THE STRUCTURE OF SUCCESS IN AMERICA

by NICHOLAS LEMANN

In America perhaps only race is a more sensitive subject than the way we sort ourselves out in the struggle for success. At the center of that struggle are higher education and ETS, the Educational Testing Service. Herewith an inside look at the history and workings of one of the most familiar yet least public of American institutions

FINALLY, I decided to take the plunge,” Henry Chauncey wrote in his diary on Sunday, February 4, 1945, a few days before his fortieth birthday, and so a natural day for assessing the course of his life. “From a safe and respected job I am embarking on an opportunity whose development depends very much on what I do.” The safe and respected job was an assistant deanship at Harvard, where he had been working as an administrator for fifteen years; the opportunity was a position in the nascent field of educational testing, where Chauncey would be in on the founding of an organization that could, he thought, in effect serve as the personnel office of the postwar United States, using multiple-choice mental tests to assess large segments of the civilian population for the first time in the country’s history.
Chauncey, descended from clergymen (his father was an Episcopalian minister, his ancestors Puritans), went to church, and afterward he added to the day’s diary entry:

During Church this morning a thought occurred to me which though not new was amplified in its implications. . . As soon as we can put in numerical terms the needs for individuals in different types of employment, nationally and locally, we will be able to embark through appropriate tests on a census of the population in relation to those jobs. . . Since we do not want to prescribe what a person should do we can indicate to the boy or girl the probability of success or failure in each field of work and the demand for people of his combination of abilities. . . This project requires consideration from a lot of angles but men of vision in the field of testing, vocational guidance, government, economics, education could be consulted individually and eventually in groups and a program eventually developed. Men with whom this might be discussed might even be so high in authority as . . . President Roosevelt himself.

With this dream in mind Henry Chauncey accepted the job, which metamorphosed into the first presidency of the Educational Testing Service—today one of the most familiar but least public of major American institutions, whose origins and rise to influence have never before been described in detail. ETS and its tests are a national obsession, deeply worked into the fabric of middle-class life. They have generated a large, independent test-prep industry and have strongly influenced elementary and secondary education, one of whose central goals is preparation for ETS tests. They are constantly referred to in cultural commentary, in sources from Boyz ’N the Hood to The Wall Street Journal. ETS is more than just an important organization. It is an essential part of a larger nexus: American higher education, whose growth to a scale and significance previously experienced anywhere in the world was one of the crucial developments in our society during the past half century; and, more broadly, what the eminent sociologist Robert K. Merton calls the structure of opportunity—a subject that ranks with its close relative, race relations, at the top of the list of the defining concerns of America.

**STATUS QUO ANTE**

HENRY Chauncey became interested in mental testing the moment he heard about it. His mind, like the minds of his Puritan forebears, was attracted to a blend of purity, order, idealism, and grandeur, which testing seemed to embody. During his first year of college, which he spent at Ohio State tuition-free, because his father was the rector of a big church in Columbus, he was given a multiple-choice placement test (on which, as would be the case whenever he took a test, he scored well but not outstandingly), and he also took a course on testing. At Harvard, alma mater of Chaunceys since the 1600s, where Henry enrolled after the year in Columbus, he studied testing under another pio-
quence. It is less complicated and more possible of fruition in the near future. It is concerned with the application of objective tests to college admission.” Chauncey offered to help in establishing such tests at Harvard, which was a smaller field than he had in mind but the only one he could then play on. At the start of his career he had found a newborn cause to which he was willing to devote his life.

In the spring of the following year came another fortunate development for Chauncey: James Bryant Conant was appointed president of Harvard. Conant, a thin, severe, bespectacled chemist, was the first Harvard president from a humble background, and he immediately moved to increase the representation of younger versions of himself (as opposed to younger versions of the boarding-school- edu-
gram. Harvard had scholarships already, but they were either informal arrangements (Chauncey’s own Harvard education had been paid for mainly by Clarence Dillon, a prominent Wall Street financier) or what Conant called “badges of poverty”; you had to be poor to qualify, the grant was so small that you had to work to supplement it, and you were cut off if you didn’t maintain a higher grade-point average than that of other scholarship candidates.

What Conant had in mind was full, four-year, nearly unconditional scholarships to be awarded solely on the basis of academic promise: if a rich boy won, he would be designated a Harvard National Scholar but would receive only a token grant. Another of Conant’s motives was a desire to make Harvard a more national and less provincially northeastern institution. The Harvard National Scholarships were initially limited to students from six states in the upper Midwest, which in 1933 was still uncharted territory as far as elite higher education was concerned.

Henry Chauncey’s job was to figure out a way to select the scholarship students. During the Depression college student bodies were substantially self-selected, mainly on the basis of ability to pay. It was assumed that most of the students at a place like Harvard had gone to well-known and trusted private schools, where a decent record was a reliable indicator of the ability to do college work. There were many years in which virtually the entire graduating class of Groton, Chauncey’s boarding school, went to Harvard or Yale.

