

# **PSYCHOLOGY, EDUCATION, THE CHURCH, AND THE MISUSE OF SCIENCE:**

## ***The Evolutionary Legacy of Six Men - Part 1***

### **I. INTRODUCTION**

The six names Wundt, Hall, Dewey, Thorndike, Rugg, and Rogers are key figures in an ideological lineage spanning time from Charles Darwin to the present. Through these six men, evolutionary ideas have spiritually misled thousands of psychological counselees, millions of students, and billions of seekers of spiritual assurance.<sup>1</sup>

In the late 1800s, Wilhelm Wundt, a disciple of Charles Darwin, founded the first humanist psychology laboratory. Like Darwin, he assumed that since man is an animal, sin is not a factor in human behavior. He concluded that psychological difficulties are the result only of unmet "animal" needs. This position is held in varying degrees by Christian accommodationists today. One of Wundt's students, G. Stanley Hall, taught John Dewey, who later influenced Edward L. Thorndike. Thorndike insinuated humanistic psychology into the American school system, and another of Dewey's disciples, Harold Rugg, wrote curricula to displace biblical teaching from American schools.

Dewey protegee Carl Rogers has brought about an invalid integration of humanist concepts into so-called "Christian" counseling, the approach exemplified by organizations such as the American Association of Christian Counselors. Pastoral counseling is increasingly based on the "Rogerian" principle of self-acceptance rather than on biblical revelation for dealing with sin. The influence of Hall, Dewey, and Thorndike, as well as that of Rogers, has brought into Christian evangelism a pragmatism which increasingly ignores man's sin and concentrates on "what feels good," i.e., self-gratification.

### **II. MODERN PSYCHOLOGY AND THE MISUSE OF SCIENCE**

Modern psychology assumes that man is an animal and is susceptible to conditioning like any other animal. In the 1800s, two advocates of this position, Wilhelm Wundt and G. Stanley Hall, made it scientifically acceptable.

#### **Psychology Before Wundt**

At the time of Wilhelm Wundt's birth in 1832, psychology was considered the "science of the soul." Noah Webster in 1828 defined psychology as "A discourse or treatise on the human soul; or the doctrine of the nature and properties of the soul."<sup>2</sup> Decades later in 1879, the same definition continued to prevail: "Psychology is the science of the soul."<sup>3</sup> The Bible teaches that man is not an animal, being separate from them, and therefore is a unique creation (Gen. 1:26-27). Though human anatomy and physiology share features with animals, psychology was a science applicable only to the unique soul of man. Animal studies could aid in understanding man's physical body, but such studies could not lead to a true understanding of the human spirit.<sup>4</sup>

Indeed, with the focus of psychology on man's unique soul and spirit, the common view was that "a correct psychology leads to theism, and to a just apprehension of a great intelligent First Cause."<sup>5</sup> In pre-humanist psychology, the human mind was seen as having the unique "power to discern right and wrong, and to exercise emotions in reference to right and wrong ..."<sup>6</sup> In the old psychology, man had a destiny outstripping that of any animal. The old psychology affirmed "the immortality of the soul from the sacred Scriptures. ... Here, then, is seen the high destiny of man. Intelligent, sensitive, and free, he is destined for immortal progress in knowledge, in happiness, and in virtue. ... The claims of immortality are [higher than] all earthly claims."<sup>7</sup> Man was much more than a collection of animal instincts.

Psychologists and educators since the late 1800s have typically condemned the pre-humanist psychology as "faulty psychology": "During the nineteenth century the most popular conception of learning was based on a faulty psychology. ... In line with religious orthodoxy, this psychological doctrine viewed the mind as a spiritual entity ... unique to man. ...

"The theoretical system of faulty psychology was especially important in the history of American education because it provided a justification for 'mental discipline' as the dominant methodology in secondary and higher education. ... This schooling called for intensive drill and practice and a cultivation of the memory. ... according to this doctrine, transfer of training resulted from strengthening the 'faculties' or powers of the mind, instead of from the specific benefits derived from a particular subject or method of study."<sup>8</sup>

#### **Despite humanistic condemnation, the old psychology and the education following from it were extremely effective.**

"In 1800, President Thomas Jefferson commissioned a national survey conducted by Dupont de Nemours to determine the status of literacy in America. The results were phenomenal.

**Better than 97% of American citizens could read and write.** The stated reason for this success was that, from Boston to Atlanta, American fathers practiced Bible reading around the breakfast table. Long before the creation of government schools or the National Education Association, faithful fathers proved that the simple act of teaching the Holy Scriptures to their children at home would lead our nation to become the most literate in the world."<sup>9</sup>

It is ironic that, "Although psychologists are not yet entirely agreed on what the mind is or how it functions, they are unanimous in rejecting this simple notion that the mind is composed of 'faculties' which can be trained for effective use in all later life situations."<sup>10</sup> This is an amazing statement: **modern humanists don't know what the mind is, but they feel free to reject the old system which produced such good educational results.**

The rise of Darwinian evolution resulted in humanist psychology displacing the older biblical psychology: "The decades from [the publication of Darwin's *Origin of Species* in 1859] to World War I witnessed intensive research and a growing number of controversies in psychology. ... Under the influence of Darwinism, new experimentation led to the development of distinct psychological systems which profoundly affected American education. Integral to these

systems were an evolutionary conception of the human mind and new theories of learning. ...

"[T]he influence of Darwinism led to a radically different conception of man's mind. Instead of being viewed as a separate entity independent of man's body, the mind was seen as a product of evolutionary growth. ... Mental activity was a behavioral *function* by which the organism adapted itself to a changing environment."<sup>11</sup> In other words, the old approach of classical education as an advance preparation of the mind for life was no longer valid; the student could only be conditioned as an animal to react appropriately to the problems of the moment, an approach eventually developed fully by the early 1900s.

### **The Ideology and Legacy of Wilhelm Wundt (1832-1920)**

**Wundt was the first psychologist to study man as an animal.** He eagerly accepted the teachings of Darwinism, especially the dogma that man is merely an animal without spiritual impulses: "For Wundt, will was the direct result of the combination of perceived stimuli, not an independent, individual intention as psychology and philosophy had, with some notable exceptions, held up to that time."<sup>12</sup> The Wundtian man was only a sack of physico-chemical responses to external stimuli, with no possibility of spiritual motivation transcending the here-and-now.

Wundt was spectacularly successful in disseminating his new psychological doctrine of man-as-animal. He has been dubbed the "father of modern psychology."<sup>13</sup> Wundt gave his animal view of man the appearance of scientific respectability by founding the world's first psychology laboratory in Leipzig, Germany, in 1879. The purpose of this laboratory was to show that man responds to stimuli and therefore can be conditioned as an animal. Wundt's students propagated his ideology:

"Through [Wundt's] students, the Leipzig laboratory exercised an immense influence on the development of psychology. It served as the model for many new laboratories that were developed in the latter part of the nineteenth century.

