G. STANLEY HALL, A MAN OF MANY WORDS: The Role of Reading, Speaking, and Writing in His Psychological Work

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The place of G. Stanley Hall within the history of psychology is both assured and problematic. While he is credited with significant contributions, those contributions are predominantly institutional rather than intellectual or scientific in nature. Further compounding the issue is the fact that those who focus on the development of psychology qua science have emphasized psychology's increasing reliance on empirical observations, its use of quantitative measures, and its subordination of language to objective referents. This has obscured the significance of Hall's work, including his massive, two-volume Adolescence (1904), which is typically criticized for falling short in these regards. A more accurate appreciation can be gained through understanding his intentions and the practices of reading, speaking, and writing that were associated with them.

Keywords: G. Stanley Hall, adolescence, developmental psychology

Little attention has been paid to the role of reading, speaking, and writing in the history of modern psychology. These functions were, of course, more typical—even definitive—of premodern psychology. In the United States, at least, the older philo-

I thank Hamilton Cravens for inviting me to write this article, which I dedicate to the memory of Sheldon H. White. Several decades ago, Shep initiated a reappraisal of Hall's psychological work (see Siegel & White, 1982, and White, 1990). He subsequently noted that Hall's work "deserves more direct examination than it has recently received," and he pointed out that "recent writings usually picture Hall as a functionary and figurehead, condense his ideas into a few slogans, quote criticisms of his work by his often-rivalrous peers, and effectively concede Hall his administrative trophies while ignoring most of what he had to say. What Hall had to say about developmental psychology is worth some contemporary examination" (White, 1992, pp. 32–33). This article is a belated contribution to the cause.

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1 Much the same can be said about the history of science in general, although there has been some research over the past two decades on the rhetoric of scientific discourse, including scientific discourse (e.g., Beer & Martins, 1990; Brown, 1992; Dear, 1985, 1991; Leary, 1987, 1990b; Nelson, Megill, & McCloskey, 1987; Peraino, & Shea, 1991). Most of this work, however, has focused on the writing contained in published work rather than the process of writing and rewriting that takes place in attempts to clarify the meaning of data, long before any formal writing-up takes place. Latour and Woolgar (1986) have noted the significance of such writing. Much less attention has been paid to the role of reading in science, although the topic has recently been opened up (e.g., by Daston, 2004a, 2004b, and Secord, 2000). As for the role of speaking or dialogue in science, even less has been done, although the work of Galison (1987). Knorr-Cetina (1981), Koch (1976), Polanyi (1958), and Toulmin (1958) is pregnant with insights and implications.
sophical psychology was commonly associated with college presidents, often ministers, whose work was more scholarly than scientific, and more oriented toward teaching than research (see Evans, 1984; Fay, 1939; Fuchs, 2000). In contrast, the newer scientific psychology was associated with a shift in emphasis toward observation, experiment, and the numerical analysis of empirical data, and with the production of new knowledge rather than the propagation of traditional wisdom. Not surprisingly, then, historians have directed their attention toward these relatively novel features, while philosophers have spent their time trying to stipulate how words and data can be linked in some univocal or near-univocal way, with data (the realm of "fact") being given precedence over mere words (the realm of "fiction"). Whether read, spoken, or written, words have been depicted as subservient to the primary business of the scientific enterprise and have been considered subversive of that enterprise to the extent that they are not adequately bonded to empirical referents. This has made reading, speaking, and writing seem, if not regrettable, at least secondary aspects of scientific work, about which the more restrictions imposed—and the less otherwise said—the better.\(^2\)

The work of G. Stanley Hall (1844—1924) invites consideration of the role of reading, speaking, and writing in the history of modern psychology. Hall was, after all, a prodigious reader, frequent speaker, and voluminous writer. Besides testifying to his remarkable energy and drive, this prolixity may help explain the ambiguous reputation of his psychological work.\(^3\) Even during his lifetime, for instance, his magisterial two-volume *Adolescence* (1904) was lauded by many as a path-breaking synthesis that created an entirely new domain of research and simultaneously derided by others as the work of a "poet-dreamer" who played

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\(^2\) One of the marks of adequate professional training is an understanding of the kinds of reading (references) that are appropriate to indicate in a scientific article. It seems clear that self-monitoring rather than editorial reprimand keeps the range of cited works both tight and typical. The implicit rules covering appropriate speech are somewhat more lax, and contributions from these sources are sometimes acknowledged, but the evanescent quality of most informal verbal exchanges and the typical absence of trained observers have made them difficult to study. As for the restrictions imposed on the process of writing, the publication manuals of various disciplines (e.g., American Psychological Association, 2001) and Bazerman’s (1988) study of this distinctive genre underscore that scientific writing is generally seen as a means of regimented expression rather than open-ended discovery.

\(^3\) The ambiguity about Hall cuts deep. On the one hand, he has been touted as the first recipient of the PhD at Harvard, the first chairperson of psychology at the newly founded Johns Hopkins University, the first person to establish a formal laboratory of psychology in the United States, the founder of the first journal of psychology in the United States (the *American Journal of Psychology*), the first president of Clark University, the founder of the American Psychological Association, a pioneer of "genetic psychology," a leading sponsor of the psychology of religion, and a key agent in the introduction of psychoanalytic ways of thinking into the United States. In addition, a survey of members of the American Psychological Association in the year after his death showed that his substantive impact on a variety of fields within psychology, including but not limited to developmental psychology, was widely acknowledged (Thorndike, 1925). Clearly, Hall was then seen as one of the more important contributors in the first quarter-century of modern psychology in the United States. On the other hand, Hall dropped off the map soon after his death in 1924 (see Ross, 1972, p. xiv). Indeed, he fell so far that today he is remembered more often as a ceremonial figure like James McKeen Cattell, known primarily for his institutional achievements, than as a historical predecessor like William James, still honored for the continuing fruitfulness of his intellectual contributions. The basic facts of Hall’s life are most fully presented in Ross (1972). Other important sources are Prueitt (1926) and Wilson (1925). Bringmann, Bringmann, and Early (1992) provide a succinct overview of his life and contributions to psychology, including the history of psychology.
with words and wove fantastic theories with seeming disregard for empirical evidence. Hall’s language—more precisely, his invention of language to convey new concepts, his combination of languages from multiple disciplines, and his willingness to use language to reach beyond available data—was clearly at issue.4

The main question I wish to pose is whether the positive assessments and historical impact of Hall’s work, on the one hand, and the criticisms of contemporaries and relative disregard of posterity, on the other, have both been due, in large part, to his distinctive practices in reading, speaking, and writing. If so, a better understanding of what Hall was trying to do might initiate a reconsideration of the standard assessment of his psychology. Before exploring the role of reading, speaking, and writing in his work, we need first to understand his view of language, including especially the nature and function of words.

Words

From a very early age, words mattered to Hall. His interest in them was obviously reinforced by his love of reading, speaking, and writing. He had very fond memories of his mother frequently reading to her children, as well as very specific memories of the many works that he himself read (Hall, 1911, Vol. 2, pp. 480–481; Hall, 1923, pp. 45, 102). He also enjoyed practicing declamation, writing essays, and composing poetry, starting in his high school years. By the mid-1860s, as a student at Williams College, he was accomplished enough to be selected as both class orator and class poet, considerable honors in those days. During the same period his passion for reading reached new heights, stimulated by his membership in a very active reading club and by a notable series of public lectures delivered by Ralph Waldo Emerson, which led Hall into a “veritable Emersonian craze” (Hall, 1923, pp. 160–163). As a consequence, Emerson became a lifelong influence, shaping Hall’s appreciation of the nature of language and the responsibilities that attend its production and consumption.5 Still, Emerson was only one of many formative influences as regards his views on language. In his year at Union Theological Seminary, in his later studies in Germany, and in his first years of teaching at Antioch College, Hall studied Max Müller’s work on language as well as a wide range of biblical scholars working in what was then called “higher criticism.”6 His subsequent acquaintance with the publications of

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4 The diametrically opposed assessments of Hall the man as well as Hall the psychologist can be sampled in Thorndike (1925, pp. 142–148). Lorine Pruette (1926), one of Hall’s first biographers, discusses the “phantasmagoria of amazing contradictions” in these and other assessments (pp. 192–197). Kimball Young (1924, p. 176) negatively characterized Hall as a “poet-dreamer.” Henry S. Curtis (1925) saw Hall as “essentially a poet and seer,” but also saw him as unequaled “in insight and vision of the future of education and psychology” (p. 67).