In 1900 the presidents of twelve leading northeastern universities had set up an organization called the College Entrance Examination Board, which administered admissions tests. These were lengthy essay examinations in specific subjects, which students took over a period of days and which were then shipped to the College Board office in New York and laboriously hand-graded by professional readers. The purpose for which the College Board had been invented was not really selection, which was almost a non-issue. It was to standardize the admissions process administratively and to force New England boarding schools to adopt a uniform curriculum—they would have to fill their students with the information required to pass the exams—so that undergraduates would arrive well prepared.

The College Boards were of little use to Henry Chauncey’s new project. They weren’t administered until June (too late to select students for scholarships), weren’t administered at all in most of the Midwest, and most boys who hadn’t studied the boarding-school curriculum couldn’t pass them anyway. What Chauncey needed was a uniform means of comparing students from all across the highly localized American education system—an academic equivalent of the standard gauge that the railroad industry had adopted after the Civil War. The United States had already become a national society in most ways, having generated, in addition to the standard gauge, a bureaucratized federal government, big corporations, and national communications media. But education—an enormous field with importance beyond its size, because of its role as a handler of people—remained a local matter.

Along with Wilbur J. Bender, a solid, plainspoken Hoosier who was also an assistant dean, Chauncey hit the road, aiming to find objective tests that could be used in the new scholarship program. It was Chauncey’s fascination with testing that had gotten him the assignment in the first place; educational testing was still new enough that Chauncey and Bender could get to know most of its progenitors personally. Psychology as a discipline had emerged only a few decades previously; intelligence tests dated from just around the time Henry Chauncey was born. The first (in fact, at that point the only) mass administration of objective mental tests—the Alpha and Beta tests, versions of the IQ test that were used to select officer candidates from the pool of Army recruits—had occurred just fifteen years earlier, during the First World War, under primitive testing conditions. The two key figures Chauncey and Bender encountered, Ben D. Wood and Carl C. Brigham, had both helped to administer the Alpha and Beta and had been protégés of leading first-generation intelligence testers.

**EARLY TESTERS**

In all too many of the social science fields there is a large proportion of the slightly maladjusted,” Chauncey once wrote in his diary. He might have had both Ben Wood and Carl Brigham in mind. Wood, the eleventh of thirteen children, was raised on the Texas-Mexico border, where his parents had moved in the hope of improving his mother’s failing health. He spent the first six months of his life in, he later wrote, a “marsupial sanctuary inside my mother’s clothing,” and his early childhood living in a supposedly disease-proof elevated, tened six-by-six-foot crib set outside. He was tended to by a young Mexican girl who spoke no English. Another babysitter once mistakenly gave him kerosene to drink, with the result that he was not able to speak normally until adulthood. In addition, he was subjected to regular beatings by his father and his brothers.

Shy, brainy, eccentric, and opinionated, the adult Wood believed that testing would purge the education system of what he saw as its pervasive idiocy, which he had first encountered when the University of Texas required him to take elementary Spanish even though his first spoken language was Spanish. After Texas he went to Columbia University, where he fell under the spell of Edward L. Thorndike, who in 1919 had created a multiple-choice admissions exam, based on the Army Alpha, for Columbia students. Wood became an indefatigable promoter of standardized testing. During the 1920s he administered the first objective section of the New York State Regents exam; he became William Learned’s partner in conducting the Carnegie Foundation study of education in Pennsylvania; he founded the Cooperative Test Service, which sold tests to schools; and he began
working with Thomas Watson, the founder of IBM, to develop a machine that could score thousands or even millions of tests in the mass administrations that were sure to come. (In 1935 Wood also created the Graduate Record Examinations for the Carnegie Foundation, and in 1939 he started the National Teacher Examinations.)

What so annoyed Wood about education was that it was illogical and disorganized. There was no real system for preparing students for college. The colleges themselves were run for the benefit of the professors, who taught whatever they wanted and declared students educated merely because they had spent a certain number of hours in class. Even so, most students who entered didn’t graduate—they either quit or flunked out—and the worst of the college students who did finish usually went on to become schoolteachers. (Despite the fulfillment of most of Wood’s dreams about the institution of mass testing, much of this is still true: only half of the students who enroll full-time in four-year colleges go on to earn bachelor’s degrees, and students at teachers colleges perenniually have lower test scores than students at liberal-arts colleges.) Wood dreamed of establishing what he called “self-education,” in which students would move through the education system on the basis of their own objectively demonstrated achievement, without reference to such foolishness as credit hours and semesters. He was not a democratizer, though. At a time when six or seven percent of eighteen-to-twenty-four-year-olds were enrolled in institutions of higher learning (today 30 percent are), Wood believed that a third of the college population didn’t belong there. New people—talented and obscure, as he had been—should be brought in, but not necessarily in numbers that would expand the overall size of the college population.

