

## **Educating the Emotions: Academic Psychology, Textbooks, and the Psychology Industry, 1890-1940**

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In this chapter I shall recover an important yet relatively neglected dimension of the history—and education—of “the psychological.” While historians have explored the early history of the mental health industry, with its novel language, technologies, and institutions, there exists hardly any analysis of the work that took place in the academy. The oversight of the work performed within colleges and universities may suggest the reluctance of scholars to question certain analytic distinctions between knowledge (science) and culture. Historians and psychologists, nevertheless, can only benefit from traversing more freely across the presumed boundaries of the scientific and the cultural, the professional and the popular, in order to better understand how psychological knowledges about social and personal life were manufactured, disseminated, and made meaningful. Here my focus is on psychology textbooks published between 1890 and 1940, a literary genre generally regarded as neither wholly scientific nor simply popular. These textbooks offer an opportunity to assess more comprehensively the relationship between the academy and the mass circulation of psychological ideas and ideologies, and have much to say about the politics of the early twentieth-century “higher education” of emotions.

In his 1890 introductory psychology textbook, William James presented a new theory of emotions as internal, physical happenings which are afterward felt as mental experiences. James reversed what he called the “natural way of thinking” about emotions that assumes that “mental perception of some fact excites the mental affection called the emotion.” In contrast to the view that

emotions were the result of mental processes, James proposed that they actually preceded the thought process: "*the bodily changes follow directly the perceptions of the exciting fact, and our feeling of the same changes as they occur IS the emotion.*"<sup>1</sup> James's theory, informed by the research of physiologist Carl Lange, was to guide emotion research for half a century, bestowing upon the new scientific psychology an organic, natural, yet fundamentally mechanistic explanation of human emotions.

The new scientific psychology, heavily influenced by James, and disseminated in textbooks and experimental reports, signals an apparent lacuna if not contradiction in the conventional histories of psychological life at the turn of the century. On the one hand, cultural historians have garnered considerable evidence of the "modern" psychological beings who, freed from nineteenth-century moralism and nourished by a culture of consumption, were conceiving themselves as self-gratifying, yearning "individuals." On the other hand, historians of science have reported how the new academic psychology was positing the idea of psychological beings as determined, biomechanical, and limited in their power to alter themselves. The first representation depicts agents who are seemingly able to make themselves into whatever they desired, while the second portrays beings whose lives are determined by invisible yet forceful laws of nature. I shall examine the emerging scientific or determinist view of emotions as a means to consider the extent and dynamics of the apparent contradiction in historical accounts.<sup>2</sup> Representations of emotions in psychology textbooks—representations that are also evident in scientific practice and popular cultural understandings of emotion—are not simply determinant ones and, in fact, reveal that this contradiction is intriguingly multivalent. What was at stake in the mixed and multivalent signals sent by the "new psychology" must be grasped as more than an effort to establish the scientific status of psychology. With a subtle infusion of dynamic notions of personhood, the determinist model of emotions offered solace to a culture in which rationality, self-sufficiency, and social order were at once championed and doubted: on the surface they certified the certainty and stability of scientific laws while acknowledging a place for motivation, desire, and change. However, these conflicting notions of human capacities cannot be comprehended in terms of an ultimate dominance or victory of one over the other model but, rather, in terms of their co-existence.

Mark Seltzer has argued that during the early twentieth century two divergent cultural beliefs, emphasizing the natural and the made, respectively, resulted in a double discourse that blurred divides between natural and constructed, between the agentic and determined, and that recast "nature in terms of the *naturalist machine* . . . and individuals as *statistical persons*."<sup>3</sup> The work of scientific psychology as it was published in the textbooks I shall discuss ex-

hibits a similar boundary-blurring language.<sup>4</sup> I shall suggest that these mixed signals and blurred boundaries buttressed psychologists' larger scientific and ideological project. The centrality of scientific determinism in psychological theories provided the discipline with authority and legitimacy, while attention to the desires and interests of middle-class individuals helped to make psychology a commercial success—a sought-after commodity that apparently served their personal and occupational aspirations. The success of this project depended not simply on a mixed rhetoric but also on an assumption that emotional experiences and expressions vary according to a social hierarchy: emotions are distributed, experienced, and managed differently by different persons and *classes* of persons. I will show that this social distribution of emotions, together with the strategic use of a double discourse, gave psychologists effective resources with which to proffer determinist theories of emotional life.

### Psychology Versus Culture?

There exists in accounts of the culture of consumption and of the reception of psychoanalysis, a picture of middle-class individuals becoming caught up in the magnification and glorification of self—via self-interest, self-realization, self-control, self-presentation—and placing less significance on nineteenth-century ideals of self-sacrifice, strenuousness, and the control if not repression of desire.<sup>5</sup> Psychoanalysis, through the translations, adaptations, and popularization of Freud's work, provided an imagery and language that described this new self and a technology for treating it. This increasingly influential therapeutic ethos fixated on social life, primarily the family and intimate others.<sup>6</sup> Yet, while Freud was developing psychoanalysis, the modern human sciences were generating a different rendition of persons, one that purportedly was more methodical in casting human action in biomechanical, rationalist, determinist forms.<sup>7</sup> In its purist form, this scientific perspective set limits to self-realization.

As exemplified in the James-Lange theory of emotion, scientific psychology appeared to be declaring the primacy of the body, not the mind; psychological research sought to locate the control of psychological life, not in desires or will or social life more generally, but in fixed, often physiological, mechanisms. While both perspectives on human action addressed the growing uncertainties about the source and form of reality, and proposed that the real mechanisms of human action lie in internal processes—either in the physiological or psychic interior—they offered strikingly discrepant procedures for analysis and control of these governing mechanisms. Although the scientific psychology that dominated work in the academy seemingly rejected a therapeutic ethos of self-discovery and cure, and also selectively discarded conceits of rational beings, it relied on a laboratory ethos of objective observation, calculation, and

dissection that was linked with professional interests in producing social control technologies that used asocial, scientific-technical practices. Scientific psychologists' aspirations for social control extended beyond the management of experimental variables in the laboratory to beliefs that an orderly and rational social life required control and regulation and that their knowledge could be applied to these ends.<sup>8</sup>

The tensions between these two opposed conceptions of "the psychological," then, comprised not a simple clash of scientific versus the popular everyday explanations. Rather, the contradictions represented in these two discourses are visible *within* scientific psychology itself in at least two forms. First, based on the notion that body determines conduct, one inspired by a Darwinism that undercut conceptions of human rationality, scientific psychology nevertheless took itself to be a rational practice that assumed the possibility that passions, desires, and emotions—irrational processes—could be controlled in order to produce a rationally functioning human world.<sup>9</sup> Although the late nineteenth century had yielded doubts about the rational, autonomous individual, such uncertainties did not seriously compromise the maturing ideals of rational science; thus, the very mission of scientific psychology juxtaposed conflicting ideas about rationality. Second, scientific psychologists themselves often experienced the push and pull of these competing conceptions of the psychological. Just as James introduced a biomechanical explanation of emotions, he also wrote about self-discovery and self-realization, became engaged with spiritualism, and suffered the agonies and therapies associated with neurasthenia. Other scientific psychologists of the period struggled to find a place for will in a deterministic world, wrestled with their "feminine" or nonanalytic characteristics, and sometimes contributed popular articles on self-determination and self-discovery at the same time that they were promulgating a deterministic and mechanistic psychology.<sup>10</sup>

Introductory psychology textbooks published during this period exemplify some of the strategies developed to handle these apparent contradictions. In the texts middle-class readers, particularly undergraduate students, were presented with sophisticated and persuasive accounts of persons as biomechanical, mainly determined beings. At first sight, these accounts give little support to the popular notions of self-gratification and the centrality of social life to the maintenance and enhancement of psychological functioning. However, the texts also conveyed an alternative conceptualization of persons, one that worked through and around scientific and mechanistic terms to signal ways out of the period's uncertainties and anxieties about rationality, self-determination, and improvement. What the texts offered, in the end, was a double discourse of the natural and the made, of persons as at once organic forms and social entities. Just as they describe the determined, biomechanical body, so

they present readers as social agents who could will and ultimately determine the direction of their lives. Whereas nineteenth-century psychologists defined sociality in terms of interacting individuals, twentieth-century American psychologists perceived sociality in terms of causal influences such that "the individual ended up either at the receiving end of these influences or as the manipulator." By fitting social events to lawful causal models, the "social" had been submitted to determinism. With the use of this sometimes subtle double accounting, psychology textbooks traversed lines of several binary notions: between the body and the machine, between the natural and the artificial (or the natural and some version of the social), and between determinism and willed action.<sup>11</sup>

