THE AMERICAN ERA OF JAMES MARK BALDWIN (1893-1903)

RONALD HAROLD MUELLER
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THE AMERICAN ERA OF JAMES MARK BALDWIN (1893-1903)

by

RONALD H. MUELLER

B.A. (Honors), University of Windsor, 1969
M.A., University of Windsor, 1970

A THESIS

Submitted to the University of New Hampshire
In Partial Fulfillment of
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ABSTRACT

THE AMERICAN ERA OF JAMES MARK BALDWIN (1893-1903)

by

RONALD H. MUELLER

This investigation focuses on the American era of James Mark Baldwin, an important early American psychologist. Particular attention is paid to the decade 1893-1903 which found Baldwin teaching psychology at Princeton. The psychological work of Baldwin's teacher, James McCosh, is addressed first. He is viewed as a transitional figure, on the one hand representing one of the last systems of faculty psychology in America, while on the other hand being favorably inclined toward evolutionary theory and the 'new psychology' which was developing in Germany.

The life and psychological contributions of Baldwin are discussed in detail, beginning with his undergraduate training at the College of New Jersey, and continuing through his year in Germany, and his academic appointments at Lake Forest, Toronto, Princeton, and Johns Hopkins. His organizational and editorial duties included the founding and co-editorship of the Psychological Review and the Psychological....
Then three of Baldwin's books are analyzed using Watson's prescriptive theory approach. Developmentalism and functionalism are found to be the most dominant prescriptions reflected in Baldwin's Mental Development, Social and Ethical Interpretations, and Development and Evolution. Developmentalism is manifested in Baldwin's genetic method, his dialectic of personal growth, and his adherence to recapitulation theory. Functionalism appears in his theory of imitation, in his views on suggestion, habit and accommodation, organic selection, and social heredity.

Seven relevant journals were then selected to serve as the basis for a citation analysis of Baldwin's writings. These included the Psychological Bulletin (1910-1969), the Psychological Review (1910-1969), the American Journal of Sociology (1895-1969), the American Sociological Review (1936-1969), the Sociological Review (1908-1969), the Journal of Philosophy, Psychology and Scientific Methods (1904-1920), and the Journal of the History of the Behavioral Sciences (1965-1973). Thirteen books and nineteen articles by Baldwin were cited in the literature that was analyzed. A total of 175 citations to Baldwin's works was uncovered. The most frequently cited books were his Mental Development (43 times), Social and Ethical Interpretations (36 times), and the Dictionary of Philosophy and Psychology (29 times). Plotting the citations of four of the journals analyzed
across blocks of ten-year periods indicated an increasing trend in the frequency of citations from 1910-1919 to 1920-1929, but then a continuously declining trend from 1930 to 1969.

Finally, Baldwin's contributions to American psychology are enumerated. These include his elaboration of the novel idea that the self arises only through social interaction, that the genetic method is the most appropriate technique for studying mental development, that evolutionary theory may help to understand mental development, and that the investigation of psychology should be functional in nature, that is, focusing on how people adapt to their environment. He also assisted in the development of early scientific American psychology by editing several journals as well as the enormous Dictionary of Philosophy and Psychology.
CHAPTER I

PSYCHOLOGY IN AMERICA BEFORE BALDWIN

If all the records of psychology, up to 1890, were to be destroyed, the science would go shivering for lack of pinfeathers [Howard, 1927, p. 307].

Comments by social scientists about James Mark Baldwin tend to fall into two general categories. The majority response is one of total ignorance as to who Baldwin was, while a second, less-frequent statement is something like: "Wasn't he an early American psychologist?"

One indication that Baldwin was a highly regarded figure among his colleagues in American psychology is of interest. In 1903, James McKeen Cattell conducted a survey in which he attempted to determine who the most eminent psychologists of the day were, as reflected by their contributions to psychological research. Baldwin ranked fifth, behind William James, Cattell himself, Hugo Münsterberg, and G. Stanley Hall, but ahead of such luminaries as E. B. Titchener, G. T. Ladd, Josiah Royce, John Dewey, and Joseph Jastrow (Cattell, 1929). Today much is written about James, and recently scholars have devoted themselves to an in-depth study of Cattell (Sokal, 1972), Hall (Ross, 1972), Ladd (Mills, 1969), and Thorndike (Jonášich, 1968).

Nevertheless, what I. Woodbridge Riley said nearly seventy years ago about American philosophy of the 18th and
19th centuries—that it is "but little studied and imperfectly understood [1907, p. vii]," seems to apply also to American psychology of the period during which Baldwin lived. It is hoped that this investigation will shed some light on both the life and contributions of James Mark Baldwin as well as the status of psychology in America during the years just prior to, and immediately following, the turn of the twentieth century.

The first chapter will provide a brief introduction to the time preceding Baldwin. Referring to the period prior to 1880, Cattell (1929) once said that the history of psychology in America would be as short as a book on snakes in Ireland since the time of St. Patrick. "In so far as psychologists are concerned, America was then like Heaven, for there was not a damned soul there [p. 336]." This statement may well be accurate if it refers to the existence of, and active research in, psychological laboratories, since no laboratories existed in America before that time. However, if the implication is that nothing of importance had occurred, or that no one was addressing himself to psychological problems, Cattell's statement is clearly misleading. It is true that there were no scholars trained exclusively in psychological theory and methodology, but why people acted the way they did was commonly discussed albeit typically in a theological setting.
Nineteenth Century American Faculty Psychology

The curricula of the nineteenth-century American colleges were characterized by courses in moral philosophy for students in their senior year oftentimes taught by ministers preaching a mixture of Scottish common-sense philosophy and faculty psychology.¹ Bryson (1932) has traced the origin of several of the contemporary social sciences directly to these courses in moral philosophy. A typical course included a discussion of logic and the philosophy of the human mind, rhetoric, natural law, politics, political economy, and morality. As has been indicated, the readings were oftentimes those of the representatives of the Scottish school. The major function of many of the early, denominational colleges was to train students for the ministry.² Veysey (1965) has noted that an orthodox Christian view of religion permeated the American college of the nineteenth century.

¹See G. Stanley Hall (1894). At the end of this article Hall listed a bibliography of over 300 works that were used in the classrooms of the American colleges during the nineteenth century. Also, see Stanley M. Guralnick (1969) who attempted "to demonstrate that science came to permeate the lives of all these institutions [i.e., 15 northeastern colleges], that it was firmly entrenched in the pre-Civil War college, and that in only a few decades the colleges learned how to establish a rapport between curriculum and social needs, a relationship which the older scholastically derived programs could not maintain [p. 10]." This is a novel thesis and it is questionable how successfully it is supported. Another valuable source for information on nineteenth-century American psychology is Albrecht (1960), especially Chapter 2.

²This appears to have been the major force leading to the establishment of the College of New Jersey, of which more will be mentioned a little later in this chapter; see B. B. Edwards (1831).
century, and one of the important ramifications of this tradition, besides the development of one's faculties, was the firm commitment that the student "ought to undergo a definite experience of conversion [p. 25]." To what extent this conversion experience occurred is unknown, but it is clear that the acceptance of Biblical authority was demanded of the students by this orthodox view of man. To the extent that moral philosophy was preached in the college curriculum, it is evident that it was presented in a manner that was congruent and consistent with the religious doctrine of the day. Only later, following the appearance of Darwin's *Origin of Species* (1859) was this conception of man challenged.

As G. Stanley Hall (1894) has stated, "... to the general student and such as were not destined to the work of the ministry, the exercises of the College must have been irksome and, in their estimation, unprofitable [p. 139]." Similarly, most of the psychological writers of this period were, according to Davis (1936), concerned with providing a sound religious and moral foundation in their readers. The writings of Thomas Reid, Sir William Hamilton, Dugald Stewart, and Thomas Brown—all prominent members of the Scottish school, did much to derail the skepticism of Hume and the speculations of Berkeley and Kant.

The account of Frederick Beasley, who was Provost of the University of Pennsylvania, regarding the impact of the common-sense philosophy at Princeton is of particular interest:
... in the College of Princeton, to which we were attached, after the fanciful theory of Bishop Berkeley, as a kind of philosophical daydream, had maintained its prevalence for a season; the principles of Reid, and the Scottish metaphysicians superseded it, and during the period of our residence in the seminary, acquired and maintained undisputed sway. At that time, I, together with all those graduates who took any interest in the subject, embraced without doubt or hesitation the doctrine of the Scottish school [1822, p. ii]. The appeal to common-sense principles fit well in a country of practical people, not favorably disposed to abstract discourse.  

In reference to the substance of the famous Yale Report of 1828, Guralnick (1969), writing in contemporary vein, has suggested that

Although 'faculty psychology' as a paradigm of intellectual development may no longer be an adequate description of the learning apparatus, as a paradigm for curriculum planning it was still meaningful. It emphasized the variety of courses needed to sharpen all the student's powers . . . [p. 55].

Kolesnick (1958) concurred with Guralnick's assessment. He has claimed that mental discipline--the idea that one's mental capabilities can be trained to function more effectively, along with the implications of a faculty psychology, reigned "as the controlling principle of American education, determining its aims and means, curriculum and methodology [1958, p. 11]." The vast majority of psychological

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³For a good discussion of the effect of the Scottish philosophy in America prior to the Civil War, see Douglas Sloan (1971). Herbert W. Schneider (1963) says "The Scotch-Irish in America were peculiarly receptive to enlightenment from this source [i.e., Scotland], for being both religiously and socially uprooted they were relatively free to listen to 'reason' and 'moral sense' from their countrymen [p. 216]."
works either assumed or defended the doctrine of faculties and the basic tenets of the Scottish school. Reid, in particular, was cited as a major authority in several psychological treatises. Ezra Stiles Ely (1786-1861), for example, a Presbyterian minister in Philadelphia, differentiated ten mental faculties in his Conversations on the Science of the Human Mind (1819). In the preface to this work, the author stated his rejection of all metaphysics, except that of common sense. He extensively referred to the works of Reid and Stewart, and said the following in his introduction to the concept of 'faculties':

"By a faculty, in general, I intend any inherent part of the original constitution for a substance by which any distinct operation is performed. . . . A mental faculty is any inherent part of the original constitution of a mind, by which it performs any simple mental operation [p. 32]."

By a 'simple mental operation,' Ely meant anything which the mind does; "for example, if you see, hear, reason, feel, choose, and exert yourself, you perform so many simple mental operations [p. 33]."

However, occasional accounts discrediting faculty psychology and common-sense realism did appear. Frederich Rauch (1806-1841), born and educated in Germany, was President of Marshall College in Pennsylvania when he wrote his

4 Beside those works to be presently discussed, see also Asa Mahan (1854), L. G. Sawyer (1839) and Thomas Upham (1827).

5 These included perception, consciousness, understanding, judging, memory, reasoning, conscience, feeling, volition, and agency (or efficiency).
Psychology; or, a view of the Human Soul, including Anthropology in 1840. In a later edition of the same work, Rauch claimed to have made, to his knowledge, the first attempt at uniting German and American mental philosophy. His critique of faculty psychology did not appear until halfway through the book:

Until recently, mental philosophers have been in the habit of representing mind as a compound of many faculties, as a whole made up of parts. This view of the soul is a mechanical one, and does not regard the character of life in general. It is scarcely necessary to refute an idea so spiritless, for who can believe that the faculties of mind are as separate and distinct as drawers in a chest, each answering a certain purpose and occupying a place, from which all the others must be excluded . . . . But the mind is neither a multitude of faculties, nor is it a simple, identical activity, but it is a union that not only comprises the manifold, but produces it by unfolding its life organically [1853, pp. 192-193].

Although it is dubious whether Rauch's conception of mental faculties was an accurate one (i.e., as being physical entities rather than hypothetical constructs), his writing reflected a clear vitalistic, as opposed to mechanistic, understanding of man.

Both Scottish common-sense philosophy and faculty psychology continued to exert an effect on psychological thought during the second half of the nineteenth century, at least as late as the 1880's (Albrecht, 1960). A major stronghold for the firm expression of both of these traditions was the College of New Jersey (now Princeton University). Undoubtedly the most prominent figure was James McCosh, a Scot
who became its President in 1868. He received training for the ministry at the University of Edinburgh which included reading the principal works of the Scottish philosophers. His acceptance of the post at Princeton allowed him to spread the views of the common-sense philosophy in America, a task which he assumed with great vigor. McCosh was a well-known conservative educator who firmly believed that the major function of a college education was the training of both the moral and mental faculties. Referring to the establishment of a Literature curriculum in addition to the Arts program which he felt should continue to occupy the essential position in the university, McCosh maintained:

... let all these branches be taught in a scientific manner and spirit, and the degree bestowed only after a rigid examination. Let no one be entitled to the honor merely because of his practical skill. This is its own reward, and needs no other than the money it brings. In every university there should be the various branches that cultivate the higher faculties of the mind [1886, p. 39].

Besides continuing the Princetonian tradition of emphasizing religious training for those students inclined to the ministry, the two decades which McCosh spent as President witnessed the development of the school into a top-notch undergraduate college, the doubling of the student body and the tripling in the size of the faculty, the introduction of elective courses, the establishment of an informal graduate curriculum and university fellowships, and the raising of upwards of three million dollars which enabled the college

---

For the best single source for information about McCosh's life see William M. Sloane (1896).
to add several new buildings to the physical plant (Wertenbaker, 1946). The development of elective courses during one's junior and senior years may be viewed as a moderately liberal advance, somewhere between the 'radically' liberal changes implemented by President Eliot at Harvard and the static, fixed curriculum which allowed for no flexibility in one's program whatsoever, which still characterized many of the more traditional colleges. A significant implication of McCosh's 'tempered liberalism' was that it allowed students the opportunity to delve into the psychological literature of the day, and thus expose themselves to influences beyond those of faculty psychology and common-sense realism. McCosh's student, James Mark Baldwin, was one of the first to take advantage of the 'mental science' fellowship which allowed him to study in Europe, and which undoubtedly had a profound effect on his psychological theorizing and interests, clearly going beyond the influences supported at Princeton at that time.

As a representative of the Scottish school, McCosh made a concerted effort to clarify its characteristics, and to distinguish it from contemporary German philosophy. Its chief features were: first, that it proceeded by observation; second, that it observed the operations of the mind through consciousness, and third, that through observation, principles

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7For an abstract of a debate on the issue of college government, in which President Eliot defended the new, more liberalized system of electives while President McCosh represented the more traditional system, see McCosh (1885).
could be discovered which were beyond observation, universal and eternal (McCosh, 1882). It was suspicious of the works of Spinoza, Leibnitz, and Hegel, and frankly, was afraid of speculation of any sort. It relied on deduction only sparingly. The principles which could be discovered through observation were those of common sense. They were by their very nature self-evident (e.g., benevolence is good, cruelty is evil), necessary (i.e., being self-evident, one must hold them, and one cannot be made to think or believe otherwise), and universal (i.e., they are possessed by all men). Borrowing the Kantian terminology, McCosh preferred to call these principles of common sense a priori, because as he said, they were in the mind prior to, and independent of, experience.

A fourth characteristic of the school, typically played down by many of its following, McCosh included, stated that the study of the mind could be aided by observation of the nerves and brain. Although he seemed to encourage the study of physiology as valuable to the advance of psychology as a science, McCosh on the other hand stated that

The scalping knife has laid bare the brain, but has not disclosed to us the judgments, the reasonings, the imaginations, the hopes and fears of the mind. . . . In the study of the mind proper physiology may be a powerful auxiliary . . . but [it] cannot construct the science of psychology. The eye, the ear, the hearing, the smell, the touch, the taste, aided even by the microscope and blowpipe, cannot tell us what any special mental act is, what perception is, what memory is, what the imagination is, what comparison is, what reasoning is, what joy and sorrow, what hope and fear are, what the idea of the perfect is, what wish is, what volition is, what the conscience is, what the remorse for evil is, and the dread of merited punishment is, what the approval of and the rejoicing in the good [are]. These can be revealed
only in the light of consciousness, which furnishes the beginning and end of psychology and mental philosophy [1881, p. 335].

The Scottish philosophy was in essential agreement with the German philosophy, as represented chiefly by Kant, in its opposition to Humean skepticism and its appeal to reason. However, three points of disagreement existed. The Scottish philosophy proceeded by means of the inductive method, began with facts assumed to be self-evident, and argued that the perceptive powers revealed things as they actually were. On the other hand, the German philosophy relied on the critical method, began with phenomena (i.e., appearances), and argued that the perceptive powers added to things by its own forms of space and time.

McCosh's effort to establish Scottish realism in this country was perhaps best exemplified in his critique of the speculative philosophical systems of Spinoza, Leibnitz, and Hegel:

... the Americans believe that there are things to be known, to be prized and secured, and will never therefore look approvingly on an agnosticism which declares that knowledge is unattainable. The American philosophy will therefore be a Realism, opposed to Idealism on the one hand and to Agnosticism on the other [1887b, p. 4].

With considerable pride, McCosh enumerated the more significant achievements of the Scottish school:

... the great merit of the Scottish philosophy lies in the large body of truth which it has - if not discovered - at least settled on a foundation which can never be moved. It has added very considerably to our knowledge of the human mind, bringing out to view the characteristics of mental as distinguished from material action; throwing light on perception through the senses; offering valuable observations on the intellectual powers, and on
the association of ideas; furnishing, if not ultimate, yet very useful provisional classifications of the mental faculties; unfolding many of the peculiarities of man's moral and emotional nature, of his conscience, and of his taste for the beautiful; resolving many complex mental phenomena into their elements; throwing aside by its independent research a host of traditional errors which had been accumulating for ages; and, above all, establishing certain primary truths as a foundation on which to rear other truths, and as a breakwater to resist the assaults of skepticism [1875, p. 9].

McCosh's psychological writings came relatively late in his career. Most of his important psychological views are to be found in two related volumes published under the titles Psychology: The Cognitive Powers (1886) and Psychology: The Motive Powers (1887). The most common division of faculties in McCosh's day was the three-fold division fostered by Kant into cognition, feeling and will (Bain, 1875). McCosh, however, found this division unsatisfactory, partly because no provision was made for conscience, or the moral power, which McCosh believed to be a characteristic differentiating man from the lower animals. Consequently, McCosh resorted to the older, two-fold division in which he subsumed feeling and will under the motive powers.

**The Cognitive Powers**

In this work, McCosh began by defining psychology as the science of the soul, that is, "that self of which every

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8 One largely psychological work entitled The Emotions, New York: Scribner's, 1880, preceded these two volumes. However, this work is not considered in the present discussion since its contents are very similar to what appears in Psychology: The Motive Powers.

9 Throughout this chapter there are constant references to faculties or powers. These terms are meant to be used
one is conscious [1906, p. 1]." The appropriate method for its study was induction, or the gathering of facts with a view to discovering and arranging an order among these facts. This approach McCosh distinguished from deduction, in which certain principles, such as mathematical theorems, are assumed from which truths are derived. This inductive orientation was soon to dominate psychology, especially as demonstrated in the laboratories of Germany. Within a decade following McCosh's statement, this tradition would firmly be reflected by the increasing number of experimental projects being carried out in American laboratories as well. In fact, a brief glance at the articles appearing in the *American Journal of Psychology*, generally considered the first such outlet of its kind in the United States, will indicate the inductive nature of its contents.¹⁰

McCosh argued that the mind could best be understood as having faculties, a doctrine known as faculty psychology as we have already seen, with a long history going back at least to the psychological contentions of Plato. The evidence for representing the mind as comprised of faculties interchangeably, just as McCosh used them. For some reason he preferred the latter term. The discussion of McCosh's faculty psychology is based upon the following editions of his psychological works: *Psychology: The Cognitive Powers* (Rev. ed.), New York: Scribner's, 1906 (originally published in 1886), and *Psychology: The Motive Powers*, New York: Scribner's, 1887.

¹⁰Rand B. Evans has recently corrected the generally-accepted belief that the *American Journal of Psychology* was the first journal of its kind in the United States. Actually it was preceded by the short-lived *Journal of American Psychology*. For more information regarding this point, see Evans (1971).
was in the tradition of the Scottish philosophers, from whom McCosh borrowed so heavily. The major argument he used was that of common sense. Analogous to the physical sciences which assumed that matter possessed properties that were nothing more than powers, so McCosh argued that the mind also had powers of understanding and emotion, limited though they might be.

Admitting the difficulty of developing a classification schema anywhere complete with regard to the faculties of the mind, McCosh nevertheless outlined a system comprised of two major groups: the cognitive powers (or faculties) and the motive powers. The cognitive powers were those which give knowledge and were subdivided into three further groups (see Figure 1, p. 15), the simple (or presentative), the reproductive (or representative), and the comparative (or those which involved the discovery of relationships).

Simple Faculties

Given that thinking was the initial exercise of the mind, McCosh rejected Hume's skeptical notion that our first conscious experience consisted of impressions, and argued from a realist position that rather, the first conscious experience consists of a knowledge of things. This view emphasized the objective existence of extra-mental reality, and, in the long run, eventually led to a narrowing of the limits of reality to actually existing being (Martin, 1961). Thus, McCosh stated:
Powers (faculties)

I. **Cognitive**—those powers which give knowledge
   
i. **Simple**—those powers which give knowledge in its simplest form: sense-perception and self-consciousness
   
ii. **Reproductive**—those powers which reproduce and represent something previously before the mind
   
iii. **Comparative**—those powers which observe and discover relationships between the simple and the reproductive powers

II. **Motive**—those powers that stir up feeling and lead to action
   
i. The emotions—those powers which express affections
   
ii. The conscience—that power which determines whether an act is moral or immoral
   
iii. The will—that power which chooses whether or not to act

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Fig. 1. McCosh's System of Faculty Psychology
I am sure that the pen with which I write, and the table on which I write, are real; so it is of a thousand things we are constantly meeting with. It is self-evidently so. We cannot be made to believe otherwise... Nothing can be more evident. It should be assumed as a first truth. A philosophy which is without it must be defective in the extreme [1906, p. 18].

Furthermore, "When we look at a tree I would not say with Locke that we have an idea of it, but that we have a knowledge of it [McCosh, 1906, p. 18]." According to McCosh, there were two simple faculties, sense-perception and self-consciousness. Sense-perception allowed one to "get a knowledge of things affecting us, external to ourselves and extended [1906, p. 20]." Sense-perceptions were original, intuitive, and positive. That is, some were inherent in the nature of the organism and could not be obtained by experience. These included, for example, odors sensed by the nostrils and sounds sensed by the ear. When McCosh said that all sense-perceptions were intuitive, he meant that material objects were perceived directly through the aid of our consciousness. Finally, they were positive (or real) in the sense that observing material objects imparted a knowledge of them. McCosh criticized two alternative views on this issue. He rejected the Phenomenal theory which suggested that we perceived appearances of things rather than the things themselves. The theory of Relativity which argued that one could know only relationships between things was also discredited. Both of these interpretations, according to McCosh, made it difficult to ever argue that man
possessed a knowledge of extra-mental reality. They were idealistic and skeptical and led nowhere.

By self-consciousness, "we know self in its present state as acting and being acted upon [1906, p. 70]." It allowed one to "perceive self in a certain state as thinking or as feeling, as is joy or in grief [p. 70]." Taken together, sense-perception and self-consciousness provided knowledge.

Reproductive Faculties

These powers were so labeled because they reproduce and re-present, oftentimes over and over, that which had previously been before the mind. This group exercised six different functions: retention, recall, association, recognition, composition, and symbolism. McCosh stressed that these, as all faculties, were not separate personalities or things. Nor is it correct to view them as acting independently of one another. The more accurate interpretation is that they interacted and influenced one another. These reproductive processes became absorbed into the experimental psychological research of Ebbinghaus.

Comparative Faculties

The final group of cognitive powers were those which served the function of discovering relationships. McCosh described them as being concerned with "the relations of objects given by the simple Cognitive and Reproductive Powers, [which] then go on to observe relations between
these . . . [1906, p. 208]." Reaffirming his realist position with regard to the comparative faculties, McCosh commented as follows:

There are metaphysicians who tell us that things themselves are unknown to us, and that we perceive only the relations of things. This makes the relations perceived subjective, that is, merely in the mind. In standing up for the veracity of our cognitive faculties and the reality of things, we should set aside both these positions and maintain that the things perceived and the relations perceived between them are both real [1906, p. 209].

In concluding his discussion of the cognitive powers, McCosh disagreed with the Sensationalists, including Condillac, who argued that all ideas came from sensation. He also rejected Locke's notion that all ideas derive from sensation and reflection. According to McCosh, there were other sources of knowledge as well, not the least of which was self-consciousness. In addition, the various powers gave rise to ideas. Thus, the cognitive powers allowed one to make comparisons and understand the relationships between things. The motive powers, as we shall shortly see, served to provide ideas of what was good or evil, what things 'ought' to be done to remain a responsible individual, as well as ideas of choice and freedom. A less scientifically legitimate source of knowledge was faith, in which ". . . we have a conviction of the reality of things not perceived by the senses[McCosh, 1906, p. 243]." Finally, at the basis of all the faculties there were fundamental truths. These fundamental truths admittedly went beyond inductive psychology, but nevertheless were crucial to McCosh's epistemology.
The Motive Powers

Written as a sequel to his earlier volume (i.e., Psychology: The Cognitive Powers), Psychology: The Motive Powers appeared one year later, in 1887. These faculties were distinguished from the cognitive powers which gave knowledge, by virtue of the fact that their main function was to "stir up feeling and lead to action [McCosh, 1887, p. 1]." The motive powers were also subdivided into three further groups: the emotions, the conscience, and the will.¹¹

The Emotions

In introducing these faculties, McCosh pointed to the wide individual differences in their expression, by reference to the following example:

Four persons of very much the same age and temper- ment are traveling in the same vehicle. At a particular stopping place it is announced to them that a certain individual has just died suddenly and unexpectedly. One of the company looks perfectly stolid; a second comprehends what has taken place, but is in no way affected; the third looks and evidently feels sad; the fourth is overwhelmed with grief, which finds expression in tears, sobs, and exclamations [1887a, p. 9].

Simultaneously, McCosh used this example to explicate the point that some basic understanding or comprehension must precede any emotional expression. Thus, the individual described above as "perfectly stolid" turned out to be a foreigner who simply did not understand the communication and thus had no idea or belief upon which to express any sentiment. The second individual who was described as "in no way affected"

¹¹See Figure 1.
had never met the deceased. The third individual who "evidently feels sad" had been a business associate of the deceased whom he respected highly. Finally, the fourth individual who was most overcome by the information happened to be the dead man's brother.

This illustration also enumerated the four elements which accompany the emotions; the motive principle, the idea of some object or occurrence, the experience of a feeling of attraction or repulsion, and the organic affection. Although he indicated that these characteristics of emotions were not new, McCosh credited himself with being the first to systematically organize and present them in this manner.

**The Motive Principle.** This was the "tendency of the mind to crave for an object for its own sake [1887a, p. 13]," and served as the basis of all emotion. In the example cited above, the love of a friend and a brother constituted the motive principle. Furthermore, McCosh distinguished two classes of motives (or appetences, as he called them), primary and secondary. The primary motives were so named because they influenced all of mankind; they were universal motives. McCosh listed eleven primary motives.  

\(^{12}\) They were: (1) to seek pleasure and to avoid pain for oneself, (2) to seek pleasure and to avoid pain for one's fellow man, (3) emotional attachment to relatives, (4) emotional experiences which occurred as a direct result of the gratification or satiation of one's interests and skills, (5) hunger, thirst, sex, etc., (6) love of society, (7) love of esteem, praise, glory (i.e., the desire to maintain the respect of others), (8) love of power, (9) love of property, (10) aesthetic sentiment, which led one to seek and appreciate those things of beauty, and (11) moral sentiment, which led one to seek and to do what was good.
individual differences may be observed in the expression of these motives, both in terms of kind and degree. The hedonistic principle guided most of man's emotional reactions. Thus, "the main motives are simply the desire to secure the ordinary gratification and avoid the common annoyances of life, along with the gratification of the appetites of some domestic affections [1887a, p. 28]." The secondary motives were those which implied primary motives. They followed mental rather than physical laws. McCosh relied on the doctrine of the association of ideas to account for the origin and development of these motives. For example, money might initially be sought in order to secure pleasure or perhaps to gratify the desire for power (both of which were primary motives). Over a period of time, however, through association and identification with these primary motives, money could become desirable for its own sake.

The Idea (or phantasm). The idea served as the stimulus for the expression of the motive. As McCosh succinctly stated, "there must always be an idea carrying out the appetence to call the emotion into actual exercise [1887a, p. 42]." He described this mental state as phantasm, which was the faculty from which the idea arose.

The phantasy presents a picture of ourselves or others, of a man, woman, or child in sorrow, and our commiseration flows forth apace, all this because we have a fountain within, which, however, needs an outlet [1887a, p. 44].

All phantasms were singular; that is, each idea referred to one, and only one, object, event or circumstance.
In order to avoid disagreement, McCosh qualified this singularity by admitting that one could have an idea of some collectivity, such as an army, or a crowd. However, when such an idea arose, it inevitably referred to only one army or crowd. An idea was always related to an object. To suggest the possibility of an idea of something in the abstract was incorrect, misleading, and nonsensical. This would have been too speculative a concept for McCosh to feel comfortable with. "In short, it is not the abstract but the concrete, not the generalizations of the comparative power, but objects animate and inanimate, perceived or imaged, which awaken our emotional nature [1887a, p. 46]."

The Experience of a Feeling of Attraction or Repulsion. This conscious feeling of excitement was produced by the gratification or stifling of a motive. Overuse of a given feeling "may be very injurious, wasting the time of youth when knowledge and habits of virtue should be acquired [1887a, p. 63]." On the other hand, frequent idleness could well result in Ennui, or a state of lethargy, in which the motives provided no feeling of attraction or repulsion. While overuse dulled the experience, underuse led to stagnation. Implicitly, some intermediate state of equilibrium was a sign of a psychologically healthy person.

The Organic Affection. Although McCosh deemphasized the part that this element played in emotion, considering it to be in the domain of physiology rather than psychology, he did argue that bodily reactions accompanied conscious feelings
of emotion. However, he disagreed with the James-Lange theory of emotions, published just prior to his own psychological works, which suggested that the bodily reaction followed the perception of the emotional experience. Thus, James, who incorporated this principle into his Principles (1890), argued that "we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be [II, p. 450]." As one might expect, however, McCosh defended the more common-sense interpretation: "mental states are not the effect, they are rather the cause of the bodily movement [1887a, p. 73]." Again, McCosh resorted to the notion of a state of equilibrium when discussing the most appropriate amount of arousal of the organic affection: "generally it may be held that a moderate degree of emotion is favorable to the health, both of mind and body [1887a, p. 74]."

Classification System of the Emotions

Due to their large number and variety, McCosh found it necessary to classify the emotions. He used four dimensions to better understand their complexity: appetible-inappetible, animate-inanimate, egoistic-altruistic, and retrospective-immediate-prospective. The divisions were "determined and given by the nature of the objects which we have an idea [1887a, p. 91]." The appetible-inappetible continuum differentiated those ideas which attract or repel one's natural inclinations. Ideas were also directed toward
either animate or inanimate objects. An egoistic emotion, such as pride, was one oriented toward oneself, while an altruistic emotion, such as trust, was directed toward another. Finally, emotions were differentiated on the dimension of time. McCosh borrowed the terms 'retrospective,' 'immediate,' and 'prospective' from Thomas Brown. A retrospective emotion was one that arose out of one's memory of some past event. An immediate emotion was one felt at the present moment, while a prospective emotion was one anticipated at some future time.

The emotions thus far discussed were simple; that is, by their nature, they tended to be experienced for relatively short-lived periods of time. Relatively more complex or continuous emotions included the affections and the passions. The purpose of studying the emotions was not so that they may be destroyed or wiped out, but rather that man could learn how best to guide them. Although McCosh argued that all emotions were inherently good, they possessed no principle of control. They were guided by one's intelligence and one's conscience which revealed what things were, and what things ought to be, respectively.

The Conscience

This was the second motive power, and its primary function was to judge the morality or immorality of an act. The possession of this faculty, according to McCosh, was a major feature which distinguished man from, and raised him
above, the level of the brute animal. Thus, he stated: "I maintain that man has not only a principle which prompts him to seek his own happiness, but one which leads him to approve of the good and to follow it [1887a, p. 199]." Conscience is a perceiving power which manifested the following characteristics: first, an obligation was implied in those acts which were perceived as moral or immoral; that is, it demanded the performance of certain actions (i.e., those considered to be moral) and deplored the performance of other actions (i.e., those considered to be immoral); second, it involved the idea of law, above itself, which it must obey; third, it connoted the idea of sin; that is, while it approved of good actions, it simultaneously disapproved of evil doings; fourth, it functioned at a level above that of all the other powers, as an arbiter and judge; and fifth, it evaluated actions of the will.

Thus far McCosh had avoided discussion of the origin of the human faculties, partly because of the controversial nature of the topic and partly because at the time of his decision to write at length on the faculties, he believed that the most valuable contribution would be to define, classify, and describe their nature. However, he digressed from this purpose briefly to discuss the growth and development of the conscience. As will be described in greater detail shortly, McCosh stood out for his relatively liberal and reconciliatory efforts to blend the tenets of Darwinian evolutionary theory with Presbyterian religious doctrine.
(Roberts, 1936). Suffice it to mention at this point that McCosh repudiated the attempts by Herbert Spencer to show how conscience developed alongside the evolutionary development of man.

The Will

The third and final motive power was the will, or optative power. The essential element of the will was choice. Some form of intentionality also appeared to play an important part as suggested by the following comment: "Good and evil do not consist primarily in outward deeds; they lie in the heart or will [1887a, p. 233]." Acts under the control of the will included desiring, attending, rejecting, wishing, and preferring. The will had the ability of accompanying all other mental faculties. Thus, for example,

The objects before the eye in the room in which we are accustomed to sit, to work or to study, must in a sense be perceived by the eye, as must be the ear the ticking and striking of the clock, and the beating of the wind upon the window; but how dim and fleeting is the whole scene unless there be something to fix the mind upon the object [1887a, pp. 240-241].

The will was presented as an elusive and flexible power. It influenced the senses and strongly affected such reproductive powers as retention, recollection, association, and recognition. This suggested a similarity to the Freudian defense mechanism of repression. In his occasional tendency to moralize, McCosh pointed out that "the will should restrain the impulses which are inconvenient, which degrade their possessors and lead them into trouble and into sin [1887a, p. 256]." Furthermore, the will had properties that
no other mental faculty possessed. Specifically, it had freedom. Behaving in accordance with the will implied options, such as making one move but not another, even though both might be equally available. When the question arose as to whether there were factors beyond and independent of the will which influenced it, McCosh argued against this assertion. He specifically rejected the commonly-held assumption that the will was swayed by the emotions. Rather, he stated: "I hold that in all motive there is a concurrence, or rather a consent of the will (1887a, p. 259)." The following example illustrates the relationship between the will and the motive of love of money:

The man, it is said, was swayed by the love of money in doing a dishonest act, and it is affirmed that the love of money was the motive. But over many the love of money has no power . . . . The power is given to it as a motive by the will, by a long succession of acts, it may be creating an appetite, and, above all, by a present act, clinging to the money [1887a, p. 259].

Finally, the will was viewed as the locus of responsibility. Only when the will was operative was man said to be a responsible being, accountable for his actions.

This completes the brief discussion of the faculty psychology of James McCosh. It would be premature, however, to attempt to address the major figure in this study—James Mark Baldwin, without some comment regarding the general influence of evolutionary theory in nineteenth-century America, and more specifically its effect on the development of psychology as reflected by the reactions of McCosh and others to it.
The Influence of Evolutionary Theory in Nineteenth-Century America

Charles Darwin's *Origin of Species*, published in 1859, began to make an impact even before the end of the Civil War. Its central thesis, that organic matter has continually evolved from simpler and more primitive forms of life through a process of natural selection, immediately began to claim supporters and critics. Among the former, Asa Gray, John Fiske, and Joseph LeConte stand out as the most notable figures. Asa Gray was honored with the opportunity to read and critique Darwin's *magnum opus* prior to its publication. Thus, he had ample opportunity to familiarize himself with its contents and subsequently wrote a favorable review for the prestigious *American Journal of Science and Arts*. His concluding remarks, however, remain noticeably unbiased:

> The work is a scientific one, rigidly restricted to its direct object; and by its science it must stand or fall. Its aim is, probably, not to deny creative intervention in Nature - for the admission of the independent origination of certain types does away with all antecedent improbability of as much intervention as may be required - but to maintain that Natural Selection, in explaining the facts, explains also many classes of facts which thousand-fold repeated independent acts of creation do not explain, but leave more mysterious than ever. How far the author has succeeded, the scientific world will in due time be able to pronounce [Gray, 1860, p. 184].

13 For two particularly valuable treatments of the influence of evolutionary theory in America see Daniels (1971), especially Chapters X and XI, and Hofstadter (1955), especially Chapter 1. Useful material on the impact of evolutionary theory on psychology may be found in E. G. Boring (1950a). The present discussion makes liberal use of these and other sources.
John Fiske, an American philosopher and historian, regarded the Darwinian theory as the greatest scientific achievement in the history of the universe. It was not easy for him to conceal his favoritism:

... so the various genera of platyrrhine and catarrhine apes, including Man, are doubtless descended from a common stock of primates, back to which we may also trace the converging pedigrees of monkeys and lemurs, until their ancestry becomes indistinguishable from that of rabbits and squirrels. Such is the conclusion to which the scientific world has come within a quarter of a century from the publication of Mr. Darwin's 'Origin of Species'; and there is no more reason for supposing that this conclusion will ever be gainsaid than for supposing that the Copernican astronomy will some time be overthrown and the concentric spheres of Dante's heaven reinstated in the minds of men [Fiske, 1994, p. 20].

Initially, the opponents of evolutionary theory probably far outnumbered its supporters. Not only most of the religious leaders of the country, but many fellow scientists were skeptical of the theory, though often for quite different reasons. Given that no formulation of the theory was ever completely sound or impervious to contradictory evidence, as Darwin himself had readily admitted, some scientists noted that with regard to certain issues, Darwin was demonstrably wrong. Thus, from a contemporary perspective, Daniels (1971) has indicated that

We now know, for example, that he [i.e., Darwin] was totally wrong in his remarks upon how heredity occurs, and that he ascribed far too much active power to the environment; even more seriously, we know that the variation upon which evolution is based is not minute and continuous, as Darwin supposed, but is discrete and discontinuous. Contrary to Darwin, nature does, indeed, make leaps, and these leaps, or mutations, are the raw materials of evolution [1971, p. 243].
Louis Agassiz, one of the outstanding American naturalists of the day, refused to adopt any form of evolutionary theory (Hofstadter, 1955). He preferred to believe that variety within the animal species had always existed and was not a result of some sort of developmental progression. His adamant refusal to entertain the concept of natural selection as even a possible legitimate interpretation of the basic rationale for Darwinism had led John Fiske to state that

... the immediate cause which drove me to the development theory was the mental reaction experienced in reading Agassiz's arguments against that theory in his Essay on Classification, in 1859, shortly before Darwin's book was published [1894, p. 58].

Other scientists, to be sure, probably never had a clear understanding of the theory upon which to propose any cogent criticisms. Nevertheless, "within less than a single generation every important scientist in America was an avowed evolutionist [Daniels, 1971, p. 244]."

The conversion of the American theologians was less rapid. For many, evolutionary theory was incompatible with

\[\text{14}^{\text{This despite the following statement made by Edward Livingston Youmans in a letter to Herbert Spencer which reflected the extreme naiveté of some clergymen concerning the implications of evolutionary theory and their reliance on Youmans' beliefs for guidance: "Twenty-five clergymen of Brooklyn sent for me to meet them of a Saturday night and tell them what they should do to be saved. I told them they would find the way of life in the Biology and in the Descent of Man. They said 'Very good,' and asked me to come again at the next meeting of the clerical club, to which I went and was again handsomely resolved. My warrant for attempting to enlighten these gentlemen is that they know nothing whatever about the subject, while I was in wonderfully sympathetic nearness to them [Fiske, 1894, p. 266]."}\]
many religious beliefs including the Genesis version of the creation of the world and the apparently divergent views as to the nature of man. The prevailing religious view was that man was, ever since the time of Adam, becoming more prone to a life of sin, whereas evolutionary theory so far as this particular point is concerned, took an optimistic view of the fate of man as ever progressing in his struggle for survival.

No more mistaken could anyone have been than Rufus Ellis, when he argued, just prior to the appearance of the Origin of Species, that,

One need not be a prophet or the son of a prophet to predict that the quarrel between Religion and Science will eventually be pronounced a very idle one. As in other cases, so in this, we shall be amazed to find how few words of explanation will set all right . . . [1857, p. 445].

The disagreements between religion and science have, by and large, been settled. But it certainly required more than a "few words of explanation," and it was a result of many years of incompatibility, and oftentimes serious debate. According to Roberts (1936) the theological training and tradition at least up to the beginning of the nineteenth century was such that "all had believed that the universe was of divine

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15 The debate over the evidence available supporting evolutionary theory continued well into the twentieth century. See Straton (1926) and the rebuttal by Osborn (1926). Edwin Grant Conklin, a professor of biology at Princeton, pointed out that "during the past few years, and especially within the past twelvemonth, there has been a remarkable recrudescence of the old theological opposition to the theory of evolution, especially as applied to man [1922, p. v]."
manufacture, made out of nothing by the Almighty in six literal days [p. 1]." Darwin's theological opponents not uncommonly attempted to confuse and misrepresent the intended implications of evolutionary theory "which often led them to make impossible and freakish demands upon Darwin's hypothesis [p. 9]."

Some theologians, James McCosh being an exceptional example, made significant attempts to reconcile evolutionary theory with religious doctrine. McCosh felt that too much time and effort had been expended at bickering over inconsistencies and insufficient concern addressed to the harmony to be found in the relationship between evolution and religion. He was aware that, daily, scientists were accepting Darwinism with ever-increasing zeal, and that theologians must keep up with the times and seriously consider the scientific facts and their implications.

However, it would be incorrect to view McCosh as a totally loyal Darwinian. He retained several reservations about the limits of the developmental hypothesis; first, "it cannot give an account of the origination of things [1883, p.25]." Secondly, "it does not originate the power which works in development [p. 25]," and thirdly, "evolution itself cannot give us the beneficent laws and special ends we see in nature [p. 26]." Thus, it is necessary to attribute to God, the Supreme Being, the creation of matter initially. Given this, however, McCosh felt that development then could follow, quite possibly as Darwin had hypothesized, and that
there was no inconsistency between the theory, properly understood, and religious doctrine. In reviewing Darwin's *Descent of Man*, McCosh capitalized on the author's occasional reference to some sort of religious element as supplementary to his scientific evidence:

"Mr. Darwin is candid enough to admit that he cannot account for everything connected with the appearance of vegetable and animal life. . . . he speaks of life, with its several powers, having been originally breathed by the Creator into a few forms or into one [1871, p. 3]."

McCosh was nevertheless thoroughly impressed with Darwin's skillful collection of data and with the ingenious manner in which he presented them which "prepared men to listen to him; and as they did so, they found he was able by Natural Selection to account for a number of phenomena which could not otherwise be explained [1871, p. 3]."

His review of Spencer's *Data of Ethics* (1879) revealed similar mixed feelings. Acknowledging the thorough foundations of his deductive philosophical system in the natural sciences, McCosh herein saw its strengths as well as its shortcomings. Ultimately, Spencer's failure to resort to some Supreme Being to account for the evolution of man's moral character was McCosh's major bone of contention, and his fear remained that Spencer's youthful readers would lose their faith.

But there is a danger—not, it may be, to our old men whose beliefs and habits are formed, but to the youth in our colleges, and especially in our scientific schools and reading only evolutionary books and magazines, and who are told that all things proceed from evolution, which needs no God to guide it—that in throwing off their religion they also throw off their morality, which has
been so intimately joined with it. Mr. Spencer will help part with their religion, which he consigns to a region unknown and unknowable, which has attractions to nobody [McCosh, 1879, pp. 608-609].

Hofstadter (1955) has concluded that by the 1880's a clear reconciliation between religion and evolutionary theory was well under way. "Religion had been forced to share its traditional authority with science, and American thought had been greatly secularized [p. 30]." No discovery has had a greater impact on how people think and what they believe. As evolutionary theory was transformed to the doctrine of social Darwinism, it reinforced two conservative attitudes: first, that the struggle for existence and the survival of the fittest guaranteed victory for those already established in the upper classes of society; and secondly, that sound progressive change must take a great deal of time, insuring no rapid revolutionary upheavals.

The impact of Darwinism on the development of psychology as a scientific endeavor was enormous. As Thorndike (1909) has pointed out, Darwin helped make psychology a natural science. He gave psychology the evolutionary point of view. Previously people had studied the human mind in isolation and the prevailing belief was that everyone's mind was patterned after a static model. Darwin's finding suggested the developmental and ever-changing nature of the human mind. Simultaneously he stimulated the investigation of individual differences. Assuming the existence of such differences in physical traits, it was left to others including
Francis Galton in England and, somewhat later, James McKeen Cattell and G. Stanley Hall in America, to observe and measure differences in mental traits.

Speaking of the period following 1880, Boring (1950a) claimed that evolutionary theory facilitated the development of an American psychology, distinctly functional in nature. The psychology of William James made considerable use of the survival value of mental functions. Mental evolution, as applied by James Mark Baldwin, was introduced into early American social psychology. More of this will be considered in detail in later chapters. Darwinism gave animal psychology its beginning by stressing the physical as well as mental continuity between man and the lower animals. It directly effected an evolutionary bias in American psychology, a bias which has continued to the present day.

At the very least, I think we can say that American psychology, in so far as it was functional and practical and pragmatic, used evolutionary principles to make itself work, and that all these values, belonging with the American character, helped conversely to make that character what it was--and is [Boring, 1950a, p. 275].

McCosh's Significance. In summary then, the influences that affected the writings of many psychologists, but which are particularly reflected in the work of James McCosh, will be presented. He is an important transitional figure in this study because both he and his student, Baldwin, were exposed to the Princeton Ortega. Intellectually, James McCosh exerted a significant influence upon the psychological writings of Baldwin. Thus, the influences on him will become
apparent as influences upon Baldwin as well. The major factors affecting McCosh's psychology include the Scottish common-sense philosophy, the doctrines of faculty psychology and associationism, and evolutionary theory.

Fate of Faculty Psychology. As was later pointed out by Pratt (1929), faculty psychology fell into disrepute by the turn of the century with the appearance of the 'new psychology.' The reason for the demise of faculty psychology focused around two major points: first, the positing of faculties was satisfactory at the descriptive level, but led to a dead-end in attempting to explain mental functioning; and, second, the faculties tended, in the writings of some, to become reified as causative agents, and thus constituted an explanatory system that was based upon circular reasoning.
CHAPTER II

BALDWIN'S ACADEMIC AND PROFESSIONAL EXPLOITS

When Freud inspect a figure out of history he resembles a physician who instead of examining his patient's whole body looks at a single organ, usually the genitals, and upon it founds his diagnosis [Ludwig, 1947, p. 177].