Carl Brigham, Ben Wood’s opposite in many ways and eventually his enemy, had been born into the northeastern gentry and had drunk his way through his first two years at Princeton while Wood was studying the classics at the University of Texas; his friends were almost shocked when Brigham got interested in mental testing and became scholarly. During the First World War, Brigham worked at the side of Robert Yerkes, the psychologist who had sold the Army on the idea of the Alpha and Beta tests. After the war he became a psychology professor at Princeton (where in later years he would be Albert Einstein’s next-door neighbor) and also, like many psychometricians of the day, an enthusiastic member of the eugenics movement. Brigham fully accepted the prevailing division of the population of Europe into three races—Nordic, Alpine, and Mediterranean—and shared the eugenicists’ alarm over the predominance of the supposedly inferior latter two of these in the American immigrant population. In 1923 Brigham published a book called *A Study of American Intelligence*, introduced by Yerkes, which analyzed the Alpha and Beta results by race and came to the grim conclusion—based, Brigham insisted, on a dispassionate scientific examination of the evidence and not on prejudice—that “American intelligence is declining, and will proceed with an accelerating rate as the racial admixture becomes more and more extensive.”

During the 1920s Brigham developed his own objective admissions test for students applying to Princeton. The College Board then put him in charge of a committee to develop a test that could be used by a wider group of schools. Brigham called this test, which was clearly modeled on the Army Alpha, the Scholastic Aptitude Test. On June 23, 1926, the SAT was experimentally administered for the first time, to 8,000 high school students, but it was not used by colleges to help sift applicants. Unlike Ben Wood, Brigham—a nattily dressed, companionable Ivy Leaguer—had a natural rapport with the College Board. Because of Brigham’s presence there, the Board opened a small branch office in Princeton, where he would conduct research on objective testing in its behalf.

By the time Henry Chauncey and Wilbur Bender met him, in December of 1933, Brigham had distanced himself from—in fact, had publicly renounced—most of what he had written ten years earlier in *A Study of American Intelligence*. He felt that he had then been writing more as a promoter of IQ testing than as a disinterested scientist, and he now doubted the whole idea that there is an all-important human intelligence quotient. As early as 1927 Brigham wrote Lewis Terman, the father of IQ testing in America, “It seems to me that the time was not ripe for the publication of such a book,” because the data were not solid enough. In 1929 he wrote Charles Davenport, a leading eugenist, “The more I work
in this field, the more I am convinced that psychologists have sinned greatly in sliding easily from the name of the test to the function or trait measured. Tests have encouraged an enormous series of hypostatized "traits." During the early 1930s Brigham several times repudiated his earlier views in speeches and in print (notably in a book called, in pointed contrast to his first title, A Study of Error). He wrote that A Study of American Intelligence was "without foundation" and that IQ was "one of the most glorious fallacies in the history of science."

Because Brigham left behind very few personal papers, the question of what exactly caused his views to change is difficult to answer. Eugenics was passing out of fashion at the time. In A Study of American Intelligence the logical flaw that leaps out is that IQ scores, which supposedly measure an innate quality, rise steadily for immigrants according to how long they have lived in the United States. Given the importance of vocabulary items on the test, surely language acquisition at least partly explains this. Yet in the book Brigham put forth the theory that every year's crop of immigrants was just a little less bright than the previous year's. The extent to which the SAT embodied Brigham's views from A Study of American Intelligence days is unknown. On the first SAT there were sections devoted to such vocabulary items as antonyms and analogies, as there had been on IQ and Army Alpha tests. Brigham's statistician, Cecil Brolyer, told an interviewer much later that despite the test's name, "we weren't thinking in terms of aptitude" for what the SAT would measure. Rather, they were thinking of educational preparedness.

Brigham hardly became a liberal, though. In 1930, well into his change of heart, he wrote his mentor, Yerkes, that the old Nordic supremacist Charles Gould "grows more delightful and witty as years go by." At around the same time, in a note to Harold Dodds, the president of Princeton, about candidates for a professorship in anthropology, he wrote, "Best man: Melville H. Herskovitz. Jew. . . . Next best: Lloyd Warner, Harvard. . . . The white hope." Is the note evidence of prejudice on Brigham's part (in A Study of American Intelligence he had written, "Our figures. . . . would rather tend to disprove the popular belief that the Jew is highly intelligent"), or is it an attempt to induce Dodds to overrule what would be the obvious choice in the anti-Semitic academia of the 1920s? It's impossible to say.
THE SAT SPREADS

CHAUNCEY and Bender decided to use the SAT as their main test for the Harvard National Scholarship program. (Bender would in the 1950s become the head of admissions at Harvard, in which position he made the student body more national.) Harvard was a leading member of the College Board, and not only was Brigham in effect the board’s house psychometrician but also the SAT was a useful test. The key issues for a mental test are reliability, or the stability of a person’s score over several administrations of the same test, and validity, or its ability to predict. The SAT was highly reliable and, in the necessarily tiny early studies comparing scores with first-year grades in college, seemed to be valid, too.

Another advantage of the SAT, or any other multiple-choice test, was that it was easy to give to very large numbers of people at a time—an idea that appealed considerably to Chauncey, for whom the job at hand was picking a few Harvard National Scholars but who had dreams of testing on a much broader scale. Tests that required the tester to question the taker directly could be administered only in limited quantities; although essay tests could be administered to large groups, they had to be graded by experts, who were expensive and slow. The SAT was hand-scored, but by clerks who worked quickly. And the automatic scoring of tests by machine—a project that had been stalled in the laboratories of IBM for years—had recently become a real possibility.

