

AMERICAN **Educator**

Overcoming the Language Gap



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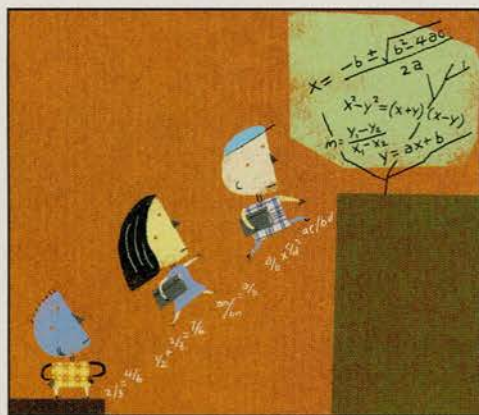
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The Professional Journal
of the American
Federation of Teachers
Volume 25, No. 2
Summer 2001

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The *American Educator* (USPS 008-462)
is published quarterly by the
American Federation of Teachers, AFL-CIO
555 New Jersey Avenue, NW
Washington, DC 20001-2079
Telephone: 202-879-4420

American Educator is mailed to all AFT teacher,
higher education and other school-related
professional members. Annual subscription price:
\$1.75 (included in membership dues) and available
only as a part of membership.
Subscription for others: \$8.

Periodicals postage paid at Washington, DC and
additional mailing offices.

Postmaster: Send address changes to
American Educator
555 New Jersey Avenue, NW
Washington, DC 20001-2079

Members: To change your address, please cut out
your label with code numbers from the back of the
magazine and mail it with your new address to the
address above.

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Signed articles and advertisements do not
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General advertising office
555 New Jersey Ave., NW
Washington, DC 20001-2079
Telephone: 202-879-4420

Advertising Sales Representative
Peter Li, Inc.
801 Wells St., Suite 901
Chicago, IL 60607
800-799-5080
312-939-1344

American Educator is produced with the assistance
of members of Local 2, Office and Professional
Employees International Union, AFL-CIO, and
members of AFT Staff Union. Composition and
printing are done in 100 percent union shops.
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LETTERS

PARENTING: THE LOST ART

Thank you, thank you for saying in print what we all have been saying for several years now. The word "no" is perhaps the most undervalued word in our nation today. Your article strengthened my belief that I am right when I say no to certain behaviors my students wish to exhibit. Thank you so much for your courageous, honest description of this horrible problem.

—E. WEBSTER

I want to tell you how much I and several of my colleagues liked the article "Parenting: The Lost Art." Never has one article evoked so much conversation and dialogue in our office. I appreciate

it when someone such as Kay Hymowitz is willing to take a stand against what is popular but not necessarily right.

Thank you for printing such a poignant and effective piece.

—MEGHAN COOK
Saratoga Springs, NY

Kay Hymowitz's article was the most insightful, brave piece that I have seen in education literature. Thank you for publishing it.

I am relieved that a well-reasoned, academic argument has finally shown the connection between permissive, amoral parenting and the woes experienced by educators and students.

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Final Copy to Typesetting

This is the last issue of *American Educator* I will edit. It has been my privilege to be the editor of this magazine for the past seventeen years.

I hope our readers have found it of some use and interest, and perhaps discovered in its pages new ideas and perspectives—or old ones that hadn't been getting the respect they deserved.

I thank the late Al Shanker, who knew the power of ideas and who time and again put himself on the line for the ones he believed in. I thank him for insisting I take this assignment, ignoring my protests that I didn't know the slightest thing about the mechanics of putting out a magazine. More important, I thank him and the current AFT leadership—Sandy Feldman, Ed McElroy, and Nat LaCour—for never blinking when *American Educator* published articles that went against the prevailing winds.

I thank my small and sturdy staff, this little band, for working harder than anyone I know, for bringing excellence to all they touch, and for having the fortitude and good humor required to meet impossible deadlines and live to tell the tale. I also thank those who stood so competently in my stead during those periods when the AFT generously allowed me leave to tend to my children and renew my spirit. I thank the many authors I have worked with over the years for allowing me to ask a lot of questions, to wrestle with their arguments and tinker with their prose, and for not threatening violence if we went to Revised 4. Finally, I thank the readers whose letters, phone calls, and e-mails cheered us on. I will sorely miss all of you.