5 The influence of Emerson in Hall’s life and work has not been adequately recognized. Among other places, it is readily apparent in the substance of Hall’s theory and practice of reading, speaking, and writing. Hall had a framed picture of Emerson on his office wall (Jones, 1962) and retained copies of Emerson’s works, even when he gave away most of his extensive, personal library toward the end of his life. (The remainder of Hall’s books are preserved in the Clark University Archives and in its Department of Psychology.)

6 Hall (1923) mentions his reading of Ludwig Feuerbach and his attendance at Heymann Steinthal’s Berlin lectures on the psychology of language (pp. 189–190). Concern for language was “in the air” at the time. His first major teacher in Europe, the philosopher Eduard Zeller, also had a direct relation to Friedrich Schleiermacher and the Tübingen school of theologians (Hall, 1912.
Hegel, Schopenhauer, and Nietzsche reinforced the views that emerged from this earlier reading and thinking. It is also reasonable to assume that he was deeply familiar with William James’s views on thinking in relation to language, that he read James’s important and relevant essay on “Brute and Human Intellect” (1878/1983), and that he was aware of James’s later criticism of “the Misleading Influence of Speech” (1890/1981, Vol. 1, p. 193).7

For Hall, as for Emerson, James, and the majority of these other scholars, language was analogical or metaphorical in origin. As he put it in Adolescence, metaphors are among the mind’s “first spontaneous creations,” from which language develops, so that conventional language—he said, using a trope borrowed from Emerson (1844/1983c, p. 457)—is essentially “fossil poetry” (Hall, 1904, Vol. 2, p. 145). To get beyond the strictures of calcified language, to allow expression of novel ways of perceiving and understanding, individuals or groups have to create new metaphors. Throughout this ongoing process, alternating between the creation and maintenance of metaphorical systems, Hall (1906) felt that “words must not take the place of things.” Things are primary; language simply tags along, as best it can, in response to novel perspectives on things. To take any given terminology, any single set of meanings, as final or absolute would be “entirely delusive,” he argued, because both experience and language are always susceptible to change. Rather than legislate any one definition, he felt that the “development history” of any given term is more instructive than any of its possible definitions (Hall, 1906, pp. 53–54).

Hall had already formed this basic view of words and language before he delivered his 1884 inaugural address at Johns Hopkins University. In that address, he argued against reifying concepts in the way that Plato, Aristotle, and Kant had done and that “ultracategorical minds and books” were still doing. Strongly opposing the adoption of “some set of categories” and then “pigeonholing among them all facts of matter and mind,” he suggested that this “ill-conceived” approach was tantamount to freezing thinking before it could grow in response to ongoing experience. As we shall see, he recommended instead an approach founded on “historical psychology” (Hall, 1885, p. 131).

Hall’s analysis did not constitute a full-blown philosophy of language, but it did express his basic conviction that any given language is an evolutionary artifact that conveys a particular, contingent perspective. Because there are always other perspectives to be had, Hall warned against a narrow consistency in the use of words. Adhering slavishly to singular definitions, and hence to artificially restricted versions of truth, is the inevitable consequence, he felt, of “the present degradation to which prejudice and class theories” have led (Hall, 1885, pp. 134, 241). Words should be used to explore the nature of things, not to forestall

Ch. 1). Finally, Hall’s copies of Macbeth (1875), White (1872), and Wheeler (1887), among the relatively few remainders from his personal library (see footnote 5), serve as reminders of Hall’s interest in language.

7 Hall was a student of James from 1876 to 1878; they spent many subsequent hours discussing psychology (e.g., in Heidelberg in 1880). Although their relations were strained later, there is no doubt about James’s early respect for Hall, who came to his classroom as a virtual equal at the age of 32 (just 2 years younger than James) after spending time in the classrooms and laboratories of some of the major European philosophers, historians, and scientists. For discussions of James’s views on thinking and language, see Leary (1990a, pp. 19–21, 46–49) and Leary (1992).
alternative and possibly better views of them. As we shall see, Hall’s own practices as reader, speaker, and writer were undertaken with the hope that they would open up rather than close down the possibility of more encompassing and useful conceptualizations of reality.

Although Hall had no time “to quibble about words and forms of expression” with “sticklers for conventional vocabulary,” as one of his closest colleagues put it (Burnham, 1925, pp. 96–97), it must be admitted that his own vocabulary was often difficult to understand. Hall was not simply a man of words, he was a man of many words, some of which had never been uttered, heard, or read before. In fact, it has been estimated that he coined around 300 words in Adolescence alone (Sheldon, 1932, p. 130). And even when he used words that could be found in dictionaries, they were often words like amphimixis, cosmocatoptric, doli-choephelic, hebetude, objugration, temibility, and verbigeration. All in all, as pretentious as the claim might sound, it is not unreasonable to suppose, along with Frederick Eby (1962), that no contemporary of Hall’s—and certainly no psychologist—had “as broad a vocabulary as he did.”

This extraordinary vocabulary as well as the overall proximity that typified Hall’s lectures and publications was remarked upon from the beginning of his career. His own father, in acknowledging receipt of several early reprints, wrote that he had found them “very interesting, especially the long words.” Even though he had not yet had time to read all of these words, his father noted, he could at least count them. Like others, he said, his principal response was “amazement” (G. B. Hall, 1880–1888). It is appropriate that his father mentioned word count as well as word length. Hall seems to have been fascinated by word counts. In discussing Wilhelm Wundt in Founders of Modern Psychology (1912), he reported that “Wundt is one of the most, perhaps the most voluminous of all authors in any field, living or dead.” Counting only the latest editions of his works up to 1911, and not counting the almost equal number of pages that Wundt had published with students in his two professional journals, Hall reached the sum of “nearly 16,000 pages.” And lest someone should doubt how impressive this is, Hall added that the pages of Wundt’s works “are not small, and abound in small-type passages.” As points of comparison, he went on to reveal that “Spencer and Darwin each wrote less than 12,000, Hegel less than 11,000, Schelling less than 8,000, Kant about 4,400, while Helmholtz has to his credit about 6,000 pages” (p. 447). Clearly, aggregations of words as well as individual words themselves mattered to Hall, who ended up publishing about 7,700 pages in books alone, not counting those in “more than 360 articles and published addresses, and hundreds of editorial notes and brief reviews” (Spaulding, 1945, p. 595)—surely, no paltry total.

Although Hall did not intend his words to take the place of things, they were nonetheless the primary medium in and through which he tried to understand the

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8 Hall’s fascination with words extended back to childhood: “As a boy I put down and often defined words that were strange, new, or especially attractive to me from their sound. This I did with a view of enlarging my vocabulary for I confess to an early conceit of using words that would make my schoolmates gape and stare. My critics in later years have, alas! often accused me of pedantry of this sort. If I am guilty, I fear I am incurable because it may thus go back to childhood” (Hall, 1923, p. 124). Hall’s adult habit of dictation suggests the fluency of his extensive vocabulary. Although his quotation of foreign terms was sometimes flawed, the meanings he wished to convey with his extensive vocabulary were generally not only accurate but quite precise, as when he described his teenage “Emersonian craze” as “an ephebic calenture” (Hall, 1917b, p. 297).
world about him, and inspire others to improve upon that understanding. Failure to recognize the tentative and forward-looking nature of what he was trying to do with words has led to misunderstanding the intended significance of what he said and wrote. Hall never presented his words as if they were so closely linked to data that they could be taken as equivalent to them. Like Emerson, he tried instead to convey a vision or perspective that was true to the nature of things but, more importantly, would inspire others to see farther and better than he did. As we shall see, Hall never claimed that his words expressed any final truths, or even any nearly final truths. Fittingly, one of his favorite words was *aperçu*: He was most excited when he could offer a pregnant insight that might lead someone else to a fuller and more accurate view of things. Although it may be fair to criticize Hall for what he did not do (as did Thorndike, 1913, 1925), such criticism should be offered in the context of what he was trying to do and how well he accomplished that. This can be done only by someone who understands the role of reading, speaking, and writing in his work.