In 1931 Reynold B. Johnson, a young high school science teacher in the town of Ironwood, Michigan, began experimenting with an electrical test scorer. He got a prototype working, barely, and the local newspaper did a story about him that was picked up by the Associated Press and that attracted attention from all over the country. Johnson gave the machine a name, the Markograph, and had an advertisement made up showing it being caressed by a pretty girl.

While exhibiting the Markograph at a National Education Association convention in Minneapolis, Johnson was struck by a flash of inspiration. As a farm boy in Minnesota, he had tormented his older sisters’ dates by scratching pencil marks on the outside of the spark plugs on their Model-T Fords because graphite conducts electricity, when they tried to start their cars, the pencil marks would draw the sparks away from the spark plugs, so the engine couldn’t ignite, ha ha. Why not use the same principle in a test-scoring machine? If students marked their answers in pencil on a separate sheet, then a machine could electrically sense whether the answers were in the right spaces.

Johnson went right to work on a new machine that could detect pencil marks; by the end of the summer of 1933 he had a working model. Meanwhile, because of the Depression, he was laid off by the school in Ironwood. Engaged to be married, he tried to support himself by substitute teach-
aminations led James Bryant Conant to propose in the fall of 1937 that all the leading testing agencies be formally merged. Ben Wood was a great supporter of this idea, and so was William Learned, who had become director of the Graduate Record Examinations for the Carnegie Foundation. Henry Chauncey, though not in their league as a force in education, was all for it too.

Immediately, in an article in a journal called School and Society, Carl Brigham registered an objection. Although Brigham was not completely opposed to the idea of a new, combined agency, he complained about its potential dangers wittily ("It is probably simpler to teach cultured men testing than to give testers culture") and at length. As a past sinner who had taken the pledge, Brigham was aware of the temptation to rush new tests into positions of authority they hadn’t earned. He thought the new agency could easily yield to this on a grand scale. Two problems in particular worried him: the standard error on tests was too high for them to be suitable for determining individuals’fates except in the emergency conditions of wartime, and any organization that profited too greatly from a particular test would inevitably become more interested in promoting the test than in honestly researching its effectiveness and trying to improve it.

In December of 1937, just after the article came out, William Learned took Brigham to lunch to try to bring him around. Evidently it didn’t go well. Brigham had little use for Learned and Wood, because he thought that in their eagerness to persuade the education world to adopt wholesale testing they were leaping to unmerited conclusions about the data from their ongoing Pennsylvania study, much as he thought he had done with the Army Alpha study in his younger days. Also he was suffering from high blood pressure and was prone to fly into dyspeptic rages. In January of 1938 Brigham wrote an amazingly ill-tempered (given the politesse that then prevailed in higher education) five-page single-spaced letter to Conant opposing the idea of merging the testing agencies. He called the Army Alpha "atrocious" and the Carnegie Foundation’s Pennsylvania study "propaganda," and—the key point—warned that "the very creation of powerful machinery to do more widely those things that are now being done badly will stifle research, discourage new developments, and establish existing methods, and even existing tests, as the correct ones."

He went on:

If the unhappy day ever comes when teachers point their students toward these newer examinations, and the present weak and restricted procedures get a grip on education, then we may look for the inevitable distortion of education in terms of tests. And that means that mathematics will continue to be completely departmentalized and broken into disintegrated bits, that the sciences will become highly verbalized and that computation, manipulation and thinking in terms other than verbal will be minimized, that languages will be taught for linguistic skills only without reference to literary values, that English will be taught for reading alone, and that practice and drill in the writing of English will disappear.

A month later Brigham wrote Conant to apologize for this outburst. "The bitterness and injustice of my personal remarks," he wrote, "were totally unwarranted and entirely foreign to my make-up. I should have had sufficient insight to recognize my own unbalanced state, but these conditions sneak up on one so gradually that correct insight at the time is apparently impossible to achieve." Still, for the author of the SAT to be an opponent of a new testing agency was an impediment significant enough to derail the idea, at least temporarily.

One Sunday afternoon in 1941, according to College Board legend, a group of board officials was sitting around in Princeton, talking about how nice it would be to abolish the board’s essay examinations and replace them with the SAT, when news of the attack on Pearl Harbor came in. Later that month the board decided to drop the logistically difficult and labor-intensive essay exams "for the duration" and use the SAT and a separate multiple-choice achievement test as its admissions examination.

In January of 1943, at the age of fifty-two, Carl Brigham died.