The present chapter is largely biographical in nature. It will discuss several periods in Baldwin's professional career and simultaneously attempt to illustrate the status of psychology in America as Baldwin came to be one of the discipline's major spokesmen during the period from about 1890 to 1910.

The Early Years

James Mark Baldwin was born on January 12, 1861, in Columbia, South Carolina, just two years after the publication of Darwin's theory of natural selection, a doctrine which was to exert a great influence on his thought and

1Permeating Ludwig's statement is a tone which reflects a criticism of the application of Freudian personality theory to the understanding of historical figures that borders on contempt. The writer shares Ludwig's skepticism about the validity of a psycho-historical interpretation of biography in general, and the understanding of the life of James Mark Baldwin in particular, partly because of the narrow and biased Freudian point of view, and partly because little is known about Baldwin's childhood which is a necessary prerequisite for a legitimate psycho-historical biography. An effort will be made to investigate Baldwin's 'whole body,' as well as the social influences that affected his life and thinking, and the cultural milieu to which he was exposed.
writings. This period was a critical one in American history, for the country was in the midst of a schism. James' father, Cyrus Hull Baldwin, was prominent as the United States sub-treasurer and collector of customs at Charleston, South Carolina, as well as a mayor of Columbia, the state's capital. Cyrus' father, Cyrus Baldwin, Sr., had been a resident of Connecticut, and he traced his ancestry to a royal family in England. The first in the family line to leave England was John Baldwin who settled in Milford, Connecticut in 1639. Cyrus Hull Baldwin was a native of Cheshire, Connecticut but he moved to South Carolina because of bronchial problems which presumably were to be alleviated by the Southern climate. James' mother, Lydia Eunice Ford, also was a native of Connecticut, coming from Hamden.

The Civil War was a particularly stressful period for the Baldwins, since they were sympathetic to northern sanctions, including freedom for the slaves. Although James' recollection of these early chaotic times was rather fuzzy, he does recall that his father purchased several slaves only to immediately set them free.

James was the third child in a family of seven, with two brothers, Walter and Allie (Alfred Cyrus) older than he,
and one brother, Cyrus, and a sister, Elizabeth, younger than he. His memories of these early days focused on the chores and the games in which he and the rest of the family participated. This closely-knit relationship was marred by the death of Allie in 1869, when James was only nine, a great shock in his early life.

With General Sherman's infamous march to the sea in 1865, much of Columbia was destroyed by fire. In order to protect the family, Cyrus sent the Baldwins north in a wagon with the federal troops. When the war was over, they returned to Columbia and James' father was eventually able to return to his business interests, which the war had interrupted. A devoutly religious family of Presbyterian tradition, the Baldwins remained as politically neutral as possible during the social, political, and economic unrest which was an aftermath of the war. James recounted his early religious views as follows:

As for myself . . . I was a docile and humble Christian, feeling no impatience or revolt against the régime of Sunday restraint and religious observance. It was only much later that I began to feel the weight of the monotony and stagnation of a Sunday in Toronto or London [Baldwin, 1926, I, p. 12].

Following a period of educational training in some of the finest private schools of Columbia, James spent the next two years working as a clerk in a large dry-goods store. His father was firmly convinced that this experience would build character and a sound appreciation for discipline. At the age of 18, James entered Salem Collegiate Institute in
Salem, New Jersey. While there, his religious convictions grew and he decided upon a career in the ministry. The principal of the Institute, Harlan P. Davidson, was an uncle of James, and his influence was instrumental in fostering James' occupational plans. Davidson was a strict conservative, a firm supporter of prohibition, and critical of the use of tobacco. On observing James bathing in the Delaware river one day, he quipped: 'There's a boy who is sure to land in the poor-house, he has no visible means of support' [Baldwin, 1926, I, p. 16]." Even James admitted that this statement accurately described his physique at the time.

Upon graduation from the Institute, James took an additional year of work before entering Princeton in 1881. His selection of this college was "almost accidental [Baldwin, 1926, I, p. 18]," because his father had attended Yale and James himself had begun his studies with the intention of going to Yale as well; but he was allowed to enter Princeton in the sophomore class. He was now twenty.

At Princeton, James took the 'academic' course which was strongly rooted in the classics and literature, but much more suited to preparation for the ministry than was the 'scientific' course. Perhaps the major figure at Princeton, from James' point of view, was its president, James McCosh. James recalled McCosh's staunch support of Natural Realism as the only true philosophical doctrine, and his fierce critique of both Idealism and Materialism. This latter point was particularly relevant to Baldwin's career at Princeton.
since his dissertation topic involved the materialistic philosophy of Spinoza which Baldwin began several years later while studying in Germany. However, when he returned to Princeton hoping to present this investigation as the subject matter of his thesis, McCosh, his advisor, abruptly countered: "'No, ... Spinoza will not do, you must refute materialism' [Baldwin, 1926, I, p. 20]."

Upon graduation in 1884, and with a ministerial career still in mind, Baldwin accepted a mental science fellowship to study in Germany. This award had been established during McCosh's tenure as president, and he urged Baldwin to take advantage of the opportunity to learn more about the 'new psychology,' despite the fact that McCosh considered Germany to be the most irreligious country that he had ever visited (Baldwin, 1926, I, p. 200). Although, as has already been pointed out, McCosh is viewed as a representative of faculty psychology, or the 'old psychology,' he remained open-minded to the new psycho-physical and experimental research being carried out in Germany, notably under the direction of Wilhelm Wundt at Leipzig. In fact, upon his return to Princeton as Instructor in 1886, McCosh invited Baldwin to present a lecture at the college describing the 'new psychology.' This led to Baldwin's first psychological publication—the translation of Théodule Ribot's German Psychology of Today (2nd ed.) in 1886. Besides the introduction of this work which Baldwin also prepared, McCosh wrote a preface to the volume. This work was particularly valuable in
that it made available, for the first time in English, the work of the highly respected Ribot. Besides distinguishing the 'old psychology' of Kant and others which was characterized by description and observation, from the 'new psychology' which emphasized experimentation and measurement, Ribot discussed the major contributions of German contemporaries such as Fechner, Weber, Lotze, Wundt, and Helmholtz.

This was not McCosh's first exposure to Wundt. In fact he claimed to have participated in a "Wundt Club" at Princeton in 1882 which met to talk about Wundt's Mental Psychology (Baldwin, 1926, I, p. 199). This indicated an early interest in the 'new psychology.' In addition, McCosh had been instrumental in establishing the first course at Princeton in experimental physiological psychology in 1883. In it, various faculty members, including Henry Fairfield Osborn and W. B. Scott (not to be confused with the Wundtian student, W. D. Scott), presented a series of lectures which were supplemented by laboratory work. Osborn claimed that the course attracted a large number of students (Baldwin, 1926, I, p. 21). Indeed, McCosh was interested in the 'new psychology' despite the fact that he has traditionally been associated with the brand of psychology that was rapidly reaching obsolescence even at the time he was propounding it. Nevertheless, his two volumes on psychology identify him with the faculty psychology of the nineteenth century and he never took the time to put in print his views toward the new experimental psychology which must have been leading him toward a
modification of his system. He obviously regarded Baldwin as one of his outstanding students because, after he had congratulated Baldwin for his newly-acquired position at the University of Toronto, he urged Baldwin to collaborate with him in extending the frontiers of a sound realistic philosophy (Baldwin, 1926, I, p. 201).

During his year at Princeton as Instructor in French and German in 1886, Baldwin took a special course at the Princeton Theological Seminary. Here he was exposed to subjects taught by Francis L. Patton, later to become McCosh's successor as president of Princeton, and William Henry Green, president of the Seminary who soon became Baldwin's father-in-law. Although he was listed among the graduates of the Seminary in the class of 1887, Baldwin never actually completed all the course requirements and consequently he had not qualified for a career in the ministry. A decision on which of his dual interests to follow—either theology or the 'new psychology,' was resolved when he accepted a teaching position offered him at Lake Forest University in Illinois.

**Appointments to Lake Forest and Toronto**

In 1887, after spending a year as Instructor at Princeton, Baldwin moved on to Lake Forest University to fill a vacancy in philosophy. This institution (now called Lake Forest College) has historically been affiliated with the Presbyterian Church and Baldwin claimed that its principal function at that time was the preparation of Presbyterian
ministers (Baldwin, 1926, I, p. 40). Although he was immediately befriended by its president, Reverend W. C. Roberts, whom Baldwin liked personally, the intellectually-stifling attitude of the University's Board of Trustees led him to seek a position elsewhere. They had attempted to assign Baldwin an additional course, which he was not competent to teach, in order to secure 15 hours of lecturing per week. But academic appointments in philosophy or its rapidly-burgeoning offspring—psychology, were not easy to come by in those days. Those who were trained in the 'new psychology' were forced to seek a teaching position in a philosophy department, usually given the title of professor of logic, ethics, or metaphysics. Baldwin, however, was in a more favorable position due to his preparation of the first volume of his *Handbook of Psychology* which was published in 1889. There were only a limited number of handbooks depicting the new discipline that were available at that time, and to author one such work gained immediate recognition. This was even more so the case since it appeared prior to William James' two-volume classic *Principles of Psychology* in 1890. In Baldwin's case it also gained for him in the immediate future an opportunity to leave Lake Forest when the University of Toronto contacted him about the possibility of going there.

His year of study in Germany combined with his preparation of the English translation of Ribot's *German Psychology of Today* provided Baldwin with a unique familiarity with the ongoing research in experimental psychology. This
was clearly reflected in his *Handbook*. His concern for methodological rigor was probably gained under the influence of Wundt:

... the conception [of psychology] now prevalent is widely different from that of twenty years ago, when many of the works were written which are yet used as introduction and strong support to the philosophy taught in the universities: the new conception [is], namely, that psychology is a science of fact, its questions are questions of fact, and that the treatment of hypotheses must be as rigorous and critical as competent scientists are accustomed to demand in other departments of research [Baldwin, 1889, p. iii].

In fact, Baldwin's explicitly stated purpose in writing the first volume of his *Handbook* was "to demonstrate the independence of psychology as a science [Baldwin, 1890a, p. vi]."

His eschewal of the 'armchair psychology' of earlier days must not be confused with any sort of rejection of McCosh's psychological views. On the contrary, Baldwin recommended that his former teacher's *Psychology: The Motive Powers* (1887) be used in conjunction with his own *Handbook* (1889) for classroom instruction.

Although he was familiar with much of the physiological research of the day and indeed regarded it as very important, Baldwin emphasized that psychology and physiology were two distinct sciences, and that it would be inappropriate to reduce all psychology to physiology.

Psychology cannot be a part of physiology because the methods and results of physiology do not reach nor involve subjective data. One is a subjective science and the other is an objective science, and the difference is strictly experiential [Baldwin, 1889, p. 6].

Baldwin's definition of psychology was still very 'mentalistic,'
not unlike the viewpoints of others prior to the behavioristic statements of John B. Watson in the second decade of the twentieth century. For Baldwin, psychology was the "science of the phenomena of consciousness . . . the science of mind as we know it [Baldwin, 1889, p. 8]." This emphasis on the subject matter of consciousness stemmed from his idea "that consciousness is the one characteristic of what we denominate mental [Baldwin, 1889, p. 8]." Being a true science, Baldwin viewed psychology's goal as going beyond the descriptive level of understanding to the causal and explanatory level.

The process of reflection, which he defined as the ability to stand aside, so to speak, apart from oneself and to report what was taking place in oneself, was, for Baldwin, an important source of information concerning consciousness. But he was quite aware of an unfortunate drawback which the sole reliance on reflections permitted, that being the effect of attention. Attention "exerts a disturbing influence [Baldwin, 1889, p. 10]," because as soon as one begins to reflect upon one's own consciousness, attention is increased, and in a real sense the state being observed is changed. Thus, for example, "pain attended to, for the express purpose of estimating its intensity, becomes more intense [Baldwin, 1889, p. 10]." Thus, Baldwin recognized that one must rely upon other sources for information about consciousness. These sources he called external and they provided a means of corroborating reflection, or what he called 'internal
observation.' "Failure to resort increasingly and repeatedly to external observation at every stage of our study leads to the most chimerical subjective systems and the most one-sided views of life [Baldwin, 1889, p. 12]." These external sources, then, served several purposes. They confirmed or modified whatever had been reflected upon. They provided generality about one's interpretations which would otherwise be lacking, and they allowed psychology to rise above the level of simple description. Thus, the study of genetic psychology would be impossible since reflection does not occur until a certain minimum level of maturation and intellectual development has been achieved, and this is typically after the period of infancy and early childhood.

Baldwin enumerated four specific types of external sources. They are folk-psychology or what today would be somewhat similar to social psychology or sociology, comparative psychology, child psychology, and abnormal psychology. Each of these sources provided a unique dimension to the study of consciousness and, when analyzed together, tended to complement one another.

Baldwin proposed that psychology rely upon what he called the synthetic method, which involved a common consideration of inductive and deductive methods. He felt that either of these methods used to the exclusion of the other was less satisfactory than their joint usage. The synthetic method was characterized by three processes: observation, experiment, and deduction. Observation was "the widest
possible appeal to fact, by way of an actual understanding of the cases in hand [Baldwin, 1889, p. 21]." Experimentation "consists in the variation of the conditions of phenomenal succession and the discovering of essential reasons or causes [Baldwin, 1889, p. 21]." Deduction provided a generalizability of the findings obtained through experimentation to other individuals and situations which had not been varied. It was evident that through observation one reached a descriptive level of understanding while through experimentation explanations and causes could be derived.

In an effort to devise a classification system of mental functions, Baldwin commented on the views of those prior to him who generally, as we have already seen, adopted the tenets of faculty psychology. On the one hand he was critical of those who

... neglecting real resemblances, have made too many divisions or faculties, in a measure dividing the mind into independent principalities and losing sight of the unity of nature which underlies all phenomena of mind [Baldwin, 1889, p. 35].

Here Baldwin was referring to some of the Scottish philosophers including Thomas Reid and Dugald Stewart.

On the other hand, he chastised those who rejected the 'faculty theory' outright and who "fail to recognize essential differences in mental states [Baldwin, 1889, p. 35]." Herbart and Ribot were examples of such critics. Baldwin clarified his usage of the term 'faculty' by indicating that it was synonymous with 'function.' In this sense, the faculty psychology of the nineteenth century served as a
precursor of the functional school of psychology which was developing in the 1890's, and for which Baldwin deserves recognition as one of its early proponents.

Baldwin had classified mental functions into three types: thinking, feeling, and willing. These are analogous to McCosh's system although McCosh subordinated the will under the motive powers. Baldwin's tripartite division incorporated the three-fold propositions: 'I know something' (thinking), 'I feel something' (feeling), and 'I do something' (willing). These functions were not to be thought of as three separate and distinct psychological processes, but as a wholistic process with the single characteristic of action. Each function had as its goal "the conservation and development of the whole [Baldwin, 1889, p. 40]."

Baldwin's classification schema reflects, as he readily acknowledged in the preface of his Handbook (1889), his indebtedness to his former teacher, McCosh. However, probably through the influence of Wundt and his study in Europe, Baldwin was much more familiar with all sorts of physiological research and psychological thought expressed by a wide variety of German, French, and British writers than was his former teacher. He was also aware of the experimental work of Donders, on the measurement of the duration of mental acts, a topic to which we will return shortly.

Research on reaction time occupied Baldwin during the early 1890's. An example which he discussed is illustrative of this research. The purpose of the study was to measure
the duration of a mental act. A common procedure which Baldwin used was to prick himself and then to determine the length of time it required for him to make a response once the pain was felt. This time interval, which occurred between the onset of the stimulus and the performance of the response, was called the 'simple reaction time.' Baldwin divided this time interval into three parts. First, the transmission from the sensor nerve to the brain center; second, the mental process of sensation and volition; and third, the transmission from the motor nerve back to the part of the body affected. Over a total of 400 trials using himself as a subject, Baldwin's average reaction time was 1/8th of a second. Baldwin recognized reaction time to vary as a function of the intensity of the stimulus. Another principle, mentioned earlier, namely that attention tends to increase the strength of a sensation, led to the further principle that "attention diminishes the time necessary for the reaction [Baldwin, 1889, p. 113]." Thus, in hypnosis when one's attention was highly concentrated the reaction time tended to decrease.

Although Boring (1950b) has stated that little of Baldwin's experimental research was very important, one topic for which he gained some renown involved his analysis of the nature of reaction times. The outcome of his research is of theoretical as well as historical interest, as has been pointed out by Boring (1929) in his presidential address before the American Psychological Association in 1928, and
more recently by Krantz (1969) who has labeled the episode 'the Baldwin-Titchener controversy.'

Five articles, two by Baldwin and three by Titchener, serve as the major source of information regarding the controversy. They all appeared either in the *Psychological Review* or in *Mind* during 1895 and 1896. The initial statement made by Baldwin was in an article entitled "Types of Reaction" (Baldwin & Shaw, 1895). Baldwin's research reported in this study had been carried out in 1892-1893 in the laboratory which he had established at the University of Toronto. He focused upon the problem of the variability of reaction times both within the same individual and between two or more individuals. Four subjects participated in the research, including Baldwin himself. The stimulus was an auditory one, to which the subject was to respond by pressing down his right forefinger. The results failed to confirm the general belief that motor reactions could be differentiated from sensory reactions on the basis of a difference in reaction times, the former presumably being shorter than the latter. The theoretical distinction between a 'motor type' and a 'sensory type' had first been determined by Ludwig Lange, a student of Wundt, who observed that

... the duration of the simple reaction was appreciably different, according as the reagent directed his attention (so far as possible) exclusively upon the sense-impression or upon the movement to be made in response to it [Titchener, 1895a, p. 74].

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³For another brief account, see Boring (1927b), p. 496. For a recent discussion of the controversy from the point of view of the changing conception of the part that the subject plays in psychological research, see Schultz (1969), especially pp. 215-216.
The importance of the study of reaction time lay largely in the fact that at that time the reaction was the simplest sort of voluntary action whose duration could be measured by means of specially developed instruments then available.

Baldwin's findings led him to observe that reaction times varied from individual to individual as well as across situations. He concluded by stating that "we may accordingly say that such individual differences are clearly established, and must hereafter be acknowledged and accounted for in any adequate theory of reaction [Baldwin & Shaw, 1895, p. 265]."

A year later James R. Angell and A. W. Moore (1896) reported independently that

"... we had reached results in our experimentation very similar to those of Professor Baldwin, and we were just ready to publish when his very notable article upon the subject appeared in his Review of May, '95, showing essentially the same results as we had reached. Not only had Professor Baldwin anticipated our results up to that time; he had also anticipated almost completely our mode of procedure. This full acknowledgment of his priority is due him on every score [p. 246]."

Baldwin argued that "The attempt of Wundt, Külpe and others [i.e., Titchener included] to rule these results out, on the ground of incompetency in the reagents, is in my opinion a flagrant argumentum in circulo [Baldwin & Shaw, 1895, p. 265]." Titchener responded by defending the Wundtian tradition of employing only trained subjects because of the imprecision and inconsistency which resulted when many people were involved in psychological experimentation, some of whom were unable to introspect. In addition, Titchener labeled Baldwin's "demand for a statement of the origin and
meaning of the 'disposition . . . [as] . . . a demand for the impossible [Titchener, 1895b, p. 506]." The hereditary and environmental factors were too complex to be at present fully understood and related to an individual's 'mental disposition.' Notwithstanding the fact that he credited Baldwin for his ingenuity in presenting his results as supporting a 'type theory' of reaction, Titchener questioned the inconsistency of the results of two of Baldwin's subjects. Their responding had been so irregular that Titchener felt that perhaps they lacked the ability to satisfactorily introspect.

Baldwin took little time in responding to Titchener's comments. While Titchener argued that this irregular responding was a sign that some people could not introspect, Baldwin accepted these irregularities "as a natural circumstance, if the truth be what my theory says it is [Baldwin, 1896a, p. 81]." Baldwin agreed with Titchener that some people do have difficulty in maintaining a steady concentration, but he associated this problem with those individuals who are mentally deranged. Rightly so, they should be kept out of the psychological laboratory if one wished to study reaction times. However, responding at consistent but irregular rates was a characteristic of many people who were quite normal mentally, Baldwin pointed out.  

4 In a postscript to his article, Baldwin quoted from a letter sent to him by James R. Angell dated November 9, 1895: 'It may interest you, in connection with Titchener's criticism of your theory for reaction time peculiarities, to know that at the very time your article appeared, I had already a considerable body of experiments remarkably similar
to Baldwin contained a defense of the work of Wundt and others of the 'Leipzig School.' He criticized Baldwin for failing to bring new data into the discussion:

Professor Baldwin objects to bringing fact together: he distributes them sparsely in a matrix of theory,—like the infrequent plums in school plum-cake. Then, if the critic complains of the quality of the compound, he says: But I have plenty more plums in the pantry. How does that help the present consumer? [Titchener, 1896, p. 240]

Was this controversy ever resolved, and if so, who is considered to have been correct? Boring (1929) and Krantz (1969), in addressing this same question, have concluded that both men were correct. Boring (1929) went on to state:

... yet neither seemed to be able to see how the other was right, obvious as the matter is now. If Baldwin wanted to work with individual differences in true American fashion, what matter if Titchener thought that personal idiosyncrasies are not the problem of science. If Titchener got his difference with general practice (not, of course, with practice for giving the desired result), why did Baldwin mind that training in the direction of attention should counteract the effect of natural modes of attention? [p. 111]

Krantz (1969) pointed to the differing theoretical orientations manifested by Baldwin and Titchener at the root of the controversy. Titchener, a loyal student of Wundt, gave allegiance to what was called the structural school of psychology whose focus was on the elements of the generalized

to yours from which I had drawn conclusions absurdly like your own... It seems to substantiate entirely the general principle underlying your view, although introducing some minor modifications [Baldwin, 1896a, p. 90].' This is corroborated by Angell and Moore's (1896) published statements mentioned on page 52.
mind. Baldwin, on the other hand, was in the process of breaking away from the Wundtian tradition, and his emphasis on intra- and inter-individual differences reflected a functional bias in his orientation.

As Krantz (1969) has observed:

A major issue which separated the two viewpoints, implicit in Baldwin's writing at the time and more clearly delineated by such later functionalists as Dewey, Angell and Carr, does not concern research methodology but basic philosophy: What types of questions should be asked in psychology? For the functionalists, the concern over the structure of mental life, while valid, was far too restrictive. Psychology, from their point of view, should study all modes of response whether they occur in the laboratory, classroom, or industry. The use of the reaction time method for distinguishing and understanding psychopathologies, for example, was suggested by Baldwin, in the course of his controversy with Titchener. For the structuralists, on the other hand, such areas of concern were not part of psychology as a science [p. 9].

The present writer tends to agree with the conclusions of both Boring (1929) and Krantz (1969). A careful reading of each of the articles by Baldwin and Titchener which formed the basis of the 'controversy,' indicates that on several occasions each man seemed to misrepresent and misinterpret the statements of the other man. A glaring ambiguity in the use of terminology is apparent. If both men had been given the opportunity to meet face-to-face, it may well have resulted in a much more rapid resolution of the controversy, with each man probably admitting that the basis of the disagreement was not in the data which they had gathered, but in the fact that each made strikingly different assumptions about the nature and the subject-matter of the new science of psychology.
Baldwin's Handbook had been so popular that one year after its initial publication, a second edition, revised, made its appearance. This was followed in 1891, by the appearance of the second volume subtitled Feeling and Will, to be distinguished from the earlier volume which had been devoted to Senses and Intellect. Reviews published in several of the leading philosophical journals of the day, including Mind, the Philosophical Review, and Revue Philosophique, generally praised the two volumes as an excellent treatise on the 'new psychology' which simultaneously was very comprehensible for college students. Even Wilhelm Wundt congratulated Baldwin on the clarity and originality of the work.

Nevertheless, Baldwin's Handbook, along with those of several others written during this era, were soon to be eclipsed by William James' classic two-volume Principles of Psychology which appeared in 1890. This, despite the

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5 For pertinent reviews, see Anon. (1890), Anon. (1891) and F. Angell (1892).

6 See Baldwin (1891a) where Wundt is quoted as having stated the following concerning volume one: "I am impressed with its clear arrangement and logical treatment . . . . The book will serve a high purpose for students both as introduction to the subject and as preparation for original work [p. 1].

7 An interesting recollection of the status of psychology in 1890, and the influence that James' Principles exerted on the psychology of that time, is presented by James R. Angell on the occasion of James' death. See J. R. Angell (1911). Baldwin himself honored James' Principles as follows: "... I think it is safe to say that no book on psychology, in any language, has been so eagerly waited for in this generation, and it is as safe to say that no other
comparative evaluation of Baldwin's Handbook with James' Psychology published in the Oxford Magazine stating that "It [i.e., Baldwin's Handbook (1890)] excells just where Prof. James fails. Sense and Intellect is the best manual we have seen, and we look forward to the companion volume [Baldwin, 1891a, p. 1]." Frank Angell, a contemporary psychologist, applauded Baldwin's volume on Feeling and Will, stating that "taken as a whole, [it] distinctly raises the level of psychological thought in America [1892, p. 313]."

Going back a few years, it may be observed that an event of personal significance was Baldwin's marriage to Helen Hayes Green while in his second year at Lake Forest, on November 22, 1888. Miss Green had come from a highly-respected family, her father—the Reverend William Henry Green, having served as president of the Princeton Theological Seminary. Author of several religious and literary works, he was regarded also as a distinguished Hebrew scholar. The Baldwins happily received their first child, Helen Green, into the family the following year, which coincided with their move to Toronto.

For pertinent biographical information on Dr. Green, see Anon. (1896) and Anon. (1943).

Baldwin's first interest in the position at the University of Toronto is mentioned in two letters to the Education Minister, G. W. Ross, June 12 and 13, 1889. Although Baldwin indicated that he was not to be considered a candidate yet, he did ask Ross for information about the position of Professor of Logic and Metaphysics, as well as for a
One might think that, due to the favorable recognition that Baldwin had received as a result of the highly-successful venture into psychological text-book writing, that he must have been unanimously welcomed by the academic community in Toronto. Such was not the case. Baldwin's appointment as Professor of Psychology, Logic and Metaphysics was a controversial one.¹⁰

The Toronto Press clearly expressed its biases about Baldwin's appointment:

The rankest job in the way of an appointment known to the history of Canada was that of the Hon. Oliver Mowat, Premier of Ontario, making his son and heir Sheriff of York at a salary of from $8000 to $10,000 a year. That will never be surpassed; but it has almost been equalled by the proposition of the same gentleman to divide the chair in metaphysics in the University of Toronto, and to give it, practically, to the 'psychologist from Forest Lake' - a little one-horse college over in York State, we believe . . . .

Hume's testimonials¹¹ are so far ahead of those of Baldwin as Kant ranks ahead of McCosh. Those competent to pass judgment on such men have all declared in Hume's favor. Baldwin is not endorsed by a single psychologist or metaphysical thinker of recognized worth.¹²

¹⁰William James was later to describe this event as 'amusing'; see James to Baldwin, March 7, 1891, reprinted in Baldwin (1926, I), p. 205.

¹¹Hume was a prize student of the late Professor Young, whose position became vacant due to his death. See Sir Daniel Wilson Diary, September 27, 1889. Hume was strongly preferred over Baldwin by his fellow students for the opening.

¹²Toronto World, October 22, 1889, p. 1. The newspaper strongly sided with those who favored Hume's appointment: "What a nice reflection on Toronto University! After a man has spent four years there, after he has spent two
Not only did the Toronto *World* rather crudely misrepresent the facts—Baldwin coming from Lake Forest University, located in Illinois rather than New York, but it implied that several members of the Toronto faculty who supported Baldwin's appointment, including Sir Daniel Wilson who soon thereafter became its president, were incompetent to pass judgment on the decision.\(^{13}\) Concern among others, who were not necessarily dissatisfied with Baldwin, centered on the fact that a clergyman (which Baldwin obviously was not), should be given equal consideration for the position.\(^{14}\)

Nevertheless, Baldwin was finally appointed to the chair in the middle of October, 1889. J. G. Hume, the promising Toronto graduate, whom the Toronto *World* had clearly preferred, finally took a fellowship in Europe. It had been additional years in the best universities in America, Johns Hopkins and Harvard, perfecting himself in his specialty, and who comes back with the best testimonials that can be had, to be told that he must stand aside and go and study some more, and a man as young as himself, with half the training and a quarter of the reading, is pitch-forked into the place [Toronto *World*, October 22, 1889, p. 1]." If this statement is accurate, one wonders why Baldwin is so much better known today to historians of psychology and philosophy than is Hume.\(^{13}\)

\(^{13}\) Other professors who urged that Baldwin be given the appointment were Drs. Caven and Sheraton. See Sir Daniel Wilson Diary, September 26, 1889. A brief account of the controversial appointment may be found in William Stewart Wallace (1927), p. 141.

\(^{14}\) J. Loudon to G. W. Ross, March 5, 1889, Minister of Education Papers. Loudon was a physics professor who later became the president of the university, while Ross was the Educational Minister.
agreed that upon his return, two years hence, he would assist Baldwin. Sir Daniel Wilson, in whom Baldwin realized his greatest support, took it upon himself to introduce Baldwin to his new classes. Wilson reflected his favorable impression of Baldwin and simultaneously his concern over the precariousness of the situation, when commenting on Baldwin he observed: "His manner and appearance are equally prepossessing, and if he only gets fair play at starting all will be well." Whatever the initial discomfort Baldwin may have experienced, he found the intellectual atmosphere very stimulating, and he spent three enjoyable years there (Baldwin, 1926, I, p. 53). Among his major accomplishments was the establishment of a laboratory for research in experimental psychology, the first such laboratory, he proudly claimed, on British soil. The development of psychology as an academic discipline and as an independent department in Canada has, as Myers (1965) suggested, lagged behind its development in the colleges and universities of the United States. Even at the

15 Sir Daniel Wilson Diary, October 19, 1889.

16 Wilson's support of Baldwin was undoubtedly influenced by the appearance of the first volume of the Handbook; see Sir Daniel Wilson Diary, October 21, 1889.

17 Sir Daniel Wilson Diary, November 13, 1889. Many University of Toronto students had requested that a lecturer or lecturers of metaphysics be appointed temporarily while Hume was away. This would probably not have met with Baldwin's approval, but such an option was never enacted.
time when psychological laboratories were burgeoning in the United States, it was not uncommon, as in Baldwin's case, to hold a chair in psychology, logic and metaphysics since these three components contributed in large part to what constituted the scope of philosophy.

Excerpts from Baldwin's inaugural address of 1890 reflect his strong bias and optimism toward the prospects of the successful integration of the principles of the 'new psychology' with those of sound philosophy, a perspective which McCosh had fostered in his own teaching and which sounds surprisingly modern:

... The scientist must needs be a philosopher, and because in the past he has partially realized this need science has made advances; on the other hand, the philosopher must needs be a scientist, and it is because in the past he has not realized this need that philosophy has not claimed her share in the discovery and application of truth. ... The two disciplines are therefore necessary to each other, and their place is side by side in a liberal education. The elements of scientific method should precede abstract philosophy, and the later development of speculation should rest at once upon the data drawn from the laboratory and the museum, on the one hand, and from the gallery of the mind on the other, where are found the specimens of the psychologist. ... 

This demand has found fruit and practical justification in late years in the new directions in which philosophy has turned inquiry, and in the more exact methods by which many questions before regarded as simply speculative have been approached. In psychology the effect has been as marked for its novelty as for its healthful stimulus. Comparative and experimental psychology are the direct outgrowth of the modern scientific spirit, and it is to the merit of contemporary philosophy that the new work is receiving its hearty endorsement. ... 

This active interest in experimental psychology and a personal preparation for such work no professor of philosophy in this generation should lack, in justice to his students and to truth. ... Psycho-physical laboratories are growing in number and in importance, and special organs are being devoted to the publication of their results. No university course in mental science is now
complete which does not present at least the methods and main results of scientific psychology, and the larger institutions in both worlds are seeking men of proper training for exact and original work.

Such study, however, should come after the descriptive and introspective study of the mind, and after the principles of logic, especially inductive logic, have been mastered. We shall then expect students who take philosophy freely to be better observers and reasoners than their fellows when they come to more advanced work either in philosophy or in science.

Such, in brief . . . is the place and function of philosophy in the modern university, and certainly such a theme or aggregate of themes is broad enough for a host of workers. . . . Hence many separate chairs are now devoted to this work in the larger institutions, chairs of Psychology, general and experimental, Logic, Ethics, Philosophy of Religion, Metaphysics, History of Philosophy, Pedagogics and Aesthetics.

. . . philosophical culture makes men, or should make men, judicial, tolerant, alive to the infinite possibilities of truth, and full of reverence first of all for truthful thought and truthful life [Baldwin, 1894, pp. 44-48].

Meanwhile, by 1890, the laboratory had been furnished with apparatus and the teaching staff included a Fellow, in addition to Baldwin himself. Some of the psychophysical research dealing with the nature of reaction time was carried out in the Toronto laboratory. Here Baldwin was assisted by W. J. Shaw, who like Hume, was a top-ranking Toronto philosophy graduate. In the Spring of 1891, $1,100 was appropriated for the purchase of laboratory equipment. Initially, at least, Baldwin was enthusiastic about the prospects of carrying out research in the laboratory, for he

18For some unknown reason, Baldwin did not publish his address until four years after he had made it.

19For specific details regarding the laboratory, see two brief articles by Baldwin (1890b, 1892c). Garvey (1929) stated that the Laboratory was officially established in 1890.
even solicited applications from students interested in working there. 20

Early in 1892, Baldwin requested the appointment of a Demonstrator to help teach his courses which, if the relative increase in the numbers of students enrolled is any indication, must have been very popular. Of the four courses that he was teaching, three had at least doubled in size since he had first taught them in 1890. 21

The year 1891 witnessed an addition to the Baldwin family with the birth of a daughter, Elizabeth. This doubled the size of the 'laboratory of infant psychology' as Baldwin called it, and provided a second subject for his research investigations on the mental development of infants reported later in his Mental Development in the Child and the Race (1894).

In the fall of 1892 a position became available for Lecturer and Demonstrator in Philosophy. The advertisement for this position had appeared earlier in the year while Baldwin was in Scotland and he must have felt that there were several candidates in Europe that should be considered because he wrote to Mr. Ross, the Education Minister, requesting that the deadline for accepting applications be extended

20 See Baldwin (1890c).

21 Baldwin to J. E. Berkely Smith, March, 1892. The specific figures which Baldwin reported to Smith, the Bursar, are as follows: (1) 165 students in Pass Psychology course; only 28 in 1890; (2) 134 students in Pass Logic course; only 87 in 1890; (3) 34 students in Honor Psychology course; only 17 in 1890; (4) 34 students in Honor Logic course; only 17 in 1890.
to allow for any potential European candidates who might be interested. Soon Baldwin suggested that the university consider August Kirschmann, a native of Germany. Kirschmann had worked for several years in the laboratory at Leipzig, and was also highly recommended by his master, Wilhelm Wundt. Although he could not converse well as of yet in English, Kirschmann's teaching ability had been praised by several American students who had studied under him including Howard C. Warren and Lightner Witmer. Baldwin thought so highly of Kirschmann that he told the Hon. Richard Harcourt, then the Acting Minister of Education, that "... if we give him [i.e., Kirschmann] our appointment we will have one of the strongest men on the continent." Early in 1893, Baldwin was given the go-ahead to offer the position to Kirschmann. Its duties included being in charge of the laboratory with Baldwin, and teaching two hours a day. After some confusion and reconsideration of the opening, Kirschmann finally accepted the position of

22 Baldwin to Ross, July 12, 1892, Minister of Education Papers.

23 Wundt apparently had been paying Kirschmann's salary out of his own pocket in order to keep him at Leipzig; see Baldwin to Ross, n.d., Minister of Education Papers.


25 Baldwin to R. Harcourt, October 4, 1892, Minister of Education Papers.

26 Baldwin to A. Kirschmann, February 9, 1893, Loudon Papers.
Lecturer in Experimental Psychology. However, simultaneously Baldwin had been negotiating with Princeton, unknownst to Kirschmann, and when he realized that Baldwin's position at Toronto was available, he wanted it. But Kirschmann doesn't appear to have received the professorship, because he didn't become Associate Professor until 1898. Upon hearing of Baldwin's call to Princeton, Frederick Tracy, a Fellow in Psychology at Clark, indicated his interest in any available vacancy at Toronto. He had applied the previous year with the strong support of G. S. Hall and E. C. Sanford, but Baldwin objected because of Tracy's lack of reading ability of German. Tracy was, in fact, appointed as Lecturer in Philosophy at Toronto in 1893.

Meanwhile, Baldwin found the offer of the Stuart Professorship in Experimental Psychology at Princeton—his alma mater, too tempting to turn down. In addition to the

27 For a time no one seemed to know the whereabouts of Kirschmann. See Baldwin to Harcourt, n.d., Minister of Education Papers.

28 Baldwin to Kirschmann, April 4, 1893, Loudon Papers; Kirschmann to Minister of Education, September 1, 1894, Minister of Education Papers; Baldwin to Loudon, May 8, 1893, Loudon Papers. Besides having originally recommended Kirschmann for the position he was vacating, Baldwin also recommended E. B. Titchener of Cornell with 'no hesitation' although he preferred not to give a public testimonial to him; see Baldwin to Ross, August 14, 1893, Minister of Education Papers; Baldwin to Loudon, August 16, 1893, Loudon Papers.

29 Tracy to Loudon, February 20, 1893, Loudon Papers.


31 President Daniel Wilson was aware of this possibility as he noted in his diary: "Professor J. M. Baldwin
promotion of psychology as a science in terms of the establishment of the laboratory and the teaching of several university courses, Baldwin deserves credit for taking the initiative to stock the university library with up-to-date works in psychology. This was particularly necessary following the fire on February 14, 1890, when the entire library, containing 33,000 volumes, was destroyed. Gifts of books were obtained from the world over, including an intact and complete set of Mind, donated by its editor, the English philosopher, G. Croom Robertson, at Baldwin's request.

Commenting on Baldwin's influence while in Toronto, Myers (1965) has concluded that

Baldwin had certainly wasted no time in spreading the Leipzig epidemic. . . . Despite the shortness of Baldwin's stay at Toronto . . . his effect was enormous. He established permanently at Toronto the notion that psychology was an experimental laboratory science. . . . At Toronto, Baldwin had broken the academic ground and prepared a laboratory nest for Kirschmann [pp. 8-9].

Baldwin had left Toronto with many fine memories. His reputation as an important American psychologist was continuing to spread, what with the appearance of the second

whose appointment as successor of Professor Young involved such a prolonged and irritating conflict is now tempted by very liberal offers from Princeton." Sir Daniel Wilson Diary, March 25, 1892.

32 For corroboration of Myers' conclusion, see the discussion of the value of experimental science as viewed by Albert H. Abbott (1900), an Instructor in Philosophy and Assistant in the Psychological Laboratory at the turn of the century, which continued to be under the direction of Kirschmann.
volume of his Handbook in 1891 and his Elements of Psychology in 1893. As we shall see, he was also intimately involved in the newly-founded American Psychological Association. In addition, he was continuing to make contacts with individuals in Europe as well, and when he visited France in 1892, he discovered the Orgeist of concern with the fascinating topics of hypnotism and suggestion, the latter of which was to have a significant effect upon his own theorizing about mental development.

Ten Years at Princeton

In 1888, upon McCosh's resignation, the tradition of selecting a Presbyterian minister remained intact as Francis L. Patton, who had been affiliated with the Princeton Theological Seminary, succeeded McCosh as president. These were years of continued development, both physical and intellectual,

33 For a review of the Elements, see Adickes (1893). Adickes suggests—quite plausibly, that Baldwin's decision to provide an abridged version of his longer Handbook followed William James' similar move when he wrote the briefer version of his own Principles which appeared in 1892. Both shorter volumes, as their two-volume counterparts, were intended largely to be used as college textbooks (see Baldwin, 1893). At least one reviewer had particularly high praise for the Elements. G. M. Duncan (1894) described it as "the best elementary textbook on psychology for use in academics, high schools, and our smaller colleges now before the public [p. 182]."

34 Baldwin's report of his visits to France are described in two letters which he wrote that were printed in Nation; see Baldwin (1892a, 1892b). His early research interest in imitation led him to attend closely to the French writers' work on suggestion; see, for example, Pedagogical Seminary, 1891, 1, 301.
for the College of New Jersey. It was Patton who invited Baldwin to return to his alma mater in 1893. Presumably Patton was cognizant of the distinction between the 'new psychology' and other disciplines; and he must have wanted to maintain this relationship, because he ordered Baldwin not to teach philosophy, which was under the jurisdiction of Professor Ormond (Baldwin, 1926, I, p. 56). Nevertheless, Baldwin found the administrative position on the idea of a university as "one of complete liberty of thought and speech [Baldwin, 1926, I, p. 56]." Unfortunately this was not to be the case during the tenure of Patton's successor, a point to which we shall return later.

Baldwin's early years at Princeton focused upon the establishment of a psychological laboratory and an opportunity to obtain a firm grounding for students in psychology as an undergraduate major, as well as the organization of a new psychological journal, theoretical and experimental projects, and a sharing in the structure and growth of the newly-founded American Psychological Association.

To assist in the laboratory work and the teaching of courses in experimental psychology, Howard C. Warren was also added to the staff in 1893. Like Baldwin, Warren had attended Princeton as an undergraduate. He arrived in 1885,

For a feeling of what undergraduate life in Princeton was like during the early 1890's, see the delightful collection of episodes described by Williams (1895). For another account by a graduate of the class of 1891 which is also useful, see Barnes (1896).
the year that Baldwin spent studying in Germany. After obtaining his B.A. in 1889, Warren was appointed as an Instructor in Logic. Then in 1893 came the appointment as Instructor in Experimental Psychology under Baldwin. To this position Warren was very well suited, having spent a year studying with Wundt at Leipzig. In 1896 he was promoted to Assistant Professor, and in 1902 to Professor. His entire career was spent at Princeton, with the exception of a year of sabbatical which he devoted to completing the requirements for the Ph.D. which he had never obtained. 36

Besides offering courses in the experimental methodology of the 'new psychology,' the undergraduate program tended to be oriented more toward genetic and social psychology in line with the theoretical interests of Baldwin. By 1896, no less than nine courses were open to graduate students as well as undergraduates. Four of these courses were entitled Experimental Psychology, three of which Baldwin

36 Warren felt very uncomfortable about being referred to as "Dr." when he didn't technically have his degree. So in 1917 he completed a volume entitled A History of Association Psychology (1921) and was officially awarded the Ph.D. from Johns Hopkins. Personal communication, Professor Max Meenes to the writer, August 29, 1973. Although Warren never took psychology courses under Baldwin (see the Daily Princetonian, November 27, 1924)—and in fact probably first became directly exposed to the 'new psychology' as a student in Germany and as assistant to Wundt at Leipzig, Baldwin does "claim the credit of having discovered and advanced [Warren] [Baldwin, 1926, I, p. 65]." It is probably in this sense that some have considered Warren to have been a 'student' of Baldwin; see Boring & Boring (1948). For brief accounts of Warren's life and psychological contributions, see Fernberger (1934) and Langfeld (1934).
was involved in teaching. Thus in Experimental Psychology--17, which Baldwin and Warren taught together, the topic of study was the experimental treatment of the special senses including sight, hearing, and touch. Experimental Psychology--18, taught by Baldwin, Warren, and Tawney--the latter having been added to the staff in 1896 as a Demonstrator, involved a detailed treatment of the measurement of mental intensities (Weber's Law) and of the results of mental chronometry. Primary readings for this course included the work of Wundt, Köpke, and Jastrow. Among the other courses offered in the department was physiological psychology by Professor W. B. Scott. It will be recalled that he had assisted McCosh in the course which Baldwin had taken in 1883. In addition, Warren taught courses on the theory of mental measurements and the psychology of logic, while Baldwin also offered two more courses. In his General Psychology--19, 20 the topics included senses and intellect, and feeling and will. Besides his own Handbook, the required readings included those of James, Höfding, and Ladd. The subject of Baldwin's Graduate Psychological Seminary--29, 30 of 1896-1897 dealt exclusively with his special interests, genetic and social psychology,37 and it is to the students in this class that Baldwin dedicated his Social and Ethical Interpretations in Mental Development, which appeared in 1897. The following year the graduate seminary discussed

social and religious psychology. By 1899, the focus was again on social and genetic questions and Baldwin was now offering a course on Theories of Heredity and Descent which addressed itself to the important questions of the day concerning evolution.

In the meantime, the psychological laboratory had been established in 1893 and much of the research conducted there was published under the title, Princeton Contributions to Psychology. By 1903, when Baldwin left Princeton, four volumes had been published in this series. A variety of experimental problems were investigated in the laboratory including studies of the temperature sense, optical illusions, various methods of assessing the accuracy of memory, and the study of reaction times which has already been referred to. Baldwin claimed credit for having discovered an optical illusion which he later described as "the displacement of the observed mid-point between two areas of different sizes—the mid-point being displaced toward the larger of the two areas [Baldwin, 1930, pp. 3-4]." During much of his tenure at Princeton, Baldwin was wrapped up and highly involved in many

38 See PR, 1897, 4, xviii.
39 See PR, 1899, 6, x-xi.
40 Several of the individual projects had simultaneously appeared in PR; see for example, Baldwin, Warren and Shaw (1895) and Crawford (1898).
41 See Baldwin (1902c), Chapter 15, 275-282. For a rather detailed description of the sorts of experimental questions studied in the Princeton laboratory, see Baldwin (1898b). Also for a brief discussion of a mouth-key which
of the more common experimental interests of the day. But this interest was to fade. Baldwin himself later admitted that as time went on, he pursued this vein of work with less enthusiasm (Baldwin, 1930, p. 4).

Nevertheless, it would not be unexpected to find an important professor, as Baldwin was at this time, producing a number of students who continued this research orientation and, in turn, trained students of their own. This, however, was not the case. A few instances existed where a graduate of Princeton went to Germany for his graduate training as was the case with Francis Kennedy who, after receiving an undergraduate degree at Princeton, went to Leipzig to receive the Ph.D. before returning to Princeton in 1898 where he served as a Demonstrator in the laboratory for a year. The following year he accepted an appointment at the University of Colorado. 42 Another student, who probably took Baldwin's Graduate Psychological Seminary course, was Wilbur Marshall Urban. After graduating from Princeton in 1895, he took an M.A. and Ph.D. at Leipzig before returning, like Kennedy, to Princeton in 1897 as an Instructor. Baldwin considered Urban to possess great talent, and a keen analytic mind. He later served as an assistant editor for the Dictionary of Philosophy and Psychology, and was 'invaluable,' according to Baldwin used in research on reaction time in his laboratory, see Baldwin (1896c). For a short outline of the research completed during the first year of the laboratory at Princeton, see Anon. (1896a).