**Reading**

If words mattered to Hall, reading was the primary means through which he gathered them.⁹ From at least the time he was in college, Hall was by all accounts a phenomenally voracious reader.¹⁰ All those who knew him marveled at the amount of physical energy and the number of late night hours it must have taken for him to keep abreast of the literature in so many fields. (The subtitle of his major work, *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education*, audacious though it is, provides only a partial glimpse of the entire range of his interests.) Consistent with many other posthumous reports, Samuel Burgess (1925) wrote that “his great ability as a reader and the rapidity with which he could absorb as well as his splendid memory made him probably the man with the largest apprehensive mass in America” (p. 61). And during Hall’s lifetime none other than William James expressed astonishment at “how he ever finds time to read so much as he does”

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⁹ According to Hall (1911), “the word ‘reading’ means gathering, and from the act of grouping letters to words . . . to that of thinking into unity the contents of paragraphs, chapters, and volumes, the whole work of reading is essentially synthetic” (Vol. 2, p. 408).

¹⁰ Even before Emerson’s visit to Williams College in November 1865, Hall had committed himself to an unusually extensive reading program. In letters to his parents, Hall reported that he was leading “the narrow life of a book worm” and that he was convinced that “reading is a great advantage to me . . . Those who read much . . . are the most successful so far as I know in after life,” i.e., after college (Hall, 1865). Because “the college library was a small hexagonal building, open at certain hours only and with very meager resources,” he recalled later that “the chief influence for good to me during all these four years was the formation . . . of an association of less than a dozen classmates . . . which we called the Junto. We met every Saturday night, immediately after supper and often stayed till midnight, telling each other what we had read, reading papers, etc., and among us there was great emulation . . . I find very voluminous notes and papers which I wrote for these meetings” (Hall, 1923, pp. 160–161). Later, when he was a student at Union Theological Seminary in New York, he “read books from the Astor and society libraries” even though “it interfered, of course, with my studies, for my interest in these outside things was far greater, but as I look back now I believe that, on the whole, it was the wisest course I could have pursued” (p. 181). His broad reading habits continued throughout his life; without such habits, he suggested, a scholar “might as well have recourse to either Carnegie’s pension or Osler’s chloroform” (Hall, 1911, Vol. 2, p. 486).
The opposition and support of neutrals (p. 177),

...interdependent responses in the development of a whole...the central problem is how to solve this...the opposition and support of neutrals (p. 177),

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pivotal point at which "men are differentiated—the masters of knowledge from its servants, those who truly know from those whose minds are mere memory pouches" (Hall, 1901, p. 131). Having a nose for what matters and, beyond that, having the courage to follow one's "passionate interests" wherever they may lead keeps the reader from the kind of "mental inertia" that was becoming typical, Hall felt, in an age of increasing specialization, in which "mental dyspepsia" (from undigested reading) and "mental inebriation" (from excessive consumption of one's own ideas) were leading scholars to repeat rather than advance what they thought (pp. 119, 131, 133). Echoing Emerson's call for self-reliant scholars who would use the work of others to inform and inspire their own original thinking rather than foster various forms of imitation (Emerson, 1837/1983a, 1841/1983b), and presaging his own future criticism of narrow-minded specialization (Hall, 1920b), Hall, here and elsewhere, proposed a "method" of reading that could lead to "syntheses" that, when digested and assimilated by others, could in turn lead to yet further developments in human understanding.14

Hall knew of no better way to proceed, either for himself, a world-class reader, or for others. After all, no one can hope to learn all that is currently known, much less all there is to know, without engaging in sustained reading. Even an experimental scientist who wishes to focus solely on the results of experimentation within a well-defined area has to read about the experiments of others. What is or is not taken from such reading, not the experiments themselves, is what ends up being crucial. The importance of reading can only be that much greater for someone like Hall who wanted to draw upon what was being discovered in a vastly wider range of fields. Although supplemented by his own direct experience and by speaking with others, reading ultimately accounted for the majority of what he knew. This is equally the case for other scholars and scientists, of course, yet few have reflected on the significance of this fact as seriously as Hall (and, before him, Emerson).15

Hall's standard practice was to order reading materials for any topics that he wanted to pursue. Ironically, the absence of a fully constituted library at the newly founded Clark University, of which Hall became president in 1888, proved to be a boon. In the absence of an established collection, Hall initiated the practice of ordering materials for both faculty and students on an as-needed basis.16 The librarian at Clark thus spent much of his time acquiring the best of all current materials for Hall and others rather than preserving an old and increasingly out-of-date collection.17 From very close observation, he was able to describe

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14 Hall's reading method was established early. In his inaugural address at Johns Hopkins, he spoke about "the depressive influence which comes from mere acquisition, or from more reading than reflection" (Hall, 1885, p. 129). For a later presentation of the same basic view, see Hall (1911, Vol. 2, pp. 449–450).

13 The metaphors of "digestion" and "dyspepsia" had been used by Friedrich Nietzsche. Hall was familiar with Nietzsche's works, including one in which he used these distinctive terms (Nietzsche, 1887/1967). (The fact that Nietzsche's views were deeply influenced by his own reading and reflection on Emerson's works will close the circle for now.)

16 Hall remained an active faculty member, one of the last true scholar-teacher presidents in the United States. He bragged when he retired in 1920 that he had never raised any money! Of course, he had access to Jonas Clark's money, or at least a good portion of it.

17 Some idea of the scope of this activity can be gained from the preface of Hall's Morale
Hall's reading while Hall was still alive: "He is a very rapid reader and possesses the rare faculty of detecting at a glance any new fact or new point of view on a printed page. . . . He reads French, German and English with equal ease, and prefers a book in the original to a translation." Noting Hall's unusual prowess, he reported "a tradition that he once devoted his lecture hour to a careful review of a 600-page German volume that had only come into his hands the previous evening" (Wilson, 1914, p. 96). Such stories abounded, many based on firsthand information. For instance, one former student said, "I remember once calling at his office to find his table piled with about 25 books, of which there were a nearly equal number in German, French, Italian and English, with one or two in Latin. He said that he must read these books before his lecture tomorrow. On the following day he made a report on most of them" (Curtis, 1925, p. 66).

In short, Hall was no ordinary reader; he had access to extraordinary resources; and his actual practice of reading accorded closely with the "method" he prescribed. For whatever reasons—no doubt including negative feelings that he had generated among some professional colleagues, especially among those not affiliated with Clark University, and negative assessments of his psychological work, much of it based on criteria that were not consonant with what he was trying to do—Hall's remarkable reading abilities and his related "genius for condensation—for getting the meat of a book or a long article into a paragraph" (Knight, 1962)—has largely fallen out of view. Still, Hall's own "confessions" (1901) and a careful review of his actual work suggest that the study in his home at Clark, not the lab that he established at Johns Hopkins, should be the lasting emblem of his professional work. This study, described as a "huge room" that was "a sight to behold . . . jammed with books" and with "periodicals from ceiling to floor," was the quintessential "sanctum sanctorum of the scholar" (Pratt, 1962). And as we shall see, many important exchanges took place in that prized space.

The preceding description of Hall's ability to condense—or, as he put it, to epitomize—what he read focuses primarily on his astute ability to assimilate. This ability was most clearly demonstrated in the most valued possessions in his study—the specially bound volumes that contained his reading notes. (By the turn of the century, long before the end of his career, there were 30 such volumes, according to Hall, 1901, p. 93.) These volumes contained the chief material upon which he based his creative syntheses, without which he would have been a "mere reader." They were so important to Hall that "I once succeeded in insuring them for $4,000, fearing that my function in life would be gone if they were burned, and later I bought a safe for the choicest of them" (Hall, 1901, p. 95). Hall's habit of epitomizing the results of his reading in writing was established "very early in life" (Hall, 1923, p. 123). Near the end of his life, reviewing the "formidable pile"
of bound sets of "epitomes," he was struck by the "prodigious amount of work, time, and even manual labor" involved in their production and use. (How he used them will be discussed later.) By all accounts, Hall had good reason to insure them and every right to be awestruck when he reflected back on all that he had done.  