Thoreau wrote, "I have been anxious to improve the nick of time, and notch it on my stick too..." I have been thinking about those words for quite a while, and plan to keep them close at hand during the slower-paced days that lie ahead. Close by, also, will be the unforgettable memories of my years at this desk.

—LIZ MCPIKE

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Overcoming the

Make Better Use of the Literacy Time Block ...

By E. D. Hirsch Jr.

The latest fourth-grade reading scores for U.S. students made the front page of the *New York Times* with the headline: "Gap Between Best and Worst Widens on U.S. Reading Test." The reporter, Kate Zernike, observed that after a "decade-long emphasis on lifting the achievement of all students...the release of the scores led to a round of finger-pointing over the cause of the growing gap."

That would lead to some tired fingers. The gap has persisted for half a century. On that front—nothing new.

If not exactly news, the continued verbal gap between rich and poor students *does* deserve to be on the front page, not because of anything that happened or didn't happen last year, but because the fourth-grade reading gap (which widens in each succeeding grade) represents the single greatest failure in American public schooling and the most disheartening affront to the ideal of democratic education.

This latest reading report from the National Assessment of Educational Progress documents a steady state. It shows no significant overall shift in American students' reading proficiency, nor any drastic widening of the already-large reading gap in fourth grade between rich and poor students. In 2000, there were minor gains at the top, and slight declines at the bottom, but no global change in overall achievement or in the gap between middle-class and low-income students, a gap that has been a disturbing feature of American schooling for at least fifty years.

(Continued on page 6)

*E. D. Hirsch Jr. is a professor of education and humanities at the University of Virginia in Charlottesville, Va., author of *The Schools We Need and Why We Don't Have Them*, and chairman of the Core Knowledge Foundation. This essay first appeared in *Education Week*, May 2, 2001.*

Language Gap

And Invest Generously in Teacher Professional Development

By Louisa C. Moats

Reporters are fond of calling me. Ever since our project to study reading instruction in the District of Columbia public schools began four years ago, I have been viewed as an inside source. In the eyes of policy makers and press writers, ours may be useful science; our mission is to prevent reading failure. When the latest scores from the National Assessment of Educational Progress were published in mid-April showing that almost two-thirds of black, Hispanic, and other poor minority children had lost a bit of ground in fourth-grade reading and were still “below basic,” I knew the press would solicit me for insights. Poor reading has become more than national news: It is a national crisis, an epidemic in the urban landscape.

Prior research consensus reports are true, I say: Most early reading failure is preventable. We are seeing progress in D.C. We gather extensive data on students, school contexts, teachers, and instructional programs. We have followed eight hundred kindergarten and first-grade children randomly selected from classrooms in nine low-performing schools all the way through third and fourth grade. Ninety-eight percent of the students in our study schools are African American and 96 percent qualify for free-and-reduced lunch. According to Snow, Burns, and Griffin’s research summary of 1998, these students are “at risk” by demographics alone. The school district listed seven of our nine schools in 1996 as candidates for reorganization if their performance did not improve. Nevertheless, the evidence is clear: When teachers teach the in-

(Continued on page 8)

Louisa C. Moats is project director of the District of Columbia site of the National Institute of Child Health and Human Development Early Interventions Project, a four-year longitudinal study of early reading instruction. She is the author of numerous articles and books on language and reading instruction, including, most recently, Speech to Print: Language Essentials for Teachers.



E.D. HIRSH, JR.

(Continued from page 4)

Before NAEP began to record such findings, the fourth-grade reading gap had been documented by Walter Loban in the 1950s and 1960s, then by Jeanne Chall in the 1970s and 1980s. In 1964, Mr. Loban published a graph that still defines early reading in the United States. It coordinated achievement along the vertical axis and student age along the horizontal. On this matrix, he plotted two lines showing the performances of low- and high-income students. The graph looks like a tilted funnel, with the narrow end at the left starting at kindergarten. In kindergarten, the two sides of the tilted funnel are fairly close. They begin to separate sharply around grade four. After that, the gap keeps the same heartbreaking trajectory. Jeanne Chall called this sharp widening “the fourth-grade slump.” The latest news from NAEP about fourth-grade reading is, in short, anything but new.