Psychology textbooks reflected emerging contradictions in notions of selfhood and social life. What was being enacted in them was the tension between cultural understandings of nature and technology at the turn of the century. In his study of double discourse, Seltzer documents how mass-produced cultural forms including literature, visual representations, and technology variously coupled the natural body and the fabricated machine. Technologies of the industrial age consisted of practices that at once changed human experience and offered new ways of imaging the natural; thus control technologies like "the electric switch, ready at hand, promises to reconnect the interrupted links between conception and execution, agency and expression."<sup>12</sup> During the first two decades of the twentieth century, scientific psychology established itself as a technology, one that by virtue of its subject matter—human mental life—was especially concerned with the relays between the natural and the technological. What has been neglected in many cultural histories of the psychological is precisely the play of these two cultural forms and its consequences for twentieth-century conceptions of personhood and social relations. While psychologists did not always successfully engage these forms or resolve the attendant contradictions, they were able to strengthen their accounts by subtle appeals to cultural norms, particularly to the status quo social order of personhood that attributed psychological qualities according to persons' social positions and identities. As we shall see, this social order is presumed in the very dialogue established between authors and readers.

### Readers, Authors, and Texts in American Psychology

In his 1894 introductory textbook, William Krohn asserted that "with a clean, well-trained eye and the mind's 'retinal field' cleared of all floating specks, the student of Psychology may ever seek the truth, the truth alone, if he would not be handicapped."<sup>13</sup> Another author, in a textbook published the same year, informed student readers that "Real knowledge and power" requires

that the pupil "observe and analyze the actual processes of his own mind and those of others instead of taking what the author tells him about imaginary mental processes."<sup>14</sup> Readers of psychology textbooks were frequently identified as a special class of "educated men" who seek knowledge about reality and who stand apart from the class of "lazy readers."<sup>15</sup> "Self-control," one textbook author posited in 1898, is "the greatest end of all education."<sup>16</sup> Robert Yerkes expanded on this theme of a privileged and enlightened knowledge by noting that those who had not acquired the skills of psychology were "poverty stricken," adding, "Millions of human beings—unfortunate but all unconscious of what they are missing—go through life blind to the psychological world."<sup>17</sup> Psychology, another author concluded, benefits "all individuals interested in studying or controlling human nature."<sup>18</sup> These and other textbook authors identified psychological knowledge both with mastery in the world and with professional aspirations and, in turn, advertised these features to readers, thus enabling them to set themselves apart from ordinary citizens.

A distinct portrait of students was taking form in psychology's textbooks during the last decade of the nineteenth century. Readers were presented as ambitious and ahead of the pack, striving to know—and control—reality, including the reality of their own selves. Their images in these texts contrasted with the mid-nineteenth-century portrayal of the gentleman reader who read moral philosophy for introspective and spiritual insight.<sup>19</sup> This shift in representation from the gentlemen of high moral fiber to ambitious, yearning youth parallels changes in higher education and academic psychology alike. The numbers of students seeking undergraduate degrees increased fourfold between 1870 and 1890, and the number of institutions of higher education increased by more than 70 percent. The dramatic rise in college attendance reflected social structural changes: in the early nineteenth century most college students were affluent, and a lesser number were middle- or lower-class individuals who sought preparation for teaching or ministerial careers, whereas by the late nineteenth century, college life attracted large numbers from the middle class, including an increasing number of women.<sup>20</sup> These new students sought not so much genteel company or speculative inquiry as opportunities for vocational advancement in the new professions and corporate organizations. They sought positions as white-collar workers and experts in a world of technological change, growing urban populations, and greater wealth. As such, they were also seeking a place in a dramatically mobile social world where individuals were to experience social relations as ever shifting, proliferating, and sometimes alienating.<sup>21</sup>

The audience for the "new" psychology textbooks, then, was largely white, American-born, middle-class youth who were about to enter an adult world of new social arrangements and who saw higher education as an opportunity to

improve their social and economic standing. Education came to be equated with professionalization—the standardization of middle-class work. In Burton Bledstein's words, education established "a formal context for the competitive spirit of individual egos." Professionalism constituted not simply a legitimization of certain skills and organization of work, but a culture which engendered the mentalities of its producers and consumers alike, a culture "by which middle-class individuals sharpened their emotional needs and measured their powers of intelligence."<sup>22</sup> Not surprisingly, psychology textbooks also were engaged in educating the emotions, not just dissecting, analyzing, and labeling them.

Participants in this culture confronted a new field of tensions. One set of tensions emerged as the possibilities for vertical mobility coincided with the formation, in all institutions, of corporate hierarchies or broad pyramids where only few were to reach the peak. On another level the nineteenth-century "producer culture" emphasis on ambition, dedication, and self-control—or plain old hard work—existed alongside newer sanctions for leisure, sport, and the permissive consumption of new mass-marketed products. In colleges, study was not supposed to interfere with good times; collective entertainment, whether it be football or fraternities, occupied a significant portion of students' time.<sup>23</sup> Popular literature offered accounts of frolic and adventure, and magazines promoted new products, not to mention new identities. Identity came to be less about character with the sublimation of individual desires to moral ends, and more about personality realized through self-fulfillment, confidence, and a desirable presentation of self.<sup>24</sup> Finally, the middle-class culture of professionalism encouraged awareness of the experience of "reality" in both work and play.

Experience and reality, however, were becoming increasingly difficult to locate. The buzz—and expansion—of experience suggested excitement and possibilities, but there was another side: the dynamic complexity, multiplicity, and obscurity of experience were daunting. The growing trust in the veracity of scientific knowledge, the faith axiomatic to professionalism, promised ultimate access to reality, yet at the same time the proliferation of new expert knowledge sometimes looked like life was multiple realities, if not *unreality*. Social science in particular challenged the very idea of reality in its repeated assaults on common sense (notably in proclamations about the inaccuracy and subjectivity of ordinary perceptions) and on the notion of autonomous action. The sense of unreality (or of the plurality of realities) did not originate with the social sciences but coincided with massive changes in social life and technology. Thus, for example, mass communication and transportation, along with growing diversity of reading experiences and the fantasies if not acts of consumption, increased the "complexity and varieties of voices represented in conversations with the self" during the late nineteenth and early twentieth centuries. Con-

tending with these widening experiences, people confronted not only multiple realities but the possibility of multiple selves. The perceived unrealness of experience and the elusiveness of reality were addressed in the new psychotherapeutic sciences, including psychology, which claimed the ultimate ability to chart reality. In turn, these promises provided the psychotherapeutic sciences with a new opportunity to assert their importance in human affairs.<sup>25</sup>

By the 1890s, academic psychology too had entered a period of expansion. Prior to 1878 no American university had a doctoral program in psychology. By 1904 psychology had produced more than one hundred Ph.D.s and ranked fourth among the sciences in the number of such degrees conferred. That year at least sixty-two institutions had three or more psychology courses and some required a psychology course for completion of a B.A. The establishment of psychological laboratories, a symbol of psychology's independence from philosophy and of its status as science, also increased. In 1892 there were eighteen laboratories situated in institutions of higher education, just eight years later that number had increased to forty-two, and by 1926 there were approximately one hundred and seventeen.<sup>26</sup>

Psychology textbooks mark both the growth and orientation of American psychology. Few undergraduate students actually entered the new psychological laboratories that symbolized the scientific legitimacy of the discipline, but many students were to discover that science through introductory textbooks. In the 1870s only six first-edition introductory psychology texts were published in the United States, in the 1890s there were thirty-three, and in the first decade of the twentieth century there were thirty-eight. After 1890, most of these texts were authored by individuals with graduate training in psychology, including many of the discipline's leading scientists. By 1910 these books had become a standardized commodity; although occasionally the texts proffered an author's favorite theory or school, most contained a standard compendium of topics—sensation, physiology, learning, and emotion—and staunchly advocated a scientific orientation to psychological inquiry. In their uniformity they stand as but one example of a burgeoning textbook industry, earning authors profit and sometimes professional status. In their language of esoteric methods, they helped introduce and buttress a professional psychological culture. In their representation of human psychic forces as biomechanical and calculable, they both constituted and contributed to a rationalist science/technology of personhood.