It should be noted, too, that even Hall, however prodigious his ability, could not read all that he wished. "Omnivorous reader" though he was, he "had books he had no time to read. He would assign those topics to [graduate] students, and then, if they happened to be things he wanted very much to know about, he would follow very carefully what was said" in their oral reports (Pratt, 1962). At various times he also had assistants who read materials and wrote epitomes for him. But he never gave up his own extensive reading. In fact, even when he had an assistant, he had a habit of going "on a reading 'spree' for several days, with only a few hours of sleep. Then, when he was ready to 'disgorge' he would call for his secretary (sometimes late at night) and dictate for several hours." Although this was a potentially abusive practice, one witness reported that Hall's secretary was not to be pitied. "She was tough too, and liked it" (Coe, 1962). In any case, with the aid of students and hardworking assistants, Hall developed "encyclopedic knowledge" (Wallin, 1962) and may well have been, as some thought, "the most widely knowledgeable American mind" (Eby, 1962).  

Nonetheless, Hall was aware that to be characterized as "widely read" was "a compliment of doubtful value. The all-important thing is to have . . . full view of the great sea of nescience with some motive to explore it or to build out the mainland ever so little into it" (Hall, 1901, p. 142). Hall's explorations and building of bridges—his creative thinking about what he had read—was advanced primarily in conversations, lectures, classes, and seminars—in sum, through speaking—as he sought to widen the circle of his rumination.

**Speaking**

If reading was the primary source of Hall's information, speaking was the major means by which he initially shared it, began to integrate it, and progressively developed and tested its "suggestiveness" (Hall, 1901, pp. 94, 103). By far, the most prominent forms of speaking in which Hall engaged occurred in the context of teaching. Although perhaps better known to posterity as a scholar and administrator, Hall was in fact first and foremost a teacher, who aimed at providing his students with "synthetic views that give general orientation and perspective." As he himself noted late in life, all three of his "larger two-volumed

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18 Ironically, and sadly for the historian, Hall destroyed the majority of these notes at the end of his life (Hall, 1922, pp. xvii–xix), although some have found their way to the Archives of the History of American Psychology at the University of Akron, Ohio.

19 Because these statements about Hall's vast knowledge, like other statements quoted in this article, may be suspect because they are made by former students and associates, it is relevant to note that many of these individuals had post-graduation experiences and subsequent positions of prominence that broadened the context and increased the credibility of what they wrote. Also, among the testimonials gathered by Edwin Starbuck and published by Thorndike (1925) are comments of individuals who had no personal relation to Hall and were quite critical of his work, yet made comments like "Hall was an unaccountable genius. I have never believed him normal" (p. 145). Whatever was thought of his personality or his professional work, his intelligence and knowledge seem to have been universally recognized.
books," including Adolescence, "evolved from years of earlier lectures" (Hall, 1923, p. 429). Thus, if the nature of any of these books is to be fully and accurately understood, the nature of the lectures leading up to it must be reviewed. In the case of Adolescence, that means reviewing the nature of his lectures on "psychogenesis," which he had offered for more than a decade preceding the publication of this masterwork (Hall, 1923, p. 363). To grasp what he was attempting to do in these lectures, we need to go back to a distinction between three different approaches to psychology that Hall had outlined in his 1884 inaugural address at Johns Hopkins.

In that address, published as "The New Psychology" (1885), Hall differentiated (a) comparative psychology, which gives insight into the deep evolutionary structures of the mind: "what is somewhat vaguely called instinct" or, in other words, "what is a priori and innate in man" (pp. 121–122); (b) experimental psychology, through which we can learn about the physical relations as well as conscious phenomena of the mind, as we struggle to determine "the range of individual variation" and to give "more exact expression" of this "limited field" (focusing only on conscious phenomena) within the overall "philosophy of mind" (pp. 127–128); and (c) historical psychology, which "seeks to go back of all finished systems to their roots," recognizing that "to know truly is to know historically" (p. 129). It is this third kind of psychology, Hall argued, that promised to reveal "the natural history of mind" and that would "no doubt" best serve the average student (pp. 128, 130). Noting that "philosophic curricula in this country are becoming more and more historical, and with great gain" (p. 129), Hall claimed that the study of "a vast mass of reasoned truth" from the past as well as the present, regarding the mind and its development, would deepen "mental perspective" and give "a wider comparative habit of mind" (p. 129). From a clearly Darwinian perspective, he argued that it was time to bring "the methods of modern historic research" to psychology, "the only field of academic study where they are not yet fully recognized" (p. 131). Doing so would reveal that "neither the popular consciousness of any one nor of all races combined can be said to have exhausted the possibilities of thought" about humans and their development. Each race or human group, from its own distinctive experience in the evolutionary history of humankind, has something to offer, something to say; none can pronounce the final word as long as evolution is ongoing. Among other things, historical psychology, by synthesizing insights from all human groups, would "rescue the higher mythopoeic faculties from the present degradation to which prejudice and crass theories have brought them" (p. 134). "If we could gather into it"—into historical psychology—"all the wisdom that lies about us scattered and ineffective in many minds till it really express the total life of our people," Hall said, it would "more nearly . . . express the life of the [human] race, and be the long-hoped-for, long-delayed science of man" (p. 135).

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20 The other works to which Hall was referring are his Educational Problems (1911) and Jesus the Christ in the Light of Psychology (1917a). In the absence of his projected but never published masterwork on the feelings, emotions, and instincts, Adolescence is Hall's major work and provides the best insight into the basic concepts and theoretical framework that would have oriented this other work (see Hall, 1904, Vol. 1, p. v; Vol. 2, Chs. 10, 12, and 16).

21 Hall's proposed method of bringing together as much as possible of all that has been thought
This is precisely what Hall set out to do in his lectures on “psychogenesis.” He gathered the accumulated historical wisdom about the human race, especially as it pertained to pivotal developments during adolescence, and he highlighted the assumptions, patterns, and findings that emerged in his analysis. In this analysis, he used his own critical thinking and intuitive insight to underscore consistencies, homologies, and trends that suggested certain tentative, but far from arbitrary conclusions. The wisdom he reviewed included but exceeded the results that could be drawn from comparative and experimental psychology. From a wider genetic perspective, for instance, Hall spoke about the “soul,” by which he intended to indicate something broader and deeper than merely conscious “mind.” In fact, in his lectures and then in Adolescence, he spoke in Emersonian fashion about the “mansoul” that was broader than mere human consciousness, although not inclusive of the distinctive forms of conscious and unconscious life experienced by other species. (In this way it was both more empirical and less universal than Hegel’s “spirit.”) This eclectic yet synthetic approach to all that has been known about humans and their development, drawing on the extraordinary breadth and depth of knowledge that Hall had gathered through his remarkable reading and

about a given topic, and then synthesizing this material through critical and intuitive thinking, probably stems from his early exposure to Charles S. Peirce’s series of articles entitled “Illustrations of the Logic of Science” (1877–1878/1992). (These six papers, which provided the historical foundation of American pragmatism, appeared while Hall was a student of William James.) Five years before his inaugural address, in an article on “Philosophy in the United States” (1879), Hall singled out this set of articles on the logic of science as “one of the most important of American contributions to philosophy” (p. 102). Among the points that he emphasized was Peirce’s inference that the progress of science relies upon human “interests” being expanded beyond “our own [individual] fate” so that they “embrace the community.” In short, what we know necessarily depends upon what others have learned and shared with us. As a result, the logic of science is “rooted in the social principle” (p. 102). In addition, “all knowledge comes from synthetic inference” (p. 103). Here is Hall’s method in embryo: (a) reliance on what others have said and (b) synthetic inference about the significance of what has been said. In short, Hall’s method seems clearly to be based on Peirce’s evolutionary philosophy of science, which counters any charge of naïve empiricism. Hall’s community focus is also apparent in his utopian speculations (Hall, 1920b), in which he criticizes rampant individualism and specialization (see Morawski, 1982). He welcomed graduate students into the community of scholars and focused on inspiring, guiding, and then giving them freedom to do their own research, trusting that they would contribute to the advancement of knowledge (Hall, 1901, p. 125).

22 Hall has invariably been portrayed as falling away from his early work in experimental psychology rather than moving on to historical psychology. For whatever reason, he did not begin to fulfill his stated plan for the development of historical psychology until he had moved from Hopkins to Clark University. Perhaps that was simply because he saw historical psychology as a “more advanced course” than either comparative or experimental psychology, one that “has not yet found much representation in our country” (Hall, 1885, p. 243). In any case, part of the message of the present article is that blindness to the significance of Hall’s proposal of this kind of psychology, not to mention his attempt to develop it, has distorted assessments of his legacy to psychology. Adolescence is not a work of insufficient and hence failed scientific psychology, if by that one means experimental psychology; rather, it is a product of an entirely different set of methods and intentions.