So, with the war on, big changes in testing were afoot: old-fashioned college-admissions tests were finished, and Brigham, the main impediment to the founding of a big new national testing agency, was gone. Testing was poised to expand tremendously. All it needed was a justification.
NATURAL ARISTOCRACY

The Scholarship Examinations represented a brand-new means—multiple-choice mental testing—applied to a very old goal, choosing a society’s elite on the basis of merit. Despite the relative newness of the term “meritocracy” (it was invented in 1958 by a British sociologist named Michael Young), the idea itself long pre-dates this country’s founding. Plato’s Republic proposed that children be taken away from their parents at the age of ten and put into the hands of the education system, which would pick out a few to join the ranks of the “guardians.” Teachers would have “the duty of degrading the offspring of the guardians when inferior, and of elevating into the rank of guardians the offspring of the lower classes when naturally superior.” Plato called this system, which he regarded as ideal, aristocracy, and counterposed it to such lesser systems as oligarchy (“the form of government in which rulers are elected for their wealth”) and democracy, by which he meant something akin to what we would call socialism. A few centuries after Plato, China instituted the first open competitive examination system for the selection of government officials.

In the West the original meaning of “aristocracy” was lost during the early modern era, because the word became associated with feudal systems in which wealth and status were inherited. Still, “aristocracy” had enough remaining positive charge as late as the early nineteenth century for Thomas Jefferson to be able to call, in a famous letter to John Adams, for replacing “an artificial aristocracy founded on wealth and birth” with a Platonic “natural aristocracy” based on “virtue and talents,” whose members would be “sought out from every condition of life” by the education system and then go on to govern the country.

The idea of a natural aristocracy, or meritocracy, has a powerful resonance in the United States. Each succeeding American elite has considered itself to embody the principle. But another idea is even more distinctively American: the idea of universal individual opportunity. This idea does not appear to have a distinguished philosophical lineage. It was simply here, to a far greater extent than it was anywhere else in the world, almost from the very beginning. “The first thing that strikes one in the United States is the innumerable crowd of those striving to escape from their original social condition,” Alexis de Tocqueville wrote not many years after Jefferson’s letter to Adams. “Every American is eaten up with longing to rise.”

Before the Second World War, meritocracy, in today’s sense of elite selection through higher education, and opportunity, meaning the ordinary citizen’s way of getting ahead in the world, were two separate and unrelated concepts. Only a tiny segment of the population went to college, and—more to the point—higher education was not thought of as a gateway to finanncial success. (This country’s first formal meritocratic structure, the civil service, also was not perceived as the path to America’s lush rewards except, perhaps, by Irish-Americans, who viewed it, with some justice, as a plot to shut them out of government jobs.) Harvard, for example, was traditionally a place where rich men sent their sons to become gentlemen, not a place for poor boys hoping to become rich—a point memorably made by Benjamin Franklin in a spoof of Harvard that he wrote as a teenager, in 1722:

Now I betought my self in my Sleep, that it was Time to be at Home, and as I fancy’d I was travelling back thither, I reflected in my Mind on the extream Folly of those Parents, who, blind to their Childrens Dulness, and insensible of the Solidity of their Skulls, because they think their Purses can afford it, will needs send them to the Temple of Learning, where, for want of a suitable Genius, they learn little more than how to carry themselves handsomely, and enter a room genteelly, (which might as well be acquire’d at a Dancing-School,) and from whence they return, after Abundance of Trouble and Charge, as great Blockheads as ever; only more proud and self-conceited.

The idea that formal education was unnecessary or even inimical to economic success was a staple of American popular culture from Franklin’s time until the mid-twentieth century. In works as adoring as Horatio Alger’s novels and as condemnatory as Theodore Dreiser’s The Financier, the self-made man always drops out of school and becomes a kind of apprentice to an older businessman as the first step on the road to riches.

It is true that universal free education is another distinctively American idea of long standing: Jefferson proposed it in the first legislative session of the State of Virginia, in order “to diffuse knowledge more generally through the mass of people.” The purpose he had in mind, though, was not to provide economic mobility to all but to create a vehicle for the selection of the natural aristocracy while equipping the masses for the basic duties of citizenship, so that political democracy would work properly.

But it took an amazingly long time for public education to take hold. Jefferson’s bill in Virginia didn’t pass. All through the mid-nineteenth century, reformers—most prominently Horace Mann, the secretary of education of Massachusetts—worked ceaselessly to get public elementary schools established. Not until after 1940 did a majority of American teenagers graduate from high school. Since before the Civil War the main selling point for publicly supported education had always been that the increasingly complex nature of American society made it a prerequisite for business growth—not that it was a fundamental right of the citizenry or a provider of individual opportunity. The arena of most people’s ambition was not school but the marketplace.

Thus far Henry Chauncey’s promotion of testing as a means of bringing scholarship students into the Ivy League had been...
a natural-aristocracy exercise with no effect on the country. His real goal was to test on a much grander scale. If this was achieved, and if the test results were heeded, the result would be the joining of a natural aristocracy with the previously separate and more highly charged issue of opportunity. Chauncey was by no means a social planner. He was fascinated by testing; any orderly process was likely to appeal to him. It didn’t occur to him that the possibility at hand was one of channeling the roaring, ungoverned force of ambition in America. What he saw before him was the prospect of a big new testing agency that would provide a grateful populace with benign, rational guidance to its proper places in the society.

THE CREATED ARISTOCRACY

Fortunately for Chauncey and other testers, someone stood ready to supply a broad vision that could justify what they wanted to do: James Bryant Conant.