42 Baldwin to Howison, May 21, 1898; June 4, 1898. Howison Papers.
Baldwin, in carrying out his duties. Urban never went into psychology, but rather he pursued a career as a professor of philosophy. Generally speaking, Baldwin's ability to generate students who would carry on the tradition of experimental research in psychology met with little success.

In 1896, the College of New Jersey celebrated its 150th anniversary and, among other things, the name of the college was changed to Princeton University. A formal address made at this time was of particular significance. The speaker was Woodrow Wilson who had come to Princeton in 1890 from Wesleyan College in Connecticut. He was later, of course to become the President of the United States; but what he had to say, as Professor of Jurisprudence, on that day, was of much more concern to Baldwin. The theme of Wilson's address, succinctly stated, was that modern science was a danger. Baldwin interpreted Wilson's attack to cover the 'new psychology' as well as the older, and more established natural and physical sciences. The fact that Ira Remsen, a famous American chemist, firmly rebutted Wilson's address was of little concern to Baldwin. He saw the writing on the wall and, when Wilson became President of Princeton in 1902, Baldwin knew that his days at his alma mater were

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\(^{43}\) Baldwin to Howison, May 21, 1898. Howison Papers.

\(^{44}\) Urban (1873-1952) taught at Ursinus College, Trinity College, Yale University, and Dartmouth College. He was a former President of the American Philosophical Association and the author of several books. In addition, he wrote Baldwin's obituary; see Urban (1935).
numbered. More of this will be mentioned later. Suffice it to say that Baldwin accurately described and realized the implications of Wilson's academic attitude, as "a penchant for the classics and an anti-penchant for 'modernistic' methods of all kinds [Baldwin, 1926, I, p. 61]."

Baldwin and his Relationship with the APA

On July 8, 1892, at the invitation of G. Stanley Hall, President of Clark University, several individuals gathered at a preliminary meeting in Worcester, Massachusetts to consider the proposal of establishing a psychological organization. One of the first orders of business of these men, of which Baldwin was included, was to establish a committee to determine the time, place, and program for the next meeting. This matter was judiciously expedited and Philadelphia was later chosen to be the location. The tradition of meeting between the Christmas and New Year's holidays was established when the first annual meeting took place on December 27 and 28, 1892. At the inaugural meeting, thirty-one individuals were nominated, including the original seven men who comprised the organizational committee, to be

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The men and their institutions are as follows: G. S. Hall (Clark), G. S. Fullerton (Pennsylvania), J. Jastrow (Wisconsin), W. James (Harvard), G. T. Ladd (Yale), J. M. Cattell (Columbia), and J. M. Baldwin (Toronto).

The best single source for information about the history of the American Psychological Association is Fernberger (1932). The present discussion borrows heavily from this source.
members of the APA. If anything characterized this group, it was heterogeneity of interests and backgrounds. Of these thirty-one individuals, eleven were later to become APA presidents. It may be an oversimplification, but two relatively distinct groups existed within the organization from its origin: those trained in the research methods and theoretical tradition of Wilhelm Wundt (e.g., J. M. Cattell, G. S. Hall, E. Pace, G. T. W. Patrick, E. W. Scripture) and those of a decidedly more metaphysical and philosophical bent (e.g., J. Dewey, W. James, J. Royce). The writer disagrees with Albrecht's (1960) analysis of the development of American psychology. Whereas he argued that early professional psychology was unified, it is the contention of the present discussion that, from its origin, there was never a unified view within the discipline.

By the date of the initial meeting at least nineteen psychological laboratories had been established in the United States and Canada for conducting research in the 'new psychology.' Two psychological journals—the American Journal of Psychology and the Pedagogical Seminary, both under the editorship of G. S. Hall, were in operation. It was the same year that Hugo Münsterberg had been brought to Harvard by William James, and E. B. Titchener had come to Cornell, both

47 Included in this number was J. G. Hume, the colleague of Baldwin at Toronto who has been discussed earlier.

48 See Garvey (1929).
to direct the research in their respective laboratories. So the atmosphere was one of vitality and hopeful optimism for the advancement of psychology, both as a respectable science and a legitimate profession.

As Camfield (1969) has indicated, the seven 'founders' of the APA retained considerable control of the organization during its early years. Gaining membership required their approval. Baldwin, Cattell, and James were nominated to constitute a committee to draft a constitution. This may well have provided the opportunity for Baldwin and Cattell to consider introducing a new psychological journal to America as we shall see later on. At the second meeting (i.e., the first annual meeting) in Philadelphia, a total of twelve papers or reports were presented. Baldwin did not present any paper but he did participate in the discussion following several presentations by his colleagues. Eighteen of the thirty-one members attended the Philadelphia

49 The two criteria which were used to determine membership in the APA were professional occupation in psychology and research; see Psychological Bulletin (hereafter cited as PB), 1907, 4, 203. For Baldwin's views as a member of the Council—about whom he would like to propose for membership and his dissatisfaction with "the council's running everything in such a 'closed-door' fashion," see Baldwin to Cattell, n.d. (1893 or 1894?), Cattell Papers.

50 The proceedings of the first three APA meetings were, until recently, extremely difficult to locate. This situation has been resolved by the reprinting of these proceedings; see Sokal (1973). Other, briefer abstracts of the APA meeting of December, 1892 may be found in Titchener (1893). and Anon. (1893). Ralph S. Bates (1965, p. 118) has erroneously implied that only seven individuals attended the preliminary meeting of the APA.
meeting. In addition, eleven new members were elected. The following year (1893), the meeting was hosted by Cattell and Columbia University with G. T. Ladd presiding as President. Again Baldwin made no paper presentation, although Howard C. Warren delivered a paper on some of the experimental research on memory that Baldwin and W. J. Shaw had carried out in Toronto and which was continued with Warren's assistance in the Princeton laboratory. Thirteen new members were elected at this meeting, including its first women—Mary W. Calkins and Christine Ladd-Franklin. Also at this meeting the invitation of Baldwin, in behalf of President Patton and Princeton, to host the 1894 meeting was accepted. In the opening address of the 1894 meeting, President Patton urged the psychologists never to forget the distinction between science and philosophy and "not to reduce psychology to the level of a mere science [Newbold, 1895a, p. 292]."

In 1895, the tradition began of holding the annual APA meeting in conjunction with that of another professional organization. It met that year in Philadelphia along with the American Society of Naturalists, the basic rationale being that

... the feeling has been growing that the close relation between the more recent forms of psychology and the biological sciences made it eminently suitable and desirable that their representatives should be brought together [Newbold, 1896, p. 156].

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51 This was the second meeting of the organization, but was considered its first annual meeting; see Sokal (1973).
This must certainly have pleased Baldwin, who was fostering an interest in related biological questions as a result of his interest in mental development and the theory of evolution. In fact he participated in a discussion of 'consciousness and evolution' at the 1895 meeting with William James, Edward Drinker Cope—a prominent American paleontologist who was the editor of the American Naturalist, G. T. Ladd, and C. S. Minot. This lively discussion focused upon Cope—a firm supporter of the Lamarckian doctrine of the inheritance of acquired characteristics, and Baldwin, who was at this time formulating the theory of organic evolution—a theory, as we shall see in the following chapter, which attempted to explain individual adaptation (or accommodation as Baldwin called it) without reliance upon the Lamarckian doctrine.

This debate was carried on in private correspondence between the two men as well as in the pages of the American Naturalist, but came to an unfortunately premature termination with Cope's death in 1896. Cope had just been elected to membership in the APA.

The 1895 meeting in Philadelphia also seems to have been the time and place at which the original heterogeneity of the group's members was to have its expected consequences when, for the first time, the Council was asked to consider the question of either establishing a section devoted to

52 See Anon (1896b).
53 See PR, 1896, 3, 121-133.
philosophy within the Association or of forming a separate philosophical society.\textsuperscript{54} Apparently the annual meetings had been dominated by non-philosophically-oriented papers to the concern and probably dissatisfaction of men like James and Royce. The following meeting did contain a session solely for philosophical papers, so for the time being at least, no separate philosophical society was formed. Baldwin probably at this time was still identifying largely with the experimental psychologists and relatively less so with the philosophers in the organization. This is reflected by his proposal, also at the 1895 meeting, to form a committee whose task it would be to consider the feasibility of cooperation among the psychological laboratories then in existence for the collection of mental and physical statistics. The committee was instituted with Cattell as chairman, and four other members--Baldwin, Jastrow, Sanford, and Witmer. At the 1896 meeting a preliminary report was presented which described the biographical information that should be collected as well as the measurements which should be taken of various abilities such as color vision, hearing, perception of pitch, fineness of touch, and sensitivity to pain. In summary the committee concluded that:

\ldots such tests be made, so far as possible, in all psychological laboratories. It does not recommend that the same tests be made everywhere, but, on the contrary, advised that, at the present time, a variety of tests be tried, so that the best ones may be determined. Those who make tests which they regard as desirable are

\textsuperscript{54}For an analysis of this issue from the point of view of one who did not favor a separate philosophical association, see Bliss (1899).
requested to send these with sufficient description to the committee.55

As we have seen, from 1895 on, the APA met jointly with other professional organizations, usually including the American Society of Naturalists, the American Association for the Advancement of Science (AAA5), the American Philosophical Association which was established in 1901, and later, the Southern Society for Philosophy and Psychology, founded in 1904, of which Baldwin was its charter president. With the formation of the American Philosophical Association, Fernberger (1932) has stated that the number of philosophical papers presented at the annual APA meetings dropped virtually to zero.

At the annual meeting held in Boston in 1896, Baldwin was elected President for the ensuing year (Warren, 1897). Several colleagues of Baldwin and Warren from Princeton were elected to membership in the organization.56 The meeting in Ithaca, New York, over which Baldwin presided, witnessed for the first time the membership in the APA exceeding 100. On doctor's orders, Baldwin was prevented from reading his presidential address 'On Selective Thinking' before the Association. It was printed, however, and served as the basis of discussion of the topic of 'invention' led by

55 See PR, 1897, 4, 137. It is interesting, as Fernberger (1932) has pointed out, that this was the first attempt by the organization to standardize tests for clinical purposes.

56 These included J. F. Crawford, J. G. Hibben, and C. W. Hodge; see PR, 1897, 4, 108.
Professors Royce, Jastrow, and Urban. The theme of Baldwin's address, consistent with his earlier works of Mental Development and Social and Ethical Interpretations, was the functional value of the thought processes as stated in the two-fold principle that not only what an organism does is a function of what it thinks, but what an organism shall think is a function of what it has done.

The most successful meeting in terms of the number of members attending, occurred at the seventh annual meeting in New York in 1898. Baldwin moved that a Standing Committee on Psychological and Philosophical Terminology be appointed. This proposal was adopted and the committee that was formed was composed of Baldwin, Cattell, Creighton, Minot, Münsterberg, Royce, and Sanford. The purpose of the committee was four-fold: (1) to recommend new terms in psychology and philosophy; (2) to recommend alternative terms in psychology and philosophy; (3) to recommend the foreign equivalents of the English terms in these fields; and (4) to inform the Association of new terms in other fields such as neurology. Although Baldwin had given considerable individual thought to the question of terminology, which he considered to be of vital concern, prior to this time, the establishment of this

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57 See PR, 1898, 9, 145, and American Journal of Psychology (hereafter cited as AJP), 1897, 9, 135, 250. Apparently it was Baldwin who first suggested 'Psychology of Invention' as a discussion topic for the meeting. See Baldwin to Cattell, Tuesday, n.d. (1897?), Cattell Papers.

58 This strong element of functionalism in Baldwin's works will be discussed in greater detail in Chapter 3.
standing committee served as a formal precursor to the international board of editors whom Baldwin solicited in preparing the enormous Dictionary of Philosophy and Psychology (1901-1905). We will return to this venture later in the chapter.

Baldwin's Social and Ethical Interpretations served as the basis of a paper presented by William Caldwell, who reviewed the work quite favorably. Baldwin himself addressed a paper to some criticisms of the first edition of his Social and Ethical Interpretations. As the membership in the APA grew, Baldwin seems to have become less involved in the affairs of the annual meetings, despite the fact that he was elected to the Council for a three-year term beginning in 1901.

At the tenth annual meeting in 1902 a proposal was adopted which allowed members of a common geographical section of the country to "organize themselves into a local section for the holding of meetings." This is an indication that not only was the size of the membership becoming prohibitively large to prepare a satisfactory program at the annual meetings, but that more and more diverse areas of the country were being represented in the Association, as compared to the early meetings in which the members came, to a

59 See PR, 1899, 6, 171.
60 See PR, 1901, 8, 158.
61 See PR, 1902, 9, 135. The first regular meeting of the Western Branch of the APA took place in December, 1902; see PR, 1903, 10, 177.
large extent, from the Middle Atlantic and New England states.

Fernberger (1932) reported that during the first decade of its existence, papers presented at the annual Association meetings totaled 219. Of these, 67 were 'theoretical' while 66 were 'experimental.' A considerable number of papers were also presented in other areas including clinical, educational, abnormal, applied, social, and animal psychology. This attests to the heterogeneity of the interests. Baldwin and his associates had represented Princeton well at the annual meetings of the first decade. Thirteen papers were contributed by individuals from Princeton during the first ten years. Only Columbia (27), Pennsylvania (18), Harvard (15) and Yale (14) contributed more (Fernberger, 1932).

In 1903, Baldwin invited the Association to meet the following year at Johns Hopkins in Baltimore where he had

62 A paper presented by Edward F. Buchner at the eleventh annual meeting in 1902-1903 reported somewhat different figures for the same time period: experimental--86, philosophical--34, apparatus--28, theoretical--25, etc. The differences between Fernberger and Buchner's figures may be due to the fact that different categories were used; see PR 1903, 10, 167. Nevertheless, the results reported by both individuals suggest the heterogeneity of paper topics presented at the annual meetings during this period.

63 It is not clear exactly what the policy on acceptance or rejection of proposed papers at these meetings actually was. Apparently no papers were rejected prior to the fifth annual meeting in 1896, at which time Lightner Witmer proposed that "the Council of the American Psychological Association be recommended to select only such papers and contributions to the program of the annual meeting as are psychological in subject-matter," PR, 1897, 4, 109. However,
just moved, but for some unknown reason this invitation was turned down. At the same meeting two individuals of quite different persuasions, but who were to become close personal friends of Baldwin, were elected to membership in the Association. The first was I. Woodbridge Riley of the University of New Brunswick, and the second was John B. Watson of the University of Chicago.

From as early as the 1899 meeting, Baldwin had become less involved in the participation of the annual meetings, reflected in part by the fact that he never again presented a paper before the Association. He was, however, still affiliated with Johns Hopkins, when the seventeenth annual meeting convened there in 1908 under the presidency of his colleague whom he had brought to Hopkins, George Malcolm Stratton.

Baldwin's involvement with several editorial adventures, which

there is no indication of whether or not this recommendation was adopted, although it probably was not, since a similar motion was made at the annual meeting in 1912 (Fernberger, 1932). It is not clear who made the proposal at the annual meeting in 1912, but due to the fact that some individuals failed to confine their papers to the allotted time limits (a problem which seems to have a long history)--and this was becoming an increasingly-common occurrence, several others were 'unavoidably detained.' One of the suggestions for remedying this problem was "refusing a place on the program to a fraction of the members with reports to present"; see PB, 1913, 10, 43.

64See PB, 1904, 1, 34. Baldwin to L. Farrand, December 27, 1903, Cattell Papers. Failing to accept an invitation of this nature appears to have been a rather uncommon occurrence, but it may partially be accounted for in terms of organizational politics. As we shall see a little later in this chapter, Baldwin and Cattell dissolved their partnership as editors of the PR in 1903. Baldwin gained full ownership and control of that publication and perhaps some of his colleagues were feeling that he was attempting to dominate the organization.
must have been a contributing factor to his declining prominence at the annual Association meetings. It is to these editorial responsibilities that we shall now turn.

The Psychological Review

G. Stanley Hall is often given credit, and rightly so, for his pioneering efforts in guiding the direction of early American scientific psychology. Not only did he found what are generally considered to be America's first two psychological journals, but he conceived of what became the American Psychological Association, and served as the chief psychological representative in the child-study movement of the 1890's. However, the material published in Hall's journals met with the criticism of fellow psychologists that it was nothing but the report of research carried out at Clark University, where Hall was President. The nature of the research was also criticized, it being almost exclusively confined to the domain of experimental psychology.

In a letter to Carl Stumpf, William James sized up the situation as he saw it:

The American Journal of Psychology edited by G. Stanley Hall has always left much to be desired. Its field is very narrow and much of its work ill-done. During the past years Professors Baldwin, Cattell and Münsterberg have been negotiating with Hall to see if some arrangement might not be made for improving the Journal, but everything has failed; and the result is that a new journal is to be started under the title (probably) of

65 For an excellent biography of Hall, see Ross (1972).
66 See Philosophical Review (hereafter cited as Phil. Rev.), 1895, 4, 688.
The Psychological Review with Baldwin and Cattell as chief editors and all the professors of psychology in the American universities (except Jastrow and Hall) as cooperating editors.\footnote{67} James' description of the origin of the Review appears to be accurate. Although Baldwin claimed that he had the idea (independently) of founding the Review, he and Cattell did initiate the unsuccessful attempt to persuade Hall to modify the policy of his \textit{Journal}.\footnote{68} Baldwin and Cattell approached Hall with two options: either to add to the editorial page of the \textit{Journal} a list of 'cooperating editors' that included Baldwin, Cattell, Fullerton, James (or Münsterberg), Jastrow, Ladd, and Schurman (or Titchener) with the condition that decisions regarding the acceptance and rejection of manuscripts be determined by a majority vote of the editorial board, or, to sell the \textit{Journal} to Baldwin and Cattell for \$3,000. They added that

\begin{quote}
In case you are unable to accept either of these offers in time to bring the new arrangement into force with Vol. VI of the Journal we shall undertake the establishment of a new journal under the conditions enumerated.\footnote{69}
\end{quote}

This move clearly reflected the growing dissatisfaction which several of Hall's colleagues in the APA felt toward his editorial policies. It is a healthy sign that concern was shown

\footnote{67}W. James to Stumpf, September 12, 1893, reprinted in Perry (1935), p. 186. Also see Cattell to Münsterberg, August 23, 1892(?). Münsterberg Papers.

\footnote{68}See Baldwin (1926), p. 64; see also "Propositions to G. S. Hall," n.d., Cattell Papers.

\footnote{69}"Propositions to G. S. Hall," Cattell Papers.
for a greater representation of universities, and the corresponding conviction that a central organ, such as the Journal, should not be too closely associated with a single university. Hall perhaps felt overly threatened by the options presented by Baldwin and Cattell, options which he had no say in developing. So it is not too surprising that he refused to accept either of the alternatives and forced the hand of Baldwin and Cattell, who did in fact what they had said they would.

So on January 1, 1894, the first issue of the Psychological Review appeared. Baldwin and Cattell had decided to rotate primary editorial responsibility by alternating each year in these duties. Initially, the prospects for a long and close relationship between the two men with the Review were optimistic. Its purpose was to

... contribute to the advancement of psychology by printing the results of experimental investigations,

70 For an excellent account of this episode from Hall's perspective, see Ross (1972), pp. 235-242.

71 See Cattell to James, July 27, 1893, Cattell Papers. Several psychologists were interested in the possibility of uniting with the Philosophical Review in order to coordinate a central organ for both philosophy and psychology, but this idea was abandoned. See Cattell to J. G. Schurman, September 1, 1893, Cattell Papers. Also see Baldwin to James, September 18, 1893, Münsterberg Papers, in which Baldwin tells James of the interest that he, along with several others, including Cattell, Ladd, Donaldson, Jastrow, and Münsterberg had in starting a new journal; see also Cattell to James, September 16, 1893, Münsterberg Papers.

72 Baldwin was later to say that this is the only reason the partnership lasted as long as it did (i.e., ten years); see Baldwin (1926, I), p. 65.

73 Baldwin to Cattell, January 10, 1894; January 17, 1894, Cattell Papers.
constructive and critical articles, and prompt reviews or concise abstracts of all publications of importance in the psychological field. The growth of scientific psychology in America during the past few years has been rapid, and it is felt that a Review is needed which will represent this forward movement with equal regard to all its branches and to all universities and contributors.74

Wide-range and diverse support for this publication venture is reflected by the quality and heterogeneity of its cooperating editors: Alfred Binet (Sorbonne), Carl Stumpf (Berlin),75 James Sully (London), John Dewey (Michigan), Henry H. Donaldson (Chicago), G. S. Fullerton (Pennsylvania), William James (Harvard), G. T. Ladd (Yale), Hugo Münsterberg (Harvard), and M. Allen Starr of New York City—clearly a most impressive group of scholars.76

Unfortunately, Baldwin and Cattell77 were both strong personalities, not always open to compromise, and to make matters more strained, they differed in their professional attitudes about the proper subject matter and methodological orientation toward psychology. Baldwin was much more the theoretician,78 while Cattell's forte was controlled,

74Anon. (1894), p. 22.

75Stumpf was approached about the offer to be listed as an editor by James; see James to Stumpf, September 12, 1893, reprinted in Perry (1935, II), pp. 186-187.

76Cattell enlisted Wundt's cooperation in serving as an editor of the Review, but for unknown reasons, Wundt turned down the offer; see Cattell to Wundt, July 31, 1893, Cattell Papers.

77For an excellent in-depth investigation of the life and works of J. M. Cattell, see Sokal (1972).

78This despite the fact that Baldwin spoke highly of Cattell's experimental research at Columbia which he urged Cattell to publish in the Review; see Sokal (1972), p. 452.
quantitative, experimental research. In some respects it is surprising that they lasted together for ten years.

During the first year of the Review, on November 16, 1894, Baldwin lost his friend and former teacher, when James McCosh passed away. It was McCosh who had originally introduced Baldwin to the 'new psychology,' and although Baldwin's two-volume Handbook reflected the influence of McCosh's thought, he was now moving on to different areas of interest, particularly genetic and social psychology, and developing a much more functional viewpoint than McCosh had ever held.\(^7^9\)

The following year (1895) the first offspring of the Review appeared in the Psychological Monographs. The Monographs were reports of original research much longer than the average articles published in the Review. By 1904, more than twenty-five monographs were available in the series. This was considered to be such a large task that Baldwin appointed Charles H. Judd to serve as editor of this series in that year.

According to Baldwin, the Review was a success from the start (Baldwin, 1926, I, p. 64). It appeared bi-monthly and comprised nearly 700 pages per volume. It, better than Hall's Journal, accomplished one of its major aims in representing a wide scope of American psychological work, and it annually published the proceedings of the APA meetings until 1904, at which time the proceedings appeared in the

\(^{79}\)Wilbur M. Urban, writing a few years later, described McCosh as a representative of the 'old psychology'; see Urban (1896).
Psychological Bulletin, established that year as the 'Literary Section' of the Review.

In the fall of 1899, with Baldwin receiving a leave of absence from Princeton to go to England to complete for publication the Dictionary of Philosophy and Psychology, he considered one of his major intentions the 'nurturance' of the Review in England. Cattell was editing the Review during 1900, around which time the partnership between he and Baldwin was beginning to show overt signs of friction. Baldwin wrote to Cattell about an issue of the Review which had appeared in 1900, saying "I think it's the poorest number, possibly that we ever printed..." and implying Cattell's responsibility in the matter. A couple of years later Baldwin chastised Cattell for taking some of the reviewing duties out of Warren's hands, and again criticized his partner: "During your last year the whole literary department was so very poor that I was ashamed of it..." Cattell may have had some complaints with Baldwin's editorial responsibilities as well. The fact that both Baldwin and Warren

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80 Baldwin to Cattell, May 1, 1899, Cattell Papers.
81 Baldwin to Cattell, March 1, 1900, Cattell Papers.
82 Warren had become Associate Editor and Business Manager in 1901.
83 Baldwin to Cattell, November 23, 1903; Baldwin to Cattell, November 28, 1903, Münsterberg Papers. Warren commonly helped handle Baldwin's editorial responsibilities while he was away, even during the years when Baldwin was responsible for these affairs; see Baldwin to Cattell, April 4, 1903; Warren to Cattell, October 27, 1898, Cattell Papers.
were accustomed to spending their summers abroad\textsuperscript{84} may well have resulted in Cattell having to devote more time to \textit{Review} matters than he had anticipated.

In any event, the situation had become unbearable, and the first serious thoughts about dissolving the partnership were expressed late in 1903. Besides the disagreement over the nature of Warren's participation in the \textit{Review}, Baldwin and Cattell differed as to how much money each should receive annually for their time and work related to publishing the \textit{Review}. Baldwin wanted to share $200 a year between the two as partial reimbursement for their efforts, while Cattell preferred to maintain the amount previously established of $50 a year to each editor.\textsuperscript{85} In addition, Warren was considering relinquishing his editorial responsibilities with the \textit{Psychological Index}, which was an offspring of the \textit{Review} concerned with the compilation of bibliographical material of a psychological nature, which he had undertaken for a nominal fee in 1895.

Baldwin's severe criticism of the quality of the journal while under Cattell's editorship seems to have been the last straw for Cattell, and the culmination of several years of interpersonal frustrations for both men, when Cattell informed Baldwin of his intentions of dissolving the partnership:

\textsuperscript{84}Warren to Cattell, April 22, 1902, Cattell Papers; see also Baldwin, Congress of psychologists, New York \textit{Evening Post}, September 12, 1896, p. 15.

\textsuperscript{85}Baldwin to Cattell, November 23, 1903, Cattell Papers.
The time has now come when it is evident that the 
REVIEW can be edited in a more adequate manner by either 
of us than by both of us. The plan of changing editors 
each year does not lead to a satisfactory policy or 
efficient administration and it appears that we can no 
longer work together harmoniously. In the interests of 
the REVIEW and of psychology in America, I propose that 
you buy my share of the REVIEW or that you sell me 
yours.86

Baldwin reacted with great surprise at Cattell's proposition. 
He admitted that perhaps he had reacted too strongly with 
regard to the eroding quality of the literary section of the 
Review during the previous year of Cattell's editorship, but 
that none the less, it should be improved. If Cattell were 
not willing to see that the quality did not noticeably 
improve, Baldwin would then agree that it would be best to 
dissolve the partnership. Commenting that he would prefer 
not to sell his portion of the Review, he suggested that per­
haps a meeting could be arranged where the two men could 
carry out a private auction.87 Baldwin was later to describe 
Cattell's initial proposal in strikingly-exaggerated terms, 
almost as if he (i.e., Baldwin) were projecting:

Even had I not wished to keep the Review, the very 
terms of this summons [by Cattell] would have determined 
me to buy it at any cost, even to the bondage of my 
children's children. But as it happened I was glad to 
have a chance to get it for itself [Baldwin, 1926, I, 
p. 65].

86 Cattell to Baldwin, November 25, 1903, Cattell 
Papers. Cattell reiterated this proposition and stated a 
few days later that "I have not formed this opinion hastily, 
but after several years of consideration. The plan of chang­
ing the editorship each year does not appear to be satisfac­
tory, and your removal to Baltimore will make it more diffi­
cult to meet in consultation." Cattell to Baldwin, November 
29, 1903, Cattell Papers.

87 Baldwin to Cattell, November 28, 1903, Münsterberg 
Papers.
Cattell accepted Baldwin's suggestion to privately auction the *Review*, and so that the arrangement could go into effect with the publication of the next volume in January, 1904, they agreed to meet at Cattell's office on December 1, 1903. Baldwin's description of the meeting is interesting:

> Our meeting was very ludicrous, but to us both it was important, for it involved our small savings and something of our professional aspirations.

> We began bidding, and the bids mounted, his by larger amounts, fifty or one hundred dollars, mine by small, ten dollars or even five. So it went - 'two-thousand,' 'and ten'; 'twenty-five hundred,' 'and ten' - Cattell writing down each bid on a pad. When it reached 3400 and I added five, he went 3500, and on my adding again 'five,' he threw down the pen and said, 'It's yours, I promised not to go higher than 3500' [Baldwin, 1926, I, p. 65].

Baldwin promptly disseminated the information regarding the new arrangements of the *Review* to all its cooperating

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88 Cattell to Baldwin, November 29, 1903; Baldwin to Cattell, November 30, 1903, Cattell Papers. Part of the agreement to dissolve the partnership read as follows: "We agree that the Review with its good will and assets shall become the property of the one of us who will pay the other the largest sum for his share, the sum to be determined by bidding in the usual manner. Of the sum bid 10 per cent shall be paid at the time of the sale and the balance in ninety days"; "Agreement to dissolve the partnership," December 1, 1903, Cattell Papers.

89 The accuracy of Baldwin's report of the bidding is in some question. Mike Sokal has provided the writer with a copy of a sheet of paper (probably the same pad Baldwin refers to) from the Cattell Papers (n.d.), which lists different figures concerning the bidding over the purchase of the journal than those indicated by Baldwin. Specifically, Cattell began the bidding at $2,000, but Baldwin consistently increased it $100 (with the exception of two occasions when he only increased it $50) until it got to $3,600, which is the price for which Baldwin received the *Review*; see also Baldwin to Cattell, December 4, 1903, Cattell Papers.
editors. He also announced plans for the publication of a separate literary section, beginning in 1904, to be called the *Psychological Bulletin*. In order to continue to maintain wide representation on the editorial board of the *Review*, he invited the cooperation of Judd and Ladd. The fact that the partnership was now dissolved did not mean that the problems between Baldwin and Cattell were over. In fact, it prompted considerable concern among their colleagues. Josiah Royce, commenting on the event, confided to Hugo Münsterberg: "I hope that they may divide territory without bloodshed." The day after the auction Cattell wrote to Baldwin telling of his plans to establish a *Centralblat* which would "in no way conflict with *The Psychological Review.*" In addition, Cattell indicated to Baldwin an interest in purchasing the *Monograph* series. Initially Baldwin agreed to the sale of the *Monographs*, but when he found out about Cattell's idea of a *Centralblat*, he viewed this as an unethical move following the sale of the *Review*, since it would

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90See Baldwin to Judd, December 4, 1903, Cattell Papers.

91This despite the fact that Baldwin did ask Cattell to remain as a 'cooperating editor' of the *Review*: see Baldwin to Cattell, December 2, 1903, Münsterberg Papers. Also see Baldwin to "All Cooperating Editors of the Review," December 4, 1903: "On December 2nd, Prof. Cattell and I met at his suggestion, and amicably dissolved our partnership in the Psychological Review."


93Cattell to Baldwin, December 2, 1903, Cattell Papers.

94Baldwin to Cattell, December 2, 1903, Cattell Papers.
probably interfere with "the 'goodwill' of the REVIEW."

Besides, Baldwin and Warren had just planned to publish the Psychological Bulletin as an offspring of the Review to serve the function of a Centralblat. Haggling over who had first thought of the idea of a Centralblat followed. The result was two-fold: the simultaneous establishment of the Psychological Bulletin by Baldwin and Warren, and the appearance of the Journal of Philosophy, Psychology, & Scientific Methods founded by Cattell and Frederick J. E. Woodbridge. At the same time, Cattell withdrew the yearly advertisement of courses in psychology at Columbia which netted the Review $100 annually. Since this was a loss of revenue to the Review, which Baldwin would incur, he felt Cattell's action to be a violation of the 'good will' of the Review verbally agreed to at the auction. However, what was more irksome, was Baldwin's suspicion that Cattell was attempting to persuade other universities, including Yale, to do likewise.

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95 Baldwin to Cattell, December 5, 1903; December 7, 1903, Cattell Papers.

96 See Cattell to Baldwin, December 7, 1903; Baldwin to Cattell, December 7, 1903; Baldwin to Cattell, December 8, 1903; Warren to Cattell, December 8, 1903; Warren to Cattell, December 22, 1903, Cattell Papers.

97 The purpose of the latter journal was to serve as a Centralblat for scientific philosophy, psychology, ethics, and logic; see Journal of Philosophy, Psychology and Scientific Methods (hereafter cited as JPP&SM), 1904, 1, 27; also see Sokal (1972), p. 464; also M. M. Sokal to the writer, March 6, 1974.

98 Baldwin to Münsterberg, December 19, 1903, Münsterberg Papers.
Several months after the auction Cattell again contacted Baldwin about the sale of the *Monographs*.\(^99\) It was in the meantime that Baldwin had appointed Judd as editor of the series, and Cattell viewed this as an attempt to placate Judd who had been selected by several of his colleagues to discuss with Baldwin the matter of selling the *Monographs* to a group of psychologists who would represent a wide range of American universities. In effect, Cattell was interpreting Baldwin's stand as similar to that of G. S. Hall, who eleven years earlier had refused to modify the editorial staff of his *Journal*. Baldwin, in a seemingly passive-aggressive manner, turned Cattell's proposition over to Judd for disposition.\(^100\) Soon thereafter Judd informed Cattell that Baldwin was unwilling to sell the *Monograph* series,\(^101\) and it remained as an integral publication of the *Psychological Review* until the Psychological Review Publications were sold to the APA in 1925.\(^102\) As early as 1910, shortly after Baldwin sold his shares of the Review Company to Warren, efforts were made to bring the publications of the

\(^99\) Cattell to Baldwin, May 14, 1904, Münsterberg Papers.

\(^100\) Baldwin to Cattell, n.d. (May 15, 1904?), Münsterberg Papers.

\(^101\) Judd to Cattell, May 23, 1904, Münsterberg Papers.

\(^102\) This, despite the fact that Baldwin was under considerable pressure to sell or relinquish his sole rights to the series; see, for example, Münsterberg to Baldwin, March 30, 1906, Cattell Papers.
Company into closer association with the APA. Yet Warren preferred to retain private ownership of the journals. At the 1910 APA meeting a committee was formed to study the question of the relationship between the Association and the various journals publishing psychological material. Warren, who was elected as the committee chairman, must have carried out his editorial responsibilities with considerable fairness and discretion, because the vast majority of the committee preferred not to see the Psychological Review Publications owned by the APA at that time. But in time the opinion shifted and in the early 1920's, the proposition that Warren's Psychological Review Company—which comprised four publications, the Review, the Bulletin, the Monographs, and the Psychological Index, be sold to the APA, was accepted. Not only did Warren sell the Company at a much lower price than it was worth, but when about 60 percent of the purchase value

103 Warren to Cattell, June 22, 1910, Cattell Papers.
104 Warren to Cattell, March 2, 1911, Cattell Papers.

G. S. Hall's response even to the idea of the committee is worth noting since it reflects the influence of Freudian theory on his own thought: "You will understand from my previous notes that my - and I think I may say our - attitude here toward any control, coercion of any sources would be entirely negative and to speak plainly, it is just because I can see no need of such a committee that I cannot help quezing whether there is some purpose that does not appear on the surface, at least to my intelligence, in having a committee. I wish I could rather psychoanalyze your own mind and find out what latent meaning or purpose lurks under the patent one; not, you understand, that I for one instant suspect you of any covert purpose, but I feel there must be some motive entirely unconscious to your self in your own mind that makes you stress this committee and comparing your last letter with the first which was full of the instinct of controlling journals, you can psychoanalyze me enough to see what ails me." Hall to Warren, March 17, 1911, Hall Papers.
Baldwin's Relationship with his Colleagues

As has already been pointed out, the relationship between Baldwin and Cattell soured as their partnership in the *Review* deteriorated, until the final split occurred late in 1903. Even though their relationship was close during the first decade of the *Review*, it was neither an intimate nor congenial one. But perhaps Baldwin's arch-rival among his American psychological colleagues was G. S. Hall. It is interesting to note that, although both had very similar interests in child psychology and evolutionary theory, they seldom referred to one another's work. The antagonism was probably due to several factors. Undoubtedly, Hall's refusal to negotiate with Baldwin and Cattell concerning editorial modifications in Hall's *Journal*, which subsequently resulted in the establishment of the *Psychological Review*, was an important event which probably embittered Baldwin. A second significant event occurred in 1895 when Hall wrote an editorial in the *Journal* describing, in effect, how American psychology had been founded by him. He described the establishment of the *American Journal of Psychology* in 1887 as

105 Warren seems to have initiated the offer to sell; see Anon. (1931a), pp. 344-345. For information about the financial success of the *PR*, see Warren to J. E. Wallin, May 20, 1919, Wallin Papers.

106 Not even one reference is made to Baldwin in Hall's huge, two-volume opus on *Adolescence* (1904).
one of the boldest and most sagacious as well as one of the most successful and beneficial steps ever taken by this leader of the new academic movement. . . . Under the influence of these men [i.e., those who had been associated with him either at Johns Hopkins or Clark] departments of experimental psychology and laboratories were founded at Harvard, Yale, Philadelphia, Columbia, Toronto, Wisconsin and many other higher institutions of learning . . . [Hall, 1895a, pp. 3-4].

To this outrageous statement several prominent individuals rebutted, including James, Ladd, and Baldwin. James corrected the 'extraordinary statement' by pointing out that he himself had founded the instruction of experimental psychology at Harvard and that Hall had been a student of his from 1877 to 1879! Ladd corrected Hall's interpretation by emphasizing that he had been responsible for the establishment of the laboratory at Yale, and Baldwin claimed rightful credit for the founding of the laboratory at Toronto; and clearly Baldwin had never been a student of Hall, nor even influenced in any professional sense by what Hall had done, other by attending the inaugural meeting of the APA at Hall's invitation. Baldwin must have considered Hall's failure to credit him with establishing the Toronto laboratory and with teaching courses in experimental psychology there as a serious and irresponsible blunder. This is particularly the case since Baldwin had described his work at Toronto in the pages of Hall's *Journal*.\(^{107}\) Perhaps this was merely an oversight on Hall's part, but a naive reader of the entire editorial would come away with the erroneous impression that Hall and his students were the only representatives of the 'new psychology' in

\(^{107}\)See Baldwin (1890b).
America.

Hall (1895b) promptly apologized for his erroneous inclusion of Toronto in the list of universities, and obviously having Baldwin in mind, he replied:

I am very sorry the name of Toronto got on the list of laboratories affected by our work. It is a mistake I cannot account for, and I am glad to correct the error with due apologies to all aggrieved thereby [1895b, p. 735].

Nevertheless, this incident did much to antagonize the relationship not only between Baldwin and Hall, but between Hall and many of his colleagues. Baldwin echoed James' view of Hall as 'narrow-minded.' James himself had several years earlier become concerned about the point of view Hall had adopted when he told Baldwin that "I do believe that some kind of an intellectual school of psychology is needed to rectify the raw philistinism of the Stanley Hall school." Shortly thereafter, Hall's scathing review of James' Principles must have irritated even the generally unperturbable James. The relationship was further

108G. S. Hall to E. B. Titchener, November 14, 1895, Titchener Papers. For an interesting account of this entire incident, see Ross (1972), pp. 242-250, and Perry (1935, II), pp. 7-9.

109For mention of this description, see Baldwin (1926, I), p. 62.


111See Hall (1891).

112In referring to Hall, James confided to Münsterberg that "He hates clearness - clear formulas, clear statements, clear understandings; and mystification of some kind seems
exacerbated by what James considered to be Hall's failure to retract as false the statements in his editorial of 1895, which James interpreted as a deliberate desire to maintain unfriendly relations with him. This prompted James to cancel his subscription to the *Journal*, and as Ross (1972) has concluded, "though the two probably never broke off formally, their friendship never recovered [p. 249]."

Baldwin pulled no punches about his disposition toward Hall. In a letter to Cattell he proclaimed: "I flatly refuse to renew the Pedagogical Seminary subscription! . . . Why should this servant be in league with the devil? [i.e., Hall]. Several years later, however, Warren continued to value the editorial experience that Hall had achieved.

Besides his close colleague Warren, Baldwin fostered a mutually intimate relationship with several contemporaries, including James, Münsterberg, and Royce—all Harvard men—who never far distant from everything he does," James to Münsterberg, August 11, 1893, Münsterberg Papers; also "He [i.e., Hall] is absolutely without judgment, can't tell good from bad, and hasn't a definite or clear idea in his head," James to Münsterberg, August 24, 1893, Münsterberg Papers. Hall must have realized that he had alienated James, for he later told Titchener: "I have not much heart in winning over James; we are not much in sympathy and no power could drag him into work with me, if I wanted it ever so much." Hall to Titchener, January 15, 1895, Titchener Papers.

113 E. C. Sanford to Titchener, January 23, 1896, Titchener Papers.

114 Baldwin to Cattell, n.d. (1898?), Cattell Papers. See also, Baldwin to Cattell, May 18, 1900, Cattell Papers.

115 Warren to Cattell, January 19, 1911, Cattell Papers.
were clearly among the more philosophically-oriented members of the APA. James was perhaps, next to Warren, Baldwin's closest American associate. The two frequently visited one another, and one occasion merits some attention. In 1896, at the 150th anniversary celebration of the founding of Princeton, James was to be awarded an honorary degree. Baldwin described the event as follows:

Thinking that I had had something to do with [this] ... he wrote conjuring me to see to it that he was not referred to officially as a "psychologist," and "don't," said he, "don't let them refer to my 'theory of the emotions.'" Why James disliked to be known as a psychologist, after having written the greatest Psychology since that of Taine, I never knew; but so it was. He aspired to be a "philosopher" ... and perhaps the title psychologist to him only went half way, leaving him too near his old associates, the medical men. It is also three to one that had the public orator not been held up he would have presented him as "author of James' noted theory of the emotions." I do not recall the terms in which he was actually presented, but I think the words "moralist" and "man of letters" figured in the citation. Yet when his name was called it is probably that half the audience asked the other half, "is it James the psychologist?" [Baldwin, 1926, I, pp. 62-63].

Baldwin evaluated James' influence on American psychology as 'great.' Baldwin later recalled that "He [i.e., James] was our recognized dean and arbiter [1926, I, p. 90]." James was always contacted for his advice whenever significant decisions were being made such as the founding of a new organization or journal. However, Baldwin always believed that James was vulnerable in one area: "His only mistakes were on the side of indulgence when ... he boosted an unworthy person, not realizing that he was being used for personal gain or flattered for a price [Baldwin, 1926, I, p. 90]."
Evidence exists to suggest that the respect between Baldwin and James was mutual. At the time of the appearance of his Briefe r Course, James told Holt, his publisher, that he considered Baldwin to be "such a growing man. I acquire more and more respect for him."\footnote{James to Holt, October 25, 1891, reprinted in Perry (1935, II), p. 126.} Two years later, James' opinion had remained essentially the same, when in a letter to Münsterberg, James referred to Baldwin as "a strong and broad man."\footnote{James to Münsterberg, August 24, 1893, Münsterberg Papers. It is noteworthy to mention, however, that in the same letter, James confessed that Baldwin was "not a clear writer."} By the late 1890's both men had become dissatisfied with those who had confined themselves to the narrow results of the experimental laboratory. Although James never seems to have been particularly sympathetic to the experimental tradition in the 'new psychology,' it took Baldwin some time to lose his enthusiasm for the laboratory, which he fostered following his early days at Leipzig (Baldwin, 1918).

Josiah Royce was another dear friend of Baldwin. Baldwin recalled James once observing that Royce's face "reminded him of certain illustrations in the anatomy books [Baldwin, 1926, I, p. 85]." Royce was a voluminous writer, if at times some of his ideas were difficult to defend. He contributed a large number of articles to Baldwin's Dictionary, and his sincere friendship toward Baldwin was readily apparent.
as the following statement indicates:

I did not write to express my sympathy for your personal affliction when I heard of it. I always feel how vain are mere words. I felt for you; and now feeling as I do how hopelessly inefficient, for professional duties, my present cares are just now making me, I feel also a great reverence for the unflagging way in which you seem to do all your work, despite your often delicate health and your various personal troubles. You are a marvel of true energy.\textsuperscript{118}

It was also Royce, who when Münsterberg was undecided about remaining at Harvard, suggested to President Eliot that Baldwin be offered Münsterberg's position, in the event that a vacancy might occur:

\ldots James and I both know Baldwin quite intimately, are sure of his discretion and have various confidential personal relations with him \ldots Baldwin has taken a sympathetic interest in many enterprises of ours and understands our situation excellently \ldots [Royce told Baldwin that, in the event that negotiations with Münsterberg would break down, Baldwin would be the] \ldots 'one man whom we should first think of.'\textsuperscript{119}

This offer was never actualized because Münsterberg finally decided to make a permanent commitment to Harvard.\textsuperscript{120}

Münsterberg was the third Harvard man who was close to Baldwin. He also assisted Baldwin on the Dictionary, as well as offering advice to Baldwin on which German and French

\textsuperscript{118} Royce to Baldwin, July 9, 1895, reprinted in Baldwin (1926, II), pp. 232-233.


\textsuperscript{120} For a detailed account of Münsterberg's relationship with Harvard, see Margaret Münsterberg (1922), pp. 58-59.
scholars to help in the project.\textsuperscript{121} They grew to become intimate personal friends. The Baldwins often visited the Münsterberg summer home in Swampscott, Massachusetts and they traveled together to the International Congress at Munich in 1896.\textsuperscript{122} Later in the same year, Baldwin, in a warm and jokingly formal style, invited his friend to visit:

\begin{quote}
We hereby (my wife & I) engage you (your wife and you) for a visit in the spring whenever you can come. If you fail, I shall never write you again but shall consider you a fraud & a villain.\textsuperscript{123}
\end{quote}

The following year, despite the fact that Baldwin was himself being favorably considered, he urged Münsterberg to decide on a permanent position at Harvard which was being offered him:

"We will convince you - as you already believe - that this is the best country & our psychologists the best men there are!"\textsuperscript{124} Again, when Baldwin heard that Münsterberg was being offered a position in Zurich he beckoned his colleague:

\begin{quote}
You must not go to Zurich. Come back to America! . . . We need your large ideas in opposition to the near­sighted men who can see only one idea or part of an idea at a time! I especially should feel it a great personal loss if you should not return for we have so much in common both in common doctrine and in intuition and method.\textsuperscript{125}
\end{quote}

\textsuperscript{121}Baldwin to Münsterberg, March 30, 1897, Münsterberg Papers.
\textsuperscript{122}See Münsterberg (1922), p. 49, 54; see also Baldwin to Münsterberg, October 3, 1897, Münsterberg Papers.
\textsuperscript{123}Baldwin to Münsterberg, December 31, 1896, Münsterberg Papers.
\textsuperscript{124}Baldwin to Münsterberg, March 30, 1897, Münsterberg Papers.
\textsuperscript{125}Baldwin to Münsterberg, October 15, 1897, Münsterberg Papers.
When Münsterberg finally opted to return, Baldwin wasted little time in inviting him to Princeton to lecture to his graduate seminary class. The group of about 30 students was so impressed that they wrote a formal acclamation to Münsterberg because "through that lecture he had not only instructed them but had given them a real impulse in the intellectual life." 126

The following year F. C. S. Schiller wrote a review of Münsterberg's Psychology and Life in Mind which must rank as one of the most destructively critical and derogatory statements to ever have appeared in a professional journal of such a generally-high quality. One of Schiller's themes was that Münsterberg's facility with the English language left something to be desired, and on one occasion he even referred to Münsterberg as a barbarian. Needless to say, Münsterberg became infuriated by the charges and asked Baldwin to reply to them. This Baldwin did, but not without its subsequent ramifications, as he later described: "it heightened the enmity of the author of the megatherium article [i.e., Schiller], who turned on me his future discharges [Baldwin, 1926, I, p. 88]." 127 Several years later Münsterberg reflected with pride and sincerity on the "old, time-honored friendship" that he had developed with Baldwin. 128

126 Baldwin to Münsterberg, November 24, 1898, Münsterberg Papers.

127 For the contents of this entire episode, see Schiller (1899, 1900) and Baldwin (1900).

128 See Münsterberg to Baldwin, March 11, 1906, Münsterberg Papers.
Probably Baldwin's closest foreign colleague was E. B. Poulton, a British zoologist. Their initial contact arose over a mutual interest in evolutionary theory. Poulton, a prolific writer, was a stalwart supporter of Darwinism and opposed the Mendelian mutation theory. Baldwin's development of the theory of organic selection (to be discussed in greater detail in the next chapter) greatly impressed Poulton. The year that he was at Oxford was spent largely in the company of Poulton and his family.  