How did these scientific treatises expounding deterministic axioms of psychological processes respond to or accommodate the discourses of self-realization, the culture of self-gratification and consumption, and the anxieties about rationality that were dramatically expressed in both popular and psychoanalytic thought? How did the texts reconcile the bio-politics inherent in their sci-

entific vision with an emerging psychic account (however confusing in its entirety) of personal fulfillment and growth? In other words, how did they (if they did at all) address the cultural and personal experiences of this new breed of readers who appeared to be self-conscious about their selves?

One plausible resolution of the conflicting visions—the biomechanical and the self-enabling—was offered by William James in "The Gospel of Relaxation" (1898). In that essay James applied the James-Lange deterministic theory of emotions to a practicable therapeutic of the self. James first extended the theory to prescribe that, because feelings follow from bodily activities, we should pay more attention to what we *do* than what we *feel*. Then by arguing that Americans' pathological "bottled lightning" of anxieties and tensions is the result of bad habits of action, he suggested that Americans change their actions in order to relieve their tense minds.<sup>27</sup> While resembling the behaviorist platform that was to emerge within the next twenty years, James's psychotherapeutic diverged from that program in important respects. His apparently contradictory advice was that we manage not only our actions but our entire selves by "freeing" our ideation and volition "from the inhibitive influences of reflection upon them, of egoistic preoccupation about their results."<sup>28</sup> Repeatedly deploying mechanical metaphors and a play between freedom and control, James urged his readers to "*Unclasp*, in a word, your intellectual and practical machinery, and let it run free: and the service it will do you will be twice as good." His advice was aimed at students, "especially to girl-students," reminding them that "Just as a bicycle-chain may be too tight, so may one's carefulness and conscientiousness be so tense as to hinder the running of one's mind."<sup>29</sup> James concluded by designating God as a helpmate for female readers who tended to become "strenuously relaxed" rather than freely discharging their tensions.<sup>30</sup>

Unlike James's didactic psychology, standardized introductory textbooks typically make no place for will or God. However, like James's account, the texts juxtapose a rhetoric of mechanics with that of freedom. Nikolas Rose has discussed these features of psychology in terms of their contribution to "technologies of the self," to a science that offers not unhuman technology but potentials: it is "the promise of personhood, of being adequate to the real nature of the persons to be governed, that underlies the power that psychology seeks and finds with such technologies."<sup>31</sup> In this regard psychology can be viewed as a "generous" discipline readily accessible to various agents of social authority: "the key to the social penetration of psychology lies in its capacity to lend itself freely to others, who will 'borrow' it because of what it offers them in the way of a justification and guide to action."<sup>32</sup> Scientific psychology, as illustrated in its textbooks, did not so much propose a model of personhood that conflicted with other cultural productions and conceptions as it generated



a new field of possibilities for personhood, a grid upon which often contradictory conceptions were mapped and aligned, superimposed and coordinated.

James's essay on relaxation illustrates the multiple versions of personhood constituting the emerging technologies of the self. Introductory textbook authors also mapped and coordinated discordant images of the self in their treatment of emotions: they charted a biomechanical model but often interjected notions of self-management and change that belied a determinant view of emotions. Their combined talk of determinism and voluntary action, the natural and the social, was sustained through an implicit system of human relations which distributed the nature and intensity of emotions according to social classes and identities. Figuring prominently in the rhetoric of the psychology textbooks is a dependence on a hierarchy of social agents—specifically on an order of authority (expertise) and regulation that locates and organizes emotional experiences.

### The Biomechanics of Emotions

By the mid-nineteenth century, the subject of emotion had gained a permanent place in the proto-textbooks of psychology; at that time the texts were usually designated as "moral" or "mental" philosophy. However, even by the final decade of that century the terms and processes used to describe and constitute emotions had been transformed. In early texts emotions were described as physical, aesthetic, *and* volitional and were appreciated for their multitudinous, nuanced, and both culturally and cognitively diverse forms. Later texts represented emotions as distinctly affective (composed of feeling rather than thinking). In the earlier texts, emotion was the compounding or culmination of various elementary mental states. Sentiment, passion, and morality were directly tied up with emotion, and it was not uncommon for these textbook accounts to be illustrated with complex cultural artifacts, for example, Old Testament parables, Socratic claims, poetry for children, and passages from great literature. Frequent attempts were made to enumerate the different emotions, often resulting in elaborate taxonomies and lists (including such affections as conjugal love, piety, patriotism, and the love of home and such aesthetic emotions as novelty, fashion, harmony, and variety in unity).<sup>33</sup> Dispensing with the tasks of enumeration and extension, along with culturally complex literary and historical exemplars, the "new" psychology textbooks focused on identifying essential mechanisms of emotion.

There are at least four dimensions that distinguish the more modern accounts of emotion that followed from the James-Lange theory. Representations shifted from conveying the multifaceted variations and artifices of emotions to describing them as *natural* and *biological* mechanisms. The location of

emotions simultaneously was moved from volition—in the head—to the *physiological* and *visceral*—in the *body*. Thus, their regulation for the most part went from being associated with mechanisms of moral or inner control to those of external, sometimes *social controls*, and their phenomenal qualities were moved from being identified with sentiment, private, and subjective experience to physical experiences that were most accurately located through the *objective observation* of scientists.

### Naturalization and Biological Representation

The James-Lange theory of emotions, along with several variations of that theory, dominate the textbooks after 1890. Informed by Darwinian thought as well as physiological research, these theories naturalize emotions by representing them as basic processes that function to guide adaptive action. Emotions are nothing more than the product of biomechanics. Emotions are a modification, often seen as an "interruption" of normal conscious processes that can be stated in biomechanical terms as "derived from the afferent nervous impulses originating in muscular disturbances of the digestive, circulatory, and respiratory tracts."<sup>34</sup> According to James Angell, emotion is a "general monitor" of friction within the organism that directs active adjustment of the organism to the external stimuli which gave rise to the bodily changes. Heeding Darwin, Angell goes on to say that expressions of emotion "are simply acts which are, or once were, useful under the circumstances calling forth the activity."<sup>35</sup> In these texts emotions were thus naturalized in two ways: as organic, bodily processes (or products of those processes) and as functional activities in the natural order of evolution.

### Bodily Location

The James-Lange theory established a new locus of origin for emotions, removing them from their previous habitat in volitional processes, in the head, to more visceral, bodily locations. Adopting this new site, textbook authors situated the origin (or accompaniment) of emotions in the circulatory system, nerves, muscles, digestive tract, respiratory system, neural mechanisms, sensory organs, and adrenal glands. Although many of these authors did not endorse the James-Lange theory in toto, they nevertheless conceded the centrality of organic states. Yerkes argued that the initial feeling in an emotion-arousing situation is not a product of bodily sensation but conceded that it "immediately is supplanted by the sensations arising from our bodily conditions."<sup>36</sup> Similarly skeptical about the veracity of the James-Lange theory because it abstracts the emotional event from our experiences of it, Harvey Carr

nevertheless accepted much of the theory, thus joining his colleagues in matching emotions with specific anatomical parts. He defined disgust, noting that "it is the alimentary mechanism that is primarily involved in the emotional reaction" and that joy consists "of a rather widespread and exhilarative organic reaction involving especially the vaso-motor mechanisms and accompanied by a great variety of motor manifestations."<sup>37</sup> Even Mary Whiton Calkins, one of the last remaining researchers committed to a psychology of consciousness (rather than one of behavior or physiology), incorporated biological mechanisms into her 1905 definition, citing the activity of specific cerebral locations like the Rolandic cells and frontal lobes.<sup>38</sup> One author made literal the metaphorical loss of head, claiming that unruly undesired emotions replace reasoned activity when the individual loses his head: "If he completely loses his head, his sensations become a diffuse mass of feeling and his set for overt activity becomes a blind struggle."<sup>39</sup> The most reticent authors relocated emotions from the mind to internal organs and processes.