For the past four years, I’ve taught a graduate course at the University of Virginia school of education that has focused on the causes and cures of the test-score gap. Over those years, my students and I have looked at the work of the most distinguished researchers in sociology, economics, social psychology, cognitive psychology, and educational history. We have also looked at reports from the field.

Some of the news from the field is promising. A few schools, even a few districts such as Inglewood, Calif.—which serve many low-income students on free and reduced-price lunch—have made inroads into the test-score gap. And some reading programs like Open Court, Success for All, and Direct Instruction have, when well implemented, raised reading skills (decoding)—up to a point. But the early gains from those programs tend to fade by fourth grade, and students still suffer the Chall “fourth-grade slump.”

Even the most effective public schools, like Nancy Ichinaga’s Bennett-Kew School in Inglewood, have not been able to raise the verbal scores of disadvantaged students up to the level of their math scores. On the other hand, the gap-closing scores from some Core Knowledge schools are very promising. But as the president of the Core Knowledge Foundation, I am not the proper person to press that point. Rather, I shall summarize how the early reading gap *can* be reduced in all schools, if they will combine intimately a carefully worked-out reading (decoding) curriculum with a carefully worked-out content curriculum that develops academic knowledge and oral language during the long periods in the early grades that are currently (and very ineffectively) devoted to “language arts.”

Although such an approach will greatly reduce the reading gap in all schools, no schools that I know of, including those calling themselves “comprehensive” and those calling themselves “Core Knowledge,” have effectively integrated the time spent on reading “skills” with time spent on “subject matters” during the long periods devoted to “language arts” in the early grades. Instead, those critical periods of the day are devoted to a fragmented hodge-podge of mainly fictional stories—on the unexamined assumption that fiction

Many a low-income child entering kindergarten has heard only half the words and can understand only half the meanings and language conventions of a high-income child.



is the essence of “language arts.” By no means, of course, should we dispense with good stories for children. But the current emphasis on “imaginative fiction” and the lack of emphasis on history and science—or even on systematically enhancing basic speaking and listening skills—is yet another vestige of the romantic movement’s emphasis on natural development and “creative imagination,” and yet another barrier to narrowing the equity gap.

To understand what needs to be done, it’s necessary first to grasp the cause and character of the current reading gap. And to view the gap accurately, it’s essential to give it a new name. The gap can’t be confined to reading, because it starts long before children are readers, and continues long after they have mastered decoding skills.

From age two on, there exist large differences in children’s familiarity with unusual words, standard pronunciation, and complex syntax, a fact that was long suspected, but not well documented and quantified until the monumental research of Betty Hart and Todd Risley, as summarized in their book *Meaningful Differences*. Many a low-income child entering kindergarten has heard only half the words and can understand only half the meanings and language conventions of a high-income child. Our schools, as currently constituted, do

not reduce this original knowledge/vocabulary gap.

The verbal gap is not effectively compensated for by programs like Direct Instruction and Success for All, which bring children to fluency in decoding skills yet do not sufficiently and systematically enlarge their vocabularies. Low-income children who read with fluency still typically show big deficiencies in vocabulary and comprehension. Hence, instead of the term “reading gap,” clarity would be better served by using a more descriptive term like “language gap” or “verbal gap.” Such a shift in terminology might reduce public confusion between “reading” in the sense of knowing how to decode fluently, and “reading” in the sense of being able to comprehend a challenging diversity of texts. It is the second, comprehension, deficit, based chiefly on a vocabulary deficit, that constitutes the true verbal gap indicated in the NAEP scores.

The widening of this verbal gap as students progress through the grades is the archetypal example of the so-called Matthew effect in education, “unto every one that hath shall be given, and he shall have abundance, but from him that hath not shall be taken away even that which he hath.”