23 Along with the ancient Greeks, especially Aristotle, Hall equated soul with life and felt that different kinds of life have different kinds of soul. Hence, the human soul, for Hall, is but one of many types of soul, and as each species goes extinct, a distinctive form of soul as well as a distinctive form of body is lost forever (Hall, 1904, pp. 54–64, esp. 63). Hall drew the term “mansoul” from John Bunyan’s The Holy War (1682/1948), in which the allegorical town of “Mansoul” represented human nature.
then preserved in his equally remarkable memory and extensive reading notes, is what led to the two-volume work that focused on the psychology of adolescence not only in its own right but also in relation to physiology, anthropology, sociology, sex, crime, religion, and education.

As the preceding review should suggest, the preparation and publication of *Adolescence* was an awesome undertaking, resulting finally in 18 long chapters that drew material from past and present as well as from psychology and many other fields, so that even the initial chapter on so seemingly mundane a topic as “Growth in Height and Weight” included in just its first five pages discussions on “the psychochonic tropism of agamic generation” (Hall, 1904, Vol. 1, p. 1), “phylogenetic evolution” (p. 2), the “law of tachygenesis” (p. 3), “Roux’s hypothesis of a struggle for survival between the tissues, organs, and cells of the same body” (p. 4), “prepubescent acceleration” (p. 5), and “memoirs and tabulations of human growth” (p. 6), all of which and much more was integrated into a continuous analytic narrative leading to the conclusion that “the adolescent stage... is the bud of promise for the race” (p. 50). The key point to be made here is that, before this chapter appeared in print, its diverse material had undergone revision after revision in year after year of Hall’s teaching, taking shape “slowly under successive repetitions and amplifications.” (Late in life, after reviewing his old lecture notes, Hall marveled at “how radically I changed the form, substance, and scope of my favorite courses each year, slowly improving them in clarity and coherence!” See Hall, 1922, p. xi.). Even so, Hall indicated that this chapter, like his other chapters, was still but “the first attempt to bring together the various aspects of its vast and complex theme.” Pointing out that he had omitted “much that was technical and detailed,” he said that he had tried “to bring the subject-matter of each chapter within the reach of any intelligent reader” (p. xix). His objective, then, was to convey a new, synthetic understanding of the general contours, various dimensions, and practical issues of adolescence. Consistent with his view that language can do only so much in relation to evolving reality, he did not pretend to have uttered any final words.²⁴ He had, however, proposed

²⁴ In this regard, in both teaching and publishing, Hall presented himself and his objectives in ways that contrasted markedly with Wilhelm Wundt and his work. Readily granting Wundt’s “vast erudition,” Hall (1912) averred that Wundt was “the greatest definer who ever wrote in the field of psychology” (p. 418); that “he never says either a brilliant or a foolish thing” (p. 419); that he “almost seems to wish to be the last in fields where he was the first, instead of taking pleasure in seeing successors arise who advance his lines still further” (p. 419); that “his best work is so in the very center... of the current tendencies that he is all the sooner to be transcended” (p. 420); that “his style in the main is lusterless” (p. 454); and that “he would rather be commonplace than brilliantly wrong” (p. 455). In contrast, Hall felt that “the true man of science... can rejoice in the work of those he has inspired quite as much as in his own” (p. 420) and that “this thought [in which Wundt “seems to take little comfort”] ought to be very precious and consoling in the declining years of a great teacher” (p. 420). Wundt’s approach in these matters, Hall said, must be ascribed “in part at least to his lack of that deep sense of evolution which sees all things, even one’s own work, by anticipation in its true historic perspective” (p. 420). For his part, Hall said, it seemed clear that what psychology most needed was not someone who offered a safe, closed system like Wundt’s, but “a bold synthetic genius who will show us the way out” of current impasses. (Hall wrote this as the Würzburgers and others were revealing the limits and problems of Wundtian introspectionism.) “Our need is a new method, point of view, assortment of topics, and problems,” he said. “These I believe geneticism is very soon to apply” (pp. 444, 454–457). This “geneticism,” necessarily open-ended, provided the orientation for Hall’s prospective book on the evolutionary psychology of
something novel, not simply a compendium of what others said, but a creative synthesis that he hoped would lead others to greater insights and, hence, better practices. That this was his intention—to produce a work that would stimulate the thinking and improve the practices of others—was corroborated by how he taught and what he meant to achieve through his teaching.

Hall was extremely critical about the typical mode of instruction in his time. He opposed the “medieval method of lecturing” that “strove to present . . . a view of a subject so complete that reading was almost unnecessary.” This nearly universal method bred passive students who “sit socially with others” while they “have knowledge poured in,” their only occupation being to record “with great assiduity the words of the master’s as dictations” (Hall, 1901, pp. 96–97). Instead, Hall attempted “to present as concisely and saliently as possible the methods and results [of research], in a way that shall be interesting and stimulating to further study, aiming chiefly at the quality of suggestiveness” (p. 103), by which students would be prompted to take the next step on their own. “The best reward of teaching,” he confessed, “is when students . . . come round to question, seek further light, or even to discuss and differ, or dissent” (p. 104). Hall sought, in short, to provide “precious and indelible experiences” that prepared his students for the “struggle for mental existence”—for giving “increased vitalization” to what otherwise would be “dead information” so that “facts and laws” may “undergo a process of higher digestion and assimilation” (p. 105).

The classroom was only one venue in which Hall taught. The prototypic setting—the setting most frequently recalled in later years by students and colleagues alike—was his home study at Clark, where he held his famous Monday Evening Seminars. “Question, answer, debate and dialogue” and “the give and take with many men of many minds” were the best means, he felt, of “sharpening” intellects for lifelong learning. In comparison to such occasions, Hall wrote, “a book is a dead companion” (Hall, 1901, p. 113). “Of the two aims of education, namely, to give exact and finished results” and “the excitement of interest and curiosity,” he had no difficulty concluding that “the latter. . . . is by far the higher” (Hall, 1923, p. 367). With the “intellectual emancipation” thus effected (p. 366), students could “be trusted, inspired and guided” to accomplish “the best work of the world” (Hall, 1901, p. 125).

This approach accords so closely with 21st-century pedagogy that we may not fully appreciate how revolutionary it was at that time. Its success, in any case, was

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instincts, emotions, and feelings, which would have connected human psychology, theoretically and practically, to its phylogenetic past and its ongoing development. Although this proposed work never appeared, its basic concepts and theoretical framework were presented in Adolescence (most notably in Vol. 2, Ch. 10).

The notion of “creative synthesis,” especially as it involved “genetic synthesis”—understanding how things have evolved and are continuing to evolve, in their total complexity—was crucially important to Hall. He not only felt that it was the primary need of psychology (Hall, 1909, p. 253), he argued that it was crucial to life in general and that it was “never so needed as in our very complex age of distracting specialization” (Hall, 1922, p. 405).

Like Nietzsche and others, Hall felt an affinity with Greek notions of vitality, approvingly noting that “the Greeks called their teachers inspirers because they deemed enthusiasm the only vitalizer of the mind” (Hall, 1904, Vol. 2, p. 523). He was referring presumably to “rhapsodes,” the poet-teachers who chanted Homer, the original source of accumulated wisdom for the Greeks. He saw himself performing the same kind of function for his students.
abundantly evident. To select only a small fraction of the available evidence, here are some typical comments from former students and colleagues: C. C. Pratt (1962) said that Hall’s “chief interest was the student, to have him follow his own interests. . . . Everybody attended the seminars, not by coercion, but because here was a man whose views might be electrifying, and you better be there. . . . Sometimes his talk could be most inspiring.” George Allen Coe (1962) contended that “Hall’s greatest gift was his power to communicate to his students enthusiasm for work and confidence in their ability.” He was “a great teacher.” Henry H. Goddard (1947) said that “he woke me up, wound me up and set me going.” Lewis M. Terman (1925) reported that “no one else ever so stimulated my thinking or fired me with so much enthusiasm.” Frank Spaulding (1945) recalled that “his lectures were more like intimate conversations.” Contrasting Hall’s lectures to those of others, he said that “Dr. Hall’s treatment of every subject and every aspect of a subject was deliberately designed to stimulate, to provoke, and as far as possible to compel his students to think.” Hall’s presentations had the effect of “opening up a subject in which there were unlimited possibilities of investigations, perhaps leading to new discoveries” (pp. 614–615). Describing Hall as a great explorer, Harry W. Chase, President of the University of North Carolina, said “he was always trying to give us, his students, a sense of the joy of such a search. He tried to make us see, not drudgery and heavy routine, but the fascination and the glories of the search for truth.” Expressing a thought shared by many others, he went on to say that Hall “always meant most to me, I think, in those hours when, in those famous seminars of his, he let his mind go, to play freely over the wide range, suggesting, illuminating, fanciful sometimes, almost fantastic, but always stimulating and inspiring. All this was extraordinarily calculated to stir the blood of ambitious youth. He did stir us, and inspire us. . . . The world has known only a handful of such great teachers” (Chase, 1925, p. 63).