During the war years Conant wrote a series of three articles in The Atlantic Monthly in which he laid out a sweeping plan to change the basic operating procedures of the United States when peace came. In the first article, published in 1940, he warned that the American tradition of equality of opportunity was rapidly eroding, and that “we see throughout the country the development of a hereditary aristocracy of wealth.” The only institution that could counteract this dire trend, he wrote, was the public education system, which he called “a new type of social instrument...a vast engine which we are only beginning to understand.”

The second article, published in 1942, urged the military not to pick officers from the college-educated population only, because “a college education is a privileged position based on family finances.” Only public education, he said again, could restore the key American ideals of opportunity, democracy, and classlessness.

The final article, called “Wanted: American Radicals” and published in 1943, was the most perfunctory of the three. First of all, Conant made it clear that the radialism he was endorsing was meant to be an alternative to Marxism, which he saw as a far greater threat to the fabric of our society than Hitler: hence American radicals—devotees of Jefferson, Jackson, Whitman, Emerson, and Thoreau—as opposed to “European” ones. The American radical, Conant wrote, believes in equality of opportunity, not equality of rewards; but, on the other hand, he will be lusty in wielding the axe against the root of inherited privilege. To prevent the growth of a caste system, which he abhors, he will be resolute in his demand to confiscate (by constitutional methods) all property once a generation.

To expand opportunity, though, the key means at hand was not really confiscation but education, which alone could provide “the equivalent of those magic lands of the old frontier” in “a highly mechanized, industrialized age.” And the end of the war would be “a God-given moment for reintroducing the American concept of a fluid society,” in which people’s roles would be “determined by their merit, their talents, their character, and their grit.”

Conant was obviously channeling the theories of Frederick Jackson Turner, the frontier historian, who had been one of Harvard’s leading professors during Conant’s undergraduate days, but his idea that America was developing an aristocracy surely grew out of what he saw around him at Harvard. By 1910, when Conant arrived there as a freshman, Harvard College had completed its long, gradual transformation from a ministerial training school into an institution dominated by the children of a distinct American upper class—mostly northeastern and mostly in business. This class might be called the Episcopacy, after its predominant religion.

The formation of the Episcopacy, in the last decades of the nineteenth century, represented the sudden resolution of what had appeared to be an irreconcilable conflict between two rival elites: the old pre-industrial, New England–based upper class, with its high-minded, non-urban mores, and the big, rough New York–based Gilded Age rich. Large-scale conversion to Episcopalianism (membership grew by 318 percent from 1860 to 1900), which combined the traditionalism of the New England group with the grandeur of the New Yorkers, was crucial to this merging of elites. So were the founding of British-style boarding schools like Groton and Hotchkiss, and of new social institutions such as country clubs, debutante societies, and restricted suburbs.

Outsiders who somehow found their way into the educational institutions of the Episcopacy during its heyday, however—people like Conant and Ben Wood and even, to some...
extent, owing to his lack of money, Henry Chauncey—were usually horrified by what they saw. The enormous heritability of status, the devolution of the ideal of gentlemanliness into a glorification of undergraduate carousing, the lack of academic standards, the casual and unearned assumption of superiority, the inability to see immigrants, Catholics, Jews, and the poor as fully human: the Episcopacy provided plenty of evidence to support the idea that it was, as Newt Gingrich would say, a corrupt elite.

Conant seems to have assumed that the Episcopacy held the whole country in as firm a grip as it held Harvard—that’s the only way to account for his sweeping assertions about the ominous rise of a hereditary aristocracy in America. Because he assumed that the United States looked like Harvard, he also assumed that what was solving Harvard’s aristocracy problem would solve America’s: providing free education to the talented, regardless of background. Conant, in other words, envisioned the selection of a meritocratic elite by the Ivy League as only the first step for higher education. The real goal was to expand public colleges and universities to the point where they became a formal structure of opportunity for nearly everybody. (Today 60 percent of high school graduates go on to enroll in college.) The American radical, he wrote, “will favor public education, truly universal educational opportunity at every level. He will be little concerned with the future of private education...”

This conceptual leap of Conant’s, born of disapproval of the Episcopacy, made all the difference for testing. It changed the job at hand from picking a few brilliant scholarship students for places like Harvard to organizing the social mobility of most of the population.

THE BIG CHANCE

The beginning of the war found Henry Chauncey in a state of some uncertainty about his future. In 1932 he had married Elizabeth Phalen, a minister’s child like himself, and by Pearl Harbor Day they had two children and a third on the way. This, along with his age, made it impossible for him to enlist in the war—the otherwise natural course for Chauncey, a man who positively leaped to duty when it presented itself.

He had been an assistant dean at Harvard since 1929. The advantages of the job were that he revered the institution and the man running it, Conant, and that he had been able to undertake an important and successful project—the broadening of the student body through the Harvard National Scholarships program and the use of the SAT. Harvard’s scholarship boys, whom Chauncey made a special effort to get to know—including James Tobin, who would become a Nobel Prize-winning economist; Caspar Weinberger, the former Secretary of Defense; and John Morton Blum, who would become a renowned historian—had done well enough that the idea of recruiting Harvard’s students from all classes and regions, according to academic merit, had taken root, even if the goal hadn’t nearly been achieved. Also, Chauncey had helped to promote the use by other elite colleges of the SAT as a selection device for scholarship students.