### Experience and Control

How do individuals imagine and experience emotions once they are defined less as private events of consciousness and more as organic occurrences? The notion of emotions as determined, biological events has two notable implications: first, authority to know and name the emotions is shifted to the expert observer (scientist), and, second, emotional experiences and expressions cannot be controlled or altered by the persons who have them. The classic example, appearing in James's text and reproduced in many others, is that an individual experiences fear only when he begins running from its object, the running being an action caused by organic activities. If emotions are constituted as physiological events, then the experience and control of those emotions, logically speaking, are dependent on those events and not on the person's volition. It is at this juncture that the textbooks abandon or at least reformulate the biomechanical person being represented in their pages. Experiences of emotion *do* vary and *can* be varied; (self-)control of emotions is often presented as a possibility, although the mechanisms of control differ from text to text. In these modifications of the biomechanical model, the self-searching, self-gratifying, and autonomous individual gains a presence, becoming a force that occasionally overrules the sometimes fatalistic determinism of biomechanical processes.

As we shall see from the following textbook examples, creating a feasible double language of educating the emotions yielded neither parsimonious nor consensual views. But the need for a double discourse was considerable. Determinist, mechanical explanations of emotions established authority (for nam-

ing and regulating them) with the scientist. This line of authority helped bolster psychology's professional status and utility. It also reinforced the image of the largely white male scientists who posed as rational outsiders gazing on the chaos of everyday life. Psychologists saw as their mission the use of their superior rationality to create knowledge to control the "half-educated man" or "the other one"—the masses of ignorant, untrained beings.<sup>40</sup> However, the self-proclaimed epistemic security of the psychological scientist was being challenged, not only by social critics, like Walter Lippmann or Stephen Leacock (who lampooned the new psychology), but also from within the discipline. Many psychologists wondered aloud about the cognitive frailties of psychologists. Thus, Raymond Dodge worried about the "perils" of the psychologist who "may get lost in the chaos of details and never emerge. I have known such lost souls." The researcher "may find himself in conflict with his colleagues or with the native inhabitants of the dark continent of ignorance, who voluntarily choose darkness rather than light and prefer prejudice to information. Not all of them live in Tennessee," where anti-evolutionists were criticizing scientific knowledge.<sup>41</sup> Even John B. Watson, who was notoriously arrogant in his scientific claims, confessed privately to occasional feelings of helplessness in his quest to understand himself and others.<sup>42</sup>

Equipped with the masculine scientific stance of superiority and distance, and invested in the imminent success of psychology as a commodity, psychologists benefited from seeing emotions as a deep structure that existed outside of the understanding or control of the individuals who experienced them. However, without any identifiable means to control emotions, including those of psychologists, the professional project could not succeed. Ascribing to emotions some possibilities for control provided psychologists with a job, a skill to be marketed. Perhaps just as important, this view furnished a conception of personhood that would appeal to middle-class consumers of psychology: its promises of management and growth accorded with their self-images. With this double view of emotions as determined yet fabricated and socially malleable, mechanistic yet natural, readers could be educated both about the necessity of psychological science and their own possibilities for knowing and changing themselves as well as managing subordinates. Psychology was useful and it was desirable.

The texts are consistent in the effort to biologize emotions, but they differ both in the extent to which control of emotions was deemed possible and in the forms of control they delineate. To a few authors who most consistently maintained a deterministic, mechanical model, the control of emotions by the individual seemed impossible. Yerkes, for instance, asserted the limits of control by quoting from another textbook, that of Edward Titchener: emotions cannot be regulated as "we do not master them and use them at will for intellectual and

practical ends as we do our ideas and judgments; rather they master us. For the time being one *is* the emotion."<sup>43</sup> Presenting the emotions as natural, akin to instincts, some authors viewed them as taking the individual "beyond the pale of social restraint."<sup>44</sup>

Despite classifying emotions as organic, bodily states, most authors nevertheless introduced mechanisms for modifying emotions or emotional expressions. The ability to control emotions successfully was variously associated with a number of factors, including self, experience, learning, individual differences, and society. Describing a case where an individual, while writing out a check for a purchase, learns that his bank has failed and his fortune is lost, Angell stated, "Such an event may or may not produce an emotion. It depends on the individual, not the emotion."<sup>45</sup> Other authors elaborated on how individual differences predispose individuals to certain emotional experiences. Some authors provided taxonomies of such differences, lists that sometimes resembled the ancient theory of humors—choleric, sanguine, melancholic, and phlegmatic personalities.<sup>46</sup> These individual types were occasionally linked to psychopathologies.<sup>47</sup>

For readers, mainly middle-class students seeking an education for the economic opportunities it promised at the time, the notion of controlling emotions was significant. Without such a notion the biomechanical theories of emotion offered no benefits: not only did such theories suggest the essential sameness of all people, of all classes and social groupings, but they afforded no knowledge that could be deployed to improve the self. The idea that strategies of control existed, and that they could be acquired and implemented by readers, intimated a means to personal improvement and advancement. In the textbook examples of emotional control, certain classes of people were exemplified as having symptoms of certain emotions which were often associated with professional middle-class life (such as the loss of control following the loss of one's savings). These symptoms required masking or reduction in order to conduct successfully the daily business of that life.

Even theoretical perspectives that focused on fixed predispositions, like individual differences, frequently incorporated other more voluntaristic mechanisms of control. Here again James set a pattern: his organic theory of emotions was surrounded by suggestions for control, including but extending well beyond the modest notion of individual differences. After claiming that "many of the manifestations [of emotions] are in organs over which we have no control," James instructed the reader on how to manage emotion.<sup>48</sup> His recommended controls include rehearsing contrary outward expressions, repressing emotional talk and display, and dissociating self from or suppressing the visceral manifestations of emotions. The first technique is illustrated by the adage of whistling to maintain one's courage (and reduce one's fear): "if we wish to

conquer undesirable emotional tendencies in ourselves, we must assiduously, and in the first instance cold-bloodedly, go through the *outward* movements of those contrary dispositions which we prefer to cultivate."<sup>49</sup> Repression of emotions works similarly when one attempts to teach children to repress emotional display so "that they may *think* more; for, to a certain extent, whatever currents are diverted from the regions below, must swell the activity of the thought-tracts of the brain."<sup>50</sup> Other authors reported these techniques, writing about the repression, concealment, and substitution of emotional acts. Even authors like Yerkes, who claimed that emotions master us and that individuals cannot wholly suppress bodily conditions and expressions of emotion, proposed that individuals can control those expressions "to a limited extent." He claimed, "Indeed, if, in the face of a situation which is wholly calculated to call forth anger, I merely laugh and make light of the circumstances I do not express anger to any marked extent: I may even experience another kind of emotion."<sup>51</sup> Here, as in other examples, the quelling or management of emotional symptoms is considered to be crucial: such examples are driven by the idea of self-mastery and the associated social costs of losing that control. To name and describe these symptoms, emotional expressions, in biomechanical terms is insufficient; their control and maintenance is especially desired.

Another commonly named mechanism for modifying emotions entailed experience and learning, with experience being more idiosyncratic and diffuse and learning being more general and calculable. Experiences for the most part simply happen to an individual, a consequence of living, and these experiences can modify emotional occurrences and expressions. Thus, for instance, Robert Woodworth wrote that love and hate along with "the higher emotions, esthetic, social, religious, are sentiments towards certain types of objects and are built up in the individual's experience, with much assistance from the social environment."<sup>52</sup> As Woodworth described it, "social pressure trains" an individual to hide his feelings while "other people are always trying to discover how he feels." Consequently, "There is a race between concealment of the emotions on one side and detection of emotions on the other, like the race in warships between defensive armor and penetrating projectiles."<sup>53</sup> Carr similarly wrote that experience modifies what stimuli will evoke the emotion, suggesting that "Society intentionally instills certain fears and eliminates others. Parents attempt to eradicate the irrational and imaginary types of fear by the development of some sort of rational inhibition. Fear is often regarded as a childish weakness that should be repressed in order to develop courage."<sup>54</sup>

The textbook reviews of means for altering emotions added new dimensions to the simple biomechanical grid upon which they were charted. Carr's account of the modification of fear blurs the lines between experience and learning, and between the incidental and intentional; through its inclusion of



parental and societal forces it names specific regulatory mechanisms, albeit fairly amorphous and complicated ones. Many textbooks, especially the later ones, cite scientific techniques of learning and conditioning as a certain means for modifying and controlling emotions. While some authors stated that social agencies "such as the church, state, and home" instill emotions as a means of establishing desired conduct,<sup>55</sup> others described these procedures in technical, scientific terms. To do so they typically either employed the language of behaviorism or recited experimental findings. Thus, the famous "Little Albert" experiment, where an infant is conditioned to fear furry objects, was used to illustrate the conditioning of emotional responses.<sup>56</sup> Writing in 1921, for instance, John Dashiell adopted such a behaviorist stance and with it the belief that emotional patterns are acquired; he also anticipated future experimental studies that would aid in the accurate detection and modification of emotions. The behaviorist position implied that "the popular conception of a person that attributes so many of his characteristics to his 'natural' propensities must be revised to make way for a view that is at the same time more practically useful, more fundamentally optimistic, and more ethically sound."<sup>57</sup> By 1935, textbook authors Edwin Boring, Herbert Langfeld, and Harry Weld confidently asserted, "Both anger and fear responses are easily attached to a new or different stimulus. These quickly established conditioned emotional responses may be altered by appropriate training or may persist over long periods of time."<sup>58</sup> They concluded their chapter with similar confidence: "In this process of conditioning, reconditioning and unconditioning we have a great deal of social facilitation and inhibition."<sup>59</sup> In these versions, behaviorism provided a response for middle-class needs for self-control.