### Baldwin's Major Books

When Baldwin arrived at Princeton in 1893, he already had the two-volume *Handbook* and the shorter *Elements* to his credit. These were followed by his *Mental Development in the Child and the Race* in 1894. This volume represents one of the first attempts to study mental development in the

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For more information about Poulton, see Anon. (1959), pp. 687-689; see also Baldwin (1926, I), p. 71.

It appears to be unclear whether this volume first appeared in 1894 or 1895. The preface to the first edition which appears in the third edition of this volume which was reprinted by Augustus M. Kelley Publishers lists March, 1895 as the date when Baldwin signed it, but the title page lists 1894 as the original date of publication. Dr. Vahan D. Sewny also lists 1894 as the date of the first edition in the bibliography of *The Social Theory of James Mark Baldwin* (1945), p. 91. See also Baldwin (1926, I), p. 43 where Baldwin says 1894. To confuse matters all the more, the Library of Congress Catalogue of Printed Cards indicates 1895 as the date of the first edition. The writer has decided to select 1894 as the correct date as it may have been that the first edition was printed in both 1894 and 1895, but that extant today are only copies of the second printing. *Mental Development* went through at least three editions and seven printings, and was translated into French (by E. Nourry) and German (by Friedrich Kiesow).
context of evolutionary theory and the principle of recapitulation.\textsuperscript{131} Indeed, William Newbold began his review of this work by stating that it "will prove of no less interest to the biologist than to the psychologist (1895b, p. 687)."

Although Baldwin had received no advanced training in biology, his interest in how infants develop mentally led him to look to Darwinian theory and the principle of natural selection for a point of reference and comparison. Accepting many of the propositions of evolutionary theory, Baldwin was then led to develop a functional view of child development, strikingly unique from the prevailing structural viewpoint of Wundt and Titchener, which was dominating the experimental psychology of the day.

Through the continued observation of his two young daughters, Baldwin came to emphasize the important part that the process of imitation played in mental development. Imitation led to accommodations or adjustments to one's environment. The consequences of these accommodations determined whether or not they would be successful and result in the perpetuation of the organism and its offspring. At this point, Baldwin had not taken a definite stand on the prevailing doctrine of acquired characteristics. His early theorizing demanded neither its acceptance nor its rejection. Not until a few years later did Baldwin formulate the theory of organic selection (sometimes called 'orthoplasy') which

\footnotesize{\textsuperscript{131}The next chapter will analyze the content of this book. The intent of the present discussion is to determine how it was received by the intellectual community of the mid-1890's.}
made the Lamarckian factor superfluous, and thus expendable.

Thaddeus L. Bolton, a student of Hall, criticized Baldwin's book on stylistic grounds—a criticism that was to be offered by many, as a weakness in Baldwin's writings. Bolton was accurate in his prediction that "the style of the author is such that he will probably never become popular with the masses [1895, p. 142]." Nevertheless, James, who had described Baldwin as "not a clear writer" only a couple of years earlier, seemed to be genuinely and pleasantly surprised when he told Baldwin that "It [i.e., Mental Development] is first rate (195 pp.) and clear as a crystal except in the last few pages. Cleaner and better observations were never made. Continue!!" Bolton was clearly inaccurate in describing the volume as "devoted almost entirely to theorizing and speculation (1895, pp. 142-143)," and although he pointed to the lack of practical application of the principles discussed in the book, Baldwin was to provide these in a later volume—The Story of the Mind.

Bolton's perspective was that of an experimentalist interested in the possibility of answering testable questions in a laboratory setting. This orientation struck him as antithetical to Baldwin's plea for 'theories, theories, always theories' and led him to be sensitive to the more speculative aspects of the volume. Yet in the overall evaluation he

132 James to Münsterberg, August 24, 1893, Münsterberg Papers.
suspected that many would find the book very stimulating, a compliment which Baldwin probably graciously received.

Alexander T. Ormond, a colleague of Baldwin's at Princeton, and one of his ex-teachers, was considerably less critical in reviewing the volume. He gave Baldwin credit for elaborating five fundamental points. These included the development of a new method of child study (called dynamogenesis, which will be discussed in the next chapter), the modification of the biological theory of recapitulation, the supplementation of Darwinian theory with two principles of his own: organic selection, and the law of excess, the emphasis on the fundamental importance of imitation in the process of mental development, and finally the recognition of these factors while retaining psychological interpretations in mental development over biological explanations, thus preventing the reduction of psychology to physiology (Ormond, 1895).

Although Freud never reviewed the book formally, his comments are of interest. Upon receiving a copy of Mental Development, Freud was prompted to write his friend, Wilhelm Fliess, and say: "It is interesting that writers are now turning so much to child psychology . . . So one still remains a child of one's age, even with something one had thought was one's very own."134 Nathan Hale (1971) has concluded that

Freud's analysis of the volume was that it failed to satisfactorily consider the sexual development of children. Indeed, from Freud's point of view this was the case, but as we shall see in the next chapter, there are some interesting parallels in the thoughts of Baldwin and Freud on child development, despite the fact that they probably did not influence one another theoretically.

It is also important to note that Baldwin differed methodologically from G. S. Hall on the appropriate procedure for studying child development. Of the two most common methods available at that time, Baldwin relied primarily upon direct observation rather than the questionnaire method pioneered by Hall. This was probably due in part to the fact that he distrusted the responses that non-psychologists would make in completing the questionnaire (Hale, 1971). 135

Josiah Royce, who was himself to take an interest in child development and the function that the process of imitation played therein,136 wrote a lengthy review in the

135 For his criticism of the questionnaire method, see Baldwin (1895d), especially Chapter 4. Baldwin (1897) was himself criticized by Schallenberger (1897) for carelessly reporting some of the observational data contained in Mental Development. He unfortunately stated that the experimental findings which he collected were published 'mainly for their illustrative value.' Miss Schallenberger responded by arguing that "if the fact that experiments are published 'mainly for their illustrative value' [is] . . . seriously put forward as an exercise for great experimental inaccuracy, it is time for someone to point out that mere profession will not work in science any more than in conduct; a man shall not be saved by the very best of intentions [1897, p. 62]."

136 After acknowledging his indebtedness to Baldwin, Royce later spoke of the importance of imitation as it relates
Psychological Review following the appearance of the second edition of Mental Development. Besides questioning the validity of Baldwin's law of excess in accounting for how the organism adapts to its environment, Royce pointed out a criticism that was to burden Baldwin for the rest of his professional career in his more theoretical writings. Acknowledging Baldwin's stimulating and ingenious insights, Royce spoke disappointingly of Baldwin's cumbersome style, probably not unlike the impression that Bolton had had on reading the book. In addition, Royce criticized Baldwin's tendency to consistently refer "to coming chapters for the explanation of the points that his present argument leaves unelucidated [Royce, 1896, p. 201]." This tendency to be evasive resulted in the by-product of verbosity. This comment reminds one of the statement that Titchener made about the plums in the cake and the plums in the pantry, and how Baldwin was criticized for not having the empirical data available at the time that he was presenting a theoretical argument. Nevertheless, Royce and Baldwin were in agreement on a rather novel belief for that day, namely, that self-consciousness is a social product. That is, without the presence of others through to language development: "It is by imitation that the child learns its language. It is by imitation that it acquires all the social tendencies that make it a tolerable member of society. Its imitiveness is the source of an eager and restless activity which the child pursues for years under circumstances of great difficulty, and even when the processes involved seem to be more painful than pleasurable. Imitativeness remains with us through life. It attracts less of our conscious attention in our adult years, but is present in ways that the psychologist is able to observe in case of people who suppose themselves not to be imitative [1903, p. 276]."
whom social interaction occurs, an awareness of one's self would never arise. 137

Guy Tawney, a colleague of Baldwin's at Princeton for a brief period 138 also reviewed the second edition of Mental Development. Writing in the International Journal of Ethics, Tawney (1897) touched upon another serious criticism which was to attack Baldwin's theoretical analysis of mental development. This was Baldwin's assumption that the essential nature of the imitative process, which served as the cornerstone of his theory, was instinctive. Of course during this era, the doctrine of instincts was still considered legitimate and William McDougall was to profess a much more sophisticated system in years to come. 139 But with the advent of animal experimentation and the uniquely American emphasis on environmentalism, instincts were to become taboo and, with it, so was any theory relying on them for its foundation.

137 See, for example, Royce (1898) and (1971), p. 193.

138 As we have already seen, Tawney was appointed a Demonstrator in experimental psychology at Princeton in 1896, but he moved on to an appointment in philosophy at Beloit College in Wisconsin in 1897; see PR, 1896, 3, 706.

139 See in particular, McDougall (1921), especially chapters 2 and 3 and McDougall (1923), especially chapter 5. Sounding very much like some of the faculty psychologists of the nineteenth century, McDougall began the second chapter of his Social Psychology by stating that "The human mind has certain innate or inherited tendencies which are the essential springs or motive powers of all thought and action, whether individual or collective, and are bases from which the character and will of individuals and of nations are gradually developed under the guidance of the intellectual faculties [1921, p. 20]."
Baldwin's second major book related to mental development was published in 1897. Originally he had intended entitling the volume "Social Interpretations of the Principles of Mental Development." Baldwin, who was vacationing with his wife in Switzerland during the summer of 1896, was forced to remain longer than planned due to an extended rain storm. Just at this time he received an announcement sent by the Danish Academy which was to be printed in the Review. The announcement described that the Royal Academy of Arts and Sciences of Denmark was planning to award its gold medal for the best work on a specific question in social ethics, that being:

Is it possible to establish for the individual isolated in society a line of conduct drawn entirely from his personal nature; and if such rules are possible, what is their relation to the rules which would be reached from the consideration of society as a whole? [Höffding, Goos, & Kroman, 1897, p. 445].

Since Baldwin was thinking that he could address this question without destroying the theme of the volume that he was presently preparing, he took the rest of the extended stay in Switzerland to write two additional chapters to his book and then submitted the manuscript in competition for the award. Before so doing, he changed the title to 'Socius' to retain his anonymity among the judges who were to make the decision. When he finally submitted the manuscript for publication he changed the title to Social and Ethical Interpretations in Mental Development, while retaining its original subtitle, A

140 See PR, 1896, 3, 468f.
Study in Social Psychology. \(^{141}\) Several months later Baldwin was informed that he had won the award. \(^{142}\) Harold Höffding, the distinguished Danish philosopher, was especially interested in the volume and complimented Baldwin several times on his "beautiful work." \(^{143}\)

In America many lengthy professional reviews of Social and Ethical Interpretations appeared, indicative of the fact that Baldwin's work was highly regarded and seriously studied. \(^{144}\) It probably bolstered his chances of being elected President of the APA, which occurred in 1897. Baldwin continued to employ the genetic method in studying child development, but now he shifted his focus to the manner in which the self becomes socialized. James Tufts (1898)

\(^{141}\) As with Mental Development, the present discussion will focus upon the reception this volume received in scientific circles following its publication.

\(^{142}\) The original award is extant and may be found in the J. Mark Baldwin Papers located at Princeton University.

\(^{143}\) See Höffding to Baldwin, April 10, 1897; May 18, 1897, both reprinted in Baldwin (1926, II), pp. 235-237; see also Höffding, Groos & Kroman (1897).

\(^{144}\) As an aside, it is interesting to note that this volume has traditionally been inexcusably overlooked when later writers have traced the history of social psychology, and have almost without exception begun with McDougall's Social Psychology and E. A. Ross' book of the same title, both published in 1908. See, for example, G. W. Allport (1954), p. 51 and Borgatta (1969), p. 365. Social and Ethical Interpretations was later translated into French (by Professor G. L. Duprat), into German (by Dr. Ruedeman), and into Spanish (By Prof. A. Posada & G. J. DeLaEspada). The American version went through at least four editions and six printings. For a brief note on the French translation of Social and Ethical Interpretations, see G. Tosti (1900).
reiterated criticisms of Baldwin's style which Royce and Bolton had made earlier in reviewing *Mental Development*, when he observed that Baldwin had had "difficulty . . . in maintaining his orientation which a reader is pretty sure to feel in his perusal [of *Social and Ethical Interpretations*] [p. 313]." But Tufts went on and in a sense rationalized this statement by concluding:

But the fact that it is doubtless much rather the author's purpose to be stimulating and suggestive than to be systematic and final indicates the point of view from which the work should be read.

Considered from this point of view, there can be no question as to the author's success [1898, p. 313].

John Dewey (1898) recognized a flaw that tended to pervade Baldwin's theorizing; that was "postulating . . . the very thing to be explained [p. 401]." A second general criticism was with the use of imitation; not so much a concern with Baldwin's conception of the nature of the process, but of his tendency to rely upon this process to such an overwhelming degree that it tended to lose its distinguishing characteristics while simultaneously reflecting amorphous properties which fostered conceptual confusion. Yet in the final analysis, Dewey praised Baldwin's efforts on a highly complex subject:

... I chiefly desire to acknowledge the indebtedness, on the part of all interested in the relations of psychology and sociology, to Mr. Baldwin for his courage in attacking at first hand problems which most steer clear of, or simply repeat well-worn conventionalities concerning, and for the fresh, varied, and vigorous way in which he has opened up new problems and new points of view [1898, p. 409].
The review by James Seth was much less intricate and generally very favorable. Rather than examining the volume in a meticulous manner as Tufts and Dewey had done, Seth urged his readers to take up the book and appreciate "the author's well-known skill of analysis, acuteness of observation, and fertility of illustration. [Baldwin's investigation has been] conducted . . . with admirable patience, fullness of information, and skill in the scientific interpretation of the elusive phenomena of the mental life [1899, pp. 87-89]."

George Vincent, in contrast to most other reviewers, claimed that Baldwin's presentation of the material rendered "more precise and systematic conceptions made familiar by Mackenzie, DeGreef, Tarde, and others [1898-1899, p. 544]." If this is not inconsistent with the critiques by Dewey and Tufts, then one wonders how confusing, vague, and cumbersome these precursors of Baldwin must have been! Recognizing that the volume was truly a contribution to social psychology, Vincent predicted that "it cannot fail to take a high place in the rapidly growing literature of social psychology [1898-1899, p. 544]." Vincent's sociological colleague, Franklin H. Giddings, on the other hand, had virtually nothing favorable to say about Baldwin's new book. The fact that he rejected Baldwin's belief that ethical sanctions were learned through social interaction was fair enough. But he was so

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145 The question of whether or not Baldwin was influenced by Tarde will be discussed in the next chapter.
involved in understanding the individual's social development as a result of his own rather vague concept of 'consciousness of kind,' that he was overly rude in his assessment of Baldwin's account of the same process:

Perhaps, however, it is in his few remarks about the social process that Professor Baldwin has been most unjust to himself and has missed an opportunity to make a really important contribution to social science [1899, p. 22].

It is not surprising that Baldwin considered Giddings' review to be not a very able one. 146

William Caldwell spoke most highly of Baldwin's book. While admitting that Baldwin's style was "unduly discursive [1899-1900, p. 183]," he justified it by stating that the nature of the work was in the vein of "an investigative and pioneer essay rather than a didactic treatise [p. 183]."

After praising Baldwin's analysis of the subject matter in genetic terms and the novel conception of the social nature of the self, Caldwell concluded that the book was "one of the most important constructive works that have appeared in the psychology and philosophy of the last decade [p. 192]."

Thus, the first edition of Social and Ethical Interpretations met, as did Mental Development, with mixed reviews from the highly complimentary one of Caldwell to the scathing one of Giddings. A two-fold consequence of the discussion caused by this volume resulted. First, Baldwin published several new editions of the work, in a constant effort to

146 Baldwin to Cattell, February 16, 1899, Cattell Papers.
incorporate some of the suggestions that he felt were warranted by his reviewers; and second, an extended dialogue resulted concerning the nature of the process of imitation.

Upon the appearance of the fourth edition of *Social and Ethical Interpretations*, Charles A. Ellwood, who had not been uncritical of any of the earlier editions, nevertheless reflected the high esteem which Baldwin's colleagues in social psychology held for this work when he summarized that:

... Professor Baldwin's book is an invaluable one to every student of sociology, and it remains, up to the present, the only systematic attempt in the English language to apply modern genetic and functional psychology to the interpretation of social organization and evolution [1906-1908, p. 282].

Shortly thereafter, American social psychology was to gain two prominent additions to its array of textbooks, both entitled *Social Psychology*, one by William McDougall and the other by Edward A. Ross. From an historical viewpoint, Baldwin's contributions to American social psychological thought were from that point on, to be either completely overlooked or to be discarded as a representative of something different from social psychology as we know it today.

A significant consequence of the review of *Social and Ethical Interpretations* was an extended controversy over the nature of imitation, largely between Baldwin and Bernard Bosanquet. In a paper read before the Aristotelian Society...

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147 A few years later Baldwin reiterated the fact that the genetic method lent itself more readily to the study of functions and adaptations; see Baldwin (1909-1910).

148 The discussion appears in Baldwin (1902a, 1902b, 1903a, 1903b); in Bosanquet (1899, 1902, 1903); in Ball (1901) and French (1904).
and later printed in *Mind*, Bosanquet criticized the imitation theory as developed by Baldwin. In both *Mental Development* and *Social and Ethical Interpretations*, Baldwin had differentiated imitation and invention, and the corresponding laws of habit and accommodation. Whereas imitation was viewed as the tendency to reproduce a copy *per se*, any variation upon such a reproduction was considered an invention. Social progress occurred through the combined operation of imitation and invention. Bosanquet (1848-1923), a distinguished British social philosopher, questioned Baldwin's distinction between imitation and invention, arguing that in practice the tendency to reproduce a copy *per se* never obtains. Thus,

> We never do simply what another person does. We do something different... strictly speaking, differentiation is always there. Even if I buy a straw hat because my neighbor has one, I buy one that fits me, and not one that fits him [1899, p. 174].

So all human behavior which is socially influenced may be described by the principle of 'identity in change.' This then negated the need to dichotomize imitations and inventions. Besides Bosanquet's accusation that Baldwin had broken up the nature of mind into unreal distinctions of imitation and invention, he considered Baldwin's emphasis on imitation as overly exaggerated as the unifying principle in mental and social life (Bosanquet, 1925).¹⁴³ In reviewing a half-dozen

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¹⁴³For a brief mention of the controversy between Baldwin and Bosanquet, see a letter from Bosanquet to Pattison, December 4, 1911, reprinted in J. H. Muirhead (1935), pp. 137-138. The brief editorial introduction preceding the letter (see pp. 136-137) is inaccurate in several places.
contemporaneous volumes in the general area of social psychology and social philosophy, Sidney Ball focused on a related but distinguishable aspect of Baldwin's imitation theory for criticism. Baldwin's failure to be precise came under attack:

... when it appears upon closer inspection that the same word [i.e., imitation] covers a considerable variety of meaning and application, our confidence is somewhat shaken: it seems to suggest that the vogue which the theory has obtained is due to the vagueness rather than the precision of the conception itself [1901, p. 152].

Furthermore, Ball found Baldwin's analysis of moral development to be inadequate. The origin of a moral consciousness was not simply the result of the function of imitation as Baldwin said it was, because

... it is difficult to see how the mere consciousness of 'self' and 'others' contains the germ of a moral relation. The relation between 'self' and 'others' can only become moral through a third idea - and that is the idea of morality itself [Ball, 1901, p. 167].

Ball posed the very interesting theoretical question: "Is it true to say - apart from society, no conscience? [1901, p. 168]," and implied that Baldwin would respond in the affirmative. Later he reiterated that no psychological theory of imitation including Baldwin's, could adequately explain the origin of morality.

Baldwin replied in kind to both Bosanquet and Ball, dismissing their criticisms as reflecting their interest in social philosophy which was not the point of view that Baldwin had adopted (Baldwin, 1902a). At the conclusion of his statement of reclarification, Baldwin made one of his not
uncharacteristic remarks when he chided his critics as
follows:

... I suggest that all of us, who think to do work in the borderland between two sciences [i.e., psychology and sociology], study to be informed each in the other's Fach, no less than in his own. I say this so fully aware of its homecoming thrust, that if Professor Giddings' colleagues confirm him in pricking some of my sociological bubbles, I shall let them collapse without a murmur; but the psychology — das ist eine ganz andere Sache! [Baldwin, 1902a, p. 69].

In Bosanquet's reply, he conceded that "when we [i.e., Baldwin and Bosanquet] differ on psychology Professor Baldwin is almost certainly to be right [1902, p. 383]," thus acknowledging his lack of expertise in Baldwin's discipline. However, he still believed that Baldwin had not satisfactorily answered his own criticisms. He suggested that perhaps their differences were merely of a semantic nature, he urging that 'logic' was the principle that "helps us most in explaining that transference and operation of ideas by which men are social [1902, p. 383]," whereas Baldwin preferred the principle of imitation. Bosanquet stressed the necessity of such a logical process to understand how a group of interrelated thoughts could originate and be maintained. Simultaneously, he argued that "mental process cannot be purely imitative [1902, p. 383]." Furthermore, Bosanquet subsumed imitation under the logical process analysis. Acknowledging that the strength of Baldwin's argument lay in his effort to account for the occurrence of new thoughts and actions from previous ones—which the process of imitation implied, Bosanquet nevertheless considered imitation as in and of itself, not
sufficient to explain the transmission of ideas and knowledge socially: "Prima facie imitation can never give the thought of a situation [1902, p. 285]." Baldwin applauded Bosanquet's analysis of the comparison of their views concerning social thought, agreeing that the logical process is a necessary factor. But in three somewhat extended discussions appearing in the Review, Baldwin (1902b, 1903a, b) went far afield from Bosanquet's original criticism of his theory of imitation, and the content of these articles is of little relevance to the present discussion. The final statement of interest here is the discussion by F. C. French of the mechanism of imitation. Although he admitted that no harm was done by the common sense view that imitation was an instinct, he did attack the validity of this assertion when defended by scientists. Baldwin was not alone in the assertion of the instinctual basis of imitation. Other prominent figures including James, Royce, Tarde, and Maudsley, also held this view. French's thesis was that instincts referred to very specific sorts of behaviors, whereas imitation was more or less a global sort of process. Thus, in fact, there is no such thing as imitation, only imitative actions. Furthermore, The very use of the single term imitation for such a large variety of actions, has a tendency to mislead. Many writers speak of imitation as if it were a sort of faculty, and this leads to the usual error of faculty psychology - the individual act is thought to be

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150 See also Bosanquet to Baldwin, January 7, 1903, reprinted in Baldwin (1926, II), pp. 259-260. This letter reflects the respect and admiration which the men had for one another.
sufficiently explained when it is shown to be an instance of the general activity of the faculty [1904, p. 138]. French was probably thinking of individuals such as Baldwin, Tarde, and McDougall when he concluded that "It seems to be the social psychologists, and those who have approached the subject from the sociological side, who are especially inclined to regard imitation as an instinct, an endowment, or a quasi-faculty [1904, p. 141]." French opted to view imitative actions as acquired or learned responses, and Baldwin's view of its inherent nature may have resulted in limiting the influence of his theory of imitation. This matter will be discussed in the final chapter. The significance of the controversy between Bosanquet and Baldwin lies in the fact that it led to a clarification of the latter's theoretical views in later editions of Social and Ethical Interpretations, thus making them more coherent than when they were initially pronounced.

Shortly after the appearance of his Social and Ethical Interpretations Baldwin defied Bolton's statement, mentioned earlier, that his style would probably never become popular with the masses, when he published his popular little volume entitled The Story of the Mind in 1898.151 The major intention of this book, which Baldwin later called "my only novel [Boring, 1950b, p. 531]" was to provide a relatively simplified description of the psychology of his day for the non-

151 See G. T. W. Patrick's (1898) favorable review in which he referred to Baldwin's style as 'simple and modest.'
professional audience. In this extremely successful book, Baldwin outlined the major sub-divisions in the rapidly-growing discipline by devoting a chapter each to child, comparative, experimental, physiological, educational, and social psychology. In addition, he discussed hypnotism and suggestion, two interesting topics of the day, and the concluding chapter was entitled 'The genius and his environment,' abridged from an article of the same title, that had appeared in W. J. Youmans' *Popular Science Monthly* two years earlier.\(^{152}\) Although C. S. Peirce, the important, albeit eccentric, American philosopher found fault with some of Baldwin's interpretations, he spoke highly of the volume: "Here is a little book, easy to hold, pleasant to read, warranted to get read, without skippings, to its last word [1898, p. 281]." The fact that Baldwin had made a truly valuable contribution to the dissemination of scientific knowledge to the common man was strongly supported by George M. Stratton's analysis:

> Skill is needed to present psychology in popular form. There is imminent danger of either unreadable technicality or of superficial chat. Professor Baldwin has escaped both of these and has produced a remarkably good book, which will certainly hold the interest of the lay reader and not forfeit the respect of specialists [1899, pp. 148-149].

William James privately complimented Baldwin on *The Story*, finding the material fresh and lively and leading him to extoll Baldwin, remarking: "You're a wonderful cuss."\(^{153}\)

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\(^{152}\)See Baldwin (1896c).

\(^{153}\)See James to Baldwin, December 16, 1898; James to Baldwin, July 9, 1899, both reprinted in Baldwin (1926, II), pp. 211-212.
With the completion of *The Story of the Mind*, Baldwin temporarily postponed any major new theoretical books in order to become more fully involved in what is oftentimes considered to be his most significant editorial adventure, to which we now turn.

**The Dictionary of Philosophy and Psychology**

In the mid-1890's Baldwin was contacted by representatives of *Johnson's Universal Cyclopedia* to contribute articles related to his psychological interests. This offer led not only to being a contributor, but also to a position as associate editor for philosophy, psychology, and ethics, a position which he shared with William T. Harris, then the United States Commissioner of Education. This responsibility probably whetted his appetite for some sort of volume analogous to the *Cyclopedia*, but restricted to the general area of psychology and philosophy. With this in mind, Baldwin approached the Macmillan Publishing Company in an effort to gain their cooperation in the venture. Arrangements were made and the official announcement of the *Dictionary of Philosophy and Psychology* appeared on January 3, 1896.\(^{154}\) In a cover letter sent to many psychologists and philosophers throughout the United States, the general features and the main purposes of the *Dictionary* were outlined. The two general features of the work were first, that it would contain concise definitions of

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\(^{154}\) See Macmillan Co. to B. Rand, January 3, 1896, Rand Papers.
all the terms in use throughout the entire range of philosophical study, including philosophy, metaphysics, psychology, ethics, and logic; and second, that it would also contain historical material which would in effect provide a list of primary references to which the reader could go for further information on any particular term. Similarly, the purpose of the Dictionary was two-fold. The major purpose was to render to philosophy the service of establishing the appropriate terminology in the different philosophical disciplines. It was generally felt that, if this could be accomplished, it would remove what was by common consent considered to be one of the major stumbling blocks to the advance of these disciplines, that being the varying and oftentimes conflicting usages of terms that prevailed at that time. The second purpose was to provide a comprehensive reference tool for teachers and students alike. The teachers would have a consistent and uniform system of meanings with which to introduce philosophical topics in the classroom. The students, meanwhile, would have the advantage of learning, once and for all, an agreed-upon terminology.\(^\text{155}\)

Although the scope and content of the Dictionary was to change over the course of its preparation, the original features and purposes were retained. Modifications of the original plan began to occur as Baldwin received feedback from individuals who had indicated an interest in cooperating in

\(^{155}\text{See Mind, 1896, 5(N.S.), 438-439; PR, 1896, 3, 467-468; and American Naturalist (hereafter cited as Amer. Nat.), 1896, 30, 694-695.}\)
the project. One person who was to exert a considerable influence on the final product was Benjamin Rand, at that time a member of the philosophy department at Harvard. When Baldwin originally contacted Rand about the Dictionary, he informed Baldwin that he could not cooperate since he felt that complications of authorship might arise between the Dictionary and a 'Bibliography of Philosophy'—already well under way, which Rand was preparing. This was apparently the first time that Baldwin had become aware of Rand's 'Bibliography,' and realizing the special skills and information that Rand might possess, he urged Rand to reconsider and assist in the compilation of the Dictionary. The first month of correspondence between the two men witnessed the first modification on the planning of the Dictionary when not only had Baldwin successfully persuaded Rand to cooperate, but that through negotiations he was able to inform Rand that

156 Benjamin Rand (1856-1934) was an Instructor at Harvard from 1897 to 1902. In 1906 he became the University's Librarian, a position he held until 1933. His major contributions involved bibliographical work in philosophy and related areas. Besides collaborating with Baldwin in the Dictionary, to which he contributed volume three, Rand also compiled three reference works. The first one, Modern Classical Philosophers (1908) was revised and enlarged in 1924. In 1909 he published The Classical Moralists, which he intended to be a history of ethics. Three years later he compiled The Classical Psychologist whose purpose was "to present in a series of selections some of the most essential features of the psychological doctrines which have appeared from Anaxagoras to Wundt [1912, p. v]." Information about the contents of the latter volume, then in its preliminary stages of preparation, was solicited from several individuals in American colleges and universities; see chapter 5, footnote 9. For more information on Rand, see Anon. (1944), p. 619.

157 Rand to Baldwin, January 1896, Rand Papers.
Macmillan had approved the proposal to print Rand's 'Bibliography' in its entirety as a special part of the Dictionary. Baldwin had not originally intended to insert extensive bibliographies into the Dictionary, but he immediately realized the mutual advantage that such a decision would have. Not only would it improve the comprehensiveness of the Dictionary, but at the same time it would secure the publication of the bibliography in its entirety for Rand.

Two additional modifications evolved simultaneously. The first was the decision to include the foreign equivalents for all the terms in the Dictionary, thus enhancing the likelihood of international agreement in terminology, and second, was the tremendous increase in the number of cooperating editors and contributors from the initial estimate of about thirteen individuals to a final total of 72. One can imagine the enormity of such a task and the difficulties encountered in seeing that things would be run smoothly. It was important not to offend those individuals who were specialists in a particular area by assigning others with less expertise to their fields of interest. Also one can imagine the variability both in length and in quality of the work.

158 See Rand to Baldwin, n.d. (January 7, 1896?); Baldwin to Rand, January 21, 1896; Rand to Baldwin, January 24, 1896; and Baldwin to Rand, February 1, 1896, Rand Papers.

159 See Baldwin (1901-1905, I), p. xiii, where Baldwin explicitly indicated this.

160 Baldwin to Rand, January 9, 1896, Rand Papers.

161 The list appearing in PR, 1898, 5, 345, is incomplete. See Baldwin (1901-1905, I), pp. v-vi, for the entire list.
assigned to different individuals. Furthermore, Baldwin had to be sensitive to the concerns of a variety of people with different temperaments and personalities.

So it was that Baldwin felt obligated to have Titchener oversee the area of the psychology of vision, while tactfully requesting Christine Ladd-Franklin to "be good enough to hold [herself] in readiness to do what may finally be necessary to bring the physiological optics into adequate shape." Surely he could count on James for many a clear and accurate definition of a hitherto ambiguous term. But James made his frank intentions known:

You alarm me with your threat of sending proofs for me to look over the Dictionary. Didn't I expressly decline to work for it? . . . Send me no proofs! I will return them unopened and never speak to you again.163

Several years later his attitude remained equally firm:

Of all the inanities! Such work as that ought to be for dull old library parasites who can't pick up a living by anything but book-worm work. . . . I hardly know whether to wish you good luck or not.164

Nevertheless, James is listed as a consulting editor and

162 Baldwin to Ladd-Franklin, November 14, 1896, Ladd-Franklin Papers.


164 James to Baldwin, n.d., 1904, reprinted in Baldwin (1926, II), pp. 206-207. James reacted in much the same way at the time that Cattell was gathering data on the relative ranking of various psychologists according to their eminence. Interestingly enough, James did rate Baldwin second, behind Münsterberg in this survey; see Batts (1960), pp. 172-173.
Baldwin later amusingly described James as the man "who refusing to collaborate, collaborated [Baldwin, 1926, I, p. 74]." Baldwin best described the problems and frustrations of being the editor-in-chief of this project:

What complications, what tribulations, what mountainous mole-hills! One contributor seized the chance to put off on us the reams of erudition he had amassed on middle-age logic and for which he had failed to find a publisher. Another writer refused to treat the word X if the related term Y was treated by the writer of another school. A writer of precise habit of mind refused to accept the slightest change, even to a comma or cedilla, made in his proofs by the editor or by a fellow writer. Another insisted that every modification in his copy be placed in brackets, even to a change in the spelling of a word. Yet others sent in copy that the printers could not handle, and many left to the editor the filling in of necessary references which they were not able or found it too much trouble to supply. Some writers are not made for co-operation, others feed on it; some hate metaphysics, others revel in it. Some procrastinated; notably one D., to such an extent that the titles of his articles had to be changed again and again in such a way as to shift the matter to synonymous terms lower down in the alphabet: thus (though these are not his topics) "Deity, see God"; "God, see Philosophy of Religion"; then "see Religion," then "see Theism"; - pretty way to treat God! In the case of one Prof. A., a Scot, after resorting to every known expedient, I became desperate and cabled to his wife, whom I had never seen, suggesting that if her husband was not dead, she might use her authority over him. This appeal brought the articles. Finally, a special lot of terms, thus hopelessly delayed, had to go under the happy title "Terminology" well down on the list. Such are some of the devices of lexicographers [Baldwin, 1926, I, pp. 72-73].

That Baldwin was continually prodding various individuals to complete their contracted articles is also substantiated in his private correspondence. What he predicted would be a monument in the history of psychology also led him to confide

165 See, for example, Baldwin to Cattell, July 17, 1899, Cattell Papers.
to Benjamin I. Wheeler, then President of the University of
California: "I should prefer some faster form of committing
suicide." 166

The final product, nevertheless, appeared between
1901 and 1905 in three volumes and four parts. The Diction-
nary itself comprised the first two volumes with Rand's
Bibliography constituting volume three which appeared in two
parts. It was so time-consuming that Warren took over much
of Baldwin's editorial responsibilities with the Review.
Baldwin was granted a half year's leave of absence from
Princeton to go to England to complete the project in 1900,
and his courses were taken over by Warren. 167 As a result,
he took up residence at Oxford and, extending his stay to a
full year, gained increasing prestige on the international
scene. In June of 1900 he was awarded an honorary doctor of
science degree in psychology, the first ever granted by
Oxford. 168 He proudly notified Cattell of this distinction,
stressing the importance of the fact that it was quite a sig-
nificant event for such a noted university to recognize psy-
chology as a science. 169 The following year, along with

166 Baldwin to Gardiner, April 7, 1896, Gardiner Papers.
Baldwin to Wheeler, July 22, 1900, Wheeler Papers. Wheeler's
article on 'Language,' at about eight pages in length, was one
of the longest to appear in the Dictionary. See Baldwin to
Wheeler, August 4, 1900. For more information on Wheeler, see
Anon. (1936c), pp. 44-46.
167 See PR, 1899, 6, 572; AJP, 1900, 11, 130; also PR,
1900, 7, 532, and PR, 1901, 8, 335.
168 See PR, 1900, 7, 427.
169 Baldwin to Cattell, June 5, 1900, Cattell Papers.
Professor Chandler, an American chemist, also received a D.Sc.
at the same time.
Robert M. Wenley, Baldwin was awarded a Doctor of Law degree by the University of Glasgow. He completed the first volume of the Dictionary while at Oxford and it appeared--printed by the Clarendon Press, in September, 1901. The second volume was completed in June of 1902.

In the preface to the first volume, the impression that Baldwin had completely eschewed the experimental method which characterized the unique nature of the 'new psychology' is clarified. Discussing the subject matter of the Dictionary, Baldwin emphasized that

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 a 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 [Baldwin, 1901-1905, I, p. ix].

One wonders about the irony of the fact that, on the one hand, Baldwin played the leading part in assembling this tremendous

170 See PR, 1901, 8, 552. Wenley (1861-1929) was a philosopher who in 1896 succeeded John Dewey as head of the department of philosophy at Michigan. Baldwin supported Wenley for the Chair of Moral Philosophy at the University of Edinburgh when the latter recognized the possibility of returning to his native land. However, he did not receive the position. Apparently he lacked certain academic credentials to make him a qualified candidate as is implied by Baldwin in a letter to Wenley on December 11, 1897: "With you I think the system a colossal error: but then what's the use of having friends if they are not to stand by a fellow!" This statement is ironic, because Baldwin was several years later going to experience a most unfortunate episode which would show him just how many real friends he had. This incident will be discussed later in this chapter. Wenley contributed numerous articles to the Dictionary. For more information on Wenley, see Anon. (1936b), pp. 652-653.
reference volume which had as one of its primary goals the clarification of hitherto ambiguous philosophical and psychological terminology, and on the other hand, the constant criticism of much of Baldwin's theoretical work that it suffered from a vague and unsystematic style. Nor did Baldwin's involvement in the Dictionary facilitate the clarity of his later writings; if anything, this stylistic criticism occurred more frequently in reviews of his later work.\footnote{171}{See, for example, \cite{russell}, p. 715; \cite{bennett}, p. 612.}

The third volume of the Dictionary, compiled by Rand and called the 'Bibliography of Philosophy, Psychology, and Cognate Subjects,' finally appeared (in two parts) in 1905. It was the result of more than a decade of research. It contained primary and secondary bibliographies of over 650 individuals in the history of philosophy. In addition, it contained topical bibliographies of systematic philosophy, logic, aesthetics, philosophy of religion, ethics, and psychology.

The immediate reaction to the two volumes of the Dictionary proper was mixed. A brief notice in the Popular Science Monthly in 1902 predicted that it would be "for many years . . . the standard reference work in philosophy and psychology [p. 378]."\footnote{172}{See \cite{anon}.} However, the articulate reviews by Charles H. Judd (1902, 1903) and R. Latta (1902-1903a, b) pointed out numerous errors in factual material as well as the extensive variability in quality and organization from
one article to the next. Judd (1902) found fault with the tendency to expend a great deal of energy on terms that he considered peripheral to the subject matter of the Dictionary. While noting "the rich fund of philosophical and scientific knowledge which has here been brought together [1902, p. 180]," he was genuinely disappointed that there was less cooperation among the contributors than there might have been. Both Judd and Latta agreed that the psychological terms as a whole were more accurately and precisely prepared than were the philosophical ones.

The contrast in their final evaluations of the Dictionary is well worth mentioning. According to Judd,

The Dictionary is a work conceived on a large scale and brought to completion in a manner thoroughly creditable to editor, contributors and publishers. It is the only book of its kind in our language and it will doubtless exercise a large influence on the future of psychological science and psychological terminology [1902, p. 204].

Latta, on the other hand, while acknowledging that "No reader can fail to be impressed by the amount of work that has been expended upon it and by the excellence of the great mass of its articles [1902-1903a, p. 117]," concluded that "On the whole I am convinced that, if the book is to be of real use, it must have a very thorough revision by some competent person [1902-1903b, p. 528]." One cannot fail to get the feeling that, all things considered, the Dictionary was less than successful in achieving its two-fold purpose. While many articles were excellent in quality, a considerable number were vague and ambiguous, leaving the field with no more of
an agreement on the basic definition of many important philosophical and psychological terms than was the case before the appearance of the Dictionary. With this in view, it seems to have precluded the possibility of achieving its second goal, namely, of being of service to teachers and students alike. Nevertheless, over 1,600 copies of volume one and about 1,450 copies of volume two had been sold by the time that volume three appeared in 1905. The major criticisms focused on its less than satisfactory organization of material and its numerous minor errors in citation. This latter problem was difficult to avoid in such a lengthy project comprising more than 1,700 pages. The first two volumes of the Dictionary were revised in 1925 and have since been reprinted three times, while volume three has since been reprinted twice. This provides some independent information about the practical and historical value of the work.

**On to Baltimore and Johns Hopkins**

Although the Princeton era is generally considered to be the time during which Baldwin made his most significant psychological contributions (see Boring, 1950b, p. 530; Watson, 1971a, p. 394), it is also here, as has already been mentioned, that several years before it was to eventuate, he

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173 See PB, 1906, 3, p. 115.

174 For specific comments on the third volume of the Dictionary, see Hibben (1907) and Morrison (1906).
realized that his career would lead him elsewhere. Woodrow Wilson's address on the occasion of Princeton's 150th anniversary in 1896 served as the initial stimulus to Baldwin's eventual decision to leave.¹⁷⁵ This, despite James' plea to Baldwin to "stay and fight it out and not abandon the place to the enemy."¹⁷⁶ So Baldwin began to consider the possibility of retirement from academic life. But it was at about the same time that Baldwin received a letter from Ira Remson, the noted American chemist who had become president of Johns Hopkins. He requested Baldwin to rate a list of four individuals¹⁷⁷ for a proposed position of chairman of the new Department of Philosophy and Psychology to be established at Hopkins. Baldwin responded by not only ranking these four individuals by his own standards, but in addition by suggesting two other men for the position: Professor McTaggart of Trinity College, Cambridge, England, and Professor A. C. Armstrong of Wesleyan, in Middletown, Connecticut. He further went on to state:

I myself am about to ask my university [i.e., Princeton] for certain very essential modifications of my chair (giving up the experimental undergraduate psychology and assuming graduate courses in psychology, history of science and general philosophy): & if they are not allowed, ¹⁷⁵For an interesting analysis of Wilson's presidency at Princeton and his later political career, see Annin (1924).


¹⁷⁷Professors Alexander, Mackenzie, Caldwell, and Evans.
I may retire or change my base of operations. Your
graduate atmosphere would appeal to me in case the duties
of the position are in the line of my projected personal
undertakings.178

Remsen responded promptly to Baldwin saying that the idea of
asking Baldwin himself to consider the new position had simply
not occurred to him because he thought Baldwin was completely
satisfied with his position at Princeton.179 Obviously this
was not the case! Baldwin proceeded to indicate his 'great
interest' in the idea of organizing a new department and with
certainty mentioned that he would be able to attract a couple
of his colleagues to teach in the department who otherwise
would not be tempted to leave their current positions. He
also suggested that Scripture, Kirschmann, or Stratton would
be superior to either Raymond Dodge or Thaddeus Bolton (whom
Ramsen had suggested) if a psychological laboratory was to be
established.180 It was through Baldwin's strong support of
Stratton that the latter was brought to Hopkins in 1904.181

178 Baldwin to Remsen, July 25, 1903, Remsen Papers.
179 Remsen to Baldwin, July 27, 1903, Remsen Papers.
180 G. S. Hall had established a laboratory at Hopkins
around 1883, but as Ross (1972) has stated: "... when Hall
left Johns Hopkins ... he left behind a very weak philosophy
department and no psychology department at all [p. 146]."
181 Whether it was Stratton or Baldwin who established
the laboratory is not clear. See Baldwin (1926, I) where
Baldwin said he did and Tolman (1961) who said that Stratton
established the laboratory. Garvey (1929) credited Baldwin
with establishing the laboratory. Baldwin originally asked
Stratton if he would be interested in his vacant position at
Princeton, but then he raised the possibility of him coming
to Hopkins. Stratton decided to accept the Hopkins offer.
See Baldwin to Stratton, December 11, 1903; June 21, 1904,
Stratton Papers.
In the event that two or three other positions would be available in the new department, and assuming that Remsen were to consider him as chairman, Baldwin mentioned that John Dewey (then at the University of Chicago) would be the best man for the philosophy position. Baldwin considered Dewey and Royce to be the "two first philosophers in America."\textsuperscript{182}

One day later, Baldwin wrote to Remsen again indicating his serious interest in the Hopkins position. He confided his dissatisfaction with the academic atmosphere at Princeton: "The place is in the hands of one or two men . . . who are imposing scholastic and individual ideals to the killing out of all scientific progress: & the pity of it is the new administration seems to be playing into the same hands."\textsuperscript{183} Baldwin expressed his sorrow in President Patton's decision to retire, because during his tenure liberal attitudes toward education had been constantly fostered.

Baldwin further told Remsen that either he would go into retirement and carry out private research, or he would consider a position at only one of two other universities: Hopkins or Harvard. He considered Harvard, which had indicated some interest in him on a couple of previous occasions, to have the reputation of tying experimental research to theoretical questions, while Hopkins would likely foster a similar atmosphere if Remsen were to allow Baldwin the freedom

\textsuperscript{182}Baldwin to Remsen, July 28, 1903, Remsen Papers.
\textsuperscript{183}Baldwin to Remsen, July 29, 1903, Remsen Papers.
to study those things that interested him. As for the experimental tradition Baldwin told Remsen: "the laboratory business has been overdone in this country."¹⁸⁴

Giving serious consideration to the possibility of moving on to Hopkins, Baldwin told Remsen that perhaps Alfred Binet, who was apparently unhappy with his position in Paris, could be approached about filling another position. If this could not be arranged, then James R. Angell should be considered, assuming that the opening was in psychology. For the Lectureship that would be needed, Christine Ladd-Franklin would be an excellent choice. But he made it clear that he wanted nothing to do with G. S. Hall, which, as we have already seen, comes as no surprise.

With Baldwin's rapid and pressing interest in the Hopkins position, Remsen went about the search for evaluations of the new candidate.¹⁸⁵ He received virtually unanimous approval supporting Baldwin for the position. Working swiftly in order to get Baldwin for the fall semester of 1903, Remsen contacted the Board of Trustees and gained prompt approval. Baldwin was to receive a salary of $5,000, highest

¹⁸⁴ Baldwin to Remsen, July 29, 1903, Remsen Papers.