Cognitive psychologists have explained the mechanism for the Matthew effect, which is made even more acute by subsequent social and emotional influences on the low-vocabulary child. Experts in vocabulary estimate that to understand spoken or written speech, a person needs to know about 95 percent of the words. The other 5 percent of word meanings can then be inferred from context. If we assume that an advantaged kindergartner knows 95 percent of the words in a teacher’s remarks, or in a passage read aloud from a book, the result is that the child is not only gaining new knowledge from the exposition, she is also gaining new word meanings, by being able to infer the meaning of the other 5 percent of the words—achieving a gain in both world knowledge and in word knowledge.

The less advantaged child, by contrast, suffers a double (or triple) loss. The exposition is puzzling from the start, because the child doesn’t know enough of the words. He therefore fails to gain knowledge from the exposition and also fails to learn new word meanings from the context. And to intensify that double loss, the child loses even that which he hath—his interest, self-confidence, and motivation to learn.

Multiply that experience by dozens of similar daily experiences, and the underlying cause of the widening verbal gap becomes clear.

How can the gap be reduced? The Coleman Report of 1966 disclosed that a child’s initial advantage of family and peers was more important to academic achievement than the school he or she attended. Then, in his later career, James S. Coleman, a hero to my students who have studied the test-score gap, devoted his extraordinary scholarship to qualifying that conclusion. Schools could reduce the academic-achievement gap, he found, by becoming more “intensive,” by devising explicit academic standards for each grade, and making sure that every child meets those expectations. Since children are not at school all day and all year, school time must be used effectively. Coleman found that schools, both public and private, that main-

tained this “intensiveness” provided much greater equality of educational opportunity than those that didn’t.

Coleman’s conclusion has been amplified by cognitive psychologists. The advantaged child has gained knowledge and a correspondingly large vocabulary chiefly by gradual, implicit means. The child has been read to, has heard complex syntax, has been told about the natural and cultural worlds in the ordinary course of growing up. This indirect and implicit mode of learning is excellent if one has lots of exposure and lots of time, as an advantaged child typically does. But the disadvantaged child has to make up for lost time, and cognitive psychologists tell us that this requires a very systematic, analytical, and explicit approach to early learning. If you want to learn fast—be explicit. Break down each domain to be learned into manageable elements that can be mastered. Then systematically build on that knowledge with new knowledge. This is the most efficient mode of learning for everybody, but it is the *essential* mode if the aim is to make up for lost time in knowledge and vocabulary.

That is the basic principle for overcoming the verbal gap. First, define the deficit by determining what knowledge and words are lacking. Then effectively teach that knowledge and those words.

My students and colleagues have some definite ideas about how to do this, ideally starting in preschool. Some enabling words and concepts will need to be taught directly, and we must do this systematically, as Andrew Biemiller of the University of Toronto has recommended. Yet we are well aware that most words will continue to be learned indirectly, in context, which is all the more reason to make sure that the context is carefully and cumulatively sequenced so that every child understands it, and makes new gains in knowledge and vocabulary.

Children learn and remember what is meaningful to them. History and science become meaningful if they are taught in a sustained and coherent way. All those currently fragmented hours devoted to “language arts” need to include the worlds of nature and history, literature, art, and music that will build the knowledge and vocabulary of children, and enable them to become readers in the true sense.

My graduate course on the verbal gap always ends in optimism. By the time we have gone through the relevant research, my students (who are mostly teachers or teachers-to-be) have concluded that the main barriers to equal educational opportunity are those that have been erected by unfortunate habits of mind in the schools and by an unfortunate tendency to believe that the job can’t be done. While Jeanne Chall and James Coleman (and others) are my students’ heroes, their only villain is the complacency caused by social determinism and IQ determinism—views that have currency only because we haven’t yet managed to narrow the verbal gap.

Before giving way to determinism, however, we need to transform the hours devoted to the literacy block in preschool and in the early grades by doing what works best, according to the ablest researchers: providing an explicit, coherent, and carefully cumulative approach to a broad range of knowledge and language. □

LOUISA C. MOATS

(Continued from page 5)

structional components supported by reading research, almost all students *can* learn to read.