The main disadvantage of his job was that there was no real career track for assistant deans. Often young men drawn from the pool of Boston Brahmins, they were poorly paid and usually found it impossible to rise above a certain point in the university hierarchy. After a few years they would go off and become boarding-school headmasters, or switch careers. Henry Chauncey, though, who had started out with the modest goal of eventually running a boarding school, by now felt that he was part of an immensely significant movement that had the potential to transform American life—testing. While everyone who knew Chauncey thought of him as an ambitious man, his view of himself was that he was selfless. Having been raised by his minister father and the minister headmaster at Groton to revere “public service” above all else, he saw the possibility of serving in an especially broad way through testing. But at Harvard most of the faculty considered testing to be a sweaty, applied-technology field, of interest to personnel managers and not a fit subject for scholars.

Chauncey had calculated that his family could not afford to buy a house, so they moved from one rental property to another in the Boston suburbs—Lincoln, Watertown, Lexington, Lexington again, back to Lincoln. He seemed to be waiting for his moment. He had gotten in on the ground floor of testing; he knew the pioneers in the field personally; he had Conant’s trust; and the war was obviously going to shake everything up.

Opportunity presented itself in the form of the U.S. Navy’s V-12 program, in which young men deemed especially promising were to be temporarily exempted from the draft and allowed to get some college education before beginning their service, so that they would be better able to perform higher-order military tasks. Many prominent psychologists, educators, and testers joined the military during the war, and one of them, Alvin Eurich, was running the Navy program. He had the idea of selecting people through a standardized test administered to high school seniors.

At the time of the death of Carl Brigham, the College Board’s tiny testing-research office in Princeton was taken over by Brigham’s No. 2 man, John Stainaker, a psychometrician who was a protégé of Louis Leon Thurstone, of the University of Chicago, one of the giants of testing. One weekend at the end of 1942 Henry Chauncey went to Princeton to see Stainaker, and they quickly came to the conclusion that the College Board, rather than some other testing organization, should be in charge of the military’s testing programs. The two men began to move with the ferocious momentum of people who realize that their big chance in life has arrived. Worried that the military bureaucracy was about to turn testing programs over to the competing American...
Council on Education, and feeling the need for an influential voice in Washington, Chauncey took the highly unusual step of calling Conant at home over the weekend to request an immediate meeting. Conant told Chauncey he was on his way to Washington but they could meet there on Sunday night.

Chauncey grabbed the first train out of Princeton, which went only as far as the North Philadelphia train station. He booked a compartment so that he could work on his presentation to Conant. At North Philadelphia he got off, changed trains, and kept working—until the conductor who took his ticket told him that the train was bound for Pittsburgh. He got off at the next stop and managed to arrive in Washington only an hour late, without ruffling Conant's feathers unduly. Chauncey made his pitch and Conant agreed to help; the Navy soon designated the College Board, rather than the American Council on Education, as its testing agency.

Soon Stalnaker was off to Washington. In early February of 1943 Chauncey received this scribbled note from Stalnaker, on Navy stationery:

Dear Henry,

Write to me at once at Room 3732 Navy Annex... This is at last a real job. Here is hoping that you are 38 and can write up your record to sound very convincing on testing and selection. You should get a Lt. commander commission and take charge of the testing & selection if all goes well... Hurry.

Within a few days Harvard had temporarily released Chauncey to the College Board so that he could work full time on the Navy program. The long-term significance of the Navy test, and the reason for Stalnaker's and Chauncey's excitement, lay in its scale. The SAT had never been given to more than 18,000 people in one year, and so could not be considered a true survey of even a large percentage of America's youth. For the College Board to test on a grander scale than ever before, by a factor of ten or twenty, posed an immense logistical challenge. The Navy test would be a matter of life and death, or at least of induction and deferment, for its takers. The Army Alpha and Beta tests that had been widely administered during the First World War were given under notoriously sloppy conditions to people who knew nothing about testing; this time the testing conditions had to be infinitely stricter. Every candidate for a college deferment had to take the test at exactly the same time; there couldn't be any copies floating around before or after. The scoring had to be done quickly and without errors.

Henry Chauncey was unlikely ever to become a university president, and he had not been trained to be a psychometrician, but this was a job he could do. He knew enough about testing to get reliable tests, he had nationwide contacts in the education world who could help him set up the testing centers, and he was naturally good at organizing things. On February 22, 1943, he and Stalnaker met at a hotel in Washington with a hastily convened national group and sketched out a basic plan: the test would be an adaptation of the SAT, and would be administered through ten regional directors.