The many students who flocked to Leipzig, united as they were in point of view and common purpose, constituted a school of thought in psychology."<sup>14</sup>

"Finally when [Wundt's students] left Leipzig, and worked in laboratories of their own - chiefly in American or German universities - most of them retained enough of the Leipzig impress to teach a psychology that, whatever the subsequent development of the individual's thought, bore traces of the system which was recognized at Leipzig as orthodox."<sup>15</sup>

Before 1900, Wundt's humanistic psychology was entrenched in the United States: "[Wundt] produced the first generation of researchers, professors, and publicists in the new psychology. ... The young Americans who studied with Wundt returned to found departments of psychology throughout the United States. With the prestige of having studied in Germany, these men found little difficulty in securing positions of influence at major American universities. Each became successful to a marked degree; each trained scores, often hundreds, of Ph.D. students in psychology; each contributed to new associations and publications in the new field of study. Almost without

exception, every one of them became involved in another field which lay open to the advance of German psychology - the field of education."<sup>16</sup> Thus the floodgates were open to the establishment of humanistic education in America by the likes of Hall, Dewey, Thorndike, and Rugg.

**Following Wundt, the new humanistic education viewed man as devoid of spirit and unable to respond to God.** (Wundt, and the other five men emphasized in this paper, were practicing atheists.) Wundt himself "established the new psychology as a [physico-chemical] study of the brain and the central nervous system. From Wundt's work, it was only a short step to the later redefinition of the meaning of education.

Originally, education meant the drawing out of a person's innate talents and abilities by imparting the knowledge of languages, scientific reasoning, history, literature, rhetoric, etc. - the channels through which those abilities would flourish and serve. To the experimental psychologist, however, education became the process of exposing the student to 'meaningful' experiences so as to ensure desired reactions."<sup>17</sup> Thus was laid the foundation for modern education which avoids training of the mind through discipline and drill, substituting instead crafts, "projects," and field trips. Above all, modern education must "feel good," whether or not the graduate can think clearly or find work in his field of study."<sup>18</sup>

**Wundt also established the basis for the coercive application of human conditioning** which spawned the failed Hitlerian "master race" concept, as well as the totalitarian systems of Lenin, Stalin, and Mao Zedong:<sup>19</sup> "Wundt's thesis [that man is conditionable by stimulus-response] laid the philosophy for the principles of conditioning later developed by [Soviet scientist Ivan] Pavlov (who studied psychology in Leipzig, in 1884, five years after Wundt had inaugurated his laboratory there ... for schools oriented more toward the socialization of the child than toward the development of the intellect; and for the emergence of a society more and more blatantly devoted to the gratification of sensory desires at the expense of responsibility and achievement."<sup>20</sup>

In other words, Wundt's legacy has led to a "dumbing down" of American education in which the teacher is no longer seen as a source of authoritative knowledge: "The Wundtian redefinition of 'education' to mean feeding experimental data to a young brain and nervous system, rather than the teaching of mental skills, led to the abdication of the traditional role of the teacher as educator. Its place was taken by the concept of the teacher as a guide in the socialization of the child, leading each youngster to *adapt* to the specific behavior required of him."<sup>21</sup>

### **The Ideology and Legacy of G. Stanley Hall (1844-1924)**

G. Stanley Hall was the first major American psychologist to study man as an animal. **Hall was Wundt's first and most prominent American student.** Like Wundt, Hall believed (1) that man is an animal, and (2) that man the animal can be conditioned. Wundt's influence on Hall is universally acknowledged, and in fact, "Wilhelm Wundt ... was

undoubtedly the major influence on G. Stanley Hall."<sup>22</sup> Hall went on to found the first humanistic psychology laboratory in America:

"The first of Wundt's American students to return to the United States was G. Stanley Hall. Returning from Leipzig in 1883, he joined the faculty of Baltimore's new Johns Hopkins University, which was being established after the model of the great German universities. Hall organized the psychology laboratory at Johns Hopkins and, in 1887, established the *American Journal of Psychology*."<sup>23</sup>

In his later years, Hall wrote of his reliance on Wundt: "I think I was the first American pupil of Wundt. The twelve years [1870-1882, spanning Hall's first and second trip to Germany], more than any other equal period, marked and gave direction to modern psychology."<sup>24</sup> Hall also acknowledged: "The psychology I taught was almost entirely experimental and covered for the most part the material that Wundt had set forth in the later and larger edition of *Physiological Psychology*."<sup>25</sup>

Like Wundt, Hall was amazingly successful in disseminating his ideas: "Hall was a prolific writer, completing, among other works, two huge volumes of *Educational Problems* (1911). ... Hall's ideas became immensely popular."<sup>26</sup> He became the leader in childhood education:

"Hall conducted numerous 'studies' of children during the 1880s and 1890s, and in 1904 issued a landmark book ... titled *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education*."<sup>27</sup> Consequently, "he was widely recognized as a national leader of the child-study movement in the United States."<sup>28</sup>

As with Wundt, Hall's students spread his ideology far and wide: "[D]octoral students from Wundt and Hall fanned out through the United States, [and] established departments of psychology and education by the score; 117 psychological laboratories just in the period up to 1930."<sup>29</sup>

Also like Wundt, Hall was profoundly affected by Darwinism: "One of the earliest psychological systems structured within the new evolutionary framework was that developed by Granville Stanley Hall. After earning Harvard's first doctorate of psychology in 1878, Hall studied experimental psychology at Leipzig under Wilhelm Wundt. In 1883 he 'founded' at Johns Hopkins University the first psychological laboratory in America ...

"Hall tried for years to reconcile man's mental life with Darwin's theory of biological evolution."<sup>30</sup> "As soon as I first heard it in my youth I think I must have been almost hypnotized by the word 'evolution,'" Hall wrote. He was once introduced to an audience as 'the Darwin of the mind' and remarked later in his autobiography that this compliment gave him more satisfaction than any other he had ever received."<sup>31</sup>

Hall's ideology in child development was an outgrowth of Darwinian evolution. Wundt's countryman Ernst Haeckel, a staunch Darwinian, theorized that the embryo in the womb retraces or "recapitulates" the biological evolution of life. Thus the embryo passes through the various stages of evolution such as a one-cell stage, then a fish stage "evolving" in the bag of waters, eventually becoming human late in the pregnancy.<sup>32</sup> Hall also believed that "the embryo in the womb

repeated Darwin's evolution of humanity from the sea," but Hall carried the recapitulation idea even further, teaching that "the stages of childhood repeated the stages of social evolution from pre-savagery to civilization. ...

"[Hall] argued that childhood consisted of 'three stages, each with a parallel in racial history' and each requiring certain set teaching approaches. Infancy and early childhood were equal to pre-stages of culture, and parent/teachers should allow the child to play with blocks and exercise freely. At 6 or 7, he believed the child experienced various crises leading to the 'pre-adolescent' years of 8 to 12, when behavior is comparable to 'the world of early pigmies [sic] and other so-called savages.'<sup>33</sup> In short, "Hall's fundamental thesis was that mind and body evolved in a parallel fashion through a series of stages from presavagery to civilized life."<sup>34</sup>

Before Hall, education had typically occurred in one-room schools in which different "grades" of students learned to get along with each other, the older helping to teach the younger, and the younger learning to emulate the older. Likewise, in churches, "youth groups" were unknown, for families typically worshipped together without being subdivided into toddlers, pre-school, K-3, 4-6, middle school, and high school subgroups.<sup>35</sup> This lack of peer groups might seem strange, but there was also inter-generational respect and appreciation, a value largely missing in American society today. **Hall's ideology laid the foundation for the "generation gap" now existing between younger and older people:**

"Hall's work provided a basis for segregating school children [into grades] by age. Elementary school children were segregated from secondary schools along the lines of his 'observations.' Twelve was the age of the break. The new fashion spread even into religion, and the clergy began to aim different lessons at special age groups: the Bible was too much for the young.