Our progress has not come easily. Bringing the best that reading research has to offer into the classroom requires much more than handing teachers a good beginning reading series. We observe teachers and coach them, teach them to assess children's progress, and reward them for attending courses on how to teach phonological awareness, decoding, vocabulary, comprehension, and writing. One of our schools has been recognized for dramatic overall improvement. Four other schools are progressing faster than other "reform model" schools in the district. Our sample of students at the end of second grade scored above the national average on several respected reading measures, including passage comprehension. Some of the class averages could rival the results from the wealthy suburbs of nearby Fairfax County, Virginia. I feel proud of our achievements, but I mistrust their durability.

In 1977, Wesley Becker reported in the large-scale Follow Through studies done in high-poverty schools that children did best in code-emphasis reading programs that used direct, systematic, and explicit methods. The gains in relative standing, however, were hard for children to sustain after fourth grade. I have reason to fear we will replicate this result. Many children have learned to read early and well. Skillful and direct teaching of phoneme awareness, letter knowledge, sound-symbol correspondence, and decoding strategies, applied to reading text, really works. With excellent preparation in the primary grades, students are reading hundreds of books in their fourth-grade read-a-thon. Some teachers cannot satisfy their students' appetites for new reading material, as budgets for books are limited and the libraries are under-resourced.

Most children, however, came to us in kindergarten with little book experience, low knowledge of letters, and low phonemic awareness. Even more striking were their entering vocabulary scores. On a commonly used test of the oral recognition of word meanings (no reading involved), the students in our randomly selected kindergarten sample scored at the 5th percentile on average. That means they could not identify pictures showing the meanings of words such as *penguin*, *sewing*, or *parachute*. In second and third grade, the score on oral vocabulary recognition had improved only to the 15th percentile, in spite of much better results on the primary reading tests. Children typically could not identify pictures showing the meanings of words such as *amazed*, *locket*, *balcony*, or *weasel*. By fourth grade, many students are clearly lost in the more complex text they encounter in school, even if their decoding skills are good. Although as first graders, they knew the meanings of perhaps 5,000 words instead of 20,000 (the difference between linguistically "poor" and linguistically "rich" children), they may have been able to get the gist of primary text, especially with the multiple readings and contextual supports that primary teachers give. But by fourth grade, children are expected to be more self-sufficient. They must

decipher the vocabulary that carries the meanings of specialized topics. They must learn, for example, in a unit about traditional and alternative medicines, the multiple meanings of *reservation* and the differences between *manipulate* and *maneuver*. Without word knowledge, comprehension fails.

In addition to their vocabulary deficits, our students' spelling is much poorer than their reading, and written composition is seriously deficient. Sentences are poorly formed; paragraphs do not exist; and few papers are free from errors on inflections, pronouns, prepositions, or auxiliary verbs. Impoverished language will undermine their entire academic performance as they move into the intermediate grades.

Language comprises rules and words, as linguist Stephen Pinker describes. Reading and writing are acquired, unnatural forms of language that rest on an oral language base. Letters abstractly represent phonemes. Punctuation abstractly represents phrase and sentence structure. Printed word forms abstractly represent morphemes, their language of origin, and their interrelationships. The layers of language are interwoven. As Yale linguist and psychologist Alvin Liberman often pointed out, words carry meaning, but meaning is accessible only if the sounds and symbols of the word have been accurately processed. Vocabulary instruction must therefore include explicit teaching of the sounds, structural elements, and contextual meanings of words. Children must be aware of the subtle phonemic distinctions between words such as *then* and *than*, *further* and *farther*, or *perfect* and *prefect* to know which is which. Words have phonological form, spelling, grammatical function, and one or more meanings in specific contexts, and literacy requires awareness of all.