Then Chauncey went to Chicago to figure out how to get the tests printed and distributed. He had so little idea of how to proceed that he spent the train trip perusing the want ads in the Chicago papers. When he arrived, he booked a room for a month at the Stevens Hotel and began interviewing printers. He selected one called Chicago Planograph, whose head had told him, "I'll make your dreams come true." The tests would come back from the printer packaged on skids. Chauncey had them delivered to his distributor, R. H. Donnelly, casually covered with drop cloths, on the theory that if they were stamped top secret, somebody would take one. Then Donnelly shipped them out to testing centers all over the country.

At the last minute the Army decided to use the same test for a similar college-deferment program. On April 2, 1943, the Army-Navy College Qualifying Test
was administered to 325,000 young men. Their answer sheets were shipped from the test sites to the ten regional offices, where they were scored by hand (a fully operational, affordable scoring machine still lay in the future; two of the test centers used prototype scoring machines and then rescored by hand). Then, as a quality-control check, the answer sheets were shipped to the College Board office in Princeton and rescored, by platoons of middle-aged women hired for the occasion.

Everything went well, evidently in a spirit not just of efficiency but of home-front ebullience. At a testimonial dinner for Chauncey afterward, the College Board staff sang him this ditty:

He plans 'em, he makes 'em, he hands 'em out too.
He scores 'em, reports 'em, a one-man test crew.
Then with brow deeply furrowed, with thumbs in his vest,
He calls from Chicago, "I gave the wrong test!"

The levy notwithstanding, something of consequence had just happened. Chauncey had proved that standardized multiple-choice tests could be simultaneously administered to enormous groups of people all across the country. This meant that educational testing had, overnight, broadened its potential scope from the elite to the masses.

SCORING THE PROS AND CONS

In June of 1944, after having administered a second-year's Army-Navy test, Chauncey returned to Harvard, with a slightly grander title: assistant to the dean of the faculty and chair of the Committee on Scholarships. What was on his mind was finding a way to capitalize on his breakthrough with the College Board. With Carl Brigham gone, the idea of merging all the country's leading testing agencies into one could now be revived. The country seemed to be poised on the brink of a new industrial revolution involving not machinery but people, whose life trajectories, thanks to the science of testing, could be efficiently and fairly organized.

Set against this grand tableau was Chauncey's familiar life as an assistant dean, which he found wrenchingly difficult to abandon. He approached Harvard about the possibility of moving the College Board's testing office from Princeton to Cambridge. That didn't work out, and Chauncey began to feel a distinct if mild chill from his fervently respected boss, Conant. All through late 1944 and early 1945 John Stalnaker pressed Chauncey to leave Harvard and come permanently to the College Board, and Chauncey agonized. Finally he decided to take his dilemma to Conant personally. He made an appointment. Conant, suffering from a bad back, seemed even more formal and correct than usual; when Chauncey asked him what the future at Harvard might hold, hoping that Conant would say something about the grand possibilities of testing, Conant instead asked Chauncey what kind of salary increase he had been hoping for.

Chauncey's admiration for Conant was so great that it was difficult for him to admit even to himself that this hurt. The idea that he had come to Conant not to discuss the future of testing at Harvard, and by extension of a crucial issue in American life, but merely to ask for a raise! Conant's reaction was, perhaps, a reminder that there was a class system in academic administration as elsewhere, and the views on broad policy matters of assistant deans with only bachelor's degrees were not of interest.

Chauncey characteristically decided that the way to make his decision was to quantify it. So he constructed a chart ranking Harvard and the College Board on a three-point scale in each of sixteen categories. On the strength of superior rankings in such categories as "Free Hand," "Job With Growing Future," and "Respect of Colleagues for One's Work," the College Board won, 36-32. He took the job. Having finally resolved the issue seemed to fill him with energy, and whatever disappointment in Conant he felt was quickly laid aside. He shared Conant's vision of universally accessible higher education, which after all provided the theoretical undergirding for the expansion of testing that Chauncey wanted to accomplish. When a columnist for a Boston paper criticized one of Conant's causes—weeding out after the first year the lowest-ranking ex-soldiers going to college on the GI Bill of Rights—Chauncey fired off a letter to the editor:

Equality of opportunity in the early days of our country did not mean that every boy became the president of a bank, a railroad magnate or the captain of a ship. But each boy did have the opportunity to rise to such positions if his talents and industry qualified him.

Today the lower rungs of the ladder of opportunity are educational. Climbing these rungs involves the same competitive element entailed a century ago by the ladder of economic opportunity.

The great work ahead appealed to Conant and Chauncey equally strongly, but for different reasons. To Conant, it was a social experiment aimed at fulfilling a democratic ideal in a way that would also strengthen the country against its enemies. To Chauncey, it was a big, challenging project that would create a monument of order and structure. As he wrote in his diary, "The stage of development in which testing is now is in the same as the railroads were in the 1850s—a lot of separate small lines. The big developments were to come in the next two decades."

This is the first part of a two-part article. In the second part, "The Great Sorting," the Educational Testing Service is founded, with the intention—on Henry Chauncey's part, at least—of testing the entire population on every possible trait. Instead its success at measuring just one trait—the ability to get good grades in school—proves invaluable to the country's booming universities, and helps to create a new kind of American elite.