"The movement mushroomed into special courses for special ages. At certain ages a child was expected to learn this much - and no more. ... Nor [was] this true only of children. There is now an expected beginning and an end to a working career: one cannot be too young - or too old. ...

"There are many variations of this development - from youth gangs to forced retirement. In fact, we have almost achieved a society nearly completely segregated by age. ... Age now separates us more than ever before in any society; persons raised only a few decades apart find one another nearly incomprehensible. [Hall therefore] can be said to have influenced us as much (and perhaps more) than Darwin or [Freud], and like these more celebrated 'thinkers' has brought us at least an equal load of distress, disturbance, and unhappiness."<sup>36</sup>

According to Hall's recapitulation theory, at age six or seven, the child was ready for school. "But a new period of crisis, he believed, arrived between 13 and 18 - *which he termed adolescence*. Hall compared [adolescence to the cultural evolution of] ancient and medieval civilizations. He also believed that it was 'a stormy [period] ... when there is a peculiar proneness to be either very good or very bad!'"<sup>37</sup>

Historical practice does not support this ideology. "Throughout all the previous centuries of Christianity - and of Judaism before that - 12 had been considered the age of maturity. Both confirmation in the Christian religion ... and the Bar Mitzvah in Judaism ... took place at that age. Thereafter, a young person was expected to behave as a responsible adult, and to assume a place in adult society."<sup>38</sup>

Due to Hall's ideology, "Adolescence is now accepted by most Americans as a strange and difficult period marked by wild swings of mood, outbursts of temper, rudeness, rebelliousness, and personality changes - all involuntary. They would be surprised to learn that this period was unknown, unrecognized and unseen in every previous civilization, culture, and society ... In earlier times this was once true even in the United States."<sup>39</sup>

Hall also tried to explain the differences in boy-girl behavior in evolutionary terms: "[H]e held tenaciously to Darwinian conceptions; for example, in the 'recapitulation' theory Hall and his coworkers found an explanation for the 'big-injun' war games which sometimes characterize the play of preadolescent children."<sup>40</sup>

Ironically, the feminist movement has impelled a number of studies of male/female sex differences which disprove Hall's evolutionary speculations. It is now recognized that sex differences, though hormonally mediated, are ultimately very deeply seated and have no satisfactory Darwinian explanation. One researcher has summarized the differences: "The female brain is predominantly hard-wired for empathy. The male brain is predominantly hard-wired for understanding and building systems."<sup>41</sup>

Recent sex-difference studies have confirmed that evolutionary selection cannot explain the differences: "Probably a major reason women find the pursuit of mathematics unappealing is that it lacks human interest. Women are generally much more people-oriented. ... This is not just social conditioning; it is very much part of the nature of most women."<sup>42</sup> **In other words, the "nature vs. nurture" debate is being settled on the side of "nature."** As one researcher notes, "[A]ll the sciences utilize systematizing as their basis, and all are dominated by men. ... Some have argued that this is because these disciplines are unfriendly to women. However, the pattern across the different sciences suggests that something more subtle is going on [i.e., that women themselves shy away from these disciplines because of in-built, non-cultural factors]."<sup>43</sup>

Lest it be mistakenly assumed that women are the weaker sex, it should be recognized that another sex difference is the greater longevity of women: "[M]ale over-mortality occurs in all age groups. Fortunately for demographic equilibrium, significantly more boys are born than girls ... [M]en and women do not display the same resistance to a variety of fatal diseases. ... [L]esser male resistance [can] not be fully explained by socio-economic factors."<sup>44</sup>

Recent research has emphatically denied the significance of (evolutionary) cultural factors in sex differences: "The old idea that [psychological sex differences] might be wholly cultural is nowadays too simplistic."<sup>45</sup> Further, "[I]t is most unlikely that differences between men and

women could be accounted for entirely by sex-role learning experiences. ... It is therefore misleading to attribute [male-female behavior] differences to patterns of upbringing unique to Western society."<sup>46</sup>

It is presently recognized that "the idea that ... social influences *determine* toy choices [among boys and girls] is unlikely. Here's why. If you ask two-year-olds which toys are for boys and which for girls, they will not be able to tell you. Children do not yet know the gender stereotypes; they are as likely to suggest a toy car or a doll for a girl or a boy. Yet at this age they already show the sex-typical toy preferences through the toys that they themselves choose to play with. This suggests that their toy choices *predate* their gender stereotypes."<sup>47</sup> This conclusion flatly contradicts Hall's ideology of sex difference and gender roles.

Actually, Hall's ideology was contradicted decades ago in the Israeli communes called "kibbutzim": "During the 1940s and 50s, these cells of collectivist life proclaimed themselves as a break with the intensely patriarchal character of Jewish life. Imbued with the philosophies of socialism and egalitarianism, the kibbutz members sought to apportion all tasks equally, regardless of sex. Distinct roles for men and women were to be eliminated. ... [E]verything seemed to be going well at first. Then the women revealed themselves to be less interested in politics and leadership positions, abandoning these activities to the men. More concerned with their households, they broke with the ideology of the kibbutz and demanded more time with their children. Still more striking, this process accelerated among the daughters of the pioneering generation. The women of the second and third generations insisted that they be allowed to spend even more time with their children, and some refused top management positions when these were offered to them. This was the end of the egalitarian experiment in the kibbutz."<sup>48</sup>

Despite the modern disproof of aspects of Hall's ideology, the entire human development concept as now taught is from the evolutionary recapitulation theory of Hall. **With Hall's assumption that all children in the lowest cohort (grade) are at too primitive a stage to think abstractly, we now have simplified curricula with watered-down content for the youngest.** This outcome is a direct result of Hall's ideology: "Hall placed the child at the center of the educational process and oriented the entire school effort around individual needs and interests. Hall wanted the school to adapt itself to the *natural* stages of human growth. ... Hall was ... developing a radically new concept of a child-centered school with curricular content derived *exclusively* from the study of child development. ... In Hall's view, every aspect of education was to be evaluated against the criteria of the pupils' needs at each stage of human development."<sup>49</sup>

### III. MODERN EDUCATION AND THE MISUSE OF SCIENCE

Wundt and Hall laid the ideological foundation for the belief that education's purpose is not to prepare the student for life,

but to condition him. It remained for John Dewey to define what the ends of this conditioning were to be. Dewey's disciple, Edward L. Thorndike, worked out the techniques of this conditioning.