I watch the gradual toll of word poverty in those children who are struggling. Word poverty includes partial knowledge of word meanings, confusion of words that sound similar but that contrast in one or two phonemes, limited knowledge of how and when words are typically used, and knowledge of only one meaning or function when there are several. A second grader, when asked to find multiple meaning words on a list, picks "jail." The teacher asks, "What else does that mean besides the place where they put people who've been arrested?" The child answers, "It's that stuff you put in your hair (gel)." In a fourth-grade class, dynamic Ms. Woods asks students for several meanings for "shock." A student responds, "a big fish." Ms. Woods adeptly takes the cue. Writing both *shock* and *shark* on the board, she contrasts the phonemes, asking the student to repeat them and use the words in sentences. The student looks surprised at the discovery that these are, indeed, two different words. In spite of previous exposure to each word, the girl has not fully attended to the internal details of sound and spelling or made the contrast implicitly. I am grateful that Ms. Woods understands her student's need for intensive, explicit instruction. Ms. Woods has taken three of our courses on language, on the importance of phonology to reading, and on the validated techniques of vocabulary and comprehension instruction. She is a star, but we

Bringing the best that reading research has to offer into the classroom requires much more than handing teachers a good beginning reading series.



need hundreds more of her.

Awareness of morphological relationships could be another important key to vocabulary knowledge, but the teacher must actively teach partnerships among such words as *celebrity*, *celebrate*, and *celebration*; *manipulate*, *maneuver*, and *manual*; and *vent*, *ventilation*, *prevent*, *invention*, and *adventure*.

Instructional materials, however, compartmentalize the various aspects of language. The word study part of the lesson (phonology, phonics, spelling, syllabication) is often separated from the vocabulary instruction that precedes and follows text reading. We choose vocabulary for instruction before, during, and after text reading according to its importance to understanding a passage (*garage*, *mustache*, *ocean*, *probably*, *seriously* are posted for *Gloria: Who Might Be My Best Friend*). The sounds, syllables and structural relationships between morphologically related families (*serious*, *seriously*; *probably*, *improbable*, *probable*, *probability*) may go unnoticed and usually are not taught. In much of our instruction, word meaning and word form are inadequately linked, especially for students who need to be taught explicitly how language works.

Early instruction in phoneme awareness is only the first layer of the direct language teaching necessary for children at risk. From the time they enter preschool, students must experience language stimulation all day long if they are to compensate for their incoming linguistic differences. Teachers must immerse them in the rich language of books. Children need to rehearse the rules of discourse, such as staying on topic, taking turns, and giving enough information so the listener understands. Children must learn how to speak in discussions, to question, paraphrase, retell and summarize, as the recently developed standards for listening and speaking now specify.* Teachers must teach directly the form, meaning, and use of words, phrases, sentences, and texts. Everything from the articulatory features of /k/ and /g/ to the construction of an organized essay is grist for the instructional mill.

The story of reading failure has several episodes, themes, and subplots. All must be addressed if children with poor language skills can reach “proficient” and “advanced” levels. The language theme, however, is central. In fact, the slogan, *Language is the new civil right!* would be more meaningful than President Bush’s focus on reading alone. Language instruction, however, requires language instructors. What we ask our present and future teachers to know and do, and how we evaluate their preparedness, will have to change. Very few teachers come to classroom instruction with an understanding of the sound system, the print system, the nature of word learning, or the nature of sentence and text structure. A young teacher exclaimed in one of our classes, “I never *heard of any of this!*” Her words resonated with the entire group.

Teachers in our study have also affirmed, in anonymous interviews, that developing expertise took two years or more of coursework, in-class coaching, and program demonstration. “At first you’re confused and overwhelmed,” said one, “then the pieces of the puzzle fall into place. You know what you’re doing and then it’s *easy*.” Many appreciated repeated opportunities to practice strategies with the companionship of colleagues, such as planning the questions for a comprehension lesson that would stimulate student discussion and understanding. Teachers developed with a combination of language study, strategy rehearsal, and assimilation of research summaries, such as the AFT’s *Teaching Reading IS Rocket Science* monograph and the *Report of the National Reading Panel*. Many endorsed the importance of learning “the sounds.” Simultaneously they understood how sounds begin the path to meaning.