Given the predominant stance of defining emotions as either constituted by or manifested through bodily surges, recipes for modifying and regulating emotions supply optimistic relief. Once fear is described as an event where "rational conduct has fled, and consciousness has become almost extinct, or else a mere riot of impulses," and embarrassment is taken as a condition where "we have been suddenly reduced to the mental condition of a vegetable,"<sup>60</sup> then who would not desire alternatives? It is at these moments that psychology could, and did, offer what Rose called "the promise of personhood" through its technologies. If psychology located such human problems, then it also created solutions. One such technology of personhood was simply *descriptive*: the language of psychological theories themselves enabled talk about changing either the emotion or its expression. For instance, when a theory introduced the function of a stimulus—a specific trigger for emotion—then one could talk about changing the stimulus or even altering the response to the stimulus. Thus Walter Pillsbury defined emotional expression as dependent upon the individual's

attitude toward the stimulus, noting, "The attitude is in large measure under one's control" since stimuli can be reclassified to elicit a different emotion.<sup>61</sup>

The promise of personhood tendered by the new psychology, however, took primary form in a scientific account that cast people and their actions in an abstracted, decontextualized, and ahistorical manner. That scientific view presumed that the particularities of individuals were irrelevant to explaining and predicting their actions; all individuals behaved according to universal natural laws. The optimism afforded by strategies for self-control of emotions (or for the control of other people's emotions) was shadowed by this mechanistic rendition of human nature. In proposing this vision of human nature, psychology was capitalizing on the authority granted to modern science, an ideology that had apparently proven itself during the Industrial Revolution, surpassed the potentials of religious belief, and organized the entire world into an intelligible if complex scheme. If this rendition of humans threatened to erase significant social and class differences or undermine beliefs in personal improvement, then the ideas that emotions and their symptoms were indeed different between members of different social groups, and could be controlled, by *some* people, were ideologically comforting.

The special relation established between authors and readers—the notions that they shared a privileged stance and subjectivity apart from ordinary persons—provided common ground for controlling their inner selves as well as managing others.

### Object

With the increase in experimentation on emotions, textbook authors had yet another technology at their service. While experiments ostensibly tested the veracity of one theory or another, they also *inscribed* emotions by giving them discrete, calculable form with identifiable and modifiable parts. That is, as a *technical* practice, experiments could actually modify natural emotions: by controlling or even creating one feature of emotional expression they produced particular events. In these technical productions, emotions were rendered artifice and, therefore, became modifiable. And, as a *scientific* practice, experiments were engaged to calculate, classify, and regulate what was irrational. This experimental logic is not delineated in the texts but rather is clearly conveyed by the power of the experiments themselves.<sup>62</sup> Persuasion is accomplished simply by describing how the administration of hormones could induce emotional moods or how dramatic mechanical devices (such as a chair that unexpectedly tilts the subject to a horizontal position) when used repeatedly eventually could elicit less organic and subjective traces of fear.<sup>63</sup> The persuasive power of the

experiments inhered in several of their unique operations, notably instruments that measured phenomena undetectable to the ordinary observer and devices that stimulated, modified, or otherwise influenced subjects' responses. Illustrations of these experiments serve as powerful persuasive devices, for they show the reader how the world works; seeing is believing.<sup>64</sup> In addition, a fundamental feature of experiments is the condition of "assessment control," whereby through the particular social arrangement of the laboratory the experimenter directs the generation, evaluation, and reporting of the psychological experience.<sup>65</sup> Through this kind of control the subjects' reports may be deemed irrelevant and misleading; the final interpretation of the events is the jurisdiction of the experimenters alone.

Through psychology's technical devices of description and inscription, then, emotions were represented as natural, organic states *and* as artificial, malleable, and indeed correctable ones. Humans were rendered both natural and artificial simultaneously, and the textbooks could espouse a scientific naturalism (and thereby also reassert the authority of scientific knowledge) while making way for and promising a therapeutic means for improvement, growth, and attention to personal change. Further, explications of regulatory mechanisms provided an economy of emotions that both implied the necessary management of emotions and—like advice books—suggested when and where spontaneous emotional expression was appropriate and useful.<sup>66</sup> These explications, which balanced control and expression, contain a double discourse that meshes discordant visions of human nature.<sup>67</sup>

### A Social Order of Emotions

Psychological accounts of emotions utilized an additional system of support, one that is intimated in the experimental technologies that were introduced. The rhetoric of the introductory texts, including their illustrative cases drawn from everyday life and from experiments, relies on a particular hierarchy of actors according to which human types were differentially accorded rationality and potential. Control was not equally available to everyone, nor did all individuals have comparable authority to name, explain, or assess emotional experiences and expressions. To the extent that readers resisted the idea of emotions as determined, irrational, and essentially biological happenings, psychologists' claims about mechanisms for control (such as learning and repressing) only partially alleviated such anxieties. A hierarchy of persons, or, more precisely, a particular order of social relations, not only rendered the biomechanical theories more believable but also lent additional reassurance about the regulation of emotional life.<sup>68</sup>

In the introductory texts, the relational order makes one appearance as a

relatively standard relation between author and reader: readers, it was noted earlier, were given a special status as ambitious and successful and, therefore, were readily distinguishable from the "subjects" who were in the same class as the typical objects of the texts' psychological analyses. Although readers were not accorded the reason, control, or gaze of the authors (who double as experimental scientists), they often were invited to become like these experts, to see the world through the objective lens of psychologists, thereby enhancing their social-cognitive status.<sup>69</sup> These author-reader relations are one of three distinguishable social orders represented in introductory texts: analogous hierarchies also take form in the relations of characters in the case examples and in the relations of laboratory experiments. In keeping with the portrayal of emotions as natural, and with the concordant claims of their evolutionary and biological functions, the texts contained plentiful examples of diverse subjects, including children, animals, adults, witnesses, mental patients, actors, pilots, textbook readers, textbook authors, fictional characters, and even scientists. Yet, just as these examples may have demonstrated the ubiquity and, more important, the universality of emotions, they also mapped (albeit sometimes subtly) a *social order* of emotional expression.

Animals and children were most often used to illustrate raw emotions or their conditioning and learning, whereas normal adults (including the writers and readers of the introductory textbooks) displayed more circumspect, milder emotional expressions. Likewise, the emotions of unbalanced persons, those with personality abnormalities, were portrayed as more intense, prolonged, and less modified by experience or training than are those of "normal" individuals. The child, the cat, and the unstable adult alike were prone to screams and snarls, whereas the adult's expressions were less animated. The individual who lost his fortune, the researcher whose mother died, and the person who is watching a "sexy" motion picture displayed more moderate emotional expressions often modified by their personal experiences, training, and attitude. Different construals of personhood were implicit in the texts, and they depended on the readers' shared sense that adults were different from children, men from women, and the educated from the uneducated. According to this logic it followed that emotions, like IQ, varied (and not randomly) across different groups of humans. One author even conjectured about designing a "scale for emotional age, after the analogy of the Binet scale for mental age."<sup>70</sup>

These different controls of personhood often relied implicitly on shared understandings of types of persons (age, social class, gender). That is, in the textbook examples readers did not learn new information about different types of people as much as they used common knowledge to glean further differences explicated in these examples. The texts offer new class distinctions in associating certain aspects of emotion with certain classes: biology is empha-

sized in the emotional experiences of nonhumans and children; "primitive" emotions are associated with the uneducated.