¹⁸⁵ One individual sought for comments about Baldwin was Basil L. Giddersleeve, editor of the American Journal of Philology. But Giddersleeve did not know Baldwin. William Bullock Clark, geologist for the State of Maryland, and faculty member at Hopkins, approved of Baldwin. Edward H. Griffin, a psychologist at Hopkins, also was anxious to have Baldwin become a colleague. See Giddersleeve to Remsen, August 20, 1903, Clark to Remsen, August 20, 1903; Griffin to Remsen, August 21, 1903, Remsen Papers.
the university offered. Laboratory space was to be set aside with the provision of an annual budget to cover the cost of materials and apparatus.

Baldwin promptly went about the task of obtaining another member for his new department. Henry H. Donaldson, a highly regarded neurologist at the University of Chicago, suggested two men as excellent candidates for a position at Hopkins. They were John B. Watson and James R. Angell. Baldwin, in his final days at Princeton, wrote to Remsen about Donaldson's comments. He urged Remsen to consider the possibility of attracting both Angell and Watson to Hopkins. If this could be achieved then "things will 'hum,,'" and Hopkins would be well on its way to establishing a top-notch department. By the middle of 1904, Baldwin had drafted an outline of the three-year program of course-work leading to a Ph.D. in the department, a proposal with which Remsen was very much impressed.187

Under Baldwin's direction, the Department of Philosophy and Psychology steadily grew. By the time that he left Hopkins in 1909, the department had witnessed the addition of Edward Buchner, Knight Dunlap, C. B. Farrar, Christine Ladd-

186 Baldwin to Remsen, September 23, 1903, Remsen Papers.

187 Courses in the outline included general, experimental (with a laboratory requirement), social comparative, history of philosophy, ethics, and social philosophy; see Remsen to Baldwin, May 13, 1904, Remsen Papers.
Franklin, W. D. Furry, and John B. Watson. In addition, George M. Stratton had arrived in 1904 to help with the laboratory courses, but he had returned to the University of California in 1908. Josiah Royce had come as a special lecturer in 1906 to discuss the topic, Aspects of Post-Kantian Idealism. Later in the same year John Dewey was brought in to give a series of lectures on Problems of Greek Philosophy. Furthermore, I. Woodbridge Riley spent three years (1905-1907) as Henry E. Johnston, Jr. Scholar, during which time he prepared his important volume on American Philosophy: The Early Schools that he dedicated to Baldwin and which appeared in 1907. During this time, Baldwin offered courses in general psychology, aesthetics, the theory of reality or real logic, the theory of evolution, the theory of individual development, and social psychology. He left

188 Baldwin considered Watson the best comparative psychologist of his day; see Baldwin to Alpheus Mayer, January 20, 1907, Mayer Papers. J. R. Angell was sorry to lose Watson to Hopkins; see Angell to Cattell, March 14, 1908, Cattell Papers.

189 See PB, 1905, 2, 88; also PB, 1907, 4, 95.

190 Baldwin's obvious interest in theories may be contrasted to that of Titchener: "So far as I know myself, I have no 'feeling' about theories, my own or others. I suppose that enthusiasm for a given man or a given theory is good, in a measure, for the science; but I have never been able to rise to it. I take my theories very lightly, as working hypotheses for the facts; and I slip some, and take on others. I think literally every year. The facts themselves, for their own sake, are what fascinates me." Titchener to Ladd-Franklin, August 4, 1902, Ladd-Franklin Papers. For Royce's acknowledgement of the different orientations of Titchener and Baldwin, see Royce to Cattell, July 23, 1903, Cattell Papers.
the experimental courses largely to Stratton, Watson, and Dunlap. He often spent his summers teaching Summer School at other universities. Thus in 1902, he and Royce taught at the University of California (Berkeley) summer school for six weeks, an experience he truly enjoyed.\textsuperscript{191} The following summer he lectured on Organic and Mental Development and Evolution at the University of Chicago. In the summer of 1904 he lectured in the Summer School of the South at the University of California where he gave a six-week lecture course on Genetic Logic. Finally, in 1906, he presented the same lectures when he returned to the University of Chicago Summer School.\textsuperscript{192}

Meanwhile, Baldwin was just about at the peak of his prestige with the recent appearance of the \textit{Dictionary}, his continued co-editorship of the \textit{Review} and the publication of two new volumes in \textit{Development and Evolution} and \textit{Fragments in Philosophy and Science}, both in 1902. He had also just been appointed by the Carnegie Institution to report on the subject of psychological research.\textsuperscript{193} The report appeared in the

\textsuperscript{191}See Baldwin to Wheeler, January 30, 1902, Wheeler Papers; Baldwin to Wheeler, August 2, 1902, Wheeler Papers; Warren to Cattell, June 24, 1903, Cattell Papers; Baldwin to Howison, March 24, 1902, Howison Papers.

\textsuperscript{192}See \textit{PB}, 1904, 1, 173. For a detailed account of the 'greatest summer school the world has ever known,' see Montgomery (1963).

\textsuperscript{193}Charles Walcott to Baldwin, October 6, 1902, Baldwin Papers.
Institution's Yearbook of 1902.\textsuperscript{194}

As one looks back to see what was happening at Princeton, it is interesting to note that Wilson had replaced Baldwin with Frank Thilly,\textsuperscript{195} a philosopher who later went on to become a president of the American Philosophical Association. Clearly Wilson avoided an experimentalist as Baldwin had expected that he would (Warren, 1930, p. 457).

Baldwin was elected to membership in the American Philosophical Society in 1897.\textsuperscript{196} As he told George Holmes Howison one year later: "My own tendency is constantly toward philosophy: but I feel that the naturalistic vein must be worked out first, before philosophy can be sure of its foundation."\textsuperscript{197} Although one of the chief purposes of the new publication begun by Baldwin and Warren in 1904, the Psychological Bulletin, was to publish proceedings of the annual meetings of the APA and the American Philosophical Association, Baldwin never seems to have favored the affiliation of these organizations.\textsuperscript{198}

\textsuperscript{194}Baldwin was originally asked to be on an 'advisory committee' by Daniel C. Gilman, the ex-president of Hopkins, and the first director of the Carnegie Institute for Research. See Baldwin (1903c). The Carnegie Institution had been established on January 4, 1902. Its purpose was to promote original research in science, literature, and art.

\textsuperscript{195}See PB, 1904, 1, 134.


\textsuperscript{197}Baldwin to Howison, May 21, 1898, Howison Papers.

\textsuperscript{198}See PB, 1904, 1, 57.
In 1904, E. B. Titchener contacted several men about the idea of forming a unique society to be devoted exclusively to the discussion of problems of an experimental nature.\(^{199}\) E. C. Sanford, writing in response to Titchener's offer to join the informal group which came to be called the Experimentalists (later called the Society of Experimental Psychology), told him that Baldwin probably wouldn't care enough about experimentation to join, although he might reconsider after the establishment of the laboratory at Hopkins.\(^{200}\)

Although Baldwin seems to have attended at least two of the meetings of the Experimentalists as a representative of the Johns Hopkins Laboratory (Boring, 1938), he doesn't appear to have been an active participant at the meetings, probably partly because he was becoming increasingly detached from rigid laboratory research.\(^{201}\) Besides, he could hardly support several of the unwritten, but nevertheless unviolated, policies which had become implicitly or explicitly stated from its beginnings. These included the exclusion of women\(^{202}\)

\(^{199}\) For more information on the founding of the Experimentalists, see Titchener to Cattell, January 15, 1904, Cattell Papers, and Boring (1938, 1967), 201. Baldwin was not at the first meeting, but he appears to have attended the second one at Clark in 1905 and the fifth one at Harvard in 1908.

\(^{200}\) Sanford to Titchener, January 19, 1904, Titchener Papers.

\(^{201}\) As he had expressed this point to Remsen; see Baldwin to Remsen, July 29, 1903, Remsen Papers.

\(^{202}\) Christine Ladd-Franklin was probably the most vocal and forceful representative of the struggle to change the sex discrimination policy of the Society. See Ladd-Franklin to Titchener, March 21, 1914, Ladd-Franklin Papers.
and the taboo of discussing topics in either social psychology or the psychology of personality (Boring, 1967). Furthermore, although Baird claimed that Baldwin, Judd, Angell and others had failed either to understand or to appreciate Titchener's structural view, Baldwin considered structural psychology to be doomed to extinction. As he matured, Baldwin came to be less inclined to agree with Titchener's view that "the founding of a psychological laboratory . . . [was] . . . the most important physical thing that could happen in psychology [Boring, 1927b, p. 501]."

It is interesting to note that Howard Warren, Baldwin's close associate at Princeton, remained a staunch experimentalist throughout his career. Besides hosting the annual meeting of the Society four times before he died, the Warren Medal, established in his memory, has since been annually awarded "for outstanding work in experimental psychology in the United States or Canada published during the five years preceding the time of the award [Boring, 1938, p. 421]."

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203 See J. W. Baird to Titchener, January 24, 1909. Titchener Papers; and Johnston (1908), p. 77; also Baldwin (1906a), p. 621.

204 For Warren's bias toward the importance of publishing experimental rather than theoretical articles in the PR, see Warren to Cattell, July 16, 1901, Cattell Papers. Warren, however, did not attend the first three meetings of the Experimentalists. See Boring (1967), p. 317.

205 In 1909, 1916, 1925, and 1929; see Boring (1967).

206 A picture of the Warren medal appears in AJP, 1938, 51, opposite page 421.
Not only did Baldwin avoid most of the meetings of the Experimentalists, but he seems to have taken no active part in the annual meetings of the American Philosophical Association as his 'philotrope' colleagues did, including Dewey, James, Münsterberg, Riley, and Royce. As has been indicated, Baldwin clearly was moving toward attempts to resolve philosophical issues. Two further indications of his philosophical bias were his membership in 'The Mind Association,' and the Southern Society for Philosophy and Psychology. The Mind Association was formed in 1900 with the expressed intention being to support the journal, Mind, which had encountered some financial difficulties. Mind had, since it founding in 1876 by Alexander Bain, been a vital organ for the publication of philosophical articles of all types. Its expressed policy was to avoid becoming the outlet for any one particular university or system of thought as Wundt's Philosophische Studien or Hall's American Journal of Psychology were later to represent. This open policy was much more consistent with Baldwin's way of thinking.

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207 This neologism, coined by the writer, is simply a label to indicate those individuals of a more philosophical orientation among psychologists. This group may be distinguished from Boring's 'sociotropes' and 'biotropes.'

208 He did prefer that the APA meet approximately every other year in affiliation with the American Philosophical Association; see Baldwin to Cattell, March 5, 1903, Cattell Papers.

209 See Mind, 1901, 10(N.S.), 1-6, for more information about the association, including a list of officers and members. It is interesting to note that Baldwin was the only American among the original list of 74 members.
Another indication of Baldwin's philosophical tendencies was his association with the Southern Society of Philosophy and Psychology, an organization which held its first annual meeting in December, 1904, at which time Baldwin was elected its charter president. The purpose of the Society was to stimulate interest in philosophy and psychology in the academic institutions in the southern portion of the United States, which have for the most part hitherto lain outside the field of the active influence of the two older American associations.

Baldwin's presidential address at the inaugural meeting was entitled a Sketch of the History of Psychology which appeared the following year in the Review. Apparently this was very similar, if not identical, to the presentation Baldwin made at the International Congress of Arts and Science (Baldwin, 1906a) which had met a couple of months earlier in St. Louis. This interest in the history of psychology was to continue for the next decade and culminate in his two-volume

210 Baldwin remained the Society's president for the first three years (1904-1907) of its existence; see PB, 1908, 5, 32. This is verified by Miner (1931), p. 11.

211 See PB, 1905, 2, 72. Miner (1931) wrote an interesting account of the organization and history of the Society. In it he credited Edward F. Buchner as its founder.

212 See Baldwin (1905).

213 Presumably Baldwin was invited to deliver one paper. But there is some confusion over its title. See Baldwin (1905) where, in a footnote on page 144, it indicated that this paper was read at the St. Louis Congress. But in PB, 1904, 1, 412, mention is made of the fact that Baldwin's paper was entitled "The Progress of Psychology in the Last Century." The reason why it is unclear whether this refers to the same article that was published in the Review in 1905.
History of Psychology in 1913. More will be said of this interest later. Baldwin remained active in the Society, being elected to a three-year term as a representative on its Council at the third annual meeting in 1908. At this meeting Baldwin presented another paper entitled "The Present State of Logical Theory" in which he outlined some considerations that appeared in his Thoughts and Things. Professor Moritz Geiger, a visitor from the University of Munich participated in the discussion following Baldwin's presentation. Speaking about his impression of this meeting, Geiger later told Titchener that "most of the papers were terrible," and that "only Baldwin gave a clear and original paper." Although due to extenuating circumstances Baldwin was never active in the Society after the 1908 meeting, it is quite conceivable that he was at least partially responsible for inducing several of his colleagues at Hopkins including John W. Baird, N. T. Burrow, Knight Dunlap, W. D. Furry, Edward H. Griffin, George M. Stratton, and John B. Watson to become active members in the Society.

Many of Baldwin's colleagues seemed to view his interests as well as those of some of the other 'philotropes' (as well as in the Proceedings of the Congress) is that the former article dealt with Greek psychology as well as nineteenth century developments. Apparently Baldwin did not even attend the Congress because it is noted that Ralph Barton Perry read Baldwin's paper; see PB, 1904, 1, 412. For a description of the Congress, see Münsterberg (1904).

214Geiger to Titchener, March 6, 1908, Titchener Papers.
in the early 1900's as wandering from psychology proper, and indeed in some respects they were. Titchener, for example, in a letter to Cattell in which he spoke of his high personal regard for G. S. Hall, and that he viewed Hall as 'at heart a psychologist,' indicated no little concern that "Muensterberg is taking to diplomacy, and Baldwin to general managing, and James to mysticism and metaphysics!" Soon thereafter Lightner Witmer, in speaking of Cattell, Baldwin, and Münsterberg at the time of the formation of the Experimentalists told Titchener that "If these three men share in the organization, particularly if we make any compromise in order to get them in for the supposed benefit of their influence, you may be sure that they will be running the society in the course of a year." Boring (1938) seems fairly certain that Columbia, Hopkins, and Harvard were not represented at the 1904 meeting. It is less clear, however, whether or not they were invited.

Baldwin's interest in educational reform was aroused upon the occasion of his introduction to Don Ezequiel A. Chávez, the Mexican Sub-secretary of Public Instruction and Fine Art. Chávez was representing the Mexican government.

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215 Titchener to Cattell, July 31, 1903, Cattell Papers.

216 Witmer to Titchener, January 25, 1904, Titchener Papers. It is not intended to argue that Cattell was leaning toward philosophical analysis, only that at least from Witmer's point of view, he shared some of the ambitions of being an editor, as did Baldwin.

217 Besides Chapters 8 and 9 in Baldwin (1926, I), the best source of information about Baldwin's involvement
in an attempt to improve the educational system in that country. He invited Baldwin to assist the Mexican government in its efforts to achieve this educational reform.

As Baldwin later described it, Chávez's dream was to found in Mexico an Institute of Psychology. Apparently feeling less tied to the interests of the Department of Philosophy and Psychology at Hopkins, and intrigued by the idea of possibly helping Chávez realize his dream, Baldwin visited Mexico. In all, he made a total of four visits there. He developed a deep and appreciative interest in the many beautiful resources which the country had to offer. The Mexican government, as Baldwin later described, "was glad to meet an American who had come to Mexico on an educational mission, and not to exploit the resources of the country [Baldwin, 1926, I, p. 131]." Under the Diaz rule, education was given a high priority. Universal primary education, previously voluntary, became compulsory. Secondary schools were built and plans were made for a National University. Chávez later recalled Baldwin's reaction to his plan for reform and particularly for the Institute:

Oh, Mr. Chávez, if you should do that, a thing that all the nations of the world should do for their peoples, and which no nation has done, and could entrust some part of that work to me, I should abandon everything in order to be able to collaborate in its realization [Chávez, 1937, p. 17].

with the National University of Mexico is in an unpublished English translation of a lecture presented by Dr. Chávez on March 8, 1937. A transcribed and translated version of the lecture (27 pages long) is contained in the Baldwin Papers.
Although Baldwin resigned his Hopkins position and went to aid in the organization of the Institute, political problems which were soon to erupt prevented him from completing his intended contribution. He did go to Mexico in 1909 for about one month, during which time he made "a thorough and comprehensive study of the educational methods employed in the republic of Mexico."\textsuperscript{218} The topics which Baldwin lectured on while in Mexico were characterized by diversity. They varied from Making a Living, considered from a psychological point of view, to Elements of Culture, to Patriotism as an Impulse toward National Struggle, to On the Ideal University.\textsuperscript{219}

He later returned to Mexico in 1910 to offer a two-year program of lectures at the new National University.\textsuperscript{220} One course, on psychology and sociology (called Psychology), later resulted in his \textit{Individual in Society}, published the following year. The second course was on the history of psychology,\textsuperscript{221} which, as we have already seen, he was becoming increasingly interested in, and which served as the basis for his \textit{History of Psychology} in 1913. Before leaving Mexico, Baldwin was made an honorary professor of the University of Mexico.\textsuperscript{222}

\textsuperscript{218}The Mexican \textit{Herald}, March 29, 1909.
\textsuperscript{219}See Baldwin Papers.
\textsuperscript{220}See \textit{PB}, 1910, 7, 396.
\textsuperscript{221}See \textit{PB}, 1912, 9, 208; also \textit{JPP&SM}, 1912, 2, 335.
\textsuperscript{222}See \textit{JPP&SM}, 1915, 12, 721.
The Library of Historical Psychology

The success of the Dictionary must have had a significant influence on Baldwin, so much so that in early 1903, in his last year at Princeton, he proposed to the Charles Scribner's Sons publishing firm a plan to publish a multi-volume psychological series which came to be called the Library of Historical Psychology. Baldwin was to be the general editor of this series and he was to solicit manuscripts from various colleagues who would prepare historical works across several related subfields in psychology. In addition, Baldwin was to write a volume that would serve as an introduction to the entire series. John Dewey and Hugo Münsterberg were to serve as editorial consultants.

Gaining initial consent from Scribner's to proceed with the plan, Baldwin began to contact his colleagues whom he had anticipated would be interested in contributing to the series. He turned to several individuals who had cooperated in the preparation of the Dictionary. Thus, James R. Angell agreed to prepare a volume on attention and apperception, George M. Stratton on perception and sense-illusions, Josiah Royce on self-consciousness and personality, H. N.

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223 First-hand information on this topic may be found in the Baldwin-Scribner correspondence located in the Scribner Papers at Princeton University. For general information on the entire Scribner Collection, see Anon. (1967).

224 See PR, 1903, 10, 344, 592.

225 The contract was signed on March 25, 1903; see Baldwin to Scribner, March 25, 1903, Scribner Papers.
Gardiner on feeling and emotion, Professor Jödl on action and will, Christine Ladd-Franklin on sensation, Howard Warren on association, E. A. Pace on theories of soul and mind, James Tufts on the psychology of aesthetics, and finally Baldwin himself on problems and epochs in the history of psychology. By 1906, he reported that twelve volumes were in the process of preparation (Baldwin, 1906a, p. 623). For several reasons, however, this editorial venture was, unlike the Dictionary opus, to be an abortive one. Although he was in a position to be equally in touch with the contributors in this series as he was with those who assisted with the Dictionary, their duties were considerably more substantial. Certainly it was a more hazardous project to prepare a book-length manuscript than even a large number of brief articles as was the case with the Dictionary. Another factor was Baldwin's increasing involvement in duties with the Mexican government, and his abrupt resignation from his Hopkins position which resulted in a hurried and premature departure from the American scene. Nonetheless, he continued to work on his historical volume, as is evidenced by the papers he presented on historical topics at the St. Louis Congress and the first meeting of the Southern Society. In addition, the historical course he offered while in Mexico in 1912 conceivably contained material which he had been gathering together for the volume in the Library series.
However, no complete manuscripts had been submitted by any of the contributors for several years. It is unclear what led Baldwin to contact Scribner early in 1913 regarding the series, but the reply that he received gives the publisher's historical account of the evolution of the project, and its extended quotation seems appropriate for this reason:

The Library of Psychology, recalled to us by your letter of the 15th, seems like rather ancient history. We had quite reached the conclusion that the project had long since been given over. . . . On the whole, we do not seem to have made appreciable progress. In fact your letter . . . is hardly so definite in its promise of early delivery of the manuscripts as those of seven or eight years ago. In your letter of November 23, 1905, you say, 'On the whole good progress has been made. . . . From your letter of March 13, 1906: 'The volume by Professor Tufts and that by myself are to be ready, all going well, for publication in the spring of 1907. The volumes by Stratton and Warren are so far along that they feel safe in saying they will be ready in the spring of 1908. . . . The volumes of Professor Gardiner, Royce, and Angell, are advancing well and while they will probably be earlier, it is safe to say spring of 1909' . . . . We have had sufficient experience with series to be aware of the difficulties and we should not have been surprised that the delay on the part of two or three or even half of the contributors should have been as long as it has, but that not one of the twelve volumes, after nine years, is in sight is hard to understand.

Thus, it seems that Scribner dealt very fairly with Baldwin in terms of leaving the door open so long for the project to be completed. As Mr. Scribner stated:

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226 He continuously checked with his contributors on their progress; see, for example, Baldwin to Gardiner, September 16, 1912, Gardiner Papers.

227 Scribner to Baldwin, January 24, 1913, Scribner Papers.
When the contributors have consistently failed to confirm such definite predictions as you [i.e., Baldwin] have made in your reports, and when an interval of more than three and a half years has elapsed since hearing from you, we could not but assume that the whole project had died a natural death. 228

Nevertheless, Baldwin's reaction to the contents of Scribner's letter was one of surprise:

I am simply surprised and perplexed. . . . There is of course reason to complain a little that the writers of the series have taken so long. . . . Now there is full reason to feel that the thing is moving well, and you propose to drop it! This I say flatly and frankly is not for a moment to be considered. 229

The fact remains, however, that with the exception of his own historical volume, and Warren's book on Associationism, none of the other authors ever followed through on their agreement to complete a manuscript. So the project, as a series, was aborted. Baldwin himself changed publishers and his two-volume History, which was soon recognized as a valuable contribution to the field (Langfeld, 1914; Riley, 1914, 1915), appeared in 1913 printed by G. P. Putnam's Sons. Warren's History of Association Psychology was the manuscript that actually served as his doctoral degree which, it will be recalled, he had not yet obtained, but received following the year on sabbatical leave at Hopkins. The book appeared in 1921.

228 Scribner to Baldwin, January 24, 1913, Scribner Papers.

229 Baldwin to Scribner, January 19, 1913, Scribner Papers.
Baldwin and His Foreign Colleagues

As we have already seen, Baldwin's involvement in several editorial endeavors, including the Psychological Review, the Dictionary, and the Library of Historical Psychology, put him in touch not only with many of America's rising social scientists, but with those of Europe as well. He fostered friendships with many French, German, and British scholars in particular. Following what was probably his first foreign visit when he studied with Wundt and Paulsen in Germany after his graduation from Princeton, he returned to Europe many times thereafter either simply to vacation or to attend the International Congress of Psychology meetings, which took place about every third or fourth year.230

Baldwin probably did not attend the first Congress held in Paris in 1889. However, he was in attendance at the second Congress held in London in 1892. At this meeting Baldwin met Henry Sidgwick, the president of the London Congress, and a noted moral philosopher, whom Baldwin later amusingly recalled because of his speech impediment: "he stammered his way to the hearts of us all, for stammering was

230 One valuable contribution particularly to the historian of psychology of the late nineteenth and early twentieth centuries, would be an authoritative account of the International Congresses. This is difficult because documentation of the early meetings is scarce. The more useful accounts include Misiak and Sætren (1966), pp. 471-475, and Piéron (1954). The latter is more of a first-hand account since Piéron attended most of the Congresses personally. See also Langfeld (1954).
his lifelong handicap [Baldwin, 1926, I, p. 74]." 231 It was at this meeting that Baldwin also presented a paper which summarized some of the early research on imitation that was to appear in his Mental Development a few years later. Warren (1930) recalled this event because, during the presentation, Baldwin was overcome by faintness and he was only able to finish in a seated position. In a report of this meeting mention was made of the discussion that followed Baldwin's presentation:

... the opinion was expressed that Prof. Baldwin, while rightly drawing attention to imitation as an important factor in volitional development, had put too heavy a strain on it; and attention was drawn to the limited sphere of imitation in the evolution of animal life. 232

It was probably on this trip that he later visited Janet, Charcot, and Bernheim who were studying the nature of hypnotism (Baldwin, 1892a, b).

Baldwin again attended the next Congress held in Munich in 1896. 233 Although he doesn't appear to have presented a paper, he was elected as an American representative to the forthcoming meeting to take place in Paris in 1900. 234

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231 Baldwin erroneously described the London meeting as the first Congress. Clearly it was the second. This was probably a slip which makes it more likely that he did miss the first meeting in Paris; see Baldwin (1926, I), p. 74.

232 See Anon. (1892).

233 For a detailed account of the 1896 Congress, see Buchner (1896).

234 See Baldwin, "Congress of Psychologists," N. Y. Evening Post, September 12, 1896, p. 15; also see Warren to Baldwin, August 31, 1900, Cattell Papers. See Warren (1900).
The fifth meeting took place in Rome in 1905, and the sixth in Geneva in 1909. At the Geneva meeting, Baldwin raised the question, related to his Dictionary, of establishing a standard terminology for new terms. He moved that an international commission be appointed to discuss the question of an international standard terminology and that it report at the next Congress (Ogden, 1909, p. 393). It was also at this meeting that it was decided that the United States would host the next Congress in 1913. William James was elected its honorary president, Baldwin its president, Titchener and Cattell its vice presidents, and John B. Watson its secretary. This, then, is some of the involvement that Baldwin had in the International Congresses where he undoubtedly made acquaintance with many of his non-American colleagues.

But he had also constantly read many foreign books that were of interest to him and even instigated the translation of several of them. One intriguing volume which Baldwin's younger sister, Elizabeth, translated from the German was Professor Karl Groos' The Play of Animals, which appeared in English in 1898 with a preface by Baldwin. He was impressed with Groos' analysis of play because the latter for an extended discussion of the Paris Congress in 1900. There is conflicting evidence as to whether or not Baldwin attended the Paris Congress. Piéron (1954) recalled Baldwin being among the 34-member U. S. delegation, but the implication in a letter from Warren to Baldwin, August 31, 1900, is that Baldwin did not attend; see Warren to Baldwin, August 31, 1900, Cattell Papers.

235 See PR, 1909, 16, 362; see also PB, 1909, 6, 327.
viewed the phenomenon as an instinct, similar but distinct from imitation, which developed as a product of natural selection, rather than as a result of the Lamarckian theory of inheritance of acquired characteristics. The functional value of play was also similar to that of imitation. As Baldwin stated:

First, it enables the young animal to exercise himself beforehand in the strenuous and necessary functions of its life and so to be ready for their onset; and, second it enables the animal by a general instinct to do many things in a playful way, and so to learn for itself much that would otherwise have to be inherited in the form of special instincts; this puts a premium on intelligence, which thus comes to replace instinct [1890a, p. 5].

Clearly Baldwin was attracted to Groos' work because of their similar concern for the importance of evolutionary theory and a functional orientation to the study of human development.236

The theorizing of two French writers also led Baldwin to encourage the translation of their work into English. Gabriel Tarde's Social Laws was translated into English by Howard Warren in 1899. This English edition also contained a preface which Baldwin prepared. Both Tarde and Baldwin had emphasized the process of imitation in their theoretical work and Baldwin fully agreed with Tarde's belief that scientific principles could be identified to account for the phenomena

236 For a review of the original German edition of Groos' book, see Wesley Mills (1896). In a brief note of the English translation of the book, an anonymous reviewer (G. S. Hall?) implied that Baldwin had better stated many of the same points in his own Mental Development; see Anon. (1898). For a longer discussion of Professor Groos' book and his theory of play, see Stanley (1899).
of social life. Tarde's (1899) three laws of repetition, opposition, and adaptation were congruent with Baldwin's functional orientation to the study of social phenomena.  

The work of another Frenchman, Alfred Binet, also greatly attracted Baldwin. As we have already seen, Binet was a cooperating editor for the Psychological Review from the outset. In addition, Baldwin had later attempted to bring Binet to Hopkins when he moved there in 1904, but this was never accomplished. Several years earlier, when Baldwin was in the midst of preparing his Social and Ethical Interpretations, he read with great interest Binet's Alterations of Personality, and he felt that an English translation would make Binet's views on personality better known in America. So in 1896 Binet's work appeared, translated from the French by Mrs. Baldwin, with a preface by her husband. Binet recognized, as had Baldwin, that habit and suggestion were important components of personality. Baldwin had shown this in his Mental Development and was just then in the process of explicating his views further in Social and Ethical Interpretations which was to appear the following year. He obviously found Binet's (1896) discussion of successive and coextensive personalities, as well as alterations of personality, full of examples with which he could readily agree. However, he did disagree with Binet's analysis of suggestion and hypnosis which followed Charcot's theory as opposed to that

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237 For a brief note of the English translation of Tarde's Social Laws, see Small (1899-1900).
of the Nancy School which Baldwin realized had gained much greater empirical support (Baldwin, 1896b, p. vii).  

James R. Angell (1896-1897) considered Binet's book as a valuable contribution to the area of the psychology of personality which was then still in its infancy. He also praised the Baldwins' work of translation and editing.

**The Scandal**

As we have seen, since 1905 Baldwin had been becoming more involved in the program to establish the National University of Mexico. At first it was more or less a consulting...
position, with the occasional responsibility of presenting lectures.

Little did Baldwin know that an unfortunate event in the summer of 1908 in Baltimore was to have a marked effect on his relationship with the Johns Hopkins University, most of his colleagues, and his general influence within American psychology. For it was at this time that he, as he himself later confided to his close, and long-time friend, Hugo Münsterberg, admitted that he had foolishly accepted the invitation of an acquaintance of his to visit a negro social club which turned out to be a house of prostitution:

I did not know that women were harbored there, I was found there entirely by reason of my ignorance and to save themselves the proprietors made a serious charge against me. The charge was dismissed at once by the presiding officer and the people making it were convicted and sent up. The justice called on me at my house afterward and assured me there was nothing either legal or moral against me.240

Baldwin's credibility as an upright member of the scientific community soon came into question. The situation was all the more delicate because he was at that time the president-elect of the International Congress of Psychology that was to take place in America in 1913. As a representative of American psychologists which this office implied, it is not surprising that some of his colleagues began to seriously consider that

240 Cited in Münsterberg to Remsen, February 8, 1910, Remsen Papers. Münsterberg stated that this quote is from a letter that Baldwin sent him dated January 23, 1910. See also Baldwin to Titchener, February 11, 1910, Titchener Papers.
he resign his position. Baldwin's relationship with several of his fellow psychologists had been continually becoming more strained due to the events of the more recent years. This included the dissolution of the partnership with Cattell in the editing of the *Psychological Review* which had occurred in 1903. Then, shortly after this, Baldwin refused to cooperate with the suggestions of several psychologists that the *Monograph Series* become a publication independent of the Psychological Review Company in which Baldwin wielded a major influence.

Thus, at a meeting of the council of representatives of the APA, the committee adopted a proposal submitted by Cattell, to ask Baldwin to resign as president of the forth-

Cattell believed that it was Baldwin who had originally suggested (at the previous International Congress) that the meeting be held in America, and he further implied in a letter to Titchener that Baldwin in effect appointed himself president. The policy of the congress was to elect its committee, so obviously Cattell was stretching the point. It is true, however, that few Americans were at the previous meeting in Geneva; Cattell to Titchener, January 18, 1909, Titchener Papers. Baldwin claimed that he refused to sign the petition for the next meeting to be held in America; Baldwin to Titchener, February 8, 1910, Titchener Papers; see also Baldwin to James, January 23, 1910, reprinted in Baldwin (1926, II), pp. 220-222. See also Cattell to Titchener, August 28, 1909, Titchener Papers.

See Cattell to Baldwin, May 14, 1904, Cattell Papers.

Concerning possible solutions to the embarrassing situation, Cattell suggested to Münsterberg that "perhaps by that time [i.e., 1913] Baldwin will be President of the Republic of Mexico and be unable to attend!"; Cattell to Münsterberg, August 18, 1909, Münsterberg Papers. See also Cattell to Titchener, August 28, 1909, Titchener Papers.
coming International Congress. Münterberg stated in a letter to Ira Remsen, the president of Hopkins, the severity of the action taken against Baldwin:

You know that the psychologists have taken very severe action against him [i.e., Baldwin]. When the Psychological Association met here in my laboratory on the 31st of December, they voted unanimously at the motion of Professor Cattell that the Council ought not to hold the International Psychological Congress in America which was to meet here under the presidency of Professor Baldwin. It was the understanding of everyone in the room that it would be undesirable to have the congress with him in the chair. He had been chosen president because he was practically the only American at the last International Congress in Geneva. Other similarly severe steps have been taken from other sides.

On the same day Baldwin, then in Paris, informed Titchener that he was "quite willing to resign the Presidency of the Congress to you [i.e., Titchener] or anyone else who feels that someone else could fill it better than I." The following month James, who was the Honorary President, told Titchener that several individuals had tried to persuade him to take over the duties of the organization of the Congress, but when he died less than six months later, another damper over-shadowed the fate of the Congress.

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244 Upon hearing of this, Baldwin urged Titchener not to be intimidated by "the great bull-dozer - C. [i.e., Cattell]; Baldwin to Titchener, August 28, 1910, Titchener Papers.

245 Münterberg to Remsen, February 8, 1910, Remsen Papers.

246 Baldwin to Titchener, February 8, 1910, Titchener Papers.

247 See James to Titchener, March 3, 1910, Titchener Papers.
Meanwhile, Baldwin was reiterating his innocence of any immoral, or illegal activities to several of his colleagues, and he pointed to the fact that he had just been unanimously elected as a corresponding member of the philosophical section of the French Academy of Moral and Political Sciences, succeeding William James. This, he presumably interpreted as a sign that the French Academy had vindicated him of any guilt in the scandal, of which they were apparently aware. Nonetheless, under intense pressure, Baldwin resigned the presidency. For a time it was thought that the Congress might still go on as planned, and an executive committee consisting of Angell, Bingham, Cattell, Münsterberg, Sanford, Titchener, and Watson, was elected to organize the 1913 Congress.

Baldwin's handling of the entire unfortunate situation is open to question. As Münsterberg sympathetically, but frankly stated to him:

In my opinion it was a tactical blunder to leave the field, which always opens the door to gossip. If matters happened as you describe them, you ought to have insisted that the trustees of the university give you a clean bill,

248 See Baldwin to Titchener, February 8, 1910, Titchener Papers; Münsterberg to Remsen, February 8, 1910, Remsen Papers; Baldwin to Gardiner, September 16, 1912, Gardiner Papers; Baldwin to Münsterberg, February 16, 1910; February 21, 1910, Münsterberg Papers.

249 See Baldwin to Titchener, June 12, 1910, Titchener Papers; see also PR, 1910, 7, 251.

250 See PR, 1910, 7, 108; Titchener to Münsterberg, March 17, 1910, Münsterberg Papers.

251 See PR, 1911, 18, 166.
emphasizing that there is nothing morally and legally against you. On the other hand since you left the field, you ought to have avoided seeking any social prominence, as you might have foreseen that the American psychologists would not allow you to preside under these circumstances in any congress.252

Münsterberg's reference to 'leaving the field' is the fact that during this period, as we have already seen, Baldwin spent considerable time in Mexico giving lectures and helping organize the National University in Mexico City. To Münsterberg's letter of February 8, Baldwin urgently responded:

... I don't know just what the authorities of the Hopkins are saying to those who inquire. For my family sake I hoped to avoid discussion by coming abroad. You see I have no resource but my word. The people at the place made the outrageous charge - to conceal their business - that I brought a woman there; when I didn't even know beforehand that women were harbored there. I thought it was a "social club" & went to see the social life! Justice Tyson officially & later on verbally, cleared me of all blame! But the circumstances are against me, & I can only write personal disclaimers to my friends. It is not the loss of position that I mind: it is the moral charge. It hurts me for any of my former friends to believe this. I am giving up Review as well - in order not to embarrass any former colleagues.253

Once the word of the scandal came to the attention of President Remsen and the Board of Trustees of Johns Hopkins, Baldwin underwent considerable pressure to resign his position.254 In an apparent attempt to avert any direct action

252 Münsterberg to Baldwin, February 8, 1910, Münsterberg Papers.

253 Baldwin to Münsterberg, February 16, 1910, Münsterberg Papers.

254 There is some evidence to suggest that Baldwin was being considered as a possible nominee for President of Hopkins around this time. It was of the opinion of I. Woodbridge Riley that the scandal would have been kept quiet had it not been for this factor; see Münsterberg to Titchener, July 2, 1910, Titchener Papers.
on such a decision, Baldwin requested Remsen to grant him leave of absence in order to complete the duties in Mexico which he had contracted. Remsen told Baldwin that he would check with the Board of Trustees which he assumed would act favorably on Baldwin's request. He consequently authorized Baldwin's departure. Baldwin contacted his colleagues in the department about arrangements for them to take over his courses in his absence.

The Mexican Press covered Baldwin's visit to Mexico with considerable fanfare. Baldwin was mentioned as being on his sabbatical from Hopkins and was to consult with Eziequiel Chávez, the Sub-secretary of Education. Baldwin himself described his duties in Mexico as assisting in the revision of the National Educational Laws with the Mexican Department of Public Institution. The expectation that this project would require more time than initially expected, along with Baldwin's own admission that his health was suffering from overwork, led him to further request an additional period of leave from Hopkins for the entire academic year, 1910-11.

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255 Baldwin to Remsen, March 11, 1909, Remsen Papers.
256 Baldwin to Remsen, March 11, 1909. Remsen replied to Baldwin on the same letter, but this reply is dated March 12, 1909, Remsen Papers.
257 Baldwin to Remsen, March 12, 1909, Remsen Papers.
258 Mexican Herald, March 29, 1909.
259 Baldwin to Remsen, March 30, 1909, Remsen Papers.
This must have appeared to be the best time to make a change because Remsen replied saying that not only could Baldwin's request not be honored, but that after deliberating with several prominent university officials, it was decided that they should request from Baldwin his unconditional resignation from Hopkins. Baldwin acquiesced, saying that some physical problems were preventing him from lecturing and that he was considering such action himself. Realizing that rumors regarding the scandal must have played a major part in Remsen's decision, Baldwin once more stressed his innocence of any wrongdoing. Remsen indicated that it was the intent of all associated with Hopkins to keep quiet regarding the matter. Baldwin's resignation was accepted by the Board of Trustees on June 7, 1909.

Somewhat later, Münsterberg wrote Remsen for a clarification of the Baldwin affair from Remsen's perspective. There seems to have been a discrepancy between how Baldwin related the story to Remsen and how he later explained it to some of his fellow psychologists including Münsterberg. This prompted Münsterberg to state:

260 Remsen to Baldwin, April 12, 1909, Remsen Papers.
261 Baldwin to Remsen, April 17, 1909. Baldwin's letter of resignation was enclosed, Remsen Papers.
262 Remsen to Baldwin, May 12, 1909, Remsen Papers.
263 This was nearly two months after Baldwin had submitted his resignation. Remsen agreed to Baldwin's suggestion to postpone the announcement of his resignation until after the school year was completed; Remsen to Baldwin, May 12, 1909, Remsen Papers.
The essential point for us is that the explanation which Baldwin gives to the facts now is new to you. It seems evident that he would have brought before you everything which might excuse him. As he did not present the matter in this light to you it is obvious that his present excuses are free inventions. That makes it entirely impossible for us to help him. I personally cannot deny that this experience with him is in full harmony with some previous occurrences with reference to money matters concerning the Psychological Review; he behaved at that time dishonestly without doubt.264

Titchener's response to the new information seems to have been somewhat more sympathetic, although it reveals some interesting personal attitudes. In writing to Münsterberg, he said:

But I am very sorry to hear what you report from Remsen, for, when I read Baldwin's apology, I thought that every line of it might be true; it was just the sort of fool-story that may, by its very impossibility and incoherence, represent the facts. The man should have made his fight and outcry at the time, though; it is too late now. To acquiesce, and then afterwards to excuse oneself by a manufactured tale, is a little contemptible. I don't so much mind honest immorality, or honest lying, but I object to a man's trying to take in his friends after the event... Else psychology suffers, and American science suffers, and we are all a bit implicated.265

It was Titchener who had earlier stated his desire to see Baldwin resign, and G. S. Hall elected in his place to the presidency of the Congress.266

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264 Münsterberg to Remsen, February 6, 1910, Münsterberg to Remsen, February 14, 1910, Remsen Papers.

265 Titchener to Münsterberg, March 5, 1910, Münsterberg Papers.

266 Titchener to Cattell, January 16, 1910, Cattell Papers. Ironically, Titchener, who had always respected Hall as a 'psychologist at heart' told Cattell, at the time of Hall's death: "I prefer not to write about G.S.H. I have never been in sympathy with his psychological views; indeed, I do not think I have ever understood them...", Titchener to Cattell, April 13, 1924, Cattell Papers.
Early in 1909, Baldwin approached John B. Watson about joining the editorial staff of the *Psychological Review*, partly because he felt a desire to have the psychology department at Hopkins continue to be actively identified with it. Initially Baldwin had intended to remain as editor of the *Review*, but his acceptance of the appointment with the National University of Mexico, which was to open in September, 1910, precluded this option and the *Review* and *Bulletin*, along with its related publications were taken over by Warren.

Mrs. Baldwin must have been under extreme pressure as she remained with the children in Baltimore. Over two years after the scandal had occurred, she contacted Remsen—still President of Hopkins—for a first-hand account of the University's stand in the matter. Remsen reassured Mrs. Baldwin that Hopkins had done everything possible to avoid embarrassment for both Professor Baldwin and the University. Apparently the Mayor of Baltimore had applied pressure for Baldwin's dismissal. According to Remsen, he had learned that Baldwin had given an assumed name at the time of the incident, but that someone nevertheless recognized him as a Hopkins professor. It was further alleged that Baldwin had paid a

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267 Baldwin to Remsen, April 28, 1909, Remsen Papers.
268 Baldwin to Remsen, May 13, 1909, Remsen Papers.
269 Remsen to Mrs. Baldwin, December 18, 1910, Remsen Papers.
judge to keep the matter quiet and drop all charges against him. The Mayor also removed Baldwin's name from consideration as a member of the school board of Baltimore for which Baldwin had, prior to this time, been given serious consideration. Mrs. Baldwin acknowledged the efforts of Remsen and Johns Hopkins in doing what they felt was best, given the delicate circumstances. She nevertheless continued to feel that a serious injustice had been done to her husband. William James had expressed disbelief that Baldwin could have committed any scandalous actions.

Thus, in addition to the personal embarrassment the incident caused Baldwin, his wife and family, it forced his resignation from his university position, the cancellation of his consideration as School Board member, and his pressured resignation as president-elect of the International Congress of Psychology. The question of guilt or innocence on Baldwin's part in the scandal is of little consequence in terms of his departure from the American scene. The damage had been done. Although no one will ever know for certain, it appears highly unlikely that Baldwin actually did anything of a scandalous nature in regard to the incident in question.

270 Notes by Remsen, n.d., Remsen Papers.
271 See Remsen Papers.
272 Mrs. Baldwin to Remsen, January 11, 1911, Remsen Papers.
It would be inaccurate to conclude that the scandal was the reason that the International Congress never took place. It is true that many of the American psychologists thought it best that Baldwin resign as president-elect, but several other factors were also operating. These included Münsterberg's observation that the previous Congress in Geneva had been a failure, that there was a genuine concern that the Congress could not legitimately be called 'international,' that William James' recent death had dampened the entire venture, and that Titchener, a significant figure in American psychology, was opposed to holding it altogether. Nevertheless, the failure of the Congress to convene in America in 1913 is often attributed exclusively to the unfortunate events of Baldwin's life during the four years prior to that time.

For Baldwin, the scandal was like a festering sore that would not heal. Not only was the Congress cancelled, as we have seen, but Baldwin resigned from his editorial duties

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273 Cattell to James, April 30, 1910, Titchener to Münsterberg, March 5, 1910, Münsterberg Papers.

274 For a brief note concerning James' death, see PB, 1910, 7, 324.

275 Titchener to Cattell, April 23, 1910, Cattell Papers; Münsterberg to Titchener, March 22, 1910; Cattell to James, April 30, 1910, Münsterberg Papers; James to Watson, May 8, 1910, Titchener Papers. See also PB, 1913, 9, pp. 43-44; see also Piéron (1954), p. 402, and Fernberger (1932), p. 70.
with the Review publications, and prematurely departed from
the American scene. 276

The Post-American Era

With Baldwin's resignation from Hopkins officially
presented in 1909, his permanent residence in the United
States ended. He did return briefly on many occasions, but
usually only to make a lecture presentation, as was the case
early in 1913 when he lectured at the University of South
Carolina (from where he had received an honorary Ph.D. in
1905) and the Columbia College for Women. 277 However, when
he left Mexico in the fall of 1912, he probably never again
was to return there, and he spent most of the rest of his life
in France. It was there that he cultivated his friendships:
individuals including Henri Bergson, Emile Boutroux, Pierre
Janet, Henri Poincaré, and Théodule Ribot.

He was rightfully proud of his election to the Institute of France, replacing William James at the time of the
latter's death in 1910. Ribot, whom it will be recalled was
the author of the volume that Baldwin had translated in 1886,
strongly supported Baldwin's election, partly because of his
high regard for Baldwin's Dictionary and the work that Baldwin
put into the entire project to see it through to completion.
Baldwin was also invited to speak on American educational
methods before the Société Libre pour L'etude Psychologique

276 See PB, 1910, I, 76.
277 See JPP&SM, 1913, 10, 112.
de L'Enfant in which he criticized those new techniques which were being used without a proper and thorough investigation of their possible shortcomings (Baldwin, 1910).

When the first World War broke out, Baldwin became one of the most vocal spokesmen critical of the barbaric brutalities of the Germans. He joined the Comite France-Amerique, an organization whose purpose was to further good relations between France and the United States. At a meeting of the organization in Paris, in early 1913, Baldwin (1913a) lectured on French and American Ideals. The theme of the address was the national differences between these two countries with regard to moral ideals. Baldwin's concern with ethical and moral issues was to reach its peak in public expression, during the war years. On March 15, 1916, Baldwin was honored by being asked to present the Herbert Spencer Lecture at Oxford University. He chose as his topic "The Super-State and the 'Eternal Values'" in which he further criticized the German policy of 'might is right.' For them, he observed, "military necessity knows no moral law." The German ideal of 'Deutschland Uber alles' was a misguided and immoral position to adopt.