I am cautiously optimistic. We have developed teachers who give the instruction that every child deserves. If it can be done for some, it can be done for all. We must teach *all* of language explicitly, with intention and intensity, and prepare *all* of our teachers to do so. This will take both patience and impatience: patience to stay the course and impatience to embolden our political will. Only then will we achieve what is both a civil right for our children and a social and economic necessity for our country. □

* *Speaking and Listening for Preschool through Third Grade*, published by the New Standards Project.

How To Prepare Students for Algebra

By H. Wu

Recent interest in mathematics education has put the teaching of algebra in the national spotlight. The present national goal is not only “Algebra For All,” but also “Algebra in the Eighth Grade.” Because algebra has come to be regarded as a gatekeeper course—those who successfully pass through will keep going while those who don’t will be permanently left behind—the high failure rate in algebra, especially among minority students, has rightfully become an issue of general social concern. Many solutions of a pedagogical nature have been proposed, including the teaching of “algebraic thinking” starting in kindergarten or first grade. I will argue in this paper that no matter how much “algebraic thinking” is introduced in the early grades and no matter how worthwhile such exercises might be, the failure rate in algebra will continue to be high unless we radically revamp the teaching of fractions and decimals.

The proper study of fractions provides a ramp that leads students gently from arithmetic up to algebra. But when the approach to fractions is defective, that ramp collapses, and students are required to scale the wall of algebra not at a gentle slope but at a ninety degree angle. Not surprisingly, many can’t. To understand why fractions hold the potential for being the best kind of “pre-algebra,” we must first consider the nature of algebra and what makes it different from whole number arithmetic.

Algebra is generalized arithmetic. It is a more abstract and more general version of the arithmetic operations with

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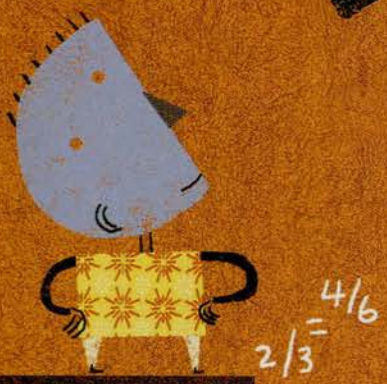
whole numbers, fractions, and decimals. *Generality* means algebra goes beyond the computation of concrete numbers and focuses instead on properties that are common to all the numbers under discussion, be it positive fractions, whole numbers, etc. In whole number arithmetic, $5 + 4 = 9$, for example, means just that, nothing more, nothing less. But algebra goes beyond the specific case to statements or equations that are true for *all* numbers at *all* times. *Abstraction*, the other characteristic of algebra, goes hand-in-hand with generality. One cannot define abstraction any more than one can define poetry, but very roughly, it is the quality that focuses at each instant on a particular property to the exclusion of others. In algebra, generality and abstraction are expressed in symbolic notation. Just as there is no poetry without language, there is no generality or abstraction without symbolic notation. Fluency with symbolic manipulation is therefore an integral part of proficiency in algebra. I will give an illustration of the concepts of generality and abstraction and how they are served by the use of symbolic notation by considering the problem of when the area of a rectangle with a fixed perimeter is largest. This of course would not be appropriate as an entry-level algebra problem, but we choose it because it is an interesting phenomenon and because it illustrates the nature of algebra well. As preparation, let us begin with some well-known algebraic identities.

If x , y and z are *any* three numbers, then

$$\begin{aligned}xy &= yx \\ \text{and} \\ x(y + z) &= xy + xz\end{aligned}$$

These are called, respectively, the *commutative law* (of multiplication)—which simply means that changing the order of