### **The Ideology and Legacy of John Dewey (1859-1952)**

**John Dewey established the fact that in modern education, the school was to serve as the agent of social change.** The dependence of Dewey's ideology on that of Wundt and Hall is universally recognized: "[Daniel Coit] Gilman [first president of the University of California, then of Johns Hopkins] imported the experimental psychology of Hegelian physiologist Wilhelm Wundt from Germany. This psychology was grafted onto the American education system through the educational laboratories at Columbia and Chicago University. And they moved a familiar name, John Dewey, a pure Hegelian in philosophy, along the fast track in his career."<sup>50</sup> Indeed, Dewey was one of Hall's "prominent" students.<sup>51</sup>

It was not by happenstance that Dewey rose to prominence: "Hall was ... interested in furthering the career of ... John Dewey. ... [Dewey] spent a year studying under Hall, receiving his doctorate from Johns Hopkins in 1884. ... in 1886 (the same year in which the National Education Association was formed) ... Dewey published *Psychology*, the first American textbook on [Wundt's humanistic psychology]."<sup>52</sup>

Like Wundt and Hall, Dewey was astonishingly successful in winning converts to his ideas: "Dewey's views were disseminated everywhere through his work at Chicago and Columbia and, until his death in 1952 at the age of ninety-two, through a steady stream of articles, commentaries, and books. At Teachers College, Columbia University, Dewey had direct contact through his courses with a vast number of teachers from all parts of the United States and from other nations."<sup>53</sup>

Dewey became the leading figure at Teachers College, the foremost teacher training school in the United States. Indeed, "By 1953, Wundtian psychology had reached out from Teachers College into virtually every public school in the land: '... With 100,000 alumni, TC has managed to seat about one-third of the presidents and deans now [1953] in office at accredited U.S. teacher training schools. It graduates make up about 20 percent of all our public school teachers. Over a fourth of the superintendents of schools in the 168 U.S. cities with at least 50,000 population are TC-trained!'"<sup>54</sup>

In other words, **by 1953, Dewey-trained educators formed the largest segment of the American educational establishment:** "During his long career at Columbia, [Dewey] wrote and published extensively, attracting a multitude of devoted followers. For at least half a century he was regarded by many as the foremost educational philosopher in America. Certainly no other philosopher has devoted so much attention to American education; none has influenced schools so profoundly."<sup>55</sup> When one considers Dewey's influence along with his religious views, it is easy to see why the modern American educational system leans far to the left.

**Dewey was an atheist with no faith in God but with complete faith in science and in human progress.** He celebrated the modern rise of secularism as the greatest

"religious" development of all time: "The Renaissance," Dewey wrote, "was essentially a new birth of secularism. The development of the idea of 'natural religion,' characteristic of the eighteenth century, was a protest against control by ecclesiastic bodies ... [T]ranscendentalism was a further move in the same general direction, a movement in which 'reason' took on a more romantic, more colorful, and more collective form. ... These movements and others not mentioned are the intellectual reflex of the greatest revolution that has taken place in religions during the thousands of years that man has been on earth."<sup>56</sup>

For Dewey, since God did not exist, religion is actually any experience which leads to "better adjustment in life and its conditions ... [If a] reorientation actually occurs, it, and the sense of security and stability accompanying it, are [religious] forces ... [Such an experience] takes place in different persons in a multitude of ways. It is sometimes brought about by devotion to a cause; sometimes by a passage of poetry [and] sometimes through philosophical reflection."<sup>57</sup>

Not surprisingly, **Dewey followed Hall in viewing education as experiences to be felt and sensed, not as content to be learned:** "Dewey gave high priority to the concept of 'experience' in the teaching-learning process. ... Dewey asserted that 'thinking is the method of intelligent learning' and that one learns how to think through 'experience'.

... 'Hence the first approach to any subject in school, if thought is to be aroused and not words acquired, should be as unscholastic as possible!'"<sup>58</sup> Following Hall, Dewey thus reinforced the rationale for a watered-down education.

Even science itself for Dewey was not content-based: "Science is not constituted by any particular body of subject matter. It is constituted by a method, a method of changing beliefs by means of tested inquiry as well as by arriving at them."<sup>59</sup> Instead, "science" was an instrument of conditioning the student. Implicitly by denying the existence of definable content, Dewey denied the existence of absolute truth, leaving open the question of which beliefs would be employed in the conditioning of school children. Dewey's ideological descendant Harold Rugg answered this question, as discussed below.

As with Wundt and Hall, "Dewey's thought was also profoundly influenced by Darwinism."<sup>60</sup> The evolutionary view of reality is that there is constant change with no absolute truth, and in true Darwinian fashion, "Dewey's own ideas gradually shifted from the study of philosophy as a strict discipline toward a broader view of social aims and a more active consideration of educational issues."<sup>61</sup>

The evolutionary sense of change embodied in Dewey's concept of reality made the educational process a malleable one which could be used to bring to pass whatever conditioning was required by current social needs. That Dewey viewed education as a tool to bring about social conditioning is beyond doubt: "Dewey's frequently quoted definition of philosophy indicates the changing direction of his system of ideas ... 'Unless a philosophy is to remain symbolic ... its auditing of past experience and its program of values

must take effect in conduct.<sup>62</sup> For Dewey, then, philosophy became an *instrument* of action in human affairs. Indeed, his whole doctrine of *instrumentalism* revolves around the theory that ideas are tools or instruments with which men might change (or improve) their environment.<sup>63</sup> In other words, **Dewey believed that men could now guide their evolution.** Of course, this left open the question of who would decide which way evolution should go, a topic taken up below.

Before his tenure at Columbia, Dewey established a model school at the University of Chicago. "In the Laboratory School which he established with his wife ... at the University of Chicago, Dewey developed experimentally some of his educational ideas. ... What was so unusual about Dewey's Laboratory School? ... the Laboratory School was child-centered. Pupil 'interests' became basic determinants of the 'curriculum' ... He pleaded for a child-centered education in which, as he put it, 'the child becomes the sun about which the appliances of education revolve'."<sup>64</sup>

Dewey's child-centered concept mirrored Hall's ideology. Also like Hall, Dewey saw children not as fallen and thus in need of compassionate constraints but rather had the "conviction ... that the native and unspoiled attitude of childhood, marked by ardent curiosity, fertile imagination, and love of experimental inquiry, is near, very near, to the attitude of the scientific mind."<sup>65</sup>

Further, "As Dewey remarked to the children's parents in February 1899, 'The teachers started with question marks, rather than fixed rules' ..., "<sup>66</sup> reflecting his own insistence that absolute truth does not exist. Following Hall's cultural recapitulation theory, "Dewey and his teachers developed certain 'experimental practices' based on the 'growth stages' of the learner."<sup>67</sup>

Eventually, **Dewey viewed education as a tool for conditioning and shaping the entire culture through the conditioning of individual students.** "[B]y 1899 Dewey ... was arguing for an essentially political role of the school as a basic instrument for social change ... 'Education is the fundamental method of social progress and reform,' he wrote.<sup>68</sup> ... Over and over again, Dewey underscored the dynamic character of American education, requiring, he believed, a 'consciously directed movement' in 'a progressively developing society'."<sup>69</sup> From Dewey's beliefs as we have discussed them, it is clear that the societal values he sought to inculcate included (1) a secular religion with no belief in God; (2) the belief that truth is relative or situational; (3) the belief that man and society are evolving; (4) the belief that man can guide his evolution.<sup>70</sup> How man might guide his evolution was a topic fully developed by Dewey's successors such as Edward L. Thorndike and Harold Rugg.