The social arrangements of author-reader and of the hierarchical classifications in case studies have a parallel in the relations of the experiment. Although several texts discuss emotions in scientists, these experiences never transpire when the scientist is in the laboratory: during experiments, emotion is present only in the subjects. Given the ethics of experimentation (codes derived largely from cultural conventions about human rights), different kinds of subjects are treated differently. The utilization of laboratory devices, procedures, and stimuli is dependent on the kind of subject under scrutiny, as are the type and degree of emotion being elicited. Cats and dogs were submitted to manipulations of their bodies—to brain surgery, muscle removal, permanent anesthetizing. Even humans were differentially exposed to particular investigative techniques and were evaluated accordingly. Experimenters were exempt from observation of their "inner selves," whereas subjects, depending on their kind and social status, were scrutinized and through that interrogation were differentially treated.

Experimenters, however, were not always exempt from emotional images and symptomologies. Over the first three decades of the twentieth century, they expressed troublesome concerns about their colleagues and their own emotions, and noted the dangers that such emotionality posed for the conduct and management of rational scientific work. In one case, an experimental psychologist, Clark Hull, was so distraught over the emotionality of psychologists that he developed an elaborate system for the management of scientific work itself. In other instances, psychologists posited less concrete means to regulate scientists' mental lives.<sup>71</sup> The presumptions made by the authors of textbooks—that readers desired to control themselves and function as calculating, rational actors—mirrored their own preoccupations with self-regulation.

These social arrangements yielded compelling power in part because they were derived from hegemonic understandings about the world and agents in that world. As common sense, these relations helped smooth inconsistencies in the conflicting discourses of determinism and autonomous action, of the natural and the made. Humans (and nonhumans) at once were rendered biomechanical, but not all persons were just that. Some groups of people were opportunistically represented and situated such that even as biological beings they could change or be changed; they were differently endowed with potential and were differentially suited to governance through scientific technologies.<sup>72</sup>

## Coda

The modern history of emotions is complicated once we begin to assess scientific productions and consolidate them with our understandings of related

representations of emotion in popular culture, art, literature, and everyday life. By the close of the nineteenth century, psychology textbooks were generating conceptions that seemed to contradict increasingly dominant cultural manifestations of emotions and of personhood. The apparent contradictions between a determinist, biomechanical model of emotional expression and a self-gratifying, masterful, and profitably desirous one were reconfigured in these texts. Introductory psychology textbook authors never directly confronted these inconsistencies and contradictions; rather, they employed a double discourse that rearranged and ultimately celebrated both accounts of emotions (and of humanity). Simultaneously engaging in rhetorics of science and of common sense, these texts participated in educating the modern college-trained self as at once natural *and* artificial, biological *and* social. Psychology, in such texts and in its other practices, thus promulgated both the promise of self-gratification and the necessity of scientific technologies of regulation. College textbooks contributed to reinforcing cultural conceptions, and expectations, about the possibilities and the limits, the enablements and the constraints, of "human nature." They offered a template with which individuals could talk about, act, and modify their own (and others') emotional experiences and yet at the same time acknowledge their biomechanical essence. They provided an ideologically comfortable place for and grounded a dependence on the expertise of scientific technology. The legacy of such academic contributions lives on in our contemporary vacillations between self-mastery and therapeutic dependence. That legacy likewise continues in our ever-changing strategies (and our ambivalence about these strategies) of concealing, shaping, suppressing, and realizing—inventing—our emotions.<sup>73</sup>

## Notes

Wendy Blumenthal, Sarah Carney, and April Weinberg assisted in the analyses of introductory psychology textbooks; I thank them for their substantial contributions. I thank Santina Scalia for her patient attention to preparation of the manuscript. My appreciation also goes to Joel Pfister and Nancy Schnog for their caring and helpful readings of earlier versions of this chapter.

1. William James, *The Principles of Psychology* (New York: Henry Holt, 1890), vol. 2, 450. James insisted that bodily states are emotions: "If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its bodily symptoms, we find we have nothing left behind, no 'mind-stuff' out of which the emotion can be constituted, and that a cold and neutral state of intellectual perception is all that remains" (451).

2. We must examine the extent to which we continue to separate, juxtapose, and naturalize notions of the cultural and the scientific; we need to investigate the historical interdependence of those oppositions as well as their consequences for social life. Janice Radway, "Mail-Order Culture and Its Critics: The Book-of-the-Month Club, Commodification and Consumption, and the Problem of Cultural Authority," in *Cultural Studies*, ed.

Lawrence Grossberg, Cory Nelson, and Paula A. Treichler (New York: Routledge, 1992), 512–30. Studies attempting to reconfigure the science-culture divides include Frank M. Turner, "Public Science in Britain, 1880–1919," *Isis* 71 (1980): 589–608; *Expository Science: Forms and Functions of Popularization*, ed. Terry Shinn and Richard Whitely (Boston: D. Reidel, 1985); Steven Schlossman, "Perils of Popularization: The Founding of Parents' Magazine," in *History and Research in Child Development*, ed. A. Smuts and J. Hagen, *Monographs of the Society for Research in Child Development* 50 (1985): 65–77.

3. Mark Seltzer introduced the term *double discourse* in *Bodies and Machines* (New York: Routledge, 1992). On the function of psychological sciences to produce both technologies of personhood and new experiences of persons and on the complexities of the science as a reflection as well as producer of cultural forms see Nikolas Rose, "Engineering the Human Soul: Analyzing Psychological Expertise," *Science in Context* 5 (1992): 351–72; John H. Gagnon, "The Self, Its Voices, and Their Discord," in *Investigating Subjectivity: Research on Lived Experience*, ed. C. Ellis and M. G. Flaherty (Newbury Park, Calif.: Sage, 1992), 221–43; Philip Cushman, "Why the Self Is Empty: Toward a Historically Situated Psychology," *American Psychologist* 45 (1990): 599–611; Kurt Danziger, *Constructing the Subject: Historical Origins of Psychological Research* (Cambridge: Cambridge University Press, 1990).

4. Psychologists' estimate of introductory textbooks changed significantly during the period 1890–1940. Textbooks initially were taken as serious intellectual documents that considered and conveyed central scientific problems. Eventually texts lost their primary function as a forum for interrogating key issues and became more homogenized, their authors unabashedly writing them primarily for profit. Nevertheless, textbooks continued to present the dominant psychological perspectives on human nature. See Ned Levine, Colin Worboys, and Martin Taylor, "Psychology and the 'Psychology' Textbook: A Social Demographic Study," *Human Relations* 26 (1973): 467–78; Wayne Weiten and Randall D. Wight, "Portraits of a Discipline: An Examination of Introductory Psychology Textbooks in America," in *Teaching Psychology in America: A History*, ed. Antonio E. Puente, Janet R. Matthews, and Charles L. Brewer (Washington, D.C.: American Psychological Association, 1992), 453–504. On nineteenth-century moral philosophy textbooks, the precursors of psychology texts, see D. H. Meyer, *The Instructed Conscience: The Shaping of the American National Ethic* (Philadelphia: University of Pennsylvania Press, 1972).

5. On the emergence of notions of self-transformation, mastery, expression, and fulfillment see Warren Susman, *Culture as History: The Transformation of American Society in the Twentieth Century* (New York: Pantheon, 1985), 271–85; T. J. Jackson Lears, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880–1920* (New York: Pantheon, 1981); Tom Lutz, *American Nervousness, 1903: An Anecdotal History* (Ithaca: Cornell University Press, 1991); John Higham, *Writing American History: Essays on Modern Scholarship* (Bloomington: Indiana University Press, 1965), 73–104; T. J. Jackson Lears, "From Salvation to Self-Realization: Advertising and the Therapeutic Roots of Consumer Culture, 1880–1930," in *The Culture of Consumption: Critical Essays in American History, 1880–1980*, ed. Richard W. Fox and T. J. Jackson Lears (New York: Pantheon, 1983), 3–38.

6. John Burnham, "The New Psychology," in 1915, *The Cultural Moment: The New Politics, the New Woman, the New Psychology, the New Art and the New Theatre in America*, ed. Adele Heller and Lois Rudnick (New Brunswick, N.J.: Rutgers University Press, 1991), 117–27.