It would be easy to multiply such sentiments, but just a few more, from well-known psychologists who were neither students nor colleagues at Clark, should suffice: “One of the most stimulating evenings of my life,” reported Robert M. Yerkes (1943), “I spent in Hall’s famous ‘Seminar’ in his smoke-filled study discussing and defending the point-scale versus the Binet methods of gauging intelligence” (p. 75). The fact that this stimulating evening involved debate about the methodology of intelligence tests suggests that some common views of Hall—that he was dogmatic (e.g., in his criticisms of testing) and that he had lost interest in and was no longer knowledgeable about developments in empirical procedures—were at least somewhat unfair. In fact, no less a person than E. B. Titchener, perhaps the most renowned methodologist of the time, tried to quash such criticisms. Calling Hall “a genius” who was “at his best on the lecture platform and, more especially, in private talk,” Titchener (1925) argued that 30 years of acquaintance qualified him to say that Hall “wasn’t so dogmatic as made out to be, nor as cavalier about methods or facts; he simply was relatively more concerned to inspire” (p. 92).

Over his long career, Hall spoke to many others besides students and psychologist-colleagues. In fact, it has been estimated that he gave over 2,500 public lectures, often devoting Saturdays, holidays, and summers to this purpose (Spaulding, 1945, p. 595). As in his university and professional lectures, he used these occasions to integrate what he had learned and to convey his own thoughts in a
manner that would stimulate and motivate his listeners. A longtime student of public oratory, Hall eventually abjured rhetorical tricks (unlike many public speakers at the turn of the 20th century), preferring to speak plainly and directly, and by most accounts (including Wilson, 1914, pp. 96–97) he was always successful in maintaining the attention of his audience. Although his son reported that Hall found this activity a “grind” (R. G. Hall, 1962), it is apparent that he was very successful in communicating his views on a variety of topics, including the need for reforms in primary and secondary education.

If Hall’s approach to teaching and public speaking were unusual at the time, so too was his approach to publication—and the two were closely linked. “G. Stanley Hall was a teacher,” Arnold Gesell (1925) noted, echoing many others. “He sought rather than shirked students. In public addresses he frequently became instructor, mentor or path breaker. The style of his printed work, likewise, was in no small measure influenced by a teaching impulse. He made himself an attorney for ideas, sometimes contradictory ideas; for he was willing to put the burden of learning and of organization upon reader or listener.” But if Hall was a teacher, Gesell said, it was “not in the didactic sense. He took no great pains to hand down a finished, well defended personal system of thought. Rather he chose to arouse new thought and to furnish fresh insight. Because his written work was informed with this teacher spirit, it will prove to be a vital legacy.”

In sum, as James H. Leuba (1925) put it, Hall was “a generator of intellectual life” (p. 76). Through both speaking and writing, his goal was to stimulate the thinking and discoveries of others.

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27 Formal declamation of poetry and speeches written by others was a typical part of schooling, and even home life, in Hall’s childhood years, but by the age of 15 or 16 he had gone beyond the norm by beginning to write his own “orations” and undertaking his own private study of classic speeches in order to improve his abilities. Years later, he recalled walking 18 miles to hear Charles Sumner, “one of my ideals,” and words, he said, “cannot express my thrills” (Hall, 1923, pp. 117–118). Hall’s oratorical skill, sharpened by participation in debate, resulted in his election as class orator in college, during which years he heard Emerson speak and began to give public addresses of his own, even outside the college (pp. 161–164). Later, as a student in New York City, he continued to hear “the great preachers of the day” and to read some of their speeches (p. 179). It seems likely that the inspirational thrust of his later teaching and speaking was influenced by his extended exposure to and interest in preaching.

28 Hall (1901) felt that “the real artist in pedagogy” should be able to “make fascinating to the general public” virtually any topic of “high academic interest” (p. 107). That he had come to speak “plainly and directly” by the turn of the century, after having mastered the finer aspects of traditional oratory, demonstrated his lifelong attention to rhetoric. (Surely, for a man with his vocabulary, ‘plain and direct speech’ had more to do with grammatical style than the choice of individual words.) As audiences changed, so did his delivery. In any case, however, Hall may have felt about his public speaking, he clearly relished and focused on his teaching. In fact, Hall insisted on orienting his weekdays around it. He spent his mornings, starting at 7:15 or 7:30, preparing for his daily 11:00 class. That this class was the center of his day is underscored by the fact that, after years of teaching at this time, his energy and intellectual powers peaked “more or less automatically, almost on the stroke of the hour,” so that even during holidays and summers “my brain crepitates” and “I . . . become unwontedly loquacious” at that time (Hall, 1901, p. 103). (He reported later that these same effects continued after retirement in 1920. See Hall, 1923, p. xi). In the afternoon Hall did other work (including visiting with students) until approximately 4:00 p.m., at which time he typically went walking, often engaged in conversation with a student or students. He devoted his evenings, extending into the early hours of the morning, to reading and writing.

29 Although the nearly unanimous testimony of those who knew him best leaves no doubt about
Writing

When Hall judged the ideas gathered through reading and developed through speaking to be sufficiently mature—which is to say, when he felt they had been vetted and improved to the point of maximal "suggestiveness"—he put them into written form and published them. This final fruit of the process that started with reading was often a long time coming. His two-volume Adolescence (1904), for instance, took 20 years to produce, if we count back to the inaugural address that foreshadowed it.

An example of the variety of materials and concerns that Hall synthesized in this work, and of Hall's ability to draw insight from the unlikeliest places, is provided in the opening pages of Chapter 3, which dealt with the seemingly prosaic topic of the "Growth of Motor Power and Function." After capturing the reader's attention with autobiographical reflections on his scientific studies in Germany in the late 1870s, Hall discusses how his attempt to understand a single, seemingly trivial muscle in a frog's leg had led him to explore electricity, mechanics, mycology, anatomy, physiology, and mathematics; how he came to realize that "the structure and laws of action of muscles were the same in frogs as

Hall's purpose or his ability to fulfill it (see, too, Averill, 1990, p. 130), it should be noted that Hall acted at times in ways that suggest that he could be threatened by the very kinds of independence that he intended to stimulate (see Sokal, 1990). Nonetheless, Hall's personal foibles in this regard seem fairly minor compared to the fact that Clark University, so largely created and shaped by him, "could claim to have been more open to more sorts of people than most contemporary American universities" (Sokal, 1990, pp. 122–123).

Although Hall and his assistants wrote very careful epitomes of what they had read, Hall generally preferred to lecture from an outline or sketchy notes rather than read from a fully prepared, written text. He had discovered that he could work out his ideas better in the ongoing flow of a presentation or conversation with students, colleagues, and others. His preference for oral communication as the means of working out ideas accords with his observation that "writing slows down the impetuosity of thought and its pace is also vastly slower than oral speech" (Hall, 1911, Vol. 2, p. 441). It is interesting and relevant to note that the writing process often took oral form for Hall, as he dictated his words to his secretary. Even revisions were often handled in this manner. Reputedly, he rarely bothered to proofread his written texts, leaving that to others (see the comments of his secretary Evelyn Fitzsimmons Douglass, 1963, pp. 2–3). A revealing summary of the entire process leading to publication has been provided by Amy Tanner (1925), one of Hall's research assistants: "When he became interested in a new aspect of psychology, his first move was to get hold of the key studies. While he was going through them his secretary was making out a bibliography and his research assistant was summarizing other articles and routing out as many references as possible. He then soaked himself, so to speak, in this sea of ideas, relaxing all critical processes, becoming the incarnation of the theory for weeks, months, or even years. [This was the 'assimilation' process described in Note 13.] During this phase he usually began lecturing on it, reproducing it for his students with tremendous zest and enthusiasm, flooding them with references, rarely criticizing it adversely, always emphasizing the new vistas opened by it. The phase would also always be brought out in connection with the thesis being read in the Seminary [i.e., Hall's Monday Evening Seminar]. . . . Then after a time orientation began. [This was the "creative thought" phase described in Note 13] Certain aspects were enlarged; others retreated to the background; some received new applications; others dropped out entirely. . . . All this was accomplished . . . as a spontaneous growth process. . . . When there was time for this process to be completed and the outcome put into words, it appeared" (pp. 89–90). Although this description underestimates the creative revision of ideas that took place in the context of Hall's teaching, probably because Tanner worked for Hall between 1911 and 1919 (after his major works, based on major courses, had appeared), it does capture the deliberate and systematic way in which he worked.