### **The Ideology and Legacy of Edward L. Thorndike (1874-1949)**

Edward L. Thorndike developed the techniques of conditioning with which to realize Dewey's vision of cultural shift from theism to secularism.

As with Hall and Dewey, Thorndike's linkage to his ideological predecessors is widely recognized: "Thorndike's

primary assumption was the same as Wundt's: that man is an animal, that his actions are actually always reactions, and that he can be studied in the laboratory in much the same way as an animal might be studied. Thorndike equated children with the rats, monkeys, fish, cats, and chickens upon which he experimented in his laboratory and was prepared to apply what he found there to learning in the classroom."<sup>71</sup>

Indeed, "Thorndike was trained in the new psychology by the first generation of Wundt's proteges. He graduated from Wesleyan University in 1895, after having studied with Wundtians Armstrong and Judd."<sup>72</sup> Like Wundt, Hall, and Dewey, Thorndike was very successful in spreading his views: "Through his publications and courses, Thorndike spread his doctrine across the land, coloring the educational thought of a generation of American teachers."<sup>73</sup>

In accordance with his belief that man as an animal evolved with the rest of nature, Thorndike wrote: "Human intercourse and institutions are as surely rooted and grounded in original nature as man's struggles with the rest of nature for food and safety." **Thorndike asserted that nothing sets man apart from animals, not even the complexities of governmental establishments,** for "the almost universal inequitable use of delegated powers by governors ... and all those in authority, warrants the conviction that the hunting response does not originally distinguish man from other animals at all. ..."<sup>74</sup>

The logical conclusion from this premise was that animal behavior models human behavior, and "Thorndike was the first psychologist to study animal behavior in an experimental psychology laboratory and [to] apply the same techniques to children and youths; as one result, in 1903, he published the book *Educational Psychology*,"<sup>75</sup> which went through many editions and became a staple of the educational community. Its concepts are taught in educational psychology classes to this day.<sup>76</sup>

Thorndike worked alongside Dewey at Teachers College. Dewey, however, merely asserted that social conditioning should occur. **Thorndike extended Dewey's efforts by working out a technique for accomplishing the human conditioning that Dewey advocated.** One writer approvingly notes that around 1900,

"Thorndike [at Harvard] was conducting experiments in animal learning which provided additional support for an evolutionary conception of the mind." Rejecting the old but biblical concept of the mind as potentially responsive to God, "Instead, contended Thorndike, the mind develops as the organism responds totally to its environment. ... Thorndike [asserted that] human nature should become whatever man can make of it, to the limit of one's capacity to learn. ... [I]n stressing the social role of education, Thorndike wanted the school to *change* human behavior in line with mankind's goals,"<sup>77</sup> echoing the goals of his mentor John Dewey.

Thorndike described his conditioning technique as follows. Since to Thorndike man has no soul or spirit, "A man's nature and the changes that take place in it may be described in terms of the responses ... which he makes ... [A]

tendency to respond in a certain way to a certain situation ... involves a *situation* or state of affairs influencing the man, a *response* or state of affairs in the man, and a *connection* or bond whereby the latter is the result of the former."<sup>78</sup> This is the concept still taught in educational psychology classes as "stimulus-response" or "positive/negative reinforcement" as a means of controlling classroom behavior. It is also known as the "law of effect."

Thorndike's great error was his insistence that this is the only valid technique for behavior control. Indeed, Thorndike was explicit that this technique applied to conditioning in all of life, not just classroom situations. To Thorndike, learning *was* conditioning: "Thorndike consistently preferred the broader connotation of the word 'situation' to the more restricted term 'stimulus.' In general, the 'connection' was made with a *total* 'state of affairs influencing the man,' not with a particular thing or happening. ... By 1912 Thorndike had extended his theory of 'animal intelligence' to human learning ... With this conception of learning, Thorndike and his followers attacked the various assumptions of faulty psychology [i.e., the older biblical psychology], especially the theories of mental discipline and transfer of training."<sup>79</sup> In other words, **echoing Hall and Dewey, education was not about learning content, but about being conditioned.**

Godly parents may sometimes use positive/negative reinforcement with their children, but the godly teacher must recognize that the first appeal to a child old enough to understand should be a spiritual appeal from God's Word. To Thorndike, such an appeal would have been invalid since to him the spirit did not exist,<sup>80</sup> but the Christian educator must resist the temptation to use Thorndike's ideology as the first step in classroom discipline. **The slow disappearance of spiritual instruction from the classroom, and its displacement with Thorndike's reinforcement method, was the forerunner to the total elimination of the Bible and prayer from public schools in the early 1960s.**

Indeed, Thorndike called for a makeover of public education. "In *The Principles of Teaching Based on Psychology* (1906), Thorndike [redefined] the art of teaching [as]: '... the art of giving and withholding stimuli with the result of producing or preventing certain responses. ... These are the origins of conditioning and the later work of behavioral psychologists such as Watson (who received his Ph.D. from Dewey at the University of Chicago in 1903 with a thesis entitled 'Animal Education') and Skinner. Thorndike based conditioning on what he called the 'law of effect,' which held that those actions and behaviors leading to satisfaction would be impressed, or stamped in, on the child, and those leading to unsatisfactory results would be stamped out. Thus the only way to strengthen a child's 'good' response is by reinforcing it, and the only way to eliminate a child's 'bad' response is by denying it."<sup>81</sup>

**Thorndike's ideology left no possibility that the human spirit could respond to spiritual instruction from the Bible, thus learning by precept as a human rather than by conditioning as a trained animal.** "[Thorndike's] thinking favors a society which operates more on the basis of gratification than on the basis of reason or responsibility."<sup>82</sup>

**Thus Thorndike's educational legacy has been a departure of biblical instruction from the schools and the emergence of "education" that "feels good."** This legacy reinforces the influence of his predecessors Hall and Dewey.

Thorndike was explicit in saying that educational content should be diluted. A primary purpose of the elementary school, he opined, was not truly to educate but "to explore the vocational interests and aptitudes of pupils and to provide some measure of vocational adjustment for those who will leave school at the earliest legal age."<sup>83</sup>

Thorndike decried the vestiges of classical education which had survived to his day: "Traditionally the elementary school has been primarily devoted to teaching the fundamental subjects, the three R's, and closely related disciplines. ... Artificial exercises, like drills on phonetics, multiplication tables, and formal writing movements, are used to a wasteful degree. Subjects such as arithmetic, language, and history include content that is intrinsically of little value."<sup>84</sup> One would be justified in asking what else in education is of value, especially since the "drill" which Thorndike condemned produced such high literacy rates in its day.