7. John M. O'Donnell, *The Origins of Behaviorism: American Psychology, 1870–1920* (New

York: New York University Press, 1985); Roger Smith, *Inhibition: History and Meaning in the Sciences of Mind and Brain* (Berkeley: University of California Press, 1992); Philip J. Pauly, *Controlling Life: Jacques Loeb and the Engineering Ideal in Biology* (New York: Oxford University Press, 1987); Lorraine J. Daston, "The Theory of the Will Versus the Science of the Mind," in *The Problematic Science: Psychology in Nineteenth-Century Thought*, ed. W. R. Woodward and M. G. Ash (New York: Praeger, 1982), 88–115.

8. Danziger, *Constructing the Subject: Psychological Testing and American Society, 1890–1930*, ed. Michael M. Sokal (New Brunswick, N.J.: Rutgers University Press, 1987); *The Rise of Experimentation in American Psychology*, ed. Jill G. Morawski (New Haven: Yale University Press, 1987).

9. Psychologists' interest in social control, specifically in techniques for producing rational beings, is well documented. However, they struggled not only toward making a rationally functioning social world but also with reconciling contradictions between their conceptions of humankind as nonrational and their self-conceptions of science and scientists as rational. On social control see Ben Harris, "'Give me a Dozen Healthy Infants': John B. Watson's Popular Advice on Childrearing, Women, and the Family," in *In the Shadow of the Past: Psychology Portrays the Sexes*, ed. M. Lewin (New York: Columbia University Press, 1984), 126–54; Nikolas Rose, *Governing the Soul: The Shaping of the Private Self* (London: Routledge, 1990); John Burnham, "The New Psychology: From Narcissism to Social Control," in *Change and Continuity in Twentieth-Century America: The Nineteen-Twenties*, ed. J. Braemen, R. H. Bremmer, and D. Brody (Columbus: Ohio State University Press, 1968). On the construction of the rational psychological scientist and its special advantages, see Karl Scheibe, "Metamorphoses in the Psychologist's Advantage," in *Rise of Experimentation*, ed. Morawski, 53–71; Jill G. Morawski, "Self-Regard and Other Regard: Reflexive Practices in American Psychology, 1890–1940," *Science in Context* 5 (1992): 281–309. On the moral virtues critical to the scientist and the scientific attitude see David A. Hollinger, "Inquiry and Uplift: Late Nineteenth-Century American Academics and the Moral Efficacy of Scientific Practice," in *The Authority of Experts: Studies in History and Theory*, ed. Thomas L. Haskell (Bloomington: Indiana University Press, 1989), 142–56. On the rise and problems of scientific naturalism in American social science see Edward A. Purcell, Jr., *The Crisis of Democratic Theory: Scientific Naturalism and the Problem of Value* (Lexington: University of Kentucky, 1973).

10. On James's life see Daniel W. Bjork, *William James: The Center of His Vision* (New York: Columbia University Press, 1988). On the varied projects and life circumstances of this first generation of scientific psychologists see Kerry W. Buckley, *Mechanical Man: John Broadus Watson and the Beginnings of Behaviorism* (New York: Guilford Press, 1989); Matthew Hale, Jr., *Human Sciences and Social Order: Hugo Munsterberg and the Origins of Applied Psychology* (Philadelphia: Temple University Press, 1980); J. G. Morawski, "Assessing Psychology's Moral Heritage through Our Neglected Utopias," *American Psychologist* 37 (1982): 1082–95; E. Anthony Rotundo, *American Manhood: Transformations in Masculinity from the Revolution to the Modern Era* (New York: Basic Books, 1993); Elizabeth Scarborough and Laurel Furumoto, *Untold Lives: The First Generation of American Women Psychologists* (New York: Columbia University Press, 1988).

11. On changes in psychological conceptions of the social set see Kurt Danziger, "The Social Origins of Modern Psychology," in *Psychology in Social Context*, ed. Allan R. Buss (New York: Irvington, 1979), 40. Late nineteenth-century doubts about rationality and

autonomous individuals took varied forms, from disenchantment with the rational structures of society to anxieties about the authenticity of the self, from crises of representation (appearance versus reality) to fears about individual control. See Lears's *No Place of Grace* and his essay "Beyond Veblen: Rethinking Consumer Culture in America," in *Consuming Visions: Accumulation and Display of Goods in America, 1880-1920*, ed. S. J. Bronner (New York: Norton, 1989), 73-97; Jay Mechling, "The Collecting Self and American Youth Movements," in *Accumulation and Display: Mass-Marketing Household Goods in America, 1880-1920*, ed. Deborah Federhan (Winterthur, Del.: Winterthur Museum, 1986), 255-85; Higham, *Writing American History*; Burnham, "New Psychology: Narcissism to Social Control."

12. Seltzer, *Bodies and Machines*, 3, 11. Taking a somewhat different (although not necessarily incompatible) purchase on the effects of psychology textbooks, Graham Richards has suggested that James's introductory textbook, while containing such a mixed discourse, succeeded at engaging readers in a self-oriented, introspective survey of consciousness but failed in convincing them to resist determinism (and related biomechanical explanations). "James and Freud: Two Masters of Metaphor," *British Journal of Psychology* 82 (1991): 205-15.

13. W. O. Krohn, *Practical Lessons in Psychology* (Chicago: Werner, 1894), 20.

14. E. A. Kirkpatrick, *Introductory Psychology* (Wininam, Minn.: Jones and Kroger, 1894), 3-4.

15. James Drever, *The Psychology of Everyday Life* (London: Methuen, 1921), v; William James in Edward L. Thorndike, *The Elements of Psychology* (New York: Sieler, 1905), vii.

16. B. P. Buell, *Essentials of Psychology* (Boston: Ginn, 1898), 4.

17. Robert M. Yerkes, *Introduction to Psychology* (New York: Henry Holt, 1911), 13.

18. F. H. C. Perrin and D. B. Klein, *Psychology: Its Methods and Principles* (New York: Henry Holt, 1926), 17-18.

19. For an extended discussion of the late nineteenth-century changes in the representation of readers in introductory psychology textbooks, see Jill G. Morawski, "There Is More to Our History of Giving: The Place of Introductory Textbooks in American Psychology," *American Psychologist* 47 (1992): 161-69.

20. Burton Bledstein, *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* (New York: Harper & Row, 1976); Lawrence R. Veysey, *The Emergence of the American University* (Chicago: University of Chicago Press, 1965).

21. Daniel J. Boorstin, *The Americans: The Democratic Experience* (New York: Random House, 1973); Bailey B. Burritt, *Professional Distribution of College and University Graduates* (Washington, D.C.: Government Printing Office, 1912); Christian Gauss, *Life in College* (New York: Scribner's, 1930); Helen L. Horowitz, *Campus Life: Undergraduate Culture from the End of the Eighteenth Century to the Present* (New York: Knopf, 1987); Henry D. Sheldon, *Student Life and Customs* (New York: Arno, 1969).

22. Bledstein, *Culture of Professionalism*, 31, x.

23. Daniel Boorstin suggested that American colleges became "less a place of instruction than a place of worship—worship of the growing individual" (*Americans*, 480). Cf. note 19.

24. Susman, *Culture as History; Culture of Consumption*, ed. Fox and Lears; *Consuming Visions*, ed. Bronner.

25. For instance, see Lutz, *American Nervousness*; Gagnon, "The Self, Its Voices," 231.

26. Boorstin, *Americans*; J. F. Fay, *American Psychology Before William James* (New Brunswick, N.J.: Rutgers University Press, 1939); Thomas Camfield, "Psychologists at War: The History of American Psychology" (Ph.D. diss., University of Texas at Austin, 1969); Veysey, *Emergence of the University*.

27. William James, "The Gospel of Relaxation," in *Talks to Teachers on Psychology* (Cambridge: Harvard University Press, 1983), 123.

28. Ibid., 127.

29. Ibid., 127-28.

30. Ibid., 131.

31. Rose's proposal for reconsidering the history of psychology resists the common bifurcations of technical, scientific psychology, and humanist psychologies and of academic psychology and popular psychology. He opens a way for exploring how the double discourse of the natural and the social, the discovered and the made, was assisted by ideas about potentials and possibilities, especially given the cultural confusion about what constituted self and the real. "Engineering the Human Soul," 357.