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278 See JPP&SM, 1915, 12, 721; see also Oxford University Gazette, April 28, 1915, 566; New York Herald (European Edition), April 24, 1915, 2.


280 Baldwin had publicly supported France's desire to avoid conflict in an address of the previous year; see Baldwin (1915a). For his praise of France in a time of crisis, see Baldwin (1915b).
Perhaps the single most significant event to arouse Baldwin during this period occurred on his return to France after the Herbert Spencer Lecture. Traveling on the Sussex, an English pleasure boat, back to France via the English Channel, the boat was torpedoed by a German submarine. Several people on the boat were severely injured, including Baldwin's younger daughter, Elizabeth. In fact, the following day it was erroneously reported that Elizabeth had been killed.281

In 1918 Baldwin lectured on the Development of American Philosophy at the École des Hautes Études Sociales in Paris. The following year he served there as professor. Ever since his departure from the American scene, Baldwin had been devoting less and less of his time and energy to strictly psychological matters. In effect, his psychological career had come to an end. However, he did address the Société Alfred Binet in November of 1918, where he spoke most favorably of the psychological work of both Binet and Ribot (Baldwin, 1918). His final publications in psychology were autobiographical in nature. The more complete account is his Between Two Wars: 1861-1921, a title which implies the importance that political events had become to him. Its subtitle reflects its contents: being memories, opinions and letters received.282 A shorter autobiographical description appeared

282 For a review of these volumes, see Riley (1927).
as the first chapter in Carl Murchison's first volume of _A History of Psychology in Autobiography_ (Baldwin, 1930). This latter work reflects the fact that his American colleagues, interested in the history of their discipline, considered the life and contributions of Baldwin sufficiently significant to be included in the first volume of this continuing series. Another indication of Baldwin's regard in America was the request by Henry Fairfield Osborn, one of Baldwin's undergraduate professors at Princeton, to provide him with a complete set of all of Baldwin's writings. He intended to include these volumes in the Osborn Biological Library which he was establishing at the American Museum of Natural History in New York. However, Baldwin was not able to oblige since he had already donated his entire collection to the Belgrade Academy of Sciences in 1923 upon the request of the President of the University of Belgrade. The University's library had been completely destroyed by the Austrians in the war. In the late 1920's, Baldwin donated nearly 1,000 French volumes which he had in his possession to the American Library of Paris, from whose Board of Trustees he resigned on October 21, 1930.284

Little is presently known about Baldwin's last four years. He was ill for several months prior to his death—caused by pneumonia—on November 8, 1934, at the age of 73.285

283 Baldwin to Osborn, August 25, 1928, Osborn Papers.  
284 Robert Davis to Baldwin, October 23, 1930, Baldwin Papers.  
285 Robert Davis to Baldwin, October 23, 1930, Baldwin Papers.
It is of some interest to note that one of the pallbearers at Baldwin's funeral was his long-time and honored friend, Pierre Janet. His body was returned to America, and it was laid to rest in Princeton, where he had spent the most productive years of his life. Professor Chávez, the man who had first contacted Baldwin about visiting Mexico, probably put it best when he described his friend as

... a profound scholar and ... leader in the field of ... Psychology, but also ... a true philosopher, ... a great and noble heart, ... a friend, ... a Citizen of the World, an uncompromising guide of men of good will that could understand his message to humanity ... 286

286 E. Chávez to Mrs. Baldwin, August 9, 1935, Baldwin Papers.
CHAPTER III

A PRESCRIPTIVE ANALYSIS OF THREE
OF BALDWIN'S MAJOR WORKS

Darwin was, with the single exception of Aristotle, possibly the man with the sanest judgment that the human mind has ever brought to the investigation of nature [Baldwin, 1898d, p. 229].

Nearly four decades ago, Kurt Lewin (1935) suggested his now famous and oft-quoted dictum: \( B = f(PE) \). "B" refers to behavior, which Lewin maintained was a function (f) of the person (P) and the environment (E).\(^1\)\(^2\) This is a molar formula and implies the complexity of human behavior.

Two popular theories concerning the history of psychology reflect differential emphasis on the factors of the person (or heredity) and the environment. First, the Great Man theory, perhaps most evident as illustrated in psychology in recent years in Robert I. Watson's *Great Psychologists* (which first appeared in 1963), argues that history advances

\(^1\)This introductory statement is based on a discussion between the writer and Dr. Peter S. Fernald. After some thought it became apparent that these remarks would serve as an appropriate prelude to the present chapter. I would like to thank Dr. Fernald for his valuable comments.

\(^2\)See Lewin (1935). He recognized the necessary interaction of these two factors when he stated: "In reality, the dynamics of environmental influences can be investigated only simultaneously with the determination of individual differences and with general psychological laws [p. 73]."
through the ingenious contributions of outstanding individuals. Implicit in this view is the bias toward heredity, or the person, as the major factor in interpreting history. Secondly, the Zeitgeist theory, as reflected in E. G. Boring's classic History of Experimental Psychology (1950b), attributes progress to the cultural situation or 'spirit of the times.' Presumably, according to this approach, nothing substantial would be lost if individual names were omitted from history. If Einstein hadn't made the discoveries that made him famous, then, as someone once amusingly suggested, it would have been Zweistein or Dreistein. Certainly someone else would have because circumstances were ripe for such a discovery and it was only a matter of time for it to occur.

Of more recent vintage is a third approach to understanding the history of psychology. This point of view, developed by Watson (1967), due to his dissatisfaction with the afore-mentioned theories, is known as prescriptive theory. In a real sense this approach attempts to incorporate both personal and environmental factors in interpreting history. Prescriptive theory posits a number of social attitudes (i.e., prescriptions held by psychologists) which represent views (some of which are controversial) concerning aspects of the basic nature of the science of psychology (see Appendix A). One of the values of this theory lies in the ability to identify which prescriptions are present in the writings of a given scientist, and then to characterize one's view in terms of
these prescriptions. Thus the personal and environmental factors are integrated.

The present chapter utilizes prescriptive theory in a content analysis of three of James Mark Baldwin's most important psychological works.\(^3\) The first editions of each of these books—Mental Development in the Child and the Race (1894), Social and Ethical Interpretations in Mental Development (1897), and Development and Evolution (1902)—appeared while Baldwin was at Princeton, although some of the research had been carried out previously while he was in Toronto.\(^4\) The remainder of this chapter will be organized around those prescriptions viewed as most salient in the works of Baldwin cited above.\(^5\) The procedure followed involved reading the

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\(^3\)Recently this theory has been used as the framework for studying several historical problems, including those which may be quantifiable as well as the more traditional qualitative investigation. For examples of quantitative studies, see Fuchs and Kawash (1971), Gibson (1972), Mirabito (1971), and Ross (1970). For an example of a qualitative investigation using prescriptive theory, see Watson (1971b). The present chapter is a qualitative investigation of prescriptive theory as applied to Baldwin's psychological contributions, and models the format of Watson's article.

\(^4\)For various reasons, later editions of two of these volumes were used, i.e., Mental Development, 3rd edition revised, 1906, and Social and Ethical Interpretations, 3rd edition revised and enlarged, 1902. The third volume—Development and Evolution—was published in 1902 and was never revised. Besides the fact that these volumes appeared during his tenure at Princeton, other works also written during this era were not included because in some sense each of these books was a sequel to its predecessor, and taken as a group, they represent a series.

\(^5\)It is virtually impossible, and clearly misleading in many instances, to argue that some particular aspect of Baldwin's work represents one, and only one, prescription. It is not uncommon to read something which reflects, to varying
three books by Baldwin with prescriptive theory in mind in order to organize what he said in terms of the salient prescriptions as defined by Watson. Rather than attempting to quantify the degree to which the prescriptions were manifested in these works, the writer read the books and in a qualitative manner determined, on the basis of the content of the volumes, which prescriptions appeared to be most dominant, as Watson (1971b) had previously done with the writings of Descartes. Thus, the rationale for applying prescriptive theory is not only to test the utility of the theory, but to use some of its terminology as themes for organizational purposes.

**Developmentalism**

According to Watson (1967), **developmentalism** is that prescription which emphasizes changes over time, and may be most directly compared to **staticism**, which stresses cross-sectional analyses. It is the intent of this section to spell out the predominant prescription of developmentalism in Baldwin's work.6

degrees, the salience of two or more prescriptions simultaneously. Since each relevant prescription is presented individually, it would be incorrect to assume that this implies that other prescriptions do not apply to the same material. An effort has been made to present the material under its most representative prescription, but when two or more prescriptions seem to apply to the same material, it is discussed with a different focus, emphasizing the salient features of each prescription.

6 The term 'development' is used considerably less frequently than the term 'genetic,' but for purposes of the present discussion, these two words are used interchangeably since they have essentially similar meanings.
The Genetic Method

Baldwin began his *Social and Ethical Interpretations* by distinguishing three empirical\(^7\) methods for studying the general question of the suitability of applying the principles of individual development to the evolution of society. The first was the anthropological (or historical) method which addressed itself to testing the validity of the theory of recapitulation. An elaboration of this theory and Baldwin's reaction to it will be taken up shortly. Secondly, the sociological (or statistical) method was utilized to determine the principles of the organization of society. Thirdly, the genetic method, which Baldwin adopted, attempted to understand the nature of things by virtue of their origin. This approach had two subdivisions: (1) the psychogenetic method, which examined the psychological development of the individual, and (2) the biogenetic method which examined the biological development of the individual. Baldwin relied particularly upon the psychogenetic method

which inquires into the psychological development of the human individual in the earlier stages of his growth for light upon his social nature, and also upon the social organization in which he bears a part [Baldwin, 1902d, p. 2].

\(^7\)The term 'empirical' refers to the gathering of knowledge on the basis of personal experience. It is not to be confused with the term 'experimental' which refers to the method of doing research based upon the manipulation of certain variables while holding other variables constant. The experimental method is an empirical procedure, but many other methods (e.g., participant observation, questionnaire) are equally empirical in nature. A statement by Carmichael (1926) may account partially for the long-standing confusion. He noted three distinct uses of the phrase 'empirical psychology,'
Reflecting his concern for an empirical basis to his investigation, Baldwin indicated that the data collected by means of this method were "drawn largely from direct observation of children [1902d, p. 2]."

The Dialectic of Personal Growth

The direct observation of his two children over a period of several years, particularly during their infancy, led Baldwin to develop a theory of "give-and-take between the individual and his fellows [1902d, p. 15]," which he called the Dialectic of Personal Growth. According to Baldwin, the first substantial discrimination that the infant performed early in its development was the ability to distinguish differences between people and inanimate objects, as well as more subtle distinctions among people themselves, that is, in their personalities. Baldwin referred to this period of growth as the projective stage which was characterized by an increasing uncertainty in the infant's relationship with other people. Not only did different people respond differently in the presence of the infant, but over a period of time even a particular person would act differently, perhaps even inconsistently. The net result of this increasing exposure to various people was a decreasing predictability in how they would respond in the infant's presence. As Baldwin succinctly

one of these being the essential equating of it with 'experimental psychology.' He suggested that these two phrases be used synonymously. Boring (1927a) helped clarify matters when he argued that empirical and experimental be distinguished. As he stated: "Every experiment is 'experimental' and hence 'empirical,' but all empirical methods are not necessarily experimental [p. 476]."
stated, "a person stands for a group of experiences quite unstable in its prophetic as it is in its historical meaning [1902d, p. 13].

This stage also witnessed the most extensive reliance upon instinctual influences on behavior. Although he generally limited reliance upon instincts (or inherited, biological reactions) as influencing human behavior to any great extent, Baldwin did argue that volition did not arise until later. This implied that the projective stage was characterized largely by instinctive and reflexive reactions on the part of the infant. It was a period distinguished by impersonal intelligence in which the infant behaved in the absence of any developed reasoning process and with no intentionally purposive goals in mind. Similarly, the infant's emotional expressions were largely organic and spontaneous, not unlike the id process hypothesized by Freud.

In his discussion of sanctions, Baldwin proposed a developmental sequence originating in the projective stage. He defined sanction as "any ground or reason which is adequate to imitate action, whether the actor be conscious or not that this is the ground or reason of a resulting action [1902d, p. 370]." Sanctions were subdivided into two classes, personal and social, depending upon whether they arose from the individual development of standards (i.e., personal), or whether

8In fact, Baldwin, in comparing humans to lower animals, in whom instincts played a considerably greater part, stated that the infant "has no complete instincts to speak of [1902d, p. 71]."
they become so generally agreed upon that they were institutionalized in the form of laws and customs (i.e., social). During the projective stage the predominant sanction was impulse. Unaided by the higher mental processes, the infant typically responded in a spontaneous manner in an effort to satisfy his biological needs. Nor did this sanction become completely uncharacteristic of later stages as Baldwin pointed out:

\[\ldots\] this lowest sanction, which expresses simply the general teleology of the life-processes as a whole, never in all the higher developments gets entirely vacated of its force. It is largely replaced, modified, inhibited, and much hidden in the child's later life when volition, thought, sentiment, come in to enrich it; but the man never ceases to be, with it all, in some degree, a creature of impulse acting with the biological machinery which he has in common with the babe and the beast [1902d, p. 373].

Only somewhat later, and with a certain vagueness about a precise age at which it occurred, did pure impulse yield to its first modification which Baldwin described as the hedonic sanction. Although he was not specific about the times at which these sanctions arose, Baldwin did state that the order of the appearance of these sanctions was invariable across all children. At this point the infant would begin to become aware of the stimulation of pleasure and pain and to attribute this stimulation to the entire object which was its source. Whereas initially the infant might reach toward fire merely because of his sanction of impulse, and with no previous experience to suggest otherwise, Baldwin indicated that, with the presence of the hedonic sanction, the infant came to
associate the painful effect with the tendency to reach for the fire but now inhibited his reaching tendency.

These sanctions, in the practical sense, prescribed certain rules of conduct. He defined these regulations functionally when he said that "**all rules of action for the guidance of life must be of possible social application, even though in their origin they are announced and urged by individuals** [1902d, p. 551]." Concerning impulsive action which predominated during the projective stage, there was no self-regulation since the actions operated under the sanction of necessity.

The second stage in the dialectic of personal growth was called the subjective stage. According to Baldwin, two distinct features characterized the onset of this period. The first was the child's awareness of his own physical body as distinct from those of other humans. This was a further and more subtle discrimination than that occurring in the projective stage, where animate and inanimate objects were distinguished. The second feature of this period was the wide-spread reliance upon the **imitative** process. As Baldwin put it:

> When the organism is ripe for the enlargement of its active range by new accommodations, then he begins to be dissatisfied with 'projects,' with contemplation, and starts on his career of imitation [1902d, p. 14].

This statement also reflected the implicit assumption of Baldwin's emphasis on the importance of the biological process of maturation. The subjective stage witnessed the
appearance of an early conception of self-consciousness. It singularly experienced pains and pleasures which other bodies around him did not.

Regarding the genetic development of thought, the child's intelligent actions were performed with a personal end in mind. He sought to satisfy his own welfare, sometimes in ways which suggested that he lied in order to do so. As Baldwin stated, he musters up "... all the conscious power and function of thought in the manipulation of society [1902d, p. 278]." The child's use of language was now not merely for communication purposes, but now directly effected social influence. The dominant sanction during this stage was desire. Baldwin differentiated two types of desire, spontaneous and reflective. In the former case the child exhibited little thought of self, of seeking long-range goals, of choosing between various means to obtain the goals, or of any serious consideration of the consequences of his actions. With the development of reflective desire, however, a consciousness of self became increasingly apparent, as did the child's tendency to weigh past experiences in the light of present circumstances, that is, to reflect. This reflective desire served to facilitate the growth of the sense of self, or ego, separate and distinguishable from the alter, or other humans. The end of the sanction of desire was self-realization. This referred to the child's ability to recognize consciousness of self and should not be confused with the contemporary interest in self-actualization, which is a
totally different concept. Thus, during this period consciousness of self arose. Furthermore, the sanction of desire led to success and truth becoming major motives of the child's intelligent actions. Whenever sanctions from the projective and subjective stages were in competition, the more intelligent sanction of desire would always supersede the expression of merely impulsive action—or at least as Baldwin stated, "... it tends to do so ... [since] impulse is the servant of reason [1902d, p. 397]." He further addressed the situation as follows:

Impulse is a thing of blind action, save to the theorist on the principles of biological development. But when intelligence comes upon the scene with its selection of means to ends, and its utilizing of the forces of life and impulse for the accomplishment of designs all its own, thus bringing some measure of control and balance into the warfare of impelling activities, then a new era begins, not only in the individual, but, as we have had reason to think from the point of view of his social equipment, also in society. Think of the difference between self-control and license, between the judge and the mob, between the child kicking against the pricks and the man removing them by his genius, and you have something of what the entrance of the sanction of intelligence means in the history of man [1902d, p. 398].

The period to which Baldwin devoted by far the most concern was the third and final stage in the dialectic of personal growth, the ejective stage. As Baldwin (1902d) stated, "... other people's bodies, says the child to himself, have experiences in them such as mine has [p. 14]." During this stage, the child developed the capacity to, as modern social psychologists would say, attribute similar experiences to other people who have themselves witnessed events that the child also has. Thus, for example, a child
who observed his younger brother drop his bottle of milk and begin to cry and kick his feet in the high-chair, now would say to himself, "He wants his milk because he's still thirsty. Poor baby brother. I'll go and pick it up for him." So what Baldwin called the true social self began to emerge. This involved not only the realization that his own physical body and self (i.e., ego) was different from all others, including his baby brother--this he was aware of in the subjective stage; now there was the further realization that the alter was in some ways similar to the ego. This realization tremendously facilitated inter-personal communication. Among other things, it served as the basis for the child's development of his self concept. The impression that was ejected into other people, including his peers, was based largely on how he behaved in their presence. An idea of his self concept would begin to accumulate as he interacted with others and he inferred their concept of him by how they interacted in his presence. So his self concept was largely mirrored by others in him. This idea was very similar to the concept of 'looking glass self' developed by Charles Horton Cooley at around the same time.⁹ This sense of self

⁹See Cooley (1964) [originally published in 1902]. Cooley stated: "In a very large and interesting class of cases the social reference takes the form of a somewhat definite imagination of how one's self--that is any idea he appropriates--appears in a particular mind, and the kind of self-feeling one has is determined by the attitude toward this attributed to that other mind. A social self of this sort might be called the reflected or looking glass self. . . . so in imagination we perceive in another's mind some thought of our appearance, manners, aims, deeds, character,
Baldwin called the habitual self. He distinguished a second type, the accommodating self. This was the aspect of the self that learned and imitated others and which eventually incorporated influences that were manifested in the habitual self.

A natural outgrowth of the social self was the simultaneous development of an ethical self. A responsibility accompanied the ejective stage of personality development which never existed before this time. He could no longer act selfishly in the presence of others.

Let the child continue to act by the rule of either of his former partial selves, - the private habitual self or the accommodating capricious self of impulse and sympathy, - and this new ideal of a self, a self that fulfills law, comes up to call him to account. My father, says the child, knows and would say 'what' and 'how'; and later, when the father-self has proved not to know all 'whats' and all 'hows,' then my teacher, my book, my inspired writer, my God, knows 'what' and 'how' still. In so far as I have learned from him, I also know; and this I expect you, my brother, my friend, my alter, to know too for our common life together. And the sense of this my self of conformity to what he teaches and would have me do - this is, once for all, my conscience [Baldwin, 1902d, pp. 56-57].

Here Baldwin clearly stressed the important part that the family and close friends served as a model to be observed and imitated, from whence the first ethical standard arose.

The ejective stage witnessed the child's performance of intelligent actions with social ends in view. He was now a member of society and so must take into consideration the actions of others. This information was then transmitted by friends, and so on, and are variously affected by it [pp. 183-184, italics added]." See also Vincent (1902-1903), p. 559.
tradition, or what Baldwin called social heredity, which will be discussed in greater length a little later. In the ejective stage the sanction of right arose. This sanction was analagous to Freud's conception of superego. Each individual incorporated this tendency to do what was right through his imitation of, and obedience to, parental influences. Initially, this ethical sanction was impulsive because the child did not really understand the reasons for his behavior. This comes only gradually. The sanction of right "tends to supersede the earlier sanctions [of impulse and desire], in the main, and that because it represents a more inclusive form of mental synthesis [1902d, p. 405]." The spontaneous and the intelligent selves were early and incomplete-in-themselves aspects of human personality. With the emergence of the ideal (or ethical) self and its corresponding sanction of right, the makeup of the total personality was fulfilled.\textsuperscript{10} Baldwin concluded that each of the sanctions existed in a compatible relationship with one another.\textsuperscript{11} As

\textsuperscript{10} The similarity of Baldwin's sanctions of impulse, desire, and right to Freud's processes of id, ego, and superego is in some ways very striking. There are no indications of any mutual influence although there is evidence that Freud had in his possession, and presumably read, Baldwin's \textit{Mental Development}. Of course, in many respects their emphases differ, notably Freud's assumption of a considerable amount of unconscious motivation operative in contrast with Baldwin's tendency to stress the consciousness of child behavior. However, this difference may be due to the nature of the subjects that they observed. Freud's subjects were largely female neurotics, whereas Baldwin's were primarily his own two daughters.

\textsuperscript{11} Here is another essential difference between Baldwin and Freud.
he stated:

The whole life of desire takes on a normally ethical character. 'What ought I to do?' becomes the mind's spontaneous response both to the demands of impulse and to the attractions of success [1902d, pp. 409-410].

His description of the ethical life as "pre-eminently a life of values [1902d, p. 409]" was a theme that was to be developed to a considerable degree in his later writings.\(^\text{12}\)

Baldwin even went so far as to claim that many types of mental disease were caused by the disintegration of the ethical aspect of one's personality. There was a disturbance in the balance between the alter and the ego.

Diseases in the moral life are essentially diseases of self-consciousness. And all diseases of self-consciousness are moral diseases, in so far as they disturb the sense of social and moral values by impairing the ideal thought of self, or the normal subordination of the partial thoughts of self to this ideal [Baldwin, 1902d, p. 412].

It is interesting to note that a somewhat similar view of mental disease has been more recently suggested by O. Hobart Mowrer, a learning theorist who was exposed to the investigation of the validity of the Freudian theory of personality while a member of the famous Institute of Human Relations at Yale University.\(^\text{13}\) In contrast to Freud who interpreted neurosis as stemming from a too severe superego, Mowrer (1967)

\(^{12}\)See particularly Baldwin (1915c).

\(^{13}\)This is an interdisciplinary institute embracing the disciplines of psychology, sociology, psychiatry, and anthropology established in 1933 under the directorship of Mark May. One of its major contributions has been an effort to integrate Freudian personality theory with Hullian learning theory. For more information, see Hall and Lindzey (1970), Chapter 11.
theorized rather that the neurotic suffered from a superego which was too weak.

During the ejective stage, with the onset of the true social self, the significance of the social sanctions becomes evident. You will recall that these sanctions were established by society, for the protection of the common good. Baldwin distinguished four institutions, part of whose function it was to exercise these social sanctions. The first type was the natural institutions such as the family which arise from the social nature of man. Such institutions tend to develop an *esprit de corps* which help guide the observance of the social sanctions. The second type of institutions were the pedagogical, including the school and the university --any institution that dealt with the training and preparation of each individual for his life's vocation. The awarding of professional degrees, for instance, represents a form of social sanction which testifies to the competence of the individual so awarded. Civil institutions constituted the third type of dispenser of social sanctions. The government, with its elaborate legislative and judicial branches protects individuals from violators of the law. Finally, ethical and religious institutions, particularly through their espoused doctrines, serve the function of exercising social sanctions. The social sanctions were compatible with the personal sanctions because it was in the personal sanctions that they had their origin. As Baldwin stated,
The oppositions which may arise between society and the individual are, in each case, capable of being construed as oppositions between the sanctions which the individual's own personal nature prescribes at different periods of his growth, or by reason of shifting emphasis in his mental operations [1902d, p. 454].

Baldwin seemingly contradicted himself when he stated that in fact the individual had only one set of sanctions, and those were personal, or those which he considered his own.

Recapitulation Theory

Developed by Haeckel in 1866, the theory of recapitulation (or as he called it, the biogenetic law) hypothesized that the individual (i.e., ontogenesis) repeats the stages of development through which the race has already proceeded (i.e., phylogenesis); or, as is the more common expression, ontogeny recapitulates phylogeny. Even the title of one of his major works—Mental Development in the Child and the Race—suggested the possibility that Baldwin viewed recapitulation theory as a means of better understanding individual mental development. Any such suspicions were promptly confirmed as Baldwin stated in the preface to this volume that he arrived at "the conviction that no consistent view of mental development in the individual could possibly be reached without a doctrine of the race development of consciousness [1906b, p. vii]." For Baldwin, the evolutionary doctrine was probably the most significant event of the nineteenth century for the scientific study of psychology. Its effect was to shatter the old faculty psychology conception of the mind (or soul) as a fixed and unchangeable substance, with attributes (i.e.,
faculties) that were similarly fixed. Thus, "the mind, like all other natural things, grows [1906b, p. 3]."

Baldwin's obvious respect for the significance of the evolutionary doctrine was tempered somewhat by his views on comparative psychology:

... child psychology is more valuable than the study of the consciousness of animals. The latter never become men, while children do. The animals represent in some few respects a branch of the tree of growth in advance of man. In studying animals we are always haunted by the fear that the analogy may not hold; that some element essential to the development of the human mind may not discover itself at all... But in the study of children we may be always sure that a normal child has in him the promise of a normal man [1906b, pp. 5-6].

The principles of mental development, which Baldwin presented, suggested that he did not accept the recapitulation theory in its strictest sense. Perhaps it is most accurate to view his position as one which regarded the theory as a useful working model, but one which was clearly subject to modification, depending upon the nature of the relevant empirical data. First, he argued, that there were many mental functions whose origin in time could not be fixed with any degree of certainty at all. As he succinctly stated, "only in broad outline and by the widest generalization can such epochs be marked off at all [1906b, p. 10]." Secondly, a distinction must be drawn between the possibility of the occurrence of some mental phenomenon, on the one hand, and the necessity of its occurrence, on the other. Thus, "it is well to emphasize the fact that one case may be decisive in overthrowing a theory, but the conditions are seldom simple enough to
make one case decisive in establishing a theory [1906b, p. 10]." Thirdly, although a great deal of variation might exist across several individuals with regard to the time at which a particular physical or mental operation occurred, there was a tendency for the order of development of various mental processes to be constant. The fourth and final principle was a methodological one. While the application of systematic experimental procedures generally led to the most conclusive results, nevertheless, "general observations kept regularly, and carefully recorded, are important for the interpretation which a great many such records may afford in the end [1906b, p. 11]." Indeed, the methodology most commonly employed by Baldwin, while typically empirical (i.e., based upon observation), tended to fall short of the requirements of the more rigorous experimental techniques which involved the manipulation of variables.

As mentioned above, Baldwin's four principles of mental development suggested a rather loose application of recapitulation theory. Yet in his discussion of the origin of bashfulness, Baldwin seemed to imply that the theory as it stood accounted for the available empirical data. What he called organic bashfulness appeared in the early development of the child. It was represented as an instinctive fear. Gradually this fear became reduced in degree through the protective, reassuring, and nurturant environment fostered by the child's parents, particularly his mother. The third stage, typically arising in the infant's third year, witnessed, as
we have seen, the period of reflective thought on self. Now
the occurrence of bashful behavior was more dependent on the
kind of self concept that the infant developed, and less
dependent upon the instinctual representation of fear. Simi-
larly, in the history of the human species, initially family
life tended to be the major type of congregation followed by
a later period of nomadic conditions, which preceded the
stage of distinctly artistic, commercial, and industrial
life of society.

The fact that Baldwin's description of the origin of
bashfulness was incomplete and perhaps even erroneous is not
of direct importance here. The significant point is that he
attempted an account of this behavior in recapitulation terms.
As Baldwin stated, "the infant is an embryo person, a social
unit in the process of forming; and he is, in these early
stages, plainly recapitulating the items in the social his-
tory of the race [1906b, p. 148]."

Similarly, in discussing the psychophysical parallel-
ism\(^{14}\) of mind and body, Baldwin went one step further and
suggested such a parallelism in evolution.

For in psychology, as in biology, the race series is but
a continuous line of individual generations, and to ask
the question of the race is but to ask whether parallel-
ism holds for any given number of generations of indi-
viduals . . . [Baldwin, 1902e, p. 14].

\(^{14}\)Psychophysical parallelism is a dualistic descrip-
tion of the mind-body problem. It assumes the existence of
both mental and physical phenomena, but that they do not
influence each other; rather, they parallel one another. For
a good discussion of this topic, see Misiak and Sexton (1966),
especially Chapter 3.
Again, in conclusion to his analysis of the theory of organic selection, which will be described somewhat later, Baldwin stated that "recapitulation is a sine qua non of heredity [1902e, p. 190]." By this Baldwin meant that recapitulation was necessary to account for the tendency of individuals to develop like their parents, that is, to proceed through the same stages of genetic development. Nevertheless, Baldwin cited essential departures from recapitulation in nature. One example was that very simple organisms, as opposed to the human infant, manifested relatively unorganized hereditary structures which resulted in a shorter developmental sequence. Also, the late stages of development in higher animals reflected a similarly weak support for recapitulation. Some stages of development were entirely omitted. These short cuts suggested an abbreviation of ontogenetic development and thus necessarily constituted a modification of the recapitulation theory.

In summary, it appeared that Baldwin sometimes accepted the recapitulation theory in toto, while at other times he introduced material implying that a modified version of the theory more closely approximated the truth. Nevertheless, it is evident that this theory played an important part in his own elaboration of mental development.

**Functionalism**

Watson (1967) defines functionalism as the attitude that "psychological categories are activities [p. 436]."
It will be recalled that Baldwin's controversy with Titchener regarding reaction times was actually a disagreement over some basic assumptions about how to conduct scientific research. Baldwin's concern with the recognition of individual differences in adaptation of the organism to his environment reflects his functional bias. As we have already seen, many writers (e.g., Boring, 1950a, b; Herrnstein & Boring, 1965; Krantz, 1969) have indicated the part that Baldwin played as a functionalist. Several of his functional views will now be presented.

Imitation

Perhaps if one contribution of Baldwin was solicited from contemporary psychologists it would be their recollection of him as stressing the part that imitation plays in learning to adapt to one's environment. Baldwin defined imitation as follows:

... I understand imitation to be either (1) a process in which one individual uses another as a copy for his own production of something,\(^\text{15}\) whether or not he intentionally and consciously aims at the other as his model; or (2) the same type of function when that which is imitated belongs to the imitator himself instead of to another person [1902d, pp. 529-530].

The first instance mentioned by Baldwin indicates that imitation could be either a conscious or an unconscious process. He called this phenomenon social imitation because it involved

\(^{15}\)The importance of the process of imitation as described in this first sense is elaborated in the present-day observational learning theory of Bandura and Walters. For further information on this topic, see Bandura and Walters (1963).
the observation of another person's behavior. He also gave
due credit to the fact that several sociologists, including
Walter Bagehot (1826-1877) and Gabriel Tarde (1843-1904) had
placed considerable emphasis on the importance of the pro-
cess of imitation, but nevertheless he pointed out that his
own theorizing developed independently of the other writers. 16

The second instance Baldwin called the imitative
function, or psychic imitation (sometimes referred to as
self-imitation), and it is to this process that psychologists
have given more attention. This was as much a form of imi-
tation as was social imitation, because "the process of imi-
tating a copy is precisely the same in the imitator's con-
sciousness, whether the copy arise in his own mind, or be
introduced there by another person [Baldwin, 1902d, p. 530]." What made social imitation social was simply the fact that at
least two persons were necessary for imitation to occur.
Each instance of imitation, however, manifested a circular
function in that it "tends normally to maintain or repeat

16 Although he had been criticized for not having
given Tarde sufficient acknowledgment as the source of his
own ideas, it appears evident that Baldwin was unfamiliar
with the contents of Tarde's views in his initial development
of the theory of imitation. As Baldwin stated, "The MS [i.e.,
manuscript] of my first volume was finished before my atten-
tion was called to M. Tarde's Lois de l'Imitation, and the
allusions to him were then made in it as it went to print
[1902d, p. xiii]." Tarde confirmed this point himself. In
a letter to Baldwin (parts of which are reprinted in the
preface to the second edition of Social and Ethical Inter-
pretations, 1898) Tarde said in effect that Baldwin had laid
the foundations for a theory of imitation and that his point
of departure was Baldwin's point of arrival. In addition to
this, each writer had sufficiently different interpretations
of the imitative process. As Baldwin stated: "It is well-
its own stimulating process [Baldwin, 1906b, p. 33]."  

Baldwin distinguished three major classifications of imitation: biological (or organic), psychological, and plastic. Biological imitations occurred earlier in development than do the other types, when the infant's behavior was still largely determined by physiological sensations such as pleasure and pain, and whose ability to remember events and actions that might be imitated was very limited. This type of imitation will be discussed in greater detail under the topic of physiological suggestion.

Psychological imitations were characterized by the presence of conscious presentations and images. . . . [that is] The copy becomes consciously available in two ways: first, as presentation, which the imitative reaction seeks to continue or reproduce (as the imitation of words heard, movements seen, etc.); and second, as memory [Baldwin, 1906b, p. 334].

Psychological imitations were further differentiated into simple and persistent imitation. Simple imitation referred to the repetition of a particular movement with no variation

nigh impossible for anyone to treat M. Tarde's views and my own together without seriously misrepresenting one writer or the other [1902d, p. xviii]." This exchange vitiates Tosti's (1902) charge that Baldwin in effect owed much of his theorizing on the importance of imitation to Tarde.

17 C. Lloyd Morgan disagreed with Baldwin on this particular point. He argued that this 'circular activity' did not necessarily occur. As an example, he cited the case of the instinctive imitations of young animals such as the chick, who by merely observing other chick's movements, would perform those movements itself. Thus, no reproduction of the initiating stimulus occurred. See Morgan (1896).
in the movement whatsoever. Persistent imitation (or what Baldwin calls the 'try-try-again type'), on the other hand, was characterized by a tendency of the imitator to modify his imitative movements in such a way as to more closely approximate the copy being imitated. Persistent imitation was closely related to the rise of volition in the child. It was a considerably more subtle and sophisticated process than simple imitation. As Baldwin stated:

He [i.e., the child] is no longer delighted with his simple activity. He detects differences between what he sees or hears and what he produces by hand or tongue, and grows restless under these differences. Then he makes effort to reduce the difference by altering his movements, and what is most remarkable, he succeeds in doing so. How he does this, - how he brings about a change in his reactions, from senseless repetition to intelligent conformity to the copy which he imitates, - that is the question of accommodation, but he does it, and the least that this can mean is that there is in some way a modification of the impelling influence of his old associations [1906b, pp. 359-360].

Baldwin called the third major type of imitation plastic imitation. This referred to all those reactions which initially were relatively conscious adaptations to one's environment, but which later became subconscious. Included

18 In the Dictionary of Philosophy and Psychology Baldwin made an additional distinction, by stating that simple imitations were involuntary in nature, while persistent imitations were voluntary.

19 Baldwin frequently used the term 'subconscious' as referring to the state of mind in which the cause of a particular behavior was not immediately available to one's awareness. It is loosely equated with the term 'unconscious,' but this is not to be equated with Freud's use of this term, because Baldwin tended to avoid descriptions which implied that one was unable to bring to awareness the cause of a particular event. It is perhaps most accurate to understand 'subconscious' as referring to that state of mind which,
as illustrative examples were the influences of social groups, such as one's peers, upon one's own behavior in the absence of any immediate consciousness of when or how this particular social influence first manifested itself. Baldwin went on to state that the "term 'plastic' serves to point out the rather helpless condition of a person who imitates, and so interprets in his own action the more intangible influences of his estate in life [1906b, p. 336]." This statement sounds rather pessimistic and indeed appeared incompatible with the idea, elaborated to a considerable degree by Baldwin, that imitation was not only a necessary but a facilitating factor in the adaptation of the individual to his environment. A discussion of this topic will be presented a little later.

The important aspect of the imitation process was that it reflected in Baldwin's theorizing the strong emphasis on a functional analysis of human behavior.

He described in considerable detail some examples of this plastic imitation. Most of these examples also fall into the category of social imitation. Thus, style of dress was an illustration of plastic imitation. A concern for wearing what's 'in' was typically not always a conscious process. Yet it arose from an imitation of another's behavior, and exerted a substantial influence upon one's own behavior.

while not immediately being able to bring to awareness the cause of some event, given time, or through the suggestions of another, this information readily returns to complete awareness.
All social customs fell under the category of plastic imitation, as did cases of conformity in general.

The importance of the imitative process was reemphasized several times. Viewed as a type of reaction, imitation was "the principal method of adjustment of the organism to its surroundings [Baldwin, 1906b, p. 355]," "the UNIT . . . the essential fact in all motor-development [1906b, p. 466]," "the essential method of growth [1906d, p. 305]," and "the engine of all mental progress [1902d, p. 403]." Finally, in response to critics of the imitation theory who argued that much social imitation had no functional value and that other factors such as recognition of another, self-constraint, or obedience, compulsion of ideas, the recognition of duties and rights, and social contract--that these factors were much more important to account for social progress, Baldwin responded:

Are any of the things mentioned as real social agencies - or all of them - sufficient without psychic imitation, without the exercise of the imitative function in the social individual? And we find that they are not. They all involve a form of social matter which can only have arisen, and can only be operative in a social situation, through the imitative function [1902d, p. 532].

Prefacing his discussion on the procedures for observing children's imitations, Baldwin reiterated the significance of the imitative process with "the general statement that nothing less than the growth of personality is at stake in the method and matter of its imitations [1906b, p. 340]." First, since the child's personality developed out of the observation of the behavior of those people with whom
he came in constant contact, it was necessary simply to observe the child himself in order to determine which significant other he was 'copying' for his own characteristic reactions. As Baldwin stated, "to use Leibnitz's term, the boy or girl is a social 'monad,' a little world, which reflects the whole system of influences coming to stir its sensibility [1906b, p. 340]." Secondly, through simple observation of the child, one could, with considerable accuracy, typically determine the extent of the child's relationship with other children. The child with brothers and sisters had many fellow child 'copies' to imitate, especially by playing games. The only child, on the other hand, had less contact with other children and was more likely to imitate the actions of his parents, which oftentimes made much less sense to him. Baldwin warned that "it is a very great mistake to isolate children. One alone is perhaps the worse. . . . [1906b, p. 341]." Thirdly, special attention should be paid to any unusually close personal relationships among children. These cases were marked by an exaggerated and unhealthy degree of imitation. Baldwin described the case of a young girl who spent virtually all her time with only one other person. Thus the girl only had one other to 'copy.' In all likelihood this would lead to a stifling of one's personality development. Baldwin clearly admonished against such instances when he said:

Above all things, fathers, mothers, teachers, elders, give the children room! They need all that they can get, and their personalities will grow to fill it. Give them
plenty of companions, fill their lives with variety, -
variety is the soul of originality, and its only source
of supply. . . . children should never be allowed, after
infancy, to room together regularly; special friendships
of a close exclusive kind should be discouraged or broken
up, except when under immediate eye of the wise parent or
guardian . . . [1906b, p. 342].

Fourthly much could be learned about children's imitative
ness through the close observation of the games they played
together. It was in the careful analysis of such games that
a child got the opportunity to practice the copies of the
actions of others which he had observed in the past. Bal-
dwin's strong environmental bias is reflected by the following
statement concerning the child's tendency to imitate his
parents:

. . . what we give him is all he gets. Heredity does
not stop with birth; it is then only beginning. . . .
the child's personality grows; growth is always by action;
he clothes upon himself the scenes of his life and acts
them out; so he grows in what he is, what he understands,
and what he is able to perform [1906b, pp. 343-344].

To illustrate this important point Baldwin went into con-
siderable detail in describing an interesting example of the
function of a game which he observed his two daughters partici-
pate in. One day he was sitting on the porch of his house,
apparently watching over his children, when Helen, the elder
at age 4½ suggested to Elizabeth, then 2½, that she was to
be 'mama' while Elizabeth was 'baby.' Mutual consent was all
that was necessary for this play to begin.

Thus 'mama' told 'baby' that it was time to get up
from her nap. 'Baby' did so obediently, first falling down(!),
(as if she were just learning to walk). Then they proceeded
to an imaginary sink where 'mama' pretended to wash 'baby's' face, going through all the motions in a surprisingly meticulous manner. Following this 'mama' pretended to help 'baby' get dressed, putting on her clothes in the correct sequence: first underwear, then stockings, then skirt, and finally shoes. At breakfast 'mama' pretended to put 'baby's' bib on at which time she brought on the porridge. After eating, it was time for another nap. But 'baby' didn't want to go to sleep and it was only through 'mama's' insistence--she finally had to emphasize that "the doctor says you must [1906b, p. 345]"--that 'baby' finally acquiesced. After another scene, this time of undressing, 'mama' kissed 'baby' and after 'baby' closed her eyes, 'mama' began to tiptoe away. But 'baby,' sensing the departure, sympathetically urged: "Don't go away, mama [1906b, p. 345]."20

Baldwin observed this entire play, occasionally pretending to be reading his newspaper. His analysis was as follows: "I recognized at once every phrase which the children used in this play, where they got it, [and] what it meant in its original context [1906b, p. 346]."

In concluding his discussion of the procedures for studying children's imitations, Baldwin addressed himself specifically to parents of young children:

You can be of no use whatever to psychologists - to say nothing of the actual damage you may be to the children - unless you know your babies through and through.

20 For a complete description and discussion of this episode, see Baldwin (1906b), pp. 344-347.
Especially the fathers! They are willing to study everything else. They know every corner of the house familiarly, and what is done in it, except the nursery. A man labours for his children ten hours a day, gets his life insured for their support after his death, and yet he lets their mental growth, the formation of their characters, the evolution of their personality, go on by absorption - if no worse - from common, vulgar, imported and changing, often immoral, attendants! [1906b, p. 347].

Thus, Baldwin placed a considerable, if not overwhelming, importance on the part that the imitative process played particularly in early childhood. The infant was like a sponge, soaking up and absorbing the reactions of all those around him. In due time, a circular reaction was observed when the infant began performing actions that approximated what he had previously experienced. Indeed, man-the-imitator seemed to define his basic nature. However, as the infant developed, the tendency to imitate every observed reaction of others declined. The principles used to account for why some reactions were imitated while others were not is lacking in Baldwin's works.21 He did suggest a tentative principle, namely, that "every intelligent action is stimulated by imitative copies whose presence the action in question tends to maintain, suppress, or modify [1906b, p. 290]." But this was a rather global principle, which may well be useful as a working hypothesis, but which undoubtedly required specific conditions to be stated which would then further delineate under what situations the imitative action would be 'maintained,

21 Bandura and Walters (1963) do suggest some principles. The consequences of the model's behavior is chief among them.
suppressed, or modified.' Baldwin did rely heavily upon the principle of association to account for the existence of imitative processes. Taking as an example learning to name objects, Baldwin stated that "the child gets the required word by direct imitation of the sound heard by him... [subsequently]... he can name the thing only because he has usurped the reaction created by this imitation [1906b, pp. 290-291]." Along with association, which enabled one "to react to facts which are distant to present facts but allied to them [1906b, p. 291]," also important in the imitative process were (1) memory, which enabled one "to react to the facts of the future as if they were present, thus conserving the lessons of the past [1906b, p. 291]; (2) perception, which enabled one "to set present facts in their proper setting, and thus to react upon them with full reference to their significance [1906b, p. 291]; and (3) sensation, which enabled one "to react upon facts according to their immediate worth to the organism [1906b, p. 291]."

Besides the functional value that imitation provided in explaining how the organism adapted to its environment and learned the necessary skills for survival, Baldwin invoked the imitative process to account for the development of one's concept of self and other. Thus, the function of imitation, said Baldwin, "enables me — the child — to pass from my experience of what you are, to an interpretation of what I am;
and then from this fuller sense of what I am, back to a
c fuller knowledge of what you are [1906b, p. 323].”

Applying his genetic method to the analysis of the
imitative process, it is not surprising that Baldwin would
support the view that how the infant imitates is, in many
ways, considerably less sophisticated than how the mature
adult imitates. We have already seen that Baldwin distin-
guished between simple and persistent imitation. Going some-
what further, he described three stages of imitation and he
related these stages to the sorts of things that an individual
was able to imitate. The first stage was that of pre-
imitative suggestion and was marked by reactions to simple
sensations, such as hearing sounds, gross movements associ-
ated with pleasure and pain, and simple random and inherited
movements. The second stage was that of simple imitative
suggestion which witnessed the recognition of objects, words,
and tunes, imperfect articulation. The third stage was that
of persistent imitation which was characterized by the rise
of volition and revealed the ability to understand speech,
the function of objects, and the voluntary co-ordination of
movements including speaking and writing.23

It is not totally clear what Baldwin viewed the
nature of imitation to be; that is, whether it was inherent

22This notion is reminiscent of Cooley's 'looking
glass self' and will be discussed again in Chapter 5.

23Baldwin suggested this order of acquisition of imi-
tative abilities with a reversal in this order of loss of
these abilities in pathological cases.
and instinctive in the organism, or whether it was a learned process. He seemed to argue that imitation was the basic process in much, if not all, of learning, yet at other times he stressed the instinctive and impulsive nature of the process. In discussing the pedagogical and conventional sanctions, he stated that

the whole growth of the individual ... proceeds by imitation. It is the law of his acquisition. The socially characteristic attitude in man must, whatever else it include, include the impulse or instinct to imitate. Once given this impulse a chance to operate without restraint or with encouragement in a group of men, and free action of the collective or co-operative type results ... [again] ... Imitation ... is an impulsive and spontaneous thing. In all the forms of action to which it gives rise it falls under the head of impulse, and so has the sanction that impulse in general has: the sanction of psychological necessity [1902d, pp. 426-427].

This suggests that, according to G. W. Allport's (1955) terminology, Baldwin is a representative of the Leibnizean, as opposed to the Lockean tradition of model of mind. Mind is not a tabula rasa (i.e., clean slate) at birth, but an inherently active being. Yet it seems plausible from Baldwin's description of the first stage of imitation, that of pre-imitative suggestion, as well as his discussion of simple versus persistent imitation, that at birth the infant did imitate blindly most everything that was presented to him. And this sounds very compatible with the tabula rasa notion.