Indeed, Thorndike's stimulus-response conditioning has a darker side which was not fully revealed until after Thorndike's death in 1949. **Thorndike's conditioning techniques were like those of Soviet scientist Ivan Pavlov;** "[y]ears before Ivan P. Pavlov's experiments, Thorndike was carefully observing animal behavior under controlled conditions."<sup>85</sup> The essential difference between the work of Thorndike and Pavlov is that the Communists used Pavlov's results to attempt the coercive control of entire countries, whereas Thorndike's methods were confined to the world of the classroom.<sup>86</sup>

It has been said that, "The concept that pleasure and pain as consequences of human actions are determiners of general behavior has a long history in psychology,"<sup>87</sup> but one could also add that it has an even longer history in techniques of torture, in which man is treated like an animal to elicit a certain response such as a confession, real or bogus. Such conditioning can be completely successful, however, only if man is truly an animal with no spiritual impulses.

**Communist attempts to re-program human beings by conditioning under torture proved ultimately unsuccessful.**

Two primary tests of coercive conditioning were conducted in Romania and in North Korea around 1950 when Stalin was at the height of his power, and used Pavlovian methods. "[T]he phenomenon that Pavlov investigated was well known for centuries and extensively used in practice to train animals." In the Communist tests with humans as the experimental victims, the Communists reasoned that "they must first reduce their victims to the condition of animals."<sup>88</sup> Thus those about to undergo conditioning were interned in the degrading conditions of a concentration camp. "In manipulating responses, the brainwasher strictly follows the Pavlovian line, considering body and mind as an integral unit. He goes on the Pavlovian assumption that any outside stimulus can be made to create any desired mental and physical reaction."<sup>89</sup> **Thus this**

### Communist conditioning was merely Thorndike's stimulus-response carried to an extreme.

Having abandoned a belief in God and the spirit and believing that man is merely an evolving animal, the Communists fully expected their coercive conditioning to succeed. It did not, however, because some of the victims were strong in spirit and withstood even the harshest attempts at conditioning. Concerning the experiments on students at Pitesti prison in Romania during 1949-1951, "As long ... as the soul remained unaltered, there had been no defeat. So it was precisely the soul that remained the principle target [of Communist conditioning], its utter destruction, the aim. ... These, then, were the main objectives of the experiment launched at Pitesti Prison by which the 're-educators' hoped to produce in the end 'the new man,' de-personalized, a robot they could manipulate."<sup>90</sup>

In the midst of unimaginable tortures, "[o]nly strength of will, a manifestation of spirit, could thus temporarily overcome the body's fatigue and successfully control it. ... But who can fathom the bottomless depths of man's soul? ... [A]ll the students who revealed their drama ... said that even when they believed the lies, they could still feel a vague anxiety, a sort of warning from the subconscious that disturbed the smooth functioning of the new order."<sup>91</sup> Thus the Communists realized that their severest attempts at human conditioning didn't really succeed.

In the end, "[t]he majority of the [Romanian] students had a faith so strong that it survived deep within them in spite of every attempt to destroy it ... The aim of the experimenters seems to have been that of determining, on the basis of scientific data, the extent to which a man could be robbed of his personality and be completely and irreversibly reconstructed. The ultimate recovery of the majority of the victims proved that the transformation thus affected was not irreversible. ... Man has within himself certain powers [of the spirit] that nobody can destroy ... and the powers within him proclaim Him Who created man."<sup>92</sup>

The same triumph of the human spirit flashed forth in the North Korean concentration camps - but only for those "strong in spirit," usually because of faith in the Lord: "[T]his additional force - spirit - had been the most important weapon for those who had successfully resisted. For the lack of it, others had miserably broken. ... Without convictions, a man was soft clay in the hands of the Reds,"<sup>93</sup> and could be conditioned like an animal. A "pushover for the indoctrinators was the indecisive mind, especially the falsely academic kind that always sees some valid point in the other side's argument."<sup>94</sup>

Soviet KGB defector Anatoliy Golitsyn makes claims suggesting that with the failure of these tests of coercive conditioning, the Communists saw the handwriting on the wall: it was clear that Communism would never be a viable, self-supporting economic system because it would never be capable of completely coercing the masses into compliance with the state. Thus Communism was eventually allowed to give the appearance of fading away.<sup>95</sup> Ironically, Thorndike's stimulus-response model is alive and well in American education, despite the fact that history has shown that ultimately, conditioning cannot conquer the human spirit.

### Notes

- 1 Many others have also carried forward the ideological lineage of these six men. Some prominent names in psychology would include Sigmund Freud, Abraham Maslow, and B.F. Skinner; in education, Robert Owen and Horace Mann, both of whom were laying a humanist foundation for American education before Darwin rose to prominence. However, Darwin's evolutionary philosophy accelerated the acceptance of humanist concepts which otherwise might have been adopted much more slowly if at all.
- 2 Noah Webster, *An American Dictionary of the English Language*, S. Converse, 1828; reprinted by the Foundation for American Christian Education, 1993.
- 3 R.H. Rivers, *Elements of Mental Philosophy*, Southern Methodist Publishing House, 1879, p. 19.
- 4 The physical similarities between man and animals had been recognized for centuries. Aristotle (c. 2300 BC) had studied the similarities, and in Medieval times, Da Vinci had battled the repressive Roman Catholic hierarchy for the privilege of investigating the comparative anatomy of man and animals. Even today, the first training for would-be medical students involves the dissection of cats and other animals as a prelude to dissecting human cadavers in medical school.
- 5 Rivers, p. 32.      6 Rivers, p. 308.      7 Rivers, pp. 370-371.
- 8 S. Alexander Rippa, *Education in a Free Society: An American History*, David McKay Co., 1976, pp. 217-218.
- 9 Douglas W. Phillips, Introduction to John Quincy Adams, *Letters of John Quincy Adams to His Son on the Bible and Its Teachings*, 1848; reprinted by Vision Forum, 2000, p. 5.
- 10 Rippa, pp. 218-219.      11 Rippa, pp. 217, 219.
- 12 Paolo Lionni, *The Leipzig Connection: The Systematic Destruction of American Education*, Heron Books, 1993, p. 5.
- 13 Lionni, p. 6, citing Edna Heidebreder, *Seven Psychologies*, Appleton-Century, 1933, pp. 96-97.
- 14 Lionni, p. 11, citing Duane P. Schulz, *A History of Modern Psychology*, Academic, 1969, p. 45.
- 15 Lionni, p. 14, citing Heidebreder, pp. 94-95.
- 16 Lionni, pp. 11, 14.      17 Lionni, pp. 7-8.
- 18 Besides producing a 97% literacy rate in America, classical education prepared one to go directly into science, business or politics; many of the American founding fathers had no college education. Modern education in America produces high school graduates with reading skills averaging eighth grade level, with one-third of high school graduates functionally illiterate. Stereotypes of the harshness of early classical education derive from the austere Prussian educational system of the 1800s, not from classical education in America. Movies and stories depicting American classical education as harsh are drawing from the inaccurate stereotype, not the reality.
- 19 Ironically, modern American education has roots in the Prussian system of the early 1800s. The Prussian system was the forerunner to Wundt's insistence on education as an agent of human conditioning. Darwinism hastened the acceptance of education as a conditioning agent.
- 20 Lionni, p. 9.
- 21 Lionni, pp. 18-19. Significantly, "Wundt's work was based on Hegelian philosophical theory" (Anthony C. Sutton, *America's Secret Establishment*, Liberty House Press, 1986, p. 87).