A more conservative estimate, based on his courses on psychogenesis, would be 10 years.
in men”; how “such contractile tissue was the only organ of the will and had done all man’s work in the world, made civilization, character, history, states, books and words”; how his frog had thus opened up for him “the mysteries not only of motor education and morality, but of energy and the universe”; and how therefore “any object, however unattractive, may be a key to the greatest themes.” Among these themes, he concludes, is the fact that “narrow specialization is now hardly possible, since evolution and the doctrine of the conversation of energy and comparative methods of study in every field have given us again a true universe instead of a multiverse” and that in recent times “we have modified the antique Ciceronian conception vivere est cogitari [to live is to think], to vivere est velle [to live is to will].” All of this, he says, “gives us a new sense of the importance of muscular development and regimen” (Hall, 1904, Vol. 1, pp. 129–131).

In this very distinctive way, citing an experimental physiologist, a cultural scholar, two poets, a classicist, a philosopher, a neurologist, and others, Hall goes from recounting a minor experimental study to underscoring (a) the need for integration, or synthesis, in a world of increasing specialization and (b) the ongoing shift in the understanding of mind, from a pre-Darwinian focus on its cognitive activity to a post-Darwinian emphasis on its conative role in the struggle for existence. If one multiplies this single example by the tens and even hundreds in this book, it becomes clear why Pruette (1926) has said that “no one should take on Adolescence as light reading, yet whoever dips within its pages is sure to find much that is interesting” (pp. 120–121). Indeed, not only interesting, but organized in an expansive way that conveys “the big picture” even when dealing with seemingly peripheral subjects. So if one wishes to consider, for instance, the relation between the changes occurring during adolescence, on the one hand, and the possibility of grand human achievement, on the other, there may be no better place to turn, even today, no matter what idiosyncrasies and anachronisms one has to tolerate. Adolescence, in short, provides a fascinating if sometimes frustrating read. Flowery phrases and otherwise excessive prose intermix with charts and asides; frequent neologisms with occasional malapropisms; scientific and historical details with philosophic interpretation; but all is offered in the service of a stimulating and, yes, sometimes “suggestive” journey. The possible taking-off points are too numerous to count.

Without question, the scope and style of Hall’s writing was out of step with the then-emerging patois of spare scientific discourse, in which a simplified form of communication was being moved toward its ultimate logical conclusion. Nonetheless, in drawing from many traditions and disciplines (including current developments in the study of ancient myths and customs), Hall’s work anticipated late 20th-century developments in interdisciplinary studies as it sought to specify the possibilities and probabilities associated with the Darwinian revolution, especially as regards understanding the conditions and meeting the challenges of the adolescent years of life. In many ways, Hall’s work more closely approximates the outlines of today’s biologically grounded, evolutionarily guided psychology than does the work of his contemporaries and critics. Neither behaviorism nor introspectionism—not even what was then called functionalism—resonates with today’s complex discipline as nearly or easily as Hall’s genetic psychology. He certainly did not get all of the facts right (many, after all, were not available at that time), but he was going—and pointing—in a direction that has proven to be fruitful.
Although it is impossible to compass briefly all that is contained in Hall’s *Adolescence*, it is possible, and more relevant, to say a few words about the theoretical framework of his classic work, focusing on typical misreadings of that framework and of Hall’s purpose in using it. For, in fact, the framework was much more flexible, and Hall’s purpose much less dogmatic, than has been represented: Hall used recapitulationist theory, intentionally, both loosely and provisionally. His objective was never to prove the theory but simply to use it to frame and advance his thinking. Had psychologists, historians, and others paid closer attention to his actual words, they would have realized what he intended to accomplish and been less prone to simple-minded interpretations and beside-the-point objections. It is past time to give Hall’s writing a closer and more sympathetic reading.\(^{32}\)

Like many others at the time, although more seriously than most psychologists, Hall felt that each phenomenon of human life, including each psychological phenomenon, is rooted in the biological realm. This conviction, coupled with his belief in evolutionary theory, entailed the conclusion that the fundamental “psychonomic law” had to be articulated in concepts that were consonant with biological evolution and with the doctrines associated with it. These doctrines, for

\(^{32}\) By a “closer and more sympathetic reading” I mean a reading that is (a) more precise in relation to the actual words that he used, as I will discuss below in the text; (b) more appropriate in relation to what he intended to accomplish, as I have been discussing in this article; (c) more sensitive to the historical context within which he wrote; and (d) more dispassionate and fair-minded than that of many of his contemporaries. As regards (c), Hall’s work has typically been written off because of its theoretical commitment to recapitulationism. But as Gould (1977), Mayr (1982), Richards (1987), and Stocking (1968) have shown, many others (besides Hall) were using recapitulationist premises in the late 19th and early 20th centuries. In fact, recapitulationism was not taken to be definitively discredited by the majority of scientists until 1930. Before that time, many respected scientists continued to hold onto some version of recapitulationism. (If this were not true, Hall would hardly have been invited to address the American Association for the Advancement of Science at the 50th anniversary celebration of Darwin’s *Origin of Species*. See Hall, 1909.) Up to 1930, there were still empirical and theoretical grounds for maintaining allegiance to recapitulationism. Although these grounds were shaky by the 1920’s, they were still relatively sturdy in the early 1900s. Hall’s awareness and openness to contrary evidence was, perhaps, best illustrated by his invitation of August Weismann, one of the strongest critics of recapitulationism, to be a principal speaker at Clark University’s 20th anniversary celebration in 1909. (Weismann did not accept. See Rosenzweig, 1992, pp. 46, 344). In short, it is simply wrong to suppose that Hall closed his mind to criticisms of recapitulationism or that Hall’s attachment to it discredits his scientific reputation. In any case, his use of recapitulationism was different from what has typically been supposed, as I argue below in the text. As regards (d), it is important to recall the ambivalence and even animosity that Hall had engendered among many of his contemporaries because of various incidents in the 1890s and early 1900s. (On Hall’s various professional quarrels, which concern me only insofar as they created a less receptive audience for his work, see Ross, 1972, Chs. 12 and 13.) As a result, *Adolescence* did not receive an unbiased reception. For instance, William James, a typically open-minded, curious, and even excessively accepting person, especially in relation to his former students, did not even cut the pages of his copy of *Adolescence*. Without a doubt, this context—the social context in which Hall’s work was received and perceived by professional colleagues, generally outside the Clark community—led to its being read, if at all, with a certain jaundiced, even suspicious frame of mind. Hall’s seeming duplicity in professional contexts had made many doubt his honesty; but even James, who thought his psychology “queer and tortuous,” did not doubt Hall’s “sincere devotion to truth” in scholarly matters (James, 1893/1999, p. 451). While acknowledging Hall’s share of responsibility for this less than ideal interpersonal context, it seems only fair to look at his scholarly work directly, for its own sake, rather than through the filter of this aspect of his professional reputation.
Hall, included recapitulationism, a system of postulates developed largely by Ernst Haeckel and Herbert Spencer and espoused by many others in attempts to describe and explain ontogeny (the development of the individual) in terms of phylogeny (the development of the species). Therefore, when it came to understanding both the phylogenetic evolution of human characteristics and the ontogenetic stages by which they develop, Hall believed that it was reasonable and prudent to base psychological descriptions and explanations on recapitulationist premises. But as Fisher (1925) has written, in an account that is still among the best treatments of Hall’s thought, modeling descriptions and explanations on recapitulationism meant only that Hall’s psychology “assumes that the psychical life and its expressions in the individual develop from birth onward through a series of stages more or less closely corresponding to successive cycles of habits through which life and especially early man and his immediate ancestors are conceived to have passed” (p. 22, italics added).