32. Ibid., 356.

33. For example, A. Schulyer, *Empirical and Rational Psychology* (New York: Van Antwerp, Brag, 1882).

34. James Angell, *Psychology* (New York: Henry Holt, 1904), 325.

35. Ibid., 324.

36. Yerkes, *Introduction to Psychology*, 184.

37. Harvey A. Carr, *Psychology: A Study of Mental Activity* (New York: Longmans, Green, 1926), 276.

38. Mary Whiton Calkins, *An Introduction to Psychology* (New York: Macmillan, 1905), 298.

39. Robert S. Woodworth, *Psychology*, 3rd ed. (New York: Hart, 1934), 358.

40. Edward L. Thorndike, "The Psychology of the Half-Educated Man," *Harper's* 140 (1920): 666-70; Max Meyer, *The Psychology of the Other One* (Columbia: Missouri Book, 1921).

41. Raymond Dodge, "Excursions in Experiential Psychology," *Scientific Monthly* 23 (1926): 129. On psychologists' reflexive thinking about their own inadequacies see Jill G. Morawski, "Organizing Knowledge and Behavior at Yale's Institute of Human Relations," *Isis* 77 (1986): 219-42. See n. 9.

42. Letter of John B. Watson to Robert M. Yerkes, Feb. 7, 1916, Yerkes Papers, Sterling Library, Yale University.

43. Yerkes, *Introduction to Psychology*, 81-82.

44. Walter S. Hunter, *General Psychology* (Chicago: University of Chicago Press, 1919), 179.

45. Angell, *Psychology*, 322.

46. Edward Titchener, *A Beginner's Psychology* (New York: Macmillan, 1916), 227; Yerkes, *Introduction to Psychology*, 183.

47. John F. Dashiell, *Fundamentals of Objective Psychology* (Boston: Houghton Mifflin, 1928); Floyd C. Dockeray, *Psychology* (New York: Prentice-Hall, 1946); Edwin G. Boring, Herbert S. Langfeld, and Harry P. Weld, *Psychology—A Factual Textbook* (New York: John Wiley, 1935).

48. James, *Principles of Psychology*, 2:462.



49. Ibid., 463.

50. Ibid., 466. The idea that the blocking (repressing) of an event or action results in rechanneling energies to another, usually higher-order event or action is not James's but is central to the concept of inhibition. Roger Smith has shown how inhibition provided not only a persuasive model with which the brain sciences could advance their claims to explain human conduct but also a metaphor that asserted social as well as biological hierarchies of control and regulation. Smith, *Inhibition*.

51. James, *Principles of Psychology*, 2:185.

52. Woodworth, *Psychology*, 354; Carr, *Psychology*, 270.

53. Woodworth, *Psychology*, 340.

54. Carr, *Psychology*, 273.

55. Ibid., 275.

56. The sensationalism of the Little Albert experiment led textbook authors to use it to demonstrate a wide range of psychological constructs. See Ben Harris, "What Ever Happened to Little Albert?" *American Psychologist* 34 (1979): 151–60.

57. Dashiell, *Objective Psychology*, 224–25.

58. Boring, Langfeld, and Weld, *Psychology*, 408, 413.

59. Ibid., 419.

60. Angell, *Psychology*, 320.

61. W. B. Pillsbury, *The Essentials of Psychology* (New York: Macmillan, 1911), 280.

62. This abbreviated comment merely intimates how experiments function as a practice and as a tool for persuasion. Experiments could locate and change emotions; reference to experiments could also serve rhetorical goals in textual accounts. Further, the reporting of experiments established new relations in reading between the firsthand observers who saw the event and the "virtual witnesses" who read the observers' accounts. On the powers of the experiment see Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge: Harvard University Press, 1987). On the relations of witnessing experiments see Steven Shapin, "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science* 14 (1984): 481–520.

63. Woodworth, *Psychology*, 357.

64. Latour, *Science in Action*, 45–48.

65. The development of psychological experimentation in the early twentieth century included methodological innovations that vested the experimenter with increasing control of the experimental situation, and participants, the subjects, with restricted options for action. These changes were based on two arguments: they increased objectivity in observations and they reduced the subjective components brought to the experiment by the untrained participants. Danziger, *Constructing the Subject*; Morawski, *Rise of Experimentation*.

66. In their history of childrearing and marriage manuals, Carol Z. Stearns and Peter N. Stearns have documented the rise of a management approach to emotions that encouraged consumption and eased tensions in the family. Similar measures to manage anger in the workplace helped workers adjust to changing labor conditions. *Anger: The Struggle for Emotional Control in America's History* (Chicago: University of Chicago Press, 1986), 69–156.

67. Peter N. Stearns has noted how the new strategies for controlling emotions com-

plicate any simple distinctions between nineteenth-century patterns of repression and self-control and twentieth-century ideals of expressivity. *Jealousy: The Evolution of an Emotion in American History* (New York: New York University Press, 1989).

68. The multiple axes of social relations located in these scientific accounts of emotion raise two theoretical questions: one concerning the analysis of author, text, and audience, and the other concerning the structure of emotions. The first question, one central to cultural studies, is finally a question about audience experiences—what they believed and how they made sense of what they read. The complexity of relations I have traced underscores a theoretical stance that does not privilege the text but rather sees audience and text in mutual relations of influence. This stance departs from the positivist assumptions in many studies of the popularization of science whereby readers are thought to believe and reflect scientific texts. A second theoretical question addresses the structure of emotions. The multiple dynamics of social relations located in the scientific texts suggest the need to consider how emotions can be defined only in relation to someone and/or to some event, whether that event be practical, moral, or economic. That is, the structure of emotions represented in the psychology texts belies the adequacy of viewing them as simply events or actions of individuals: these textbook accounts of emotions actually contradict the purported conception of emotions as individual experiences that are solely internal and in the head. See John Fiske, "Audiencing: Cultural Practice and Cultural Studies," in *Handbook of Qualitative Research*, ed. Norman K. Denzin and Yvonna S. Lincoln (Thousand Oaks, Calif.: Sage, 1994), 196; Gianna Pomata, "History, Particular and Universal: On Reading Some Recent Women's History Textbooks," *Feminist Studies* 19 (1993): 28. For an alternative (a dialogic, relational) perspective on emotions see Judith T. Irvine, "Registering Affect: Heteroglossia in the Linguistic Expression of Emotions," in *Language and the Politics of Emotion*, ed. Catherine A. Lutz and Lila Abu-Lughod (Cambridge: Cambridge University Press, 1990), 126–61.

69. Readers were often distinguished as a class apart from (and above) the ordinary persons to whom psychological analyses were applied. The psychologist's standpoint then became a motive for reading (and believing); the psychology textbooks' readers were invited to work toward the elevated position of the scientist. Morawski, "There Is More to Our History," 166–67.

70. Woodworth, *Psychology*, 353.

71. See Morawski, "Organizing Knowledge and Behavior."

72. Both feminist studies and social studies of science have indicated how formal knowledge systems have generated and proceeded only through distinct categorizations of the world—into the animate and inanimate, active and passive, moral and amoral. These categories have formed the basis of modern epistemology and politics. Donna J. Haraway, "A Game of Cats' Cradle: Science Studies, Feminist Theory, Cultural Studies," *Configurations* 1 (1994): 59–71; Bruno Latour, "The Impact of Science Studies on Political Philosophy," *Science, Technology and Human Values* 16 (1991): 3–19; Steve Woolgar, *Science: The Very Idea* (New York: Tavistock, 1988). Critical analyses of categories of agents in psychological research include Sharon Lamb, "Acts without Agents: An Analysis of Linguistic Avoidance in Journal Articles on Men Who Batter Women," *American Journal of Orthopsychiatry* 61 (1991): 250–57; Lola L. Lopes, "The Rhetoric of Rationality," *Theory and Psychology* 1 (1991): 65–82.

73. The historical and dynamic feedback between knowledge produced by scientific psychology and the activities of persons in everyday life is explored in Kenneth J. Gergen, "Social Psychology as History," *Journal of Personality and Social Psychology* 26 (1973): 309–20; Ian Hacking, "Making Up People," in *Reconstructing Individualism*, ed. T. C. Heller, M. Sosha, and D. Wellbery, with Arnold I. Davidson, Ann Swidler, and Ian Watt (Stanford: Stanford University Press, 1986), 222–36.