After the destruction of Prussia in the Napoleonic wars, the Prussian government launched a program to determine (1) why Prussia had been vulnerable to Napoleon's attacks, and (2) what could be done to prevent another military defeat. The philosopher Hegel concluded that Prussia had been defeated because the citizenry did not sufficiently obey the state. He asserted that the Prussian educational system must be used to condition the



people to follow the state in perfect, blind obedience. This, he said, would produce an invincible Prussian fighting machine. Hegel was therefore the originator of the Prussian educational system as a human conditioning agent. History reveals that Hegel's philosophy of blind obedience to the state led to a crushing defeat of Hitler's Germany in the twentieth century. Unfortunately, Hegel's philosophy of education as a conditioning agent survives in America.

22 Sutton, p. 86. Wundt's own academic training was in philosophy. As the science of the soul, pre-Wundtian psychology was considered a theological discipline, and psychology books were published by denominational presses; e.g., see Rivers, op. cit. Significantly, Hall began his educational career by following in the footsteps of the earlier educational humanist Horace Mann: "In 1872 [Hall] accepted a professorship at Antioch College, Ohio, that formerly was held by Horace Mann" (Sutton, p. 83, citing *National Cyclopaedia of American Biography*). "Antioch [was] a `liberal' Unitarian college with a more than `liberal' view of education." (Sutton, pp. 83, 85).

23 Lionni, pp. 14-15.

24 Sutton, p. 85, citing G.S. Hall, *Founders of Modern Psychology*, Appleton, 1912, pp. v-vi.

25 Sutton, p. 91, citing Hall. 26 Rippa, p. 222.

27 Otto Scott, "The Invention of Adolescence," *Chalcedon Report*, July 1991, p. 3.

28 Rippa, p. 222. 29 Sutton, p. 91. 30 Rippa, p. 221.

31 Rippa, citing G.S. Hall, *Life and Confessions of a Psychologist*, Appleton, 1923, pp. 357, 360.

32 Heackel's concept has been dubbed the "biogenetic law," parroted by generations of students as "ontogeny recapitulates phylogeny." Modern embryonic studies have shown this "law" to be false, but it remains in textbooks. Indeed, as early as 1874 it was shown that Heackel had falsified drawings of embryos to make the "law" appear plausible. The idea that human embryos have "gill slits" in the "fish" stage is an outgrowth of this "law." The abortion lobby has vastly benefitted from the recapitulation concept, since it supports the claim that a baby in the womb is not human until long after conception.

33 Scott, p. 3, citing *How Old Are You?: Age of Consciousness in American Culture*, Princeton, 1989, p. 67.

34 Rippa, p. 222.

35 There are two inaccurate stereotypes about pre-Hall schools and churches: (1) that one-room schools were devoid of any "groups"; and (2) that church services were rigidly segregated with women on one side of the sanctuary and men on the other. Students in one-room schools often worked in groups, but the groupings were not seen as an ideological necessity before Hall, and learning was not restricted to a child's "grade level"; children were free to learn as rapidly and as much as they wanted, which was one factor in producing high literacy rates in early America. In most churches men and women sat together as they do today; only in a minority of denominations, mostly of the Reformed variety such as high Lutheran churches, was this not true.

36 Scott, pp. 3-4.

37 Scott, p. 3, citing *How Old Are You?*, p. 67.

38 Scott, p. 3. This is the explanation for the fact that prior to Wundt, it was not rare for students to enter colleges such as Harvard at age 13 or 14, excelling in Greek and Hebrew. Jonathan Edwards is one example.

39 Scott, p. 3. The term "adolescence" existed before Hall (Webster, op. cit.), but it referred only to a person in a certain age range ("the period of life between *childhood* and *manhood*"), not to a period of maladjustment and rebellion. It can be argued that the rigidly graded education which Hall advocated, by its separation of children into different "peer groups," actually causes the alienation and rebellion which adolescence supposedly involves by its nature. Thus the educational system Hall advocated made his version of adolescence a self-fulfilling prophecy.

40 Rippa, p. 222.

41 Simon Baron-Cohen, *The Essential Difference: The Truth about the Male and Female Brain*, Basic Books, 2003, p. 1.

42 Glenn Wilson, *The Great Sex Divide: A Study of Male-Female Differences*, Scott-Townsend Publishers, 1992, p. 142.

43 Baron-Cohen, p. 73.

44 Yves Christen, *Sex Differences*, Transaction, 1993, pp. 21, 23.

45 Baron-Cohen, p. 10. 46 Wilson, pp. 33, 56.

47 Baron-Cohen, p. 91. The paradigm shift among sociologists has been so complete that some researchers admit having done an about face; e.g., "The first edition of this text, based on information available in 1965, presented a thoroughly sociological explanation of the origin of sex differences in behavior. ... The information available today invalidates my previous explanations" (Wilson, p. 36, citing J.R. Udry, *The Social Context of Marriage*, Lippincott, 1974, p. 75).

48 Christen, p. 59. 49 Rippa, pp. 222-223.

50 Sutton, p. 56. Labelling Wundt and Dewey as "Hegelians" signifies the prime importance which they attached to education as a method of conditioning human behavior. Dewey went further, however, advocating war as the most efficient method of conditioning the public to do whatever the state desires: "War is the most effective preacher of all merely finite interests, it puts an end to that selfish egoism of the individual by which he would claim his life and his property as his own or as his family's" (Sutton, p. 119, citing J. Dewey, *German Philosophy and Politics*, p. 197).

It is also significant to relate present state politics - conservative or liberal - to the first presidents of state universities founded in the 1800s. Berkeley, California, the center of the California state university system, was named after the atheistic British philosopher, and Gilman's views reflected Berkeley's opinions of God and Christianity. California's liberal politics is not solely a product of the entertainment industry.

51 Sutton, p. 91. Dewey was not Hall's only prominent student, however: "Hall taught John Dewey, Lewis Terman (who later pioneered `mental' tests), and Arnold Gesell, later famed as a `child' psychologist" (Scott, p. 3).

52 Lionni, pp. 15-16. 53 Rippa, p. 215.

54 Lionni, p. 87, citing Lawrence A. Cremin, David A. Shannon, and Mary Evelyn Townsend, *A History of Teachers College, Columbia University*, Columbia University, 1954, p. 269. As with the works of many revolutionaries such as Marx, Lenin, and Darwin, or for that matter Wundt and Hall, few have actually read Dewey's works, because "Dewey built his philosophical system ... through thirty-six books and over eight hundred articles ... [of] disjointed and incredibly obscure prose" (Rippa, p. 216). Most writers, if using "disjointed and incredibly obscure prose," would suffer rightly-deserved oblivion. So how is it that Dewey's ideas were so widely accepted? For that matter, how is it that Hall's ideas, or Wundt's, now discredited by further research and by history itself, continue to be influential?

In other words, what rocketed Dewey and others like him to such stratospheric heights of popularity and acceptance? The answer cannot exist entirely in cultural openness to his ideas, for his ideas have been continuously resisted by a significant fraction of the public to this day. So why the acceptance? The answer is that the acceptance took place among the highly educated and the elite, the makers of policy. This begs the question, What has united such people in advocating ideas which the general public has found objectionable? The answer lies in linkages between financial interests and social ties (Lionni, pp. 43-81).