Suggestion

Intimately related to, and actually a precondition for, imitation is the concept of suggestion. This term
exemplifies the functional prescription in that it infers the adaptability of the organism to its environment. Baldwin defined suggestion as:

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\text{from the side of consciousness . . . the tendency of a sensory or an ideal state to be followed by a motor state, in the manner typified by the abrupt entrance from without into consciousness of an idea or image, or a vaguely conscious stimulation, which tends to bring about the muscular or volitional effects which ordinarily follow upon its presence [1906b, pp. 101-102].} \]

His interest in the idea of suggestion stemmed from his reading of (and later close association with) some of the work of certain French and German writers on the subject, including Janet, Binet, Schmidkunz, Wundt, and Ziehen. In citing each of these writers, Baldwin indicated their unanimous agreement on a fundamental point concerning every sort of suggestion; that is, the tendency for inhibitions of physical action (i.e., movement) to be removed in a state of consciousness called suggestibility. Baldwin left the question of what made consciousness suggestible unanswered and moved on to the presentation of three common principles which apply in the relationship between suggestion and attention. First, when an idea, thing, or event was suggested, consciousness tended to narrow upon that idea, thing, or event. Secondly, the motor impulses also would narrow upon less complex lines of discharge; and thirdly, the selective nature of one's perception of awareness would become inhibited.

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\[24\] This definition was first presented prior to the publication of Mental Development in his Handbook of Psychology (1891), p. 297.
Baldwin distinguished six types of suggestion and in the order of their occurrence in early childhood they are: physiological, sensori-motor, ideo-motor, subconscious adult, inhibitory, and hypnotic.

Physiological suggestion was the type which predominated during the first stage of imitation, the pre-imitative suggestion stage. During this period the infant has no clear-cut mental images. The memory function has not yet developed to the level for images to be recalled or conjured up. The infant's reactions are either purely reflexive or random and impulsive. Baldwin illustrated a case of physiological suggestion from the experiences of his oldest child, Helen, with her nurse. When preparing Helen for sleep, the nurse was in the habit of laying Helen face down in the bed and simultaneously patting the end of Helen's spine very gently. It was not long before this position and procedure was not only suggestive of sleep to Helen, but sometimes even necessary before Helen would go to sleep. The effect of this type of suggestion was apparent as early as the first month after Helen's birth.

It may appear surprising to see Baldwin implying that consciousness is operative in the one-month old infant. Yet clearly this is the case since Baldwin viewed consciousness as a necessary factor of suggestibility. He cited the research of Ribot and Schneider to support his contention. In

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25See Ribot (1895), pp. 15-16.
26See Schneider (1880), p. 53.
addition, the theory of Albert Moll on this issue was perhaps the most strongly-worded and firmly-stated position of all: "There is no suggestion without consciousness. It makes no difference whether the suggestion is made through imitation . . . or by a command [1899, p. 289]."

Baldwin labeled the second type of suggestion sensori-motor. This type was distinguished from physiological suggestion in that the resulting action was followed upon sensations such as seeing and hearing, rather than that of feeling [e.g., being patted on the back] which predominated in the earlier stage. Baldwin described three different sub-types of sensori-motor suggestion. The first he simply called general. Examples of general sensori-motor suggestion included various more sophisticated sleep suggestions, and food and clothing suggestions.

For instance, Baldwin mentioned the time when, due to the illness of both his wife and the child's nurse—both of whom were more likely to care for their child at bedtime—Baldwin himself was forced to put his child to bed. This turned out to be a less than pleasant experience for him (and probably for his child as well!). He found it difficult to get Helen to go to sleep even after a reasonable amount of prompting. Various techniques failed, including the patting on the child's back that seemed to work for their nurse. He finally decided to try singing a short refrain. Initially

27Only Helen was born at the time of this incident.
this technique greatly lengthened the time required for Helen to fall asleep, but soon it greatly shortened this period of time. What had not uncommonly taken upwards of an hour, now required as little as four or five minutes.\footnote{Baldwin did not speculate as to the possibility that Helen found his singing unpleasant, and it is open to interpretation why she fell asleep so suddenly.} Upon the return of Mrs. Baldwin and their household nurse to the task of putting little Helen to bed, they were now as unsuccessful as Baldwin had initially been. Now he had but to utter the simple refrain once and Helen would be fast asleep. In fact, soon not even this was necessary. Simply the presence of Baldwin was sufficient to induce sleep. As Baldwin stated: "The sight of myself was sufficient to make her quiet \cite{1906b, p. 111}."\footnote{Baldwin described an interesting experience, which reminds one of Skinner's report of superstitious behavior, in which on one occasion—totally by accident—Helen fell asleep immediately following a flash of bright light. See Baldwin (1906b), p. 110, footnote 1.} The functional value of this suggestibility went beyond the normal day-to-day ritual of putting Helen to bed at nighttime. For as Baldwin said: "I found it of service, when she was teething and in pain, to be able thus to give her quiet, healthful sleep \cite{1906b, p. 111}."

Several examples from Baldwin's personal experience may be presented as illustrative of food and clothing suggestibility. Thus, Helen was observed to extend her hands, smile, and make crowing sounds at the sight of her baby bottle. The bottle acted as a suggestion to the performance...
of these reactions in the infant. Similarly, Helen began, around the fifth month, to show signs indicating familiarity with procedures of getting dressed. When being clothed she would duck her head, and extend and withdraw her hands and arms at the appropriate times. She even showed signs of pleasure at the appearance of her coat, hood, boots, and mittens before going outside in cool weather.

Suggestions of personality were the second major subtype of sensori-motor suggestion. The tendency of the infant to smile at the sight of the mother's face was, according to Baldwin, "probably a purely reflex indication of agreeable organic sensation [1906b, p. 112]." The suggestions of the mother's voice, touch, and sight "are among the most important in infancy, serving as elements in the growth of the consciousness of self and of external reality [1906b, p. 112]." Baldwin rejected the possibility that these suggestions were nothing more than simple examples of the association of ideas. Suggestions of personality did not bring associated ideas to consciousness.

The muscular movement is produced without the production of an idea of that movement, largely through native pathways of discharge, or by the production of organic conditions, such as sleep, which involve muscular conditions. Can we say that the sleep suggestions first bring up an idea or image of the sleep condition, or that the bottle brings up an idea of the movements of grasping, or even the sweet taste? I think the case is more direct . . . it is not an association plus a suggestion, or an association plus an association, as current atomistic doctrines of association lead us to expect. We cannot say that pleasure or pain always intervenes between the present state of consciousness and the motor reaction . . . . The most that can be said is that the conscious
state as a whole, with its hedonic colouring, serves to bring about a modification of the reaction, whether it be a native one, or one established by association or habit [1906b, p. 113].

Returning to the topic of suggestions of personality, Baldwin stressed their importance and the fact that never before had the analysis of such suggestions been attempted on the actual detailed and careful observation of children. As a result of this careful observation, Baldwin—in his typical genetic orientation—distinguished four phases of personality suggestion. During the first phase, the infant made its initial discriminations, and these were in terms of movements of other things, including people. Not only did these movements serve as objects of curiosity, but they soon came to provide the infant with experiences of pleasure or pain. Thus, through movement food was brought to him, clothing was put on him, he was rocked to sleep. As Baldwin indicated, from the point of view of the infant, "movements come to succour him [1906b, p. 115]."

During the second phase the infant came to differentiate the characteristics of different others from one another and simultaneously to associate regularities in stimuli with a particular individual and irregularities between two or more people. Baldwin regarded this phase as the critical period during which the process of imitation began to exert its major impact on the development of the

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30 Baldwin based this analysis on the observation of his own two daughters, Helen and Elizabeth, and two other children.
individual: "The infant waits to see how others act, because its own weal and woe depends upon this 'how'; and inasmuch as it knows not what to anticipate, its mind is open to every suggestion of movement [1906b, p. 118]."

The third phase was characterized by the infant's tendency to act differently in the presence of different individuals. Thus he might obey what his mother or father told him to do, but disregard doing what his older brother or sister might demand. Similarly, the child might act like an angel at school or in the presence of his parents, but like a villain in the absence of any respected authority figures.

The fourth phase corresponded to Baldwin's ejective stage in the dialectic of personal growth. The child developed a social feeling, a sense of others as, in many respects, similar to himself. The characteristic emotion that comes to be expressed in this phase was sympathy, or the ability of the child to feel sorrow for others who experience unfortunate circumstances. Things generally (with the exception of those involved in satisfying primary needs) tended to become less important, while people tended to become more important.

These four phases seem to parallel the stages of Baldwin's dialectic of personal growth. As the child developed, increasingly more subtle and sophisticated suggestions affected his consciousness, and these suggestions largely determined his imitative reactions.
The third subtype of sensori-motor suggestion was called deliberative which Baldwin defined as "a state of mind in which co-ordinate sense-stimuli meet, confront, oppose, [and] further, one another [1906b, p. 120]." He did not mean deliberation in the sense of a completely voluntary type of behavior. Rather he was referring to suggestion that appeared to be deliberative. Baldwin cited the case of Helen, who at about eight months of age, developed the irritating habit of scratching the face of Mrs. Baldwin and the nurse when they would hold her. As Baldwin himself described,

It became fixed in her memory, probably because of the unusual facial expression of pain, reproof, etc., which followed it, until the close proximity of any one's face was sufficient suggestion to her to give it a violent scratch [1906b, p. 121].

This habit obviously annoyed Baldwin, so he attempted to get Helen to break it. Every time he picked her up and she began to scratch him, he would punish her by hitting her fingers hard enough to make her feel pain. This proved to be only partially effective because in his absence she would still scratch the person that was holding her. But she began now to scratch only once at a time, pausing each time after she did it and becoming "very solemn and quiet for some moments afterwards, as if thinking deeply [Baldwin, 1906b, p. 121]."

After this pause she would scratch once again in an impulsive fashion, and following punishment, would cry for an extended period of time. She soon began to cry immediately after scratching as if anticipating her punishment. Eventually her bad habit disappeared entirely. Baldwin suggested that the
habit started as a simple physiological suggestion, a random response that occurred accidentally. It became a sensori-motor suggestion at the point when seeing a face served as the cue to scratch, and not until constant punishment followed this response did it become permanently inhibited.

Baldwin derived two inferences from the case of deliberative suggestion. First, "there is nothing here that requires volition [if by volition is meant some sort of active consciousness, and second,] suggestion is as original a motor stimulus as pleasure and pain [1906b, p. 123]."

The third type of suggestion was ideo-motor. This type of suggestion described "the condition in which the stimulus was a clearly pictured idea, a presentation or object with all its 'meaning,' or a revived image of memory or imagination [1906b, p. 123]." The most prevailing example of ideo-motor suggestion was conscious, social imitation. This phenomenon, as we have already seen, has been subdivided into simple- and persistent-imitation. Baldwin indicated his inability to confirm Preyer's finding that this phenomenon occurred in the infant's third or fourth month. The observation of his own children suggested to Baldwin that imitative reactions did not arise until about the tenth or eleventh month. Imitative reactions, for Baldwin, tended to perpetuate themselves. Thus,

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31 Preyer did, however, agree with Baldwin's definition of imitation as requiring a more or less distinct image of movement or what he called a motor idea. See Preyer (1893), p. 54.
the essential thing, then, in imitation, over and above simple ideo-motor suggestion, is that the stimulus starts a motor process which tends to reproduce the stimulus and, through it, the motor process again. From the physiological side we have a circular activity - sensor, motor; sensor, motor; and from the psychological side we have a similar circle - reality, image, movement; reality, image, movement, etc. [1906b, p. 126].

The fourth type of suggestion Baldwin called subconscious adult suggestion. An example of this type of suggestion was the internal tune, or the tendency of a song to begin to be hummed, quite unconsciously, with apparently no immediately preceding stimulus provided. Thus, one occasionally finds oneself humming a tune which may have been playing on the radio earlier in the day just as it was turned off, or as Baldwin suggested, one might find himself humming a hymn sung in church the previous day. The unique characteristic of this type of suggestion was that the stimulus (e.g., the tune) was not recalled voluntarily and not until it entered consciousness, and sometimes after considerable thought as to its origin, was the suggesting influence discovered. Baldwin argued that such tunes often entered consciousness during a period coinciding with some sort of rhythmic subconscious experience such as the throbbing of the engines while on a ship. Sometimes one was not able to identify words with the melody. Baldwin used these data as evidence that some internal tunes arose in infancy before the child had learned to speak, but well after the time he had learned to discriminate audible sounds.
Dreams also served as a stimulus in this type of suggestion. Baldwin recalled an incident involving his daughter Helen. Once when she was a little over two years of age, Helen was accidentally run over by a dog. Although she was not physically hurt, the incident was very frightening to her. The second night after this event, Baldwin and his wife were awakened by the shouting coming from Helen's room. Upon entering the room, they observed Helen "sitting in bed undergoing a paroxysm of fear from a bad dream [1906b, p. 130]." She apparently was reliving the incident of the previous day, as she was constantly repeating how a dog had just run over her. The following night she refused to enter her bedroom, saying that the dog was in the room. Over the next several days she was observed to become extremely fearful at the sight of any dog on the street. This fear even exceeded in degree that aroused following the actual original experience which preceded her bad dream. Although he did not state how long this fear continued to bother Helen, Baldwin suggested that it might have had potentially long term effects: "The sight or even the picture of a dog excited great emotion, and it is not unlikely that she will carry for life this antipathy, which will appear later to be unaccountable [1906b, p. 131]."

Why Baldwin labeled this general type of suggestion as adult subconscious is not clear, especially when he cited this example involving Helen.
A case of normal auto-suggestion provided another example of this general class of suggestions. In attempting to suggest sleep to another, Baldwin observed that this condition led to a desire to sleep in himself. He found this to be a successful cure for insomnia.

The fifth type of suggestion was inhibitory suggestion. Broadly defined, this type "refers to all cases in which the suggesting stimulus tends to suppress, check, inhibit, movement [Baldwin, 1906b, p. 135]." In many situations, the degree of suggestibility was potentially, as well as actually, as great as the sort of suggestibility which facilitated movement.

One subtype of inhibitory suggestion was pain suggestion. It was a generally accepted principle that pain tended to inhibit movement which may stimulate the reoccurrence of the painful situation. As Baldwin put it, "the general fact . . . is . . . that pain suggests a lively muscular revolt away from every stimulus which produces it [1906b, p. 136]." More about the function of pain will be discussed later. A second type was called control suggestion. Thus, through "a system of organic checks and counterchecks . . . the infant brings the movements of his legs, arms, head etc. gradually into some kind of order and system [Baldwin, 1906b, pp. 136-137]." Particular bodily sensations served as suggestions for performing certain bodily movements, such as holding up one's head, extending one's hands, and grasping objects with the thumb in the characteristic opposed position.
to the other four fingers. Another subtype of inhibitory suggestion was contrary suggestion, which Baldwin defined as the "tendency of a very singular kind observable in many children, no less than in many adults, to do the contrary when any course is suggested [1906b, p. 137]." Many of the behaviors of his daughter, Elizabeth, during her second year, illustrated for Baldwin the idea of contrary suggestion. These included her signs of dislike after being told that a certain food was good, even though previously she had reacted favorably to the same food. Similarly, when asked to hold her father's hand, she would immediately put it behind her back. Also, despite the fact that she enjoyed the outdoors, she would create a big fuss as soon as an attempt was made to put her hat and coat on her. This period which witnessed her contrary behavior was only a relatively brief one, and as Baldwin pointed out, "the tendency yielded to the all-conquering onset of imitation late in her second year, and she is now (third year) as docile an imitator as one could desire [1906b, p. 138]."

Bashfulness was a further subtype of inhibitory suggestion. Originating usually in the infant's first year, it acted in such a way as to inhibit the infant's normal activities. Some of its characteristics, familiar to us all, included a bowing of one's head and hiding of one's face, a general neglect of eye contact with another--oftentimes a stranger, and a reddening of the face and neck--so-called blushing. Baldwin described it as "a state of general
passivity or inhibition of movement, akin to a sort of paralysis usually associated with great fear [1906b, p. 139]." The analogy of bashfulness to fear suggested to Baldwin that probably at one time in the evolution of man bashfulness was a symptom of fear. Like so many other processes, Baldwin viewed bashfulness as a phenomenon with several stages, and as we have already seen, he employed the recapitulation theory to draw a parallel between its development in the individual and its occurrence in the race.

The sixth and final type of suggestion Baldwin called hypnotic suggestion. His interest in this phenomenon stemmed from his reading of some of the works and his interaction with some of the French psychologists and medically-trained researchers who were at that time studying various problems of psychopathology. He defined hypnosis as "any method or device which serves to secure undivided and prolonged attention to any kind of a 'suggestion,' - be it object, idea, anything that can be thought about [1906b, p. 150]." Baldwin described two rival theories which attempted to account for the data of hypnosis.

First, the Paris school, led by Charcot, argued that hypnosis was a pathological state which could only be induced in those individuals who already were mentally diseased. The condition was characterized by three relatively distinct

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33 While in France in June, 1892, Baldwin wrote two lengthy letters concerning the interest in hypnotism in that country at that time. See Baldwin (1892a, b).
stages. The first, catalepsy, witnessed the "rigid fixity of the muscles in any position in which the limbs may be put by the experimenter [1906b, p. 150]." The second stage was called lethargy, in which the individual was most unresponsive to stimulation, and the final stage was somnambulism, or a condition analagous to sleep-walking.

The Nancy school, led by Bernheim, rejected the idea that hypnosis was a pathological condition and argued that it "is nothing more than a special form of ordinary sleep brought on artificially by suggestion [Baldwin, 1906b, p. 156]." The data concerning the nature of the hypnotic state strongly supported the view of the Nancy school.

The stage which the Paris school referred to as somnambulism was of particular interest to Baldwin. He believed this stage to exhibit several distinguishing characteristics. These included an apparent impairment of memory. During hypnosis there seemed to be a suspension of recall of events in the normal functioning of the individual. While in the waking state, on the other hand, the individual typically could not recall events experienced during hypnosis. Furthermore, during a second period of hypnosis, one was able to recall events of the earlier hypnotic state.

A second characteristic was an unusual inclination to suggestions of most any type. Thus,

He will see, hear, remember, believe, refuse to see, hear, etc., anything, with some doubtful exceptions, which may be suggested to him by word or deed, or even by the slightest and perhaps unconscious indications of those about him . . . pain, pleasure, and the organic
accompaniments of them may be produced by suggestion. The arm may be actually scarred with a lead-pencil if the patient be told that it is red-hot iron . . . [furthermore] . . . these phenomena . . . are no longer based on the mere reports of the 'mesmerists,' but are the recognized property of legitimate psychology [Baldwin, 1906b, p. 151].

Such suggestions could lead to immediate movement, or to delayed movement as in the case of post-hypnotic suggestion, which occurred during the normal waking state but for which the individual lacked a conscious explanation of his movements.

Thirdly, this stage witnessed an exhaltation, or excitation of the mental functions in general, such that the patient "may get suggestions which are not intended, from experimenters, and discover their intentions when every effort is made to conceal them [Baldwin, 1906b, p. 152]."

In addition, somnabulism was characterized by a sense of rapport between the patient and the hypnotizer. This could lead to a situation in which the patient was hypnotizable only by one other individual and that suggestions from others were not followed when one was in hypnosis.

Baldwin believed, as did supporters of the Nancy school, that most anyone in normal health was hypnotizable, as long as one was not overly suspicious of the motives or the competence of the experimenter in question. A considerable degree of variability was thought to exist in the extent to which individuals were susceptible to suggestions under hypnosis. Baldwin discounted the idea that the weak-minded person was particularly susceptible to suggestions. If
anything, probably the reverse was true, since hypnotizability required a concerted effort of attention. Earlier it was mentioned that 'with some doubtful exceptions,' a person would react to the suggestions presented in hypnosis. The possible exceptions included suggestions to perform criminal acts or such behaviors that the individual regarded as reprehensible in the waking state. The Paris school argued that even such criminal suggestions were performed by patients and their evidence included cases of patients firing an unloaded gun at another. The Nancy school accepted that data, but argued that the patients were aware that such actions were a farce and thus complied with the suggestions made by the experimenter. Thus, although the reality of the phenomenon was in dispute. Baldwin agreed with the Nancy school interpretation, that

... in hypnosis, suggestibility is exaggerated to an enormous degree ... [and that] ... it has limits in the more well-knit habits, moral sentiments, social opinions, etc., of the subjects. And it further shows that hypnosis is probably, as they claim, a temporary disturbance, rather than a pathological condition of mind and body [1906b, p. 155].

Despite rumors to the contrary, Baldwin doubted that hypnosis had any therapeutic value in the cure of physical disease. On the other hand, however, there was considerable evidence to support the idea that various manifestations of hysteria had been relieved through hypnosis.

Given the extensive data regarding the phenomena of suggestion, Baldwin attempted to formulate a law to explain the data. The law which Baldwin invoked was dynamogenesis.
He called this "the foundation-stone of the theory of organic development [1906b, p. 157]," and simply stated, it said that action follows stimulation. Similarly, changes in movement follow changes in stimulation. This law will be discussed in greater detail in the next section.

Habit and Accommodation

Perhaps the two concepts that best reveal Baldwin's strong functional bias are habit and accommodation. The principle of habit "expresses the tendency of an organism to repeat its own movements again and again [Baldwin, 1906b, p. 203]." Baldwin observed that the phenomenon of repetition was the corner-stone of biological as well as psychological theories of development. This did not imply that repetition was what all organisms did under all circumstances, as was most obviously pointed out by those movements which caused pain. Such movements tended not only not to be repeated, but typically were actively inhibited or avoided by the organism. Thus, Baldwin modified his definition: "Habit expresses the tendency of the organism to secure and to retain its vital stimulations [1906b, p. 205]." This view implied that an organism inherently possessed habits, and whether or not a particular habit occurred was a function of the consequences.

34 This principle, although rather global, reminds one of B. F. Skinner's 'functional analysis' approach to the study of psychology. That is, through the observation of covariations between stimulus conditions and response patterns, one can develop a truly S-R theory of psychology. See Skinner (1953).
of the particular movements through which the habit was expressed. In this way, Baldwin overcame the criticism of the Spencer-Bain theory of development (to be discussed later) which stated that "habits are distinctly due to the repetition of motor discharges . . . [this view suggests] . . . that the organism starts with nothing equivalent to habit, with no native tendency to any kind of movement, with no teleology in its movements, no ulterior organic ends [1906b, p. 203]." Furthermore, Baldwin pointed out that this view failed to indicate what sorts of movement were desirable and, hence, likely for the organism to perform, and on the other hand, what sorts of movements were undesirable and thus unlikely for the organism to perform.

Baldwin went further in the elaboration of his own ideas concerning the nature of habit:

In order to habit . . . the organism must have contractility - ability to make a response in movement to a stimulus - and then it must have some incentive to make and keep making the right kind of movement. The essential thing about habit, then, is this: the maintenance of advantageous stimulations by the organism's own movements [1906b, p. 453].

Several answers were possible to explain the nature of the incentive which guided the organism's behavior. The incentive could be the actual stimulus which was external to the organism. According to this view, "the right movement may be

35 In discussing the rise of volition, Baldwin stated that: "Habit represents what is congenital with what it tends most naturally to do, under the guidance of all experiences up to date [1906b, p. 336]."
only a chance selection from many movements [Baldwin, 1906b, p. 453]." The second explanation was that the incentive was only partially external to the organism. This is, "the organism, after the first reaction to the stimulus, tended to repeat its lucky reactions again [Baldwin, 1906b, p. 453]."

An internal incentive arose in the form of pleasure which guided the organism in securing such movements that had pleasurable consequences. This was in essence the Spencer-Bain theory. Baldwin acknowledges that this view was superior to the first possible explanation, but he argued that it was inaccurate to interpret pleasurable and painful stimulation through lucky adaptive movement. Thus, the third explanation of the nature of the incentive that led to repetitions in movement was the one proposed by Baldwin himself. Thus,

the stimuli as such are the agents of good or ill, pleasure or pain; and this pleasure or pain process - index, as it is, of the fundamental vital processes - dictates the very first adaptive movement toward or away from certain kinds of stimulations [1906b, p. 454].

We will return to a more detailed account of this theory after the concept of accommodation receives some discussion. According to Baldwin, "accommodation is the principle by which an organism comes to adapt itself to more complex conditions of stimulation by performing more complex functions [1906b, pp. 454-455]." It differed from habit in at least two respects. First, it dealt with novel movements and had what Baldwin called a prospective reference, whereas habit tended to refer to the repetition of old movements, indicative
of a retrospective reference. Secondly, accommodations implied the breaking up of habits, or the performance of movements which were, to varying degrees, modifications of earlier habits. Accommodations were acts of learning and served as "adaptations to more complex conditions [Baldwin, 1906b, p. 455]."

Habit and accommodation had their physiological correlates. As for their psychological interpretation, habit "means loss of oversight, diffusion of attention, subsiding consciousness [1906b, p. 277]," whereas accommodation "means reviving consciousness, concentration of attention, voluntary control [1906b, p. 277]."

Returning to the question of biological adaptation, the generally accepted theory of Baldwin's day was the one developed by Alexander Bain and Herbert Spencer. Baldwin phrased the questions to which these men addressed themselves in a two-fold genetic manner. First, at the phylogenetic level, how is one able to explain the development of organic life with its constantly increasing complexity and more sophisticated adaptation. And secondly, at the ontogenetic level, how is one able to account for individual adjustment to the environment; that is, how is it that the individual organism can learn to do anything? The first question

36 It is interesting to note Baldwin's use of the adjectives prospective and retrospective, rather atypical terminology, but reminiscent of McCosh's use of these terms as a dimension in classifying the emotions in his system of faculty psychology. See Chapter 1.
largely occupied the biologists, but the second question was
directly in the realm of, and according to Baldwin, "the
most urgent, difficult, and interesting question of the new
genetic psychology [1906b, p. 171]."

Herbert Spencer's theory of adaptation was physiologically grounded. He had argued that simple contractility (i.e., reaction to stimulation) in an organism led to a variety of random movements. By mere chance, certain of these movements were more adaptative than others. 'Heightened nervous energy' came to accompany the more adaptive movements. Thus, the more adaptive movements tended to predominate because of the accompaniment of greater nervous energy. Alexander Bain developed his views in a modification of Spencer's theory. Bain assumed that all organisms manifested a spontaneous movement by nature. Through chance, certain of these movements gave pleasure to the organism by providing a better adjustment to its environment. The memory of these pleasure-producing movements served to stimulate their repetition when similar conditions arose in the future. Over a period of time such movements were not only acquired but maintained. Thus, whereas Spencer's view was more biological, stressing heightened nervous energy, Bain's account was more psychological with its stress on the organism's consciousness of pleasurable experiences and its recall of them.

37See Spencer (1896).
38See Bain (1875, 1902).
Baldwin agreed with much of what he referred to as
the 'Spencer-Bain theory.' But he questioned the account of
how a lucky movement which gained pleasure got repeated.
Pleasure was not inherent in these movements themselves, but
rather it was a resultant or product obtained by making such
movements. Or as Baldwin stated:

It is what the organism gets by the movements or without
movement, that ministers to its life; that is the original
pleasure-giving thing, not the mere fact of one move-
ment rather than another [1906b, p. 180].

Baldwin's dynamogenic method served as the principle
which specified the relationship between stimulation and
movement. The formula was as follows:

\[ D = k \cdot \frac{q}{d} \]

"D" represented the "dynamogenic influence of a stimulus
[1906b, p. 45]," "k" referred to a proportion, "q" stood for
the quality of the stimulus, and "d" represented the distance
of the stimulus object from the organism. Thus Baldwin empha-
sized only two variables--quality and distance--as influencing
the effect that a stimulus had on an organism. However,
he remains cautious in the application of this principle:

This method, like all other psychological methods, must
be used with a thousand cautions and as many failures;
and the last condition of such experiments, as the first
condition of all work with children, is sympathetic
insight into their mental movements [1906b, p. 47].

---

39 Baldwin acknowledged the use of the concept of dy-
namogeny by Féré, James, and Ladd. See Baldwin (1901-1905, I),
p. 302 for a further description of the principle of dynamo-
genesis.

40 For his discussion of his experimental research on
right- and left-handedness, and distance and color perception
in infants, see Baldwin (1906b), pp. 48-77.
Thus, the principle of dynamogenesis—that "every organic stimulus tends to bring about changes in movement [1906b, p. 161]"—was at the root of Baldwin's theory of development. From this principle followed the concepts of habit and accommodation. Habit and accommodation interacted to provide adaptations, and these adaptations were selective. The organism learned those adaptations that were selective by means of Darwin's principle of natural selection. That is, those organisms which learned the adaptative movements were selected and survived while those organisms which either failed to learn the adaptive movements or learned non-adaptive movements perished. However, if this were the sole operating principle

... every change in the environment would weed out all life except those organisms which by accidental variation reacted already in the way demanded by the changed conditions—in every case new organisms showing variations, not in any case new elements of life history in the old organisms [1906b, pp. 165-166].

In Baldwin's day two possible alternatives could account for how an organism learned. The first was through heredity, or the theory of acquired characteristics, as developed by Lamarck. Baldwin, as we shall see, rejected this explanation, and provided his own theory emphasizing the organism's impact on its environment, to which we now turn.

**Organic Selection**

Around 1895, three independently derived views concerning how adaptations from previous generations came to be selected by an individual were proposed by C. Lloyd Morgan,
Henry Fairfield Osborn, and Baldwin.\textsuperscript{41} Upon mutual agreement the theory came to be called 'organic selection,' the name which Baldwin had originally assigned it, although somewhat later it also came to be known as 'the Baldwin effect.'\textsuperscript{42} Baldwin defined organic selection as

\begin{quote}
The process of individual accommodation considered as keeping single organisms alive, and so, by also securing the accumulation of variations, determining evolution in subsequent generations [1902e, p. 119].\textsuperscript{43}
\end{quote}

Thus, individual accommodations, while not inherited, did serve the function of indirectly influencing the direction of evolution. As Baldwin said,

\begin{quote}
For such modifications and accommodations keep certain animals alive, in this way screen the variations which they represent from the action of natural selection, and so allow new variations in the same direction to arise in the next and following generations; while variations in other directions are not thus kept alive and so are lost [1902e, p. 138].
\end{quote}

\textsuperscript{41}See Osborn and Poulton (1897) where they mention the independent development of this principle.

\textsuperscript{42}This label implies Baldwin's primacy to the theory, which is incorrect, since both Morgan and Osborn shared in its development. All three writers agreed on the latter point, and there was no dispute over whether one of them should receive more credit. The fact that they continued to remain close friends is evidenced by Baldwin's dedication of his Development and Evolution to Morgan and Osborn (as well as E. B. Poulton). For Morgan's (1896) discussion of the independent derivation of organic selection, see p. 315.

\textsuperscript{43}Osborn credited Baldwin with the proposition of the term 'organic selection' and stated the hypothesis as follows: "That ontogenetic adaptation is of a very profound character. It enables animals and plants to survive very critical changes in their environment. Thus all the individuals of a race are similarly modified over such long periods of time that very gradually congenital or phylogenetic variations, which happen to coincide with the ontogenetic adaptive variations, are selected. Thus there would result an apparent but not real transmission of acquired characters [Osborn & Poulton, 1897, p. 584]."
Thus, organic selection complemented natural selection. The effects of the individual's accommodations were twofold: first, they kept the organism alive, and second, those adaptations adopted by such organisms that survived the process of natural selection were kept in existence and continued to be manifested in future organisms, while those variations which were non-adaptive tended to be wiped out since they were manifested by organisms which failed to successfully meet the challenge of natural selection. In this way,

The ontogenetic modifications are really new, not pre-formed nor guaranteed in the variations with which the individual is born, and they really recur in succeeding generations, although not physically inherited [Baldwin, 1902e, p. 103].

This was a different process than what the Lamarckians had claimed was operative. They argued that the acquired characteristics, or variations, performed by an individual organism were directly passed along to that organism's descendants through physical inheritance. But why should this necessarily be the case, Baldwin wondered, if one posited the ability to learn certain adaptations. Given this plasticity or adaptability, it seemed more reasonable to conclude that such successful adaptations could also be learned by offspring of the organism. To suggest that 'use inheritance,' or the direct physical transmission of functional variations, was operative would imply that the number of instinctive or unlearned behaviors would increase over time, whereas the reverse seemed to be the case. Furthermore, the direct physical inheritance of acquired characters suggested a relatively rapid rate of
mental evolution, whereas organic selection implied a much more gradual change over time. This too, seemed to weaken the compellingness of the Lamarckian point of view. Besides the lack of intuitive appeal for the Lamarckian doctrine, Baldwin was quick to point out that little if any data supported the theory.44

In addition to the observation of an increasing plasticity in human nature with less reliance upon instinctual determinants of behavior, Baldwin indicated that

It is very probable, as far as the early life of the child may be taken as indicating the factors of evolution, that the main function of consciousness is to enable him to learn things which natural heredity fails to transmit . . . [Baldwin, 1902e, p. 108].

Baldwin similarly accounted for the development of separate groups with distinct behavioral characteristics. For example, animals which made certain common adaptations would mate together and survive. When faced with a threatening situation such as the proximity to a feared enemy, those animals that could run fast departed and mated together, while other animals which could climb trees developed other arboreal characteristics that eventually were manifested in their offspring, and so on. Therefore, over time and through the reliance upon different types of variations, separate and distinct groups tended to emerge.

44 This same criticism has been waged against the theory of organic selection. See Chapter 5.
Baldwin, who at one point called himself a 'neo-Darwinian', found organic selection a compatible and necessary supplement to natural selection. That is, it recognizes the positive accommodations on the part of individual animals by which they keep themselves alive and so have an advantage over others under the operation of natural selection [Baldwin, 1902e, p. 170].

Baldwin cited an interesting example to illustrate the interactive relationship of natural selection and organic selection. Assume for a moment that for some reason cats are more successful at catching long-tailed than short-tailed rats. Through the operation of natural selection a time would come when long-tailed rats would be completely exterminated. Let us further assume that prior to this point in time, all the long-tailed rats, by means of some type of intelligent accommodations, removed themselves to an environment free of cats. Then it would only be a matter of time until it was the short-tailed rats that would be wiped out. Thus, not only did natural selection have its effect, but organic selection served as a qualifying process determining which organisms survived and which perished.

Social Heredity

In the realm of human evolution, a form of organic selection which Baldwin called social heredity was operative. By social heredity, Baldwin meant:

... the mass of organized tradition, custom, usage, social habit, etc., which is already embodied in the

\[46\] See Baldwin (1902d), p. 84.
institutions and ways of acting, thinking, etc., of a
given social group, considered as the normal heritage
of the individual child [1902d, p. 310].

Through social heredity, Baldwin argued, the child becomes—
over time—a social person, acquiring largely through imita-
tion and instruction information about how he is expected
to behave in his environment. Thus, as a type of organic
selection, social heredity served to discount the Lamarckian
document of acquired characteristics. Rather than acquired
through direct physical heredity, social heredity suggested
that these adaptations passed along from generation to genera-
tion through social transmission and never became physically
inheritable.

It was perhaps unfortunate that Baldwin coined the
term social heredity, because, although it seemed to imply
some sort of hereditary process in the transmission of non-
physical characteristics in development, it clearly dismissed
any such connotation. Several of Baldwin's contemporaries
criticized his selection of this phrase, even if they did
essentially agree with the point that he was making. C. Lloyd
Morgan (1896) thought it unfortunate because, as he stated,
exactly what it refers to is so important since its effects
are produced independent of physical heredity.46 E. D. Cope,

46 Morgan preferred the term tradition, which he
defined as follows: "By tradition I mean this: that the
animal is born into a group of animals which perform a number
of activities in certain ways, and that through the imitative
tendency it falls into these ways, which are thus handed on
or carried down through tradition [1896, p. 183]." Baldwin
was dissatisfied with this term because it "denotes the matter
handed down while 'social heredity' indicates the imitative
who was somewhat less sympathetic to the entire doctrine, also criticized Baldwin's selection of the phrase social heredity. Cope's reading of the definition of the term suggested to him that Baldwin was both accepting and rejecting Lamarckianism and the neo-Darwinian views, then called Weismannism. He argued (erroneously, according to Baldwin) that the biologists of the day had repudiated Weismannism and he called for the evolutionary psychologists, including Baldwin, to dispense with the doctrine and accept the Lamarckian idea of acquired characteristics. He acknowledged the contribution of social heredity as a real factor in human evolution, "but as it is not heredity, I think it should have a new name, which shall be less confusing [Cope, 1896]."

Nevertheless, Baldwin—who was using the phrase metaphorically—defended his selection of this term on two counts. First, that it was analogous to physical heredity. That is, much that the child learned to do including speaking, playing, reading, writing comes to be a significant part of his adaptive behavior just as if he had been born instinctively to emit such responses. This justified Baldwin's conclusion that

process of absorption of this matter of tradition by individuals, whereby its continuity from generation to generation is secured. The social heredity of individuals differs with sex, temperament, etc., while their tradition may be the same; social heredity is the outcome of a personal reaction upon tradition [1902d, p. 69].

47 See Cope (1896) and Ball (1901).
. . . it is inheritance; for it shows the attainments of the fathers handed on to the children; but it is not physical heredity, since it is not transmitted physically at birth [1902d, p. 69].

Secondly, social heredity was hereditary in that the child could not avoid its influence. The child was born into a world of social relationships, and he was molded by his social environment just as his physical inheritance reflected those physical characteristics of his parents. As Baldwin stated,

He [i.e., the child] is born into a system of social relationships just as he is born into a certain quality of air. As he grows in body by breathing the one, so he grows in mind by absorbing the other [1902d, p. 70].

Social heredity secured progress in development in that it required the individual to learn what the race had already learned. Take, for example, the case of the boy, who is raised by unconcerned parents and gets run over by a car. In a real sense, the failure of the parents to properly instruct their son about the hazards of playing near the street has doomed the child to perish. On the other hand, the boy who asks his parents to retrieve the ball whenever it goes into the street has benefited from the process of social heredity and survives, and in this way, progress is secured. Secondly, priority is afforded those variations which are socially available. Thus, if a child observes his father's carpentry work, while receiving instruction in this craft from both his father and his teachers at school, this secures progress in the sense that the child learns an occupation which, among other things, will allow him to survive. Social heredity thus functioned as a process which allowed
for progress to occur through the extra-organic transmission of useful adaptations from generation to generation.

**Evaluation of Prescriptive Theory**

To summarize the thesis of this chapter, the application of Watson's (1967) prescriptive theory to Baldwin's psychological views expressed in his *Mental Development, Social and Ethical Interpretations*, and *Development and Evolution* reveals a strong developmentalism and functionalism bias in his writings. **Developmentalism** was reflected by the approach Baldwin took to the study of mental development; namely, the genetic method. This approach revealed another developmentalistic aspect of Baldwin's thought in his 'dialectic of personal growth' which viewed mental development as progressing through three relatively distinct stages — the projective, subjective, and ejective. In addition, Baldwin's adherence to the recapitulation theory which argued that ontogeny recapitulates phylogeny reflected developmentalism. The concepts of imitation and suggestion exemplify the prescription of **functionalism** in that they infer the ways in which organisms adapt to their environment. This is also the case for his conception of habit and accommodation, organic selection, and social heredity. In one respect he was, along with G. Stanley Hall, contributing to the origin of the sub-discipline now called developmental psychology with its emphasis on the study of the child, while on the other hand, his writings served as a harbinger of the
functional school of American psychology for which he is oftentimes inexcusably overlooked, as some of his contemporaries—including John Dewey and James R. Angell—receive perhaps a disproportionate amount of credit for the instigation of this orientation.

As we have seen, the two prescriptions of developmentalism and functionalism seem to be particularly salient in the theoretical work by Baldwin discussed in this chapter. This is not to say that all the other prescriptions are totally absent. It is possible that some indication of many of the prescriptions may be found in Baldwin's work. It was felt, however, that it would be more appropriate to discuss in greater depth those prescriptions which appeared to be most dominant.

On the other hand, some prescriptions (e.g., staticism) do not appear to be reflected at all in the writings of Baldwin analyzed herein. This, however, does not diminish the value of a prescriptive analysis, but rather, it allows for comparisons of the salience of various prescriptions across individuals. It is felt that the major value of prescriptive theory has been the utility of its basic terminology for purposes of organizing, or classifying into a small number of categories, the point of view which predominated Baldwin's psychological works.
CHAPTER IV

A CITATION ANALYSIS OF BALDWIN'S
PSYCHOLOGICAL CONTRIBUTIONS

The frequency with which a scientist's work is cited in the ... journal literature provides an index that is quantitative, objective, and readily available ... [however] ... it is clear that the uncritical use of such a measure would sometimes be misleading [Myers, 1970, p. 1047].

Thus far much of this project has focused upon James Mark Baldwin and early American psychology in what Stocking (1965) has called a historicistic approach, that is, studying the past for its own sake. The following two chapters will tend to reflect a presentist approach, or the bias toward studying the past for the sake of understanding the present. The rationale for this shift in focus is the writer's concern for analyzing the influence that Baldwin exerted on later psychology following his departure from the United States. The specific question which now concerns us is what effect, in terms of citation analysis, did Baldwin have on his contemporaries and subsequent scientists in the social sciences, particularly psychology and sociology. 1

1 In a sense, this is analogous to considering Baldwin as the independent variable and the citations of Baldwin in the literature as the dependent variable. Of course, this is an oversimplification of the problem but it reflects the writer's changing focus toward the subject matter.
The Method

The procedure for describing and assessing the influence of Baldwin's writings is known as citation analysis. This method has been employed in research related to the study of scientific problems in a number of studies, although its definition and implementation have typically been ambiguously described. Some investigators have used this method to study the eminence of scientists (e.g., Myers, 1970), while others have used it to trace the influence of a single work (e.g., Brožek & Goodman, 1970; Goodman, 1971). Still others (e.g., Shulman & Silverman, 1972) have used it to construct a profile of a specific sub-discipline, such as social psychology. As has just been mentioned, much research published thus far using this method has failed to explicitly define what constitutes a citation, and thus what data actually are analyzed in the process. It is of great importance that a citation, as discussed in the context of this project, be clearly operationalized.

Further Problems

Various procedures have been used over the years to give proper recognition to the influence of the writings of fellow scientists. These procedures include (1) mentioning the individual in the body of one's own work, but nothing further; (2) citing the individual and/or a specific work in a footnote; and (3) citing the name of the individual in the body of a work and listing its entire reference at the end.
of the work in a reference or bibliography section. Different writers use different procedures, while some professional organizations (e.g., APA) have conventionalized and prescribed a preferred procedure for the citation of the works of others. This, along with the fact that these procedures have been modified over the past 60 or 70 years, make the task of drawing inferences from citation analysis about the eminence or even the influence of a particular individual, idea, or event, difficult at best. In addition to these problems, one must also consider certain biases in the procedure such as what Price (1965) has called the immediacy factor, or the tendency to cite recent articles more frequently than early articles. Further problems will be mentioned once an explicit definition of a citation is presented.

Citation--Operationally Defined

For the purposes of the present study, a citation will be defined as a reference to a work (either authored, co-authored, or edited) by Baldwin mentioned either in a

2For an analysis of the immediacy factor principle, see MacRae (1969).

3It was decided to include references to Baldwin's Dictionary as a citation despite the fact that in some cases a citation may more likely reflect his visibility than his influence. For a discussion of these factors, see Cole and Cole (1968). These writers found that characteristics which led to high visibility (e.g., quality of work, possession of honorific awards, rank of department, and specialty) among academic physics professors did not lead to high awareness.
footnote or bibliography of an article in any of the journals or books analyzed. Certain qualifications have also been attached to this definition. Only articles and discussions have been analyzed. This excludes book reviews, letters to the editor, news and notes, or any other such sections which commonly comprise a portion of most of the journals reviewed. Any mention of Baldwin either in the body of an article, or in a footnote, that fails to include a mention of some work of his, will not count as a citation. Furthermore, if one work is referred to more than once in a particular article, this will count as one citation. For example, if his Mental Development is cited seven times in a certain article, it will only count as one citation. Works in which Baldwin served as a co-author will count as one citation, and volumes which Baldwin edited (e.g., the Dictionary) will count as one citation.

The problems inherent with this operationalization of a citation and more generally, with the method of citation analysis itself, are largely a function of the purpose for which one conducts a citation analysis. Thus, if one were to use this procedure as an index of eminence, the differential

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4 Although obituaries of Baldwin described his life and contributions in considerable detail, they were not counted as citations because they failed to satisfy the operational definition of a citation mentioned above.
writing styles of scientific researchers would limit the validity of one's conclusions regarding the relationship between the number of citations and eminence.\(^5\) Similarly, if one is attempting to assess the influence of a particular individual on another, the latter's reference to a work of the former seven times, is probably indicative of a greater degree of influence than the single reference to another's work.

Furthermore, as mentioned earlier, perhaps the most important concern is how one uses the citation. Is a particular work cited because it is representative of an extremely unacceptable and poorly developed theoretical point of view, or because of its obvious methodological weaknesses? If so, this may serve as a guide for what not to do, but whether this is a sign of influence in the normal sense of the term, is open to question.

Also, one requires little experience in employing citation analysis to realize that there are different types of citations. Some researchers apparently feel that writing a two-page article with fifty-three references in the

\(^5\) Indices of eminence are discussed in Clark (1957), especially Chapter 3. One index which Clark mentions is journal citation counts. As he states: "This index is the number of times an individual's work is cited in the published literature by other research workers [p. 43]." Not all the citations were included in the counts. Restrictions which Clark mentions include citations to one's own works, and citations which appear in articles that are primarily of a review nature. Several citations to one work in any given article were apparently counted as one citation, although he does not specifically address this question.
bibliography is a sign of a succinct and scholarly integration of a particular area of investigation, when in fact it may simply be a sign of the author's fetish for name-dropping.

The purpose of the citation analysis in this study is largely its utility as a tool for uncovering, in a fairly systematic fashion, those articles which mention a work of Baldwin. This in a gross way may reflect Baldwin's influence, however, whether or not this is the case, and the extent to which this inference is warranted, will be left to be determined in Chapter 5, when a detailed evaluation of Baldwin and his influence will be qualitatively elaborated.

Books and Journals Analyzed

Twelve contemporary introductory psychology textbooks and seven scientific and professional journals served as the sample of literature that was analyzed for citations of Baldwin.

Books. The twelve introductory psychology books\(^6\) were analyzed not only for citations of Baldwin, but for

\(^6\)The introductory psychology textbooks analyzed were: Bruno (1972); Dember and Jenkins (1970); Hilgard, Atkinson, and Atkinson (1971); Kretch, Crutchfield and Livson (1969); McKeachie and Doyle (1970); Miller (1962); Munn, Fernald and Fernald (1972); Ruch and Zimbardo (1971); Robinson (1972); Sanford and Wrightsman (1970); Vinacke (1968); and Whittaker (1970).
citations to nine of his colleagues who, on the basis of a survey conducted by James McKeen Cattell in 1903 (and published in 1929) were rated by their peers as the ten most eminent psychologists of the day, as reflected by their contributions to psychological research. Table 1 contains the results of the citation analysis of these twelve books across the ten psychologists who ranked highest in Cattell's survey. The findings clearly indicate that introductory psychology textbooks tend to cite important early American psychologists rather infrequently. Only a total of 34 citations were found for these ten individuals across all twelve books. This is a rather surprising finding since most of these books contain an historical chapter, while a quarter of them are written largely from an historical point of view (i.e., Bruno, 1972; Miller, 1962; and Robinson, 1972). William James is far and away the most frequently cited member of the group, with all but one of the textbooks citing at least one work of his. James, in fact, accounts for more citations than all the others combined, having accumulated more than two-thirds of the total number of citations.

