experimental psychology. American Journal of Psychology, 21, 404-421.
- Worchel, S. & Shebilske, W. (1983). Psychology: Principles and applications. Englewood Cliffs, N.J.: Prentice Hall.

Table 1

Partial Bibliography for the Grundzüge der Psychologie (Principles of Psychology) and the Abriss der Psychologie (Outline of Psychology) by Hermann Ebbinghaus

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- 1897 Grundzüge der Psychologie (Vol. 1, First section). Leipzig: Veit & Co.
 1902 Grundzüge der Psychologie (Vol. 1). Leipzig: Veit & Co.
 1905 Grundzüge der Psychologie (Vol. 1, 2nd ed.). Leipzig: Veit & Co.
 1908 Grundzüge der Psychologie (Vol. 2, First part). Leipzig: Veit & Co.
 1908 Abriss der Psychologie. Leipzig: Veit & Co.
 1908 Psychology: An elementary textbook (M. Meyer, Trans.). Boston: D.C. Heath & Co.
 1909 Abriss der Psychologie (2nd ed.). Leipzig: Veit & Co.
 1910 Abriss der Psychologie (3rd ed.). Leipzig: Veit & Co.
 1911 Grundzüge der Psychologie (Vol. 1, 3rd ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
 1912 Abriss der Psychologie (4th ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
 1913 Grundzüge der Psychologie (Vol. 2, 2nd ed.) (started by Hermann Ebbinghaus, continued by Ernst Dürr). Leipzig: Veit & Co.
 1914 Abriss der Psychologie (5th ed.) (revised by Ernst Dürr). Leipzig: Veit & Co.
 1919 Abriss der Psychologie (6th ed.) (revised by Karl Bühler). Leipzig: Veit & Co.
 1919 Grundzüge der Psychologie (Vol. 1, 4th ed.) (revised by Karl Bühler). Leipzig: Veit & Co.
 1922 Abriss der Psychologie (8th ed.) (revised by Karl Bühler). Berlin: de Gruyter
 1932 Abriss der Psychologie (9th ed.) (revised by Karl Bühler). Berlin: de Gruyter

Fig. 1. Table of Contents of Ebbinghaus's Textbook.

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Table 2

A TOPICAL COMPARISON OF EBBINGHAUS' TEXT WITH RECENT TEXTS¹

TOPICS	EBBINGHAUS	1 2 3 4 5 6 7							MEAN (recent texts)
		1	2	3	4	5	6	7	
INTRODUCTION	12		2	2	4	3	1	5	2
HISTORY		4	4	3			4	4	1
RESEARCH METHODS	6	5	4	7	7	10	6	5	2
PHYSIOLOGICAL PSYCHOLOGY	13	5	4	4	6	6	3	3	6
SENSATION		6	4	7	4	6	3	3	4
PERCEPTION	6	5	4	3	5		6	7	5
ALTERED STATES OF CONSCIOUSNESS		5	4	3	5		6	7	4
LEARNING	1	5	7	13	6	7	7	4	7
MEMORY	3	6	5	4	5	5	4	3	5
LANGUAGE	7	4	5	3	3	6	1	3	4
THINKING	7	1	3	3	3	3	1	7	2
EMOTION	6	3	4	4	6	6	3	7	4
MOTIVATION	4	8	7	8	5	6	7	6	7
DEVELOPMENTAL PSYCHOLOGY		8	7	10	9	3	10	12	8
PSYCHOMETRICS		5	4	5	6	13	5	3	6
PERSONALITY		12	14	7	10	9	11	7	10
PHYSICAL & PSYCHOLOGICAL DISORDERS		8	6	4	6	8	5	8	6
TREATMENT & PREVENTION			4	4	5	5	5	6	5
SOCIAL PSYCHOLOGY		11	13	10	11	9	10	19	12
APPLIED PSYCHOLOGY							4		1
TOTAL	65	100	100	100	100	100	100	100	100

- 1.- Numbers in heading refer to the recent texts as follows: 1- Atkinson, Atkinson & Hilgard; 2- Bootzin, Loftus & Zajonc; 3- Buss; 4- Darley, Glucksberg, Kamin & Kinchla; 5- Gleitman; 6- Smith, Sarason, & Sarason; 7- Worchel & Shebliske.