55 Rippa, p. 205.

56 J. Dewey, *A Common Faith*, Yale, 1964, reprint of 1934 edition, pp. 64-65. Ironically, Dewey commended fundamentalist Christians for their superior understanding of the sweeping change involved in the theistic-to-secular paradigm shift: "The scope of the change [away from biblical

religion toward a secular "faith"] is well illustrated by [the following] ...

[W]henver a particular outpost [of traditional religious belief] is surrendered [to secularism] it is usually met by the remark from a liberal theologian that the particular doctrine or supposed historic or literary tenet surrendered was never, after all, an intrinsic part of religious belief. ... What is not realized - although perhaps it is more definitely seen by fundamentalists than by liberals - is that the issue does not concern this and that piecemeal *item* of belief, but centers in the question of the method by which any and every item of intellectual belief is to be arrived at and justified [i.e., by biblical revelation, or by "experience"]" (Dewey, *A Common Faith*, p. 32).

57 Dewey, *A Common Faith*, p. 14.

58 Rippa, p. 214, citing J. Dewey, *Democracy and Education: An Introduction to the Philosophy of Education*, Macmillan, 1916, pp. 181, 211.

59 Rippa, pp. 38-39.

60 Rippa, p. 204. Coincidentally, "Dewey was born ... in 1859, the year that Darwin's *Origin of Species* was published" (Rippa, p. 203).

61 Rippa, p. 204.

62 Rippa, p. 205, citing Dewey, *Democracy and Education*, p. 383.

63 Rippa, p. 205.

64 Rippa, pp. 206, 210, citing J. Dewey, *The School and Society, Being Three Lectures*, University of Chicago, 1907, p. 48.

65 Rippa, p. 211, citing J. Dewey, *How We Think*, Heath, 1910, p. 111. 66 Rippa, p. 207, citing Dewey, *The School and Society*; supplemented by *A Statement of the University Elementary School*, "Three Years of the University Elementary School," p. 116.

67 Rippa, p. 208.

68 Rippa, p. 210, citing J. Dewey, *My Pedagogic Creed*, Progressive Education Association, no date, Article V, "The School and Social Progress," p. 15.

69 Rippa, p. 212, citing Dewey, *Democracy and Education*, p. 377.

70 Significantly, Dewey was a signer of the first Humanist Manifesto in 1933. Since most educators are recipients of Dewey's ideology, it is not surprising that modern concepts such as Outcome Based Education continue to espouse the humanist tenets which Dewey taught.

71 Lionni, p. 32. 72 Lionni, p. 30. 73 Rippa, p. 240.

74 E.L. Thorndike, *Educational Psychology*, Teachers College, Columbia University, 1925, pp. 27, 39.

75 Lionni, pp. 31-32.

76 "Thorndike's famous dissertation on *Animal Intelligence* is a classic in the history of psychology. ... The so-called modern associationists have elaborated on Thorndike's earlier ideas ... Nevertheless ... modern associationists still find little cause for modifying Thorndike's original emphasis on the law of effect" (Rippa, pp. 236, 241).

77 Rippa, p. 220.

78 Thorndike, p. 1. Acting on his belief that man is merely another animal, Thorndike modeled human behavior (as defined by his situation-connection-response series) by appeal to the anatomy and physiology of frogs and rats (Thorndike, p. 90).

79 Rippa, p. 237, citing Thorndike, *Educational Psychology*, 1:1; see also Thorndike, *The Elements of Psychology*, A.G. Seiler, 1922, p. 205.

80 Thorndike wrote: "[Behaviors] are redirected by substituting, in the *situation-connection-response* series, another response instead of the undesirable original one. ... The behavior of man ... is rooted in his unlearned, original equipment of instincts and capacities" (Thorndike, *Educational*

*Psychology*, 1925, p. 3). In other words, there is no higher human faculty subject to change by the Holy Spirit, and positive biblical instruction is to be replaced by reinforcement methods of the sort used with animals.

81 Lionni, pp. 32, 33-34. 82 Lionni, p. 34.

83 Lionni, p. 37, citing E.L. Thorndike and Arthur I. Gates, *Elementary Principles of Education*, Macmillan, 1929, p. 310. In addition to the need for education to be self-gratifying, there was a more pragmatic motive behind Thorndike's call for lowering the educational bar. The corporations of the day needed masses of factory workers sufficiently trained to perform on the assembly line but insufficiently educated to aspire to higher goals. Thus in the following, Thorndike's reference to "society" should be understood to mean "the corporations": "[T]he best interests of the individual and society will be served by providing a certain number of the pupils least gifted in intelligence with the equipment needed to begin their vocational career by the completion of the junior high school period or even earlier in a few cases. Other individuals will advance their own welfare and that of society by securing but one more year, others by two, others by three additional years" (Lionni, pp. 39-40, citing Thorndike and Gates, p. 320). Gates was a major player in the growing Rockefeller industrial empire.

84 Lionni, p. 36, citing Thorndike and Gates, p. 308.

85 Rippa, p. 236. The Pavlovian situation-connection-response paradigm is a foundation for the inefficient "see and say" or "whole word" reading method, since any word shapes are supposed to be recognizable as meaningful words if conditioning has been sufficient (Thorndike, *Educational Psychology*, 1925, p. 154).

86 "Lenin ... had come to realize how impossible it was that he would ever obtain the people's willing cooperation in changing human nature and creating the new 'Soviet man.' He saw in Pavlov's discoveries a technique that could force it upon them. Marx had expected communism to change human nature. Lenin had found out that it would never happen naturally. Now he saw in the Pavlovian technique the ferment which could bring it about despite the opposition it naturally aroused" (Edward Hunter, *Brainwashing*, Pyramid Books, 1958, p. 40).

87 Hunter, p. 40.

88 D. Bacu, *The Anti-Humans: Student "Re-Education" in Romanian Prisons*, Soldiers of the Cross, 1971, pp. 50, 51.

89 Hunter, pp. 227-228. 90 Bacu, pp. 43, 44.

91 Bacu, pp. 72, pp. 111-112. 92 Bacu, pp. 214, 246-247, 256.

93 Hunter, pp. 81, 253. Hunter (pp. 254-255) gives a specific example of one who was strong in the Lord: "[Mary Liu] exposed what could be a fatal [Communist] weakness where the Reds seemed safely in control, as in China. Hers was the most dramatic and encouraging life story I had ever come across ... Glancing through the Bible one day as a child, she found a verse ... 'My Grace is sufficient for thee' ... Her life confirmed this passage in its deepest sense. ... The Communist Party saw this power in her and was afraid."

94 Hunter, p. 258.

95 Anatoliy Golitsyn, *New Lies for Old: The Communist Strategy of Deception and Disinformation*, Dodd, Mead, 1984, pp. 18, 19, 84, 123, 134, 313. Golitsyn does not discuss the coercive conditioning experiments, but he documents that the planned transformation of the Communist world into a form to be merged with the West began in 1958. This coincides with the termination of the final experiments in Romania.