Journals. Whereas frequent citation in contemporary introductory psychology textbooks may reflect one's influence

7The psychologists, in the order of their eminence based on Cattell's survey are: William James, James McKeen Cattell, Hugo Münsterberg, G. Stanley Hall, J. Mark Baldwin, E. B. Titchener, Josiah Royce, G. Trumbull Ladd, John Dewey, and Joseph Jastrow.
on the state of present-day psychology, another interesting question involves the trend to cite a particular individual's work over a considerable span of years. For this reason, several journals in the social sciences were analyzed over a number of years. The rationale for the selection of a journal was that it relate to the general area of the psychological, sociological, and interdisciplinary sciences, and that intuitively it would be more likely to refer to works by Baldwin than certain other journals in the social sciences. Thus, for example, the Psychological Review was selected for analysis, but not the Journal of Educational Psychology, because the former was more likely to contain material relevant to Baldwin than the latter. Besides the Psychological Review (PR), the following journals were selected as the sample of literature to be analyzed for citations of Baldwin: Psychological Bulletin (PR), American Journal of Sociology (AJS), American Sociological Review (ASR), Sociological Review (SR), Journal of Philosophy, Psychology and Scientific Methods (JPPSM), and the Journal of the History of the Behavioral Sciences (JHBS). The number of years and the number of volumes analyzed in each journal are presented in Table 2. The journals are listed under three headings: psychological, sociological, and interdisciplinary. These categories are not to be considered as mutually exclusive, but are intended as descriptive of relatively broad types of affiliation. Each journal is listed once and it appears under its most appropriate classification.
### TABLE 1

THE FREQUENCY OF CITATIONS FOR 10 PSYCHOLOGISTS ACROSS 12 CONTEMPORARY INTRODUCTORY PSYCHOLOGY TEXTBOOKS

<table>
<thead>
<tr>
<th>Psychologists</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>James</td>
<td>1</td>
</tr>
<tr>
<td>Cattell</td>
<td>-</td>
</tr>
<tr>
<td>Münsterberg</td>
<td>-</td>
</tr>
<tr>
<td>Hall</td>
<td>-</td>
</tr>
<tr>
<td>Baldwin</td>
<td>-</td>
</tr>
<tr>
<td>Titchener</td>
<td>-</td>
</tr>
<tr>
<td>Royce</td>
<td>-</td>
</tr>
<tr>
<td>Ladd</td>
<td>-</td>
</tr>
<tr>
<td>Dewey</td>
<td>-</td>
</tr>
<tr>
<td>Jastrow</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The following code has been adopted to save space: 1 = Hilgard, Atkinson, & Atkinson (1971); 2 = Munn, Fernald & Fernald (1972); 3 = Krech, Crutchfield, & Livson (1969); 4 = Ruch & Zimbardo (1971); 5 = Miller (1962); 6 = Dember & Jenkens (1970); 7 = Vinacke (1968); 8 = McKeachie & Doyle (1970); 9 = Whittaker (1970); 10 = Sanford & Wrightsman (1970); 11 = Robinson (1972); and 12 = Bruno (1972).*
## TABLE 2

A SUMMARY OF THE RELEVANT INFORMATION REGARDING THE JOURNALS ANALYZED FOR CITATIONS OF BALDWIN

<table>
<thead>
<tr>
<th>Journal Analyzed</th>
<th>Range of Years Analyzed</th>
<th>Number of Years Analyzed</th>
<th>Number of Volumes Analyzed</th>
<th>Number of Citations of Baldwin</th>
<th>Number of Citations of Baldwin Per Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Psychological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Bulletin</td>
<td>1910-1969</td>
<td>60</td>
<td>65</td>
<td>23</td>
<td>0.35</td>
</tr>
<tr>
<td>Psychological Review</td>
<td>1910-1969</td>
<td>60</td>
<td>59</td>
<td>49</td>
<td>0.83</td>
</tr>
<tr>
<td>II. Sociological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Journal of Sociology</td>
<td>1895-1969</td>
<td>75</td>
<td>75</td>
<td>39</td>
<td>0.52</td>
</tr>
<tr>
<td>American Sociological Review</td>
<td>1936-1969</td>
<td>34</td>
<td>34</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Sociological Review</td>
<td>1908-1969</td>
<td>62</td>
<td>61</td>
<td>5</td>
<td>0.08</td>
</tr>
<tr>
<td>III. Interdisciplinary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal of Philosophy, Psychology and Scientific Methods</td>
<td>1904-1920</td>
<td>17</td>
<td>17</td>
<td>42</td>
<td>2.47</td>
</tr>
</tbody>
</table>
The variability across journals in terms of the number of years and the number of volumes analyzed is due to various reasons. In certain instances (e.g., JHBS), the entire series of volumes for each journal have been analyzed. In other instances (e.g., PR, PR, AJ5, ASR, SR) an effort was made to compare various journals over a common period of time. The PR and PB were selected partly because they have an uninterrupted series of volumes dating back at least to the early 1900's. In neither case, however, were the earliest volumes of these journals analyzed, because Baldwin was affiliated as a co-editor with both the PR and PB up to 1909 when he resigned his editorships. It was felt that somewhat biased results would be obtained for the years prior to 1909 while he served in his editorial capacity. It is conceivable that during these years contributors may have cited more works of Baldwin in the hope that this would increase the likelihood of their articles being published. There is no way to arrive at a definite answer to this question since this bias exists as a possible confounding factor. A comparison across several journals can be made for the period between 1910 and 1969. Table 2 lists all the journals analyzed, and their dates, the number of years and the number of volumes for each of the journals and the total number of citations of Baldwin's works across each journal. The last column lists an average number of citations of Baldwin's works per volume across each of the journals.
Results

A total of 175 citations of Baldwin's works were uncovered in the analysis. The range included the PR which contained a total of 49 citations to the ASR which contained no citations of Baldwin's works. The PR was analyzed from 1910 to 1969 and contained 59 volumes. An index of the number of citations of Baldwin's work per volume of the PR indicates that an average of 0.83 citations occurred during this period. The largest number of citations per volume occurred in the JPPSM in which there was an average of 2.47 citations of Baldwin's work per volume, across a total of 17 volumes.

Figure 2 presents the number of citations appearing in the four journals—PR, PR, AJS, and SR—according to ten-year periods from 1910 to 1969. The data indicate that, based on the four journals sampled, the number of citations of Baldwin's works peaked in the 1920's with a total of 32 citations, and then steadily declined in the subsequent decades until the 1960's where a total of only three citations of Baldwin's works were discovered. This decreasing trend of citations coincides with an ever-increasing trend, particularly noticeable in the 1960's, to include large numbers of citations by contributors to psychological and sociological journals. Perhaps this is a paradoxical result of Price's (1965) immediacy factor. This is due to the fact that the amount of research has burgeoned in recent years so the tendency to cite recent literature makes it highly
unlikely that a work of Baldwin's would be cited in the contemporary literature.

One additional question of interest concerns the most frequently cited works of Baldwin. Are they his books, certain journal articles such as his presidential address to the American Psychological Association in 1897, or perhaps something he edited such as the Dictionary of Philosophy and Psychology? Table 3 contains the list of Baldwin's cited works in order of decreasing frequency. A total of 13 books and 19 articles were cited at least once among the journals sampled. The vast majority—nearly 85 percent—of the citations were to books which Baldwin either authored or edited. Among the books, three stand out for their relatively large number of citations. These are his Mental Development (43 citations), Social and Ethical Interpretations (36 citations), and the Dictionary of Philosophy and Psychology (29 citations) for which he served as general editor. If one were to argue that citations are an index of the influence of the 'citee' on the 'citer,' it is probably questionable whether this would be entirely appropriate in the case of citations of the Dictionary. Although there is no question that Baldwin contributed an extensive amount of time, effort, and organizational skills to the publication of the Dictionary, many of its citations were to specific articles written by individuals other than Baldwin himself. Thus it probably does not reflect so much Baldwin's influence in this instance as it does perhaps his visibility. However, it was decided that, since he
### TABLE 3

**THE FREQUENCY OF CITATIONS OF BALKWIN'S WORKS**

<table>
<thead>
<tr>
<th>Work of Baldwin</th>
<th>Frequency of Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Books</strong></td>
<td></td>
</tr>
<tr>
<td>1. Mental Development</td>
<td>43</td>
</tr>
<tr>
<td>2. Social and Ethical Interpretations</td>
<td>36</td>
</tr>
<tr>
<td>3. Dictionary of Philosophy and Psychology 3 vols.</td>
<td>29</td>
</tr>
<tr>
<td>4. History of Psychology. 2 vols.</td>
<td>6</td>
</tr>
<tr>
<td>5. Handbook of Psychology. 2 vols.</td>
<td>6</td>
</tr>
<tr>
<td>6. Thoughts and Things. 3 vols.</td>
<td>5</td>
</tr>
<tr>
<td>7. Genetic Theory of Reality</td>
<td>5</td>
</tr>
<tr>
<td>8. Development and Evolution</td>
<td>5</td>
</tr>
<tr>
<td>9. The Story of the Mind</td>
<td>3</td>
</tr>
<tr>
<td>10. The Individual and Society</td>
<td>2</td>
</tr>
<tr>
<td>11. Between Two Wars. 2 vols.</td>
<td>1</td>
</tr>
<tr>
<td>12. Darwin and the Humanities</td>
<td>1</td>
</tr>
<tr>
<td>13. Fragments in Philosophy and Science</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>145</strong></td>
</tr>
<tr>
<td><strong>Articles</strong></td>
<td></td>
</tr>
<tr>
<td>1. (with W. J. Shaw) Memory for square size. PR, 1895, 2, 236-239.</td>
<td>4</td>
</tr>
<tr>
<td>2. The 'Type-theory' of reaction. Mind, 1896, 5, 81-90.</td>
<td>3</td>
</tr>
<tr>
<td>3. Psychology past and present. PR, 1894, 1, 363-391.</td>
<td>3</td>
</tr>
<tr>
<td>4. The limits of pragmatism. PR, 1904, 11, 30-60.</td>
<td>3</td>
</tr>
<tr>
<td>5. Selective thinking. PR, 1898, 5, 1-24.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Title</td>
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<tr>
<td>---</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>(with W. J. Shaw) Types of reaction.</td>
</tr>
<tr>
<td>7</td>
<td>The psychological laboratory in the University of Toronto.</td>
</tr>
<tr>
<td>8</td>
<td>Child Study.</td>
</tr>
<tr>
<td>9</td>
<td>The origin of a 'thing' and its nature.</td>
</tr>
<tr>
<td>10</td>
<td>Discussion: The origin of emotional expression.</td>
</tr>
<tr>
<td>11</td>
<td>The history of psychology.</td>
</tr>
<tr>
<td>12</td>
<td>Social interpretations: A reply.</td>
</tr>
<tr>
<td>13</td>
<td>Psychology of social organization.</td>
</tr>
<tr>
<td>14</td>
<td>Sketch of the history of psychology.</td>
</tr>
<tr>
<td>15</td>
<td>Logical community and the difference of discernibles.</td>
</tr>
<tr>
<td>16</td>
<td>Imitation: A chapter in the natural history of consciousness.</td>
</tr>
<tr>
<td>18</td>
<td>The coefficient of external reality.</td>
</tr>
</tbody>
</table>

Sub-total 30

Grand Total 175
Fig. 2. Frequency of citations of Baldwin in four journals from 1910 to 1969.
contributed and/or modified a large number of articles in the Dictionary, references to the Dictionary should be counted as a citation to a work of Baldwin.

Among the 19 articles which turned up in the citation analysis, the most frequently cited article (i.e., Baldwin & Shaw, 1895) occurred only four times. Thirteen of the 19 articles were cited only once. Most of Baldwin's experimental research appeared in these articles rather than in his books, which were typically theoretical in nature. The relatively small number of citations to these articles seems to corroborate Boring's (1950b) conclusion regarding Baldwin's experimental work, that "... there was little of importance [p. 532]."

A listing of the articles which cited Baldwin's works appear chronologically across journals in Appendices B-G; see pages 314-335.

**Evaluation of Citation Analysis**

The most direct value of the method of citation analysis as used in the present investigation was that it provided a sample of historical material which mentioned some primary reference of Baldwin.

Beyond this, however, little value was found in the technique. The citations vary to such an extent that it would be most hazardous to infer such factors as influence or scientific eminence on the sole basis of a frequency count of citations. Myer's (1970) comment which prefaces this chapter
is overly optimistic about the nature of this technique. True, it is quantitative, objective, and, if one has the time and disposition, readily available. However, the citations uncovered in the present investigation varied from something less than reflective of Baldwin's influence on later psychological thought (e.g., Bird, 1939) to some genuinely valuable consideration of the work of Baldwin which clearly revealed an appreciation of the contributions and limitations of his writings upon those that followed him (e.g., Schultz, 1969).

Citation analysis, per se, is insufficient. A qualitative analysis of the citations uncovered, must follow the strictly quantitative and objective aspect of the procedure. This is, in fact, what has been attempted and will be revealed in the final chapter to which we now turn.
CHAPTER V

EVALUATION

The age's preoccupation with practical achievement afforded a climate more hospitable to the scientific technologist than to the scientific theorist [White, 1973, pp. 8-9].

In this final chapter an attempt will be made to explicate Baldwin's contributions to psychological thought. In addition, several factors will be enumerated to account for his limited influence on contemporary American psychology. This is particularly hazardous because there is not simply one Baldwin, but in a figurative sense, five or six Baldwins since he was such a complex man.¹

Initially, as we have seen, he began his career not unlike that of many of his colleagues, optimistic that the prospects of the 'new psychology,' with its novel characteristics of objective measurement and manipulation, would solve the problems associated with discovering the nature and functioning of the human mind. Thus, influenced by Darwinian theory, he began to study the behavior of his own two children, upon whom most of his theoretical statements are based. But his responsibilities extended beyond the laboratory and the classroom. People were needed to organize associations and

¹The writer would like to thank Dr. Vahan D. Sewny for the valuable comments he provided in an interview on January 17 and 18, 1974.
edit journals, tasks to which Baldwin devoted a considerable amount of time. But he was also a prolific writer and author of more than fifteen books. Later in life he became one of the first historians of his discipline. He certainly had the personal experience to serve as a basis for describing the origin of the 'new psychology' in America since he was, in effect, a part of it. Finally, moving out of the coveted position of a highly-regarded psychology professorship, he embarked on a totally new career as a political observer and analyst, a career which is beyond the scope of the present investigation and thus has only been briefly discussed.

So it is that Baldwin is many things to many people and this investigation would not be complete without some attempt to evaluate his contributions to psychology, to which we now turn.

Contributions to Psychology

Although his involvement in academic psychology was limited to only about two decades, Baldwin is to be remembered for his contributions to American social psychology, his incorporation of evolutionary theory into the understanding of mental development, his organizational and editorial contributions, and his emphasis upon a functional view for studying man.
American Social Psychology

Before 1890 psychology in America possessed an ill-defined subject matter and almost completely lacked any independent status within the university departmental structure. With the appearance of James' two-volume Principles of Psychology in 1890, a new era witnessed the need to recognize the growing research and theoretical interests related to the study of consciousness or the human mind. One chapter of the first volume of the Principles was social psychological in nature, despite the fact that its title, The Consciousness of Self, may not immediately suggest this fact. Herein James spoke of the constituents of the self, one of which being the social self which he defined as "the recognition which he [i.e., a person] gets from his mates [1890, II, p. 293]." James went on to point out that "a man has as many social selves as there are individuals who recognize him and carry an image of him in their mind [1890, II, p. 294]."

However, other than briefly describing one aspect of the self as reflecting a social element, it was not really until Baldwin's Mental Development in 1894 and even more so his Social and Ethical Interpretations in 1897, that the idea of the nature of the self being social received any substantial theoretical and empirical support.²

²House (1936) has described the situation as follows: "Although some of the original insights can be traced to William James, and perhaps to earlier writers, particularly Wundt and his predecessors of the 'folk-psychology' school, it may be said with substantial truth that modern American social psychology was founded by Baldwin [p. 317]."
Baldwin's dialectic of personal growth argued that the development of personality proceeds, as we have already seen, through three stages. It is through this genetic process that "the 'ego' and the 'alter' are . . . born together [Baldwin, 1902d, p. 15]." This was a novel and provocative view. Bodenhafer (1920-1921) was later to credit Baldwin as being among the major representatives of the movement toward a social psychology, as distinguished from the earlier conceptions of man simply as individualistic. Similarly, Park (1921-1922) pointed to Baldwin's concern for "the investigation of the effects upon the individual of his contacts with other individuals [p. 19]." Not only through the processes of suggestion and imitation did Baldwin recognize the implications of how people influence one another, but the additional conception of the self arising only through interaction with others permeated his theorizing. As Petras (1968) has recently remarked:

The major characteristic of Baldwin's work is his repeated emphasis upon the necessity of understanding the individual through the interdependent relationship which exists within the group [p. 134].

Baldwin's assertion that man is a social outcome rather than a social unit is closely related to this point, one for which Charles H. Cooley gave Baldwin due credit in his own social psychological theorizing (Cooley, 1964, p. 125).  

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3Baldwin has been credited by many investigators for giving currency to this novel idea. See for example, Gough (1947-1948), Karpf (1932), Sargent and Williamson (1958), Sewny (1945), Waterbor (1972), and Young (1947).

4For an interesting analysis of the self as a social product, see Todd (1918), especially Chapters 4 and 5.
House (1936) has accurately described Baldwin's ideas about personality development when he stated that, according to Baldwin, "The self is formed in the image of the other, but one's conception of personality in others is formed and enriched by his subjective experience of the activities initiated in himself by imitation of others [1936, p. 316]."

In fact, Baldwin, who is oftentimes remembered largely for his emphasis on the process of imitation, nevertheless considered this process to be subsumed under a self theory of personality. As he himself stated: "In spite of the large place which I assign to Imitation in the social life, I should prefer to have my theory known as the 'Self' or the 'Self Thought' theory of social organization [Baldwin, 1902d, p. xviii]." So it would be inaccurate to overemphasize Baldwin's thesis regarding the nature of the self being social, because despite the fact that this indeed was a significant contribution to the thought of his day on this subject, he nevertheless reiterated the personal or individual side of the issue.

Baldwin's emphasis on imitation and suggestion is probably of equal importance. He viewed imitation as a circular reaction, or a sort of feedback mechanism which allowed the individual to adapt to his environment. Ellwood (1900-1901) credited Baldwin's formulation of the imitation theory as "more careful and more scientific [p. 723]" than that developed independently, and, as we have seen, somewhat earlier by Tarde. Whereas Tarde claimed that 'society is
imitation,' Baldwin distinguished between the matter and the process of social organization. As Ellwood emphasized:

... Professor Baldwin develops a clear and consistent theory of the social process as a whole, which Tarde fails to do ... Briefly stated, Professor Baldwin's theory may be thrown into four propositions, namely: (1) the matter of social organization is thoughts; (2) the method of their organization is imitation; (3) these thoughts originate with the individual; (4) later certain of these thoughts are imitated and so generalized by society [1900-1901, p. 725].

Although the imitation theory as developed largely by individuals like Baldwin and Tarde somewhat later became considered outdated by many, for reasons which we will discuss shortly, interest in the process of imitation has reappeared recently in the work of some contemporary social psychologists, particularly in the writings of Bandura and his colleagues (e.g., Bandura, 1965, 1969; Bandura & Walters, 1963). This work has resulted in many ingeniously constructed experiments which have pointed out how imitation (or what has come to be called 'modeling') seems to account for a considerable amount of human social learning. It would be inaccurate to claim that Bandura has been in any direct sense influenced by Baldwin, since nowhere has the writer located any citations by Bandura to any of Baldwin's works.  

5Other contemporaries who have been directly influenced by Baldwin's writings include Jean Piaget, Donald T. Campbell, and Lawrence Kohlberg. However, it is largely Baldwin's writings on Genetic Logic which appeared after his Princeton era, that have influenced Piaget, Campbell, and Kohlberg. See, for example, Piaget (1932), p. xxiii. Piaget has also stated: "Unfortunately I did not know Baldwin personally, but his works had a great influence on me. Furthermore, Pierre Janet, whose courses I took in Paris, cited him constantly and had been equally very influenced by him ... "
Despite this fact, however, the significance of Baldwin's recognition and elaboration of the functional value that imitation plays in mental development and the growth of personality should not be overlooked.

It is important to realize what the fields of sociology and psychology were like in Baldwin's time. Both were young and budding areas of interest for only a handful of individuals. Franklin H. Giddings (1899) made the interesting observation that

Any new contribution to either Psychology or Sociology is likely to be found also a contribution to the other, and we may look in the near future for a number of books of which it will be difficult to say whether they are primarily works on Psychology or on Sociology [p. 16].

Clearly the era in which Baldwin lived was not characterized by the number and degree of distinctions that differentiate science today. Although Giddings considered Baldwin's Mental Development to be "definitely a study in Psychology [1899, p. 16]" [if not a work attempting in some sense to bridge the gap between psychology and biology], he considered Social and Ethical Interpretations to be as sociological as it was psychological in its subject matter.

(Translated from the French by Annette Mueller); Piaget to the writer, June 12, 1972. It will be recalled from Chapter 2 that Janet was one of the pallbearers at Baldwin's funeral indicating Janet's close personal friendship with Baldwin as well. Campbell (1973) has also quoted quite extensively Baldwin's three-volume work on Genetic Logic in his chapter on 'Evolutionary Epistemology,' while Kohlberg has incorporated some of Baldwin's views on development in support for his own theory about how morality arises. See, for example, Kohlberg (1968).
Another important aspect of Baldwin's social psychological work was his emphasis on the genetic (or what today is better known as the longitudinal) method. Although he was not the first to observe children carefully and use these observations as the data for his theoretical statements (as, for example, did C. H. Cooley), he did manifest the methodological trend, predominant today, of the analysis of direct observation as serving the basis for one's empirical data. As has been noted, this approach differentiated him from the methodology of G. S. Hall who pioneered the questionnaire. Perhaps more significantly, it was probably the work of Freud and his emphasis upon internal, unconscious, and unobservable motives which soon eclipsed the orientation to simply deal with observable behavior, a procedure that Baldwin clearly manifested. House (1936) has acknowledged Baldwin's emphasis on the genetic method as follows: "It must be remembered . . . that Baldwin . . . performed effective and influential pioneer work demonstrating the relevance of the study of young children to the fundamental problems of sociology and social psychology [pp. 360-361]."

Although the not-uncommon procedure by some historians of psychology to write about some particular individual, usually obscure, and oftentimes unheard of, as the 'founder' of this, or the 'first' that, which seems to the present writer to be of limited scholarly value, it does seem appropriate to mention Baldwin in this connection. Thus, Karpf (1932) has claimed that Baldwin's theorizing "may be said to
mark the real beginning of social psychological thought in this country [p. 275]." A few years later, House (1936) observed that "... it may be stated with substantial truth that modern American social psychology was founded by Baldwin [p. 317]." The definitiveness that House intended in this statement, however, is open to question because on the following page he stated that "... a case could be made out for the proposition that John Dewey ... was the first modern social psychologist [p. 318]." More recently, Gordon (1969) has referred to Baldwin as one of the founding fathers of symbolic interactionism, but he goes on to indicate that, along with Cooley, James, and Mead, Baldwin "provided only vaguest indications of how any aspect of the self could be translated operationally into usable methodological form [p. 366]." It does seem to be the case that the phrase social psychology had never appeared in a title of any English work prior to Baldwin's Social and Ethical Interpretations in Mental Development (1897) which bore the subtitle: A Study in Social Psychology (Bogardus, 1922, 1955). Baldwin's belief that social psychological analysis was not to be a passing fad is reflected in his prediction that "the psychology of the future will be social to the core ... [Baldwin, 1906a, p. 621]."

Evolutionary Theory

As has already been discussed, Baldwin was greatly impressed by the Darwinian analysis of evolution and its chief principles, including natural selection. He even took
a genetic point of view in interpreting the history of psy-
chology as "that of a parallelism between racial reflection
and individual thought [Baldwin, 1913b, I, p. vi]." As he
expressed it in the preface of his *Story of the Mind*:

It will be remarked that in several passages the
evolutionary theory is adopted in its application to
the mind... I may say that, in my opinion, the evi-
dence in favour of it is about the same, and about as
strong, as in biology, where it is now made a pre-
supposition of scientific explanation [Baldwin, 1898d,
p. vi].

It was Baldwin who attempted to apply this doctrine to the
study of mental development, while simultaneously attempting
to apply psychological principles to the study of evolution
(Bristol, 1921; Martindale, 1960, pp. 313-317). As Davies
(1923) has pointed out:

... and if Baldwin led the psychologists in the
investigation of the mind of the child and the race
[which it is argued that he did], it should be remarked
that the biologists have come to realize during the past
thirty-five years that mind cannot be eliminated from
the facts with which their science deals [p. 169].

The result was the principle of organic selection (sometimes
referred to as orthoplasy or the Baldwin effect) developed
in the mid-1890's independently by Baldwin, C. Lloyd Morgan,
and Henry Fairfield Osborn. Briefly stated, this principle
suggested that the accommodations (or adaptations) of an
individual operate in such a way as to keep certain indi-
viduals alive and thus to allow for the appearance of those
same accommodations in later generations. This principle is
significant in that it attempted to account for development
to occur partially, at least, according to psychological
variables, rather than simply to biological principles as was implied by both the idea of natural selection and the Lamarckian doctrine of the inheritance of acquired characteristics. 'Organic selection' was accepted by many biologists and psychologists alike during this time including Alfred Russell Wallace, E. B. Poulton, William James, and James McKeen Cattell. 6

More recently, its discussion has led to somewhat mixed evaluations. Simpson (1953) in evaluating the scientific status of the principle has concluded that

The Baldwin effect is fully plausible under current theories of evolution. Yet a review of supposed examples and of pertinent experiments reveals no instance in which it indubitably occurred, no observations explicable only in this way, and few that seem better explained in this way than in some other. It probably has occurred, but there is singularly little concrete ground for the view that it is a frequent and important element in adaptation [p. 115].

Mayr (1958) echoes the view of Simpson, saying that, in references to the origin of instinctive behavior in birds, that this is "one of the few evolutionary phenomena where the 'Baldwin effect' might have played a role [p. 354]."

On the other hand, White and Smith (1956) have argued that "The Baldwin effect . . . looms as a probably common aspect of evolution of far-reaching importance [p. 51]."

More recently, in a review of the relationship between American biology and a major biological journal, the American Naturalist, Dunn (1966) has concluded that

6See PR, 1898, 5, 24.
Although 'The Baldwin Effect' has not become an essential part of any general theory of the mechanism of evolution, it provoked a discussion which has lasted 70 years [p. 486].

Perhaps Dunn has hit upon the major significance of the principle of organic selection, that is, its heuristic value, or the ability to generate further research. This is more than can be said about many ideas, often less well defined, which tend to lead to little fruitful consequence.  

Baldwin's idea of social heredity is also of particular significance because through it he acknowledged how the Lamarckian doctrine was superfluous and therefore expendable. Baldwin's argument is cogent: if one can explain social progress in terms of learning adaptations from one's fellow man, why ignore this phenomenon and attribute progress to the inheritance of acquired characteristics? However, Baldwin's selection of the phrase social heredity was clearly an unfortunate one.

Recapitulation theory also served as a guiding principle in much of Baldwin's theorizing. However, as it was initially propounded by Haeckel in 1866, it has since fallen into disrepute. Its principal thesis was that the individual (ontogeny) recapitulates, or goes through the same stages of evolutionary development as has the race (phylogeny). Shumway (1932) has questioned the validity of this theory by

7See also Stocking (1968), especially Chapter 10 for a discussion of the relationship between the doctrine of organic selection and Lamarckianism.
pointing to many instances where certain stages have been skipped in individual development, while apparent reversals in the sequence of development have also been recorded. This has led him to conclude "that the hypothesis be abandoned [p. 98]." Baldwin, as we have seen, initially put the theory to a test in the material contained in his Mental Development. He was cognizant of some of the problems with the theory and, although he never abandoned it in its totality, he did place some definite qualifications upon it. This has been recognized by Karpf (1932) who noted that "he [i.e., Baldwin] was much more cautious than was Hall in the application of its suggested biological analogies [p. 275]." Barnes (1921) had said something very similar about a decade earlier when he stated that

Baldwin . . . is inclined to doubt the value of too much reliance upon the law of recapitulation, or upon biological and anthropological analogies in interpreting the psychic evolution of the individual [p. 204].

Editor and Founder

Besides his theoretical and methodological contributions to American social psychology, Baldwin's contributions as an organizer and editor stand out as impressive achievements. Both the Psychological Review and the Psychological Bulletin, in whose founding Baldwin played an instrumental part, are among the most prestigious journals in contemporary American psychology. The Dictionary of Philosophy and Psychology unquestionably was an enormous feat, and although he did not do it all alone, Baldwin deserves the
credit for conceiving of the idea and acting as editor-in-chief throughout the venture. It stands as a significant attempt to bring some basic agreement and unity to the fields of psychology and philosophy. Since then, it is probably the emphasis on operational definitions that has helped objectify and clarify to what the basic terminology of the science of psychology refers.

As an original member of the APA, Baldwin was among those who helped mold the structure and function of this society which today has expanded in membership to over 35,000 individuals.

Psychological Viewpoint

It is probably accurate to evaluate Baldwin's experimental research as of limited value. The one exception is his reaction time research that led him into conflict with E. B. Titchener. The results per se of this research are of less importance than are the implications of how to carry out research and what questions are important to ask.\(^8\)

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\(^8\)Baldwin's type theory was a consequence of this controversy. Some have taken this theory to be related to Jung's theory of psychological types which first appeared in 1924. Baldwin spoke of a motor type and a sensory type, while Jung spoke of introverts and extroverts. Freyd (1924) observed that: "The motor type is prompt, quick, and unreflective, - he jumps to conclusions. The sensory individual is passive, contemplative, non-suggestible, withdrawn, and possesses physical inertia [p. 84]." Guilford and Braly (1930) also have spoken of Baldwin's type theory in relation to Jung's type theory. But no support has been found for suggesting that Jung ever read any of Baldwin's work. Perhaps the only real thing in common between the two theorists is that they both propounded a type theory.
Baldwin clearly represents a functional point of view, with its emphasis on how the individual adapts to his environment, along with the concern for recognizing individual differences.9 Baldwin would have fully agreed with Ellwood's (1898-1899) assertion that "a mere structural psychology of the adult human individual cannot, from its very nature, give an interpretation of life in its broadest phases, much less of the activities of society [p. 807]." Later Baldwin himself argued that

The analysis of a cross-section of consciousness is either descriptive, and thus barren of further results, or it is hypothetical, and in so far possibly mythological. This is the essential defect, and the dilemma of a "structural" psychology [1906, p. 621].

In this respect, Baldwin's functional orientation seems to have gained an ever-increasing recognition, while the structural approach originally identified with Wundt and Titchener has waned.

But Baldwin seems to have been bucking the Zeitgeist of his day, placing relatively more emphasis upon theoretical formulations than the collection of empirical data. Karpf (1932) has observed, with reference to his social psychological contributions that

Like the direction of thought with which he identified his position, Baldwin's formulation of his theory was highly intellectualistic and to that extent it was

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9 See LaPiere and Farnsworth (1936, pp. 22, 28) for one of the few sources that gives Baldwin due credit as a representative of functional psychology in America.
not altogether in harmony with the developing tendencies of American social-psychological thought . . . [p. 291].

As we have seen, Baldwin's interest in laboratory research waned during his psychological career. It is ironic that he is credited with establishing laboratories at Toronto, Princeton, and Johns Hopkins because he clearly reflected philosophical concerns later in his career. This probably indicates the complexity and variety of the man and partly accounts for the fact that he is in many respects an enigmatic figure.

It remains that he was highly regarded by his colleagues as is reflected in his ranking of fifth among his contemporaries as reported by Cattell's survey conducted in 1903, and which was mentioned at the beginning of the first chapter of this investigation. One other indication of his importance is of relevance. Early in 1910, the Houghton Mifflin publishing company surveyed academicians throughout the country as to the likelihood of their using a forthcoming volume edited by Benjamin Rand entitled *The Classical Psychologists* either in their psychology courses, or for being purchased for their library. Replies were received from 30 individuals. The results are not of interest here. What is of interest, however, are the responses of some of these people to the list of modern psychologists who were to be represented in the volume. Baldwin and several of his contemporaries were not included on the initial list. However, several responses indicated that he should be included.
Those who suggested this point included J. E. Creighton (Cornell), E. B. Huey (Lincoln State School), Naomi Norsworthy (Teacher's College), and E. C. Sanford (Clark). Here is some further evidence suggesting that even after the scandal and Baldwin's departure from Hopkins, his contemporaries thought highly of his works.

Limitations of Baldwin's Influence

Before concluding, it seems worthwhile to mention what are considered to be some of the more important factors that may account for Baldwin's relatively limited direct influence upon contemporary American psychological thought.

Writing Style

It has already been acknowledged that one of the major criticisms of much of Baldwin's theoretical work was that his writing style was cumbersome and verbose. Many reviewers of Baldwin's books pointed out this drawback, including Thaddeus Bolton, Josiah Royce, James Tufts, and John Dewey. Sometime later, Yerkes (1903) wrote an astute review of Baldwin's Development and Evolution in which he concluded:

The book, although bad in form, contains much valuable material. One can but feel that the author might well have taken the trouble to carefully rewrite it in a systematic and logical fashion instead of merely throwing together a lot of fragmentary discussions, without any attempt at the avoidance of repetition. Professor

Baldwin evidently likes to make his readers work [p. 348].

In comparing the social psychological views of Baldwin and Cooley, Sewny (1945) observed that "Cooley presented his views in a language that is lucid and readable, and free of the confusing and jumbled terminology that fills the writings of Baldwin [p. 84]." Cooley himself analyzed the style of Baldwin as follows:

A great fault with strenuous writers like Baldwin is that in their eagerness to produce they do not allow time enough for their imaginations to grow naturally and thoroughly into the mastery of a subject. They force it, and so impair its spontaneity, its sanity and humanness. What they write may be stimulating, consecutive, attractive for a time, but it is not food to live on. A style like this Goethe calls mannerism or "das manierierte." If you wish to produce anything of lasting value, you must see to it that the subject matter, the truth, is the first interest of your mind, not your books, your essay, yourself as discoverer and communicator of truth.  

A problem closely related to his writing style, was the ambiguity of some of the basic terminology in his writings, particularly the concept of imitation. Although Petras (1968) has pointed to indications that Baldwin did not view imitation as an instinct, there are probably at least as many instances where Baldwin claimed that it was an instinct. Furthermore, many investigators (e.g., Allport, 1935, p. 801; Freeman, 1936, pp. 182-183; McDougall, 1921, pp. 94, 106; and Miller & Dollard, 1941, p. 299) have interpreted Baldwin's

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12 Although they don't describe imitation as instinctive, Miller and Dollard (1941) in effect imply that his
use of the concept as an example of an instinct. This issue, as we have seen in Chapter 2, served as a major point of disagreement between Baldwin and F. C. French. Krantz and Allen (1967) have cogently pointed to the conceptual problems associated with the meaning of an instinct. Although it was generally agreed that instincts were some type of inherited tendency, they were often not distinguished from habits and reflexes. Different theorists developed lists of instincts which were often in disagreement, and it became unclear just what was an instinct and what was not. Besides the problem of ambiguity, instincts came to be considered as causative agents, not unlike some of the earlier conceptions of faculties. This sometimes resulted in circular reasoning with the post hoc explanation of a certain behavior being attributed to some appropriate instinct and then, in turn, that instinct being used to explain the behavior in question. Thus, instincts possessed no real explanatory power and the instinct doctrine soon fell into disrepute because it was non-heuristic. As Krantz and Allen (1967) have stated, "Such 'explanations' could easily lull theorists into a false sense of explanatory security [p. 329]." Applied to Baldwin's view was that imitation was instinctive when they stated that "Baldwin could not get along entirely without nativistic presumptions . . . [p. 299]."

13 For a critique of the concept of imitation as used in social psychological theorizing, see F. Allport (1924, pp. 239-242). See also Young (1947), pp. 108-110.
theorizing, it was not clear whether one learned to imitate, or one imitated to learn.

Another problem related to Baldwin's style was his tendency to invent new terms which connoted something different than what was intended. Perhaps the best example of this occurred when he coined the term social heredity. As will be recalled, this phrase referred to the tendency of a person to learn through interaction with his peers, rather than acquiring this new accommodation through inheritance of some characteristic. Then why did he insist on calling it social heredity, implying that what was learned was indeed inherited? Or as Wesley Mills cleverly observed: "'Social heredity' is about equivalent, is it not, to social environment, and the entire environment is one into which, as a rule, the animal is born, so why speak of 'social heredity?'" [Mills, 1898, p. 287]." Even his close friend, Josiah Royce, once confided to Baldwin: "Your terminology is, I think, sometimes a little puzzling."\(^{14}\)

These problems of writing style, accompanied by vagueness of some basic terminology, and the coining of unfortunate terms to express himself, may well account for his limited influence today. In addition to these factors, his association with recapitulation theory and the conceptually confusing nature of imitation theory were bound to lead

him into obsolescence when these views became outmoded. As Young and Oberdorfer (1940) have concluded, "Baldwin's early work was fundamental to the development of social psychology, although his system implies a too logical and rational unfolding of the self under social stimulation and his use of imitation is far too broad for the facts [p. 339]."

Lack of Students

Although Baldwin taught courses in psychology at both the undergraduate and graduate levels for some twenty years, he never engaged in any type of programmatic research that attracted any substantial number of students, either graduate or undergraduate, to him. The reason for this was, to some extent, external to Baldwin. At Princeton, the establishment of a graduate school met with considerable opposition. Regarding the idea of supporting a graduate school there, Wertenbaker (1946) has stated: "The trustees were lukewarm, the alumni were lukewarm, [President] Patton himself was lukewarm [p. 379]." Even when he went to Johns Hopkins in 1903 which was then emphasizing the establishment of a graduate department in psychology culminating in the Ph.D. degree, no students seem to have worked under him. Of course, his waning interest in laboratory research is probably a major reason why no one carried on psychological research with, or under, him. The situation was much different among the members of Titchener's Experimentalists who often brought along some of their advanced graduate students to the annual meetings
of the group. The close association between a professor and his students typically results in considerable professional influence 'rubbing off' on the students. This sort of tradition was virtually entirely lacking in the case of Baldwin so that there was never anyone to automatically carry out related research, not even his close friend and long-time colleague, Howard Warren. It is entirely plausible that the influence of men such as Titchener, and some of the other leading experimental psychologists such as Thorndike, was in part, due to the fact that their students continued to carry out similar research which subsequently maintained an influence for themselves.

Premature Departure from the American Scene

As we have already seen, Baldwin began to become involved in the affairs of the educational system of Mexico as early as 1905. This is just about the time that he had reached his peak in recognition among his colleagues. Four years later he left Hopkins after which he never spent much time in the United States. With the onset of the first World War he became involved in political affairs and largely set psychological matters aside. His contemporary influence upon Piaget is probably due in part to his residence in France for much of the last twenty years of his life. Had he remained in the United States he may well have continued to exert an influence upon the psychology developing here. Had the scandal not occurred, the International Congress of 1913 may well have taken place as planned, and Baldwin may have emerged
as a major figure in American psychology. But this is all speculation and no one can say for certain what would have happened. There is no question that the scandal and the subsequent departure from the American scene did not facilitate the influence that he may have otherwise exerted.

In conclusion, Baldwin is to be remembered for some truly important contributions in psychology. Among these are his emphasis on the social nature of the self, his genetic method and direct observational approach, his incorporation of evolutionary factors into psychology and vice versa, his functional bias, and his organizational and editorial accomplishments. Yet, several factors probably limited the exertion of a still greater influence within psychology. These include his cumbersome style, his association with the recapitulation and imitation theories which became outmoded during his own lifetime, his extreme bias toward theoretical speculations which is viewed as going against the Zeitgeist of his day, the fact that he never really produced any students, and finally, his premature departure from the American scene. Perhaps Baldwin should be best remembered as a stimulating and original thinker as well as a leader in organizational and editorial affairs of the 'new psychology' in America.
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APPENDIX A

THE PRESCRIPTIONS OF PSYCHOLOGY ARRANGED
IN CONTRASTING PAIRS

Conscious mentalism-Unconscious mentalism (emphasis on awareness of mental structure of activity—unawareness).

Contentual objectivism-Contentual subjectivism (psychological data viewed as behavior of individual—as mental structure or activity of individual).

Determinism-Indeterminism (human events completely explicable in terms of antecedents—not completely so explicable).

Empiricism-Rationalism (major, if not exclusive source of knowledge is experience—is reason).

Functionalism-Structuralism (psychological categories are activities—are contents).

Inductivism-Deductivism (investigations begun with facts or observations—with assumed established truths).

Mechanism-Vitalism (activities of living beings completely explicable by physico-chemical constituents—not so explicable).

Methodological objectivism-Methodological subjectivism (use of methods open to verification by another competent observer—not so open).

1 For a detailed discussion of prescriptive theory and the analysis of the science of psychology in prescriptive terminology, see Watson (1967).
Molecularism-Molarism (psychological data most aptly described in terms of relatively small units—relatively large units).

Monism-Dualism (fundamental principle or entity in universe is of one kind—is of two kinds, mind and matter).

Naturalism-Supernaturalism (nature requires for its operation and explanation only principles found within it—requires transcendent guidance as well).

Nomotheticism-Idiographicism (emphasis upon discovering general laws—upon explaining particular events or individuals).

Peripheralism-Centralism (stress upon psychological events taking place at periphery of body—within the body).

Purism-Utilitarianism (seeking of knowledge for its own sake—for its usefulness in other activities).

Quantitativism-Qualitativism (stress upon knowledge which is countable or measurable—upon that which is different in kind or essence).

Rationalism-Irrationalism (emphasis upon data supposed to follow dictates of good sense and intellect—intrusion or domination of emotive and conative factors upon intellectual processes).

Staticism-Developmentalism (emphasis upon cross-sectional view—upon changes with time).

Staticism-Dynamism (emphasis upon enduring aspects—upon change and factors making for change).
APPENDIX B

ARTICLES IN THE PSYCHOLOGICAL BULLETIN (1910-1969) WHICH CITE WORKS BY JAMES MARK BALDWIN

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## APPENDIX D

**ARTICLES APPEARING IN THE AMERICAN JOURNAL OF SOCIOLOGY (1895-1969)**

**WHICH CITE WORKS BY JAMES MARK BALDWIN**

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<td>1910-1911</td>
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<td>The influence of newspaper presentations upon the growth of crime and other anti-social activity, 342-371.</td>
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<td>Hayes, E. C. (1913)</td>
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<td>Bodenhafer, W. B. (1921)</td>
<td>The comparative role of the group concept in Ward's <em>Dynamic Sociology</em> and contemporary American sociology, 716-743.</td>
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APPENDIX E

ARTICLES APPEARING IN THE SOCIOLOGICAL REVIEW (1908-1969) WHICH CITE WORKS BY JAMES MARK BALDWIN

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<td>1921</td>
<td>13</td>
<td>Barnes, H. E. Some contributions of American psychology to modern social and political theory. I., 152-167.</td>
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APPENDIX F

ARTICLES APPEARING IN THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY & SCIENTIFIC METHODS (1904-1920) WHICH CITE WORKS BY JAMES MARK BALDWIN

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<td>Stoops, J. D. The psychology of religion, 512-519.</td>
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Dictionary


Mental Development


Dictionary, II

Dictionary

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APPENDIX H

MANUSCRIPT COLLECTIONS CONSULTED AND INTERVIEWS CONDUCTED

A. Manuscript Collections Consulted

1. James Mark Baldwin Papers
   Princeton University Library
   Princeton, New Jersey

2. James McKeen Cattell Papers
   Library of Congress
   Washington, D.C.

3. H. N. Gardiner Papers
   Neilson Library
   Smith College
   Northampton, Massachusetts

4. G. Stanley Hall Papers
   Clark University Library
   Worcester, Massachusetts

5. George Holmes Howison Papers
   Bancroft Library
   University of California
   Berkeley, California

6. Christine Ladd-Franklin Papers
   Columbia University Library
   New York, New York

7. James Loudon Papers
   University of Toronto Library
   Toronto, Ontario

8. Alpheus Mayer Papers
   Princeton University Library
   Princeton, New Jersey

9. James McCosh Papers
   Princeton University Library
   Princeton, New Jersey

10. Minister of Education Papers
    Archives of Ontario
    Toronto, Ontario
11. Hugo Münsterberg Papers
   Boston Public Library
   Boston, Massachusetts

12. Henry Fairfield Osborn Papers
   The American Museum of Natural History
   New York, New York

13. Benjamin Rand Papers
   Houghton Library
   Harvard University
   Cambridge, Massachusetts

14. Ira Remsen Papers
   Office of Centennial Planning
   Johns Hopkins University
   Baltimore, Maryland

15. Charles Scribner Papers
   Princeton University Library
   Princeton, New Jersey

16. George Malcolm Stratton Papers
   Bancroft Library
   University of California
   Berkeley, California

17. E. B. Titchener Papers
    John M. Olin Library
    Cornell University
    Ithaca, New York

18. Wilbur Marshall Urban Papers
    Baker Memorial Library
    Dartmouth College
    Hanover, New Hampshire

19. J. E. Wallace Wallin Papers
    Archives of the History of American Psychology
    University of Akron
    Akron, Ohio

20. Robert Mark Wenley Papers
    Bentley Historical Library
    University of Michigan
    Ann Arbor, Michigan

21. Benjamin Ide Wheeler Papers
    Bancroft Library
    University of California
    Berkeley, California
B. Interviews Conducted

1. Dr. Vahan D. Sewny
   Southport, Connecticut
   January 17 & 18, 1974

2. Mrs. Philip A. Sterrett
   Washington, D.C.
   February 23, 1972

3. Mrs. Elizabeth M. Stimson
   Hightstown, New Jersey
   a. February 22, 1972
   b. January 13, 1974
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Ronald Harold Mueller

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University of New Hampshire 1970-1974 Ph.D.

Honors or Awards:

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National Science Foundation Grant (No. G5-40652) in the Program of the History and Philosophy of Science, 1973-1974

Publications:


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