Unfortunately, Hall’s contemporary critics and subsequent commentators have almost invariably failed to note the “more or less”—even the “as if”—quality of Hall’s reliance on recapitulationism. As a result, they have overestimated the extent to which Hall believed in recapitulationist theory. The reader of this article, thinking back on what has been said about Hall’s approach to words and language, is perhaps better prepared than most to understand how, for Hall, recapitulationism provided only a convenient and possibly temporary framework, pending further corroboration, modification, or disconfirmation. But for anyone who reads his work carefully enough, without blinding presuppositions, he could hardly be clearer when he writes that “general psychonomic law assumes . . .”; certain psychological mechanisms are “perhaps” a relic of many generations; and other mechanisms, “whatever they are,” are “somewhat” represented in the brain; nor could he be clearer in acknowledging that, “tentative as is now our knowledge,” he can only offer genetic explanations of widely varying “degrees of probability” (Hall, 1904, Vol. 2, pp. 61, 65; Vol. 1, pp. viii, 50, italics added). In short, Hall was absolutely up front in acknowledging that his claims “have been demonstrated [only] so far as is now possible in this obscure and complicated realm,” and he explicitly added that “the limitations and qualifications of the recapitulation theory in the biologic field” were such that “the time has not yet

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33 It is not my purpose, nor is there space, to review either the history or the specifics of recapitulationism. Readers who wish the basic facts of post-Darwinian theory (including neo-Darwinism and neo-Lamarckianism) can confer Nordenskiöld’s classic (1928) treatment. For more recent and more detailed discussions, see Gould (1977) or Mayr (1982). A more sympathetic review of the history of recapitulation theory, although not extending all the way up to the time of Hall, can be found in Richards (1992). Richards (1987) has also provided the best treatment of the impact of evolutionary theory, including recapitulationist and neo-Lamarckian theory, on late 19th- and early 20th-century theories of mind and behavior. The lasting influence of recapitulationism can be seen in works by Sigmund Freud, Carl Jung, and Jean Piaget (see Sulloway, 1982; Boden, 1979, Ch. 6; and Shamsasani, 2003, pp. 182–191, respectively), most of which were published long after Hall’s Adolescence. Interestingly, some of the questions and issues associated with recapitulationism, and especially with Hall’s use of it, have come back to the fore in recent evolutionary developmental biology (see Carroll, 2005, and Raff, 1996).

34 Hall’s pragmatic approach to psychological theory is clearly reflected not only in his early discussion of Peirce’s thought (Hall, 1879, pp. 101–103) but more pertinent in his later criticism of Wundt for ignoring “German pragmatism,” as represented in Hans Vaihinger’s Philosophy of “As If” (Hall, 1912, p. 444).
come when any formulation...can have much value.” In this situation, he had done “the best I could with each instance as it arose” (Vol. 1, p. viii). Such statements can be found throughout Adolescence, so that it seems only fair to conclude that Hall was not a stooge for recapitulationist theory, but was engaged in appropriately qualified thinking by means of the only conceptual framework that seemed then to promise an adequate biologically oriented explanation of psychological phenomena, many of which other psychologists had overlooked and some of which they would soon try to legislate by fiat out of existence (or at least out of psychology). Indeed, Hall’s thinking and writing were so qualified, as Fisher (1925) also pointed out, that “ontogeny” in Hall’s discussions “often reverses or fails to follow phylogeny” (p. 38). In other words, though Hall was using recapitulationist language, he felt free—or rather, compelled—to modify its application whenever the available evidence seemed to warrant it. In any case, he fully admitted that “no one can feel more painfully than I the inadequacy of such crude attempts as the above to delineate a standpoint which, from the nature of the case, cannot yet entirely transcend the realm of crude analogy and metaphor” (Hall, 1904, Vol. 2, p. 142). In many instances, he said, “the problem, whether there is any paleopsychic race element, is as inevitable as it is unanswerable” (p. 194).

Then why, one might ask, did Hall use recapitulation theory at all? Why did he operate, as he readily admitted, at the level of “crude analogy and metaphor”? Because he felt that was the best way to advance his thinking and that of others. And with this realization we can close the loop of this article’s argument. From the beginning, largely through reading, Hall strove to gather the best information that he could. He then sought to express what he had learned in insightful and provocative words, spending years testing his various formulations, especially through speaking to and with others. When he felt he had done as much as he could to improve what he had to say, he wrote up and shared his thoughts through published work that he hoped would stimulate and guide the next steps in the pursuit of empirical knowledge, theoretical understanding, and practical wisdom.35

35 As we come to the end of this analysis of the role of reading, speaking, and writing in Hall’s work, it is reassuring (to the author) to note that its results are consonant with the view of Hall that was articulated by his colleague and friend Edmund C. Sanford (1924). Borrowing a distinction made by the German physicist Wilhelm Ostwald, Sanford called Hall a genius of the Romanik as opposed to the Klassiker variety. “His mental machinery is labile: his ideas bud forth in all directions; his interests are wide; he reads everything; he talks readily and interestingly; his enthusiasm is contagious. As a consequence he draws about him, without effort, eager collaborators... They, in turn, work as never before, accomplish results seemingly beyond their powers, and make return in affectionate admiration. But the need for communication is intense in the Romanik; the university lecture-room and seminar rarely suffice for it; he reaches out for a larger audience through publication. When he writes, he...is careless of details and even of minor errors... Is it not enough that he has furnished a new insight and opened new territory?” Foreshadowing Thomas Kuhn’s (1970) distinction between revolutionary and normal scientists, Sanford argued that the Romanik “cleared” new fields and “ploughed old ones... anew,” whereas “the more methodical and cautious Klassiker” preferred to work “in fields already reduced to normal tillage” (pp. 318–319). In the end, “it is as a pioneer and propagandist” that the Romanik should be judged. “The attempt to appraise him by other standards misses the essential meaning and purpose of his life” (p. 320). Although nothing has been said about “practical wisdom” in this article, Hall was clearly concerned that knowledge and understanding should lead to improved ways of dealing with adolescents, their potentials, and their problems. Adolescence was no more the final word in practical wisdom than in knowledge and understanding, but there is no doubt that it brought warranted attention to the distinctive opportunities and challenges of this phase of life and thereby helped to advance practical wisdom.
When he published *Adolescence*, Hall knew that he was offering only “the first attempt to bring together the various aspects of its vast and complex theme” (Vol. 1, p. xix), but he happily anticipated the pleasure of “seeing successors arise” who would advance “still further” than he (Hall, 1912, p. 419). It seems reasonable to conclude that he would be pleased—for very good reasons—with the progress he helped to inspire. No doubt, he would also be pleased to think there were at least some psychologists and historians of psychology who remembered him for this contribution.

Science may be distinguished by its affinity to data, measurement, and operational language, but the advancement of knowledge—in science as elsewhere—depends upon more than these. For a few important decades, G. Stanley Hall, a man of many words, supplied some of the means by which psychology passed through its adolescence as both discipline and profession. And he did it his way—a way that suggests that more attention should be paid to the role of reading, speaking, and writing in the history of science.36

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36 The reader will naturally wonder how my vision of Hall differs from that of Dorothy Ross (1972). Clearly, Ross remains the biographer of Hall’s life and work, and everyone who follows will be indebted to her work, including her extensive interviews with individuals who are no longer available for comment. Essentially, I have tried to give further perspective to her recognition that Hall’s contemporaries criticized his work for its weaknesses while neglecting to note its strengths (p. xiv). Even though her portrait of Hall as a “prophet” dovetails with my vision, she was relatively more concerned to focus on the origins and development of his work, and the various conflicts that he experienced, whereas I have focused my attention on the methodological context and the open-ended, future-oriented, heuristic quality of his work. I hope it is clear that one need not deny the problematic aspects of Hall’s life and career to argue that his prophecies were not all castles in the air.

References


Hall, G. S. (1865). Letters to parents. G. Stanley Hall Papers, Clark University Archives, Clark University, Worcester, MA.


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