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
$$x^2 - y^2 = (x+y)(x-y)$$
$$m = \frac{y_1 - y_2}{x_1 - x_2} = \frac{a}{b}$$



$$\frac{1}{2} + \frac{2}{3} = \frac{7}{6}$$

factors in multiplication does not change the answer—and the *distributive law*, which means that if a number is broken into parts and each part is multiplied, the answer is the same as when the number is kept whole and multiplied. These laws are usually taken as basic assumptions about *all* numbers, as we do likewise here. Using these simple but powerful mathematical laws, we can derive three general statements about numbers. First, for any numbers a and b , the following identity is always valid

$$(a + b)^2 = a^2 + 2ab + b^2. \quad (1)$$

This is easily derived from the preceding two identities by substituting $(a + b)$ for x , a for y , and b for z :

$$\begin{aligned} (a + b)^2 &= (a + b)(a + b) \\ &= (a + b)a + (a + b)b \quad (\text{the distributive law}) \\ &= a(a + b) + b(a + b) \quad (\text{the commutative law}) \\ &= aa + ab + ba + bb \quad (\text{the distributive law twice}) \\ &= a^2 + 2ab + b^2 \quad (\text{the commutative law}) \end{aligned}$$

Now because identity (1) is valid for *any* two numbers a and b —including negative numbers—we may replace b by its opposite $-b$. When we do, identity (1) becomes:

$$(a + (-b))^2 = a^2 + 2a(-b) + (-b)^2.$$

But $a + (-b) = a - b$, $2a(-b) = -2ab$, and $(-b)^2 = b^2$. Therefore we may rewrite the preceding as:

$$(a - b)^2 = a^2 - 2ab + b^2 \quad (2)$$

Identity (2) could have been derived directly as in identity (1). The present derivation, however, serves the purpose of illustrating one kind of abstract reasoning that routinely enters into algebraic arguments: If a statement is true for *all* numbers, then we can reap dividends by specializing the statement to specific numbers. Let us see, for example, how identities (1) and (2) can be used to compute with ease the squares of numbers close to multiples of 10. Using identity (1), we see that $62^2 = (60 + 2)^2 = 60^2 + (2 \times 60 \times 2) + 2^2 = 3,600 + 240 + 4 = 3,844$. Or, we can solve a seemingly more difficult problem, $(79)^2$, by first converting 79 to $(80 - 1)$. Then, using identity (2): $79^2 = (80 - 1)^2 = 80^2 - (2 \times 80 \times 1) + 1^2 = 6,400 - 160 + 1 = 6,241$. On a more sophisticated level, (1) can be used to explain the standard algorithm for the extraction of the square root of a whole number,¹ but we have to omit the details for lack of space.

We need one more identity. Again with a and b as arbitrary numbers, and using only the distributive and commutative laws,

$$\begin{aligned} (a + b)(a - b) &= a(a - b) + b(a - b) && (\text{distributive law}) \\ &= a^2 - ab + ba - b^2 && (\text{distributive law}) \\ &= a^2 - ab + ab - b^2 && (\text{commutative law}) \\ &= a^2 - b^2 \end{aligned}$$

So we have:

$$a^2 - b^2 = (a + b)(a - b) \quad (3)$$

Note that (3) can also be used to provide a simple way to



compute the product of some special numbers, e.g., $89 \times 91 = (90 - 1)(90 + 1) = 90^2 - 1^2 = 8,100 - 1 = 8,099$. Likewise, $117 \times 123 = (120 - 3)(120 + 3) = 120^2 - 3^2 = 14,400 - 9 = 14,391$.

Let us now take up the problem of the areas of rectangles in earnest: We want to show that the area of a rectangle with unequal sides is less than the area of a square with the same perimeter. (Recall that the *perimeter* of a rectangle is the sum of the lengths of all four sides.) Right at the outset, notice how this problem is distinctly different from a typical problem in arithmetic: Instead of saying that the rectangles of sides 1.5 and 2.5, and 1.9 and 2.1 have areas less than that of a square with sides equal to 2 (they all have perimeter 8)—a fact that can be easily verified by simple computations—we are claiming that, *no matter what the lengths of the sides of a rectangle may be*, its area must be less than that of a square with the same perimeter. This is an example of generality: not about one rectangle or a few rectangles, but about *all* rectangles with unequal sides.

With very few exceptions in mathematics, one cannot understand the general without first understanding the particular. Let us, therefore, first verify such a claim about areas of rectangles by considering some concrete cases. Take three rectangles with perimeters equal to 8, say with sides of 1.7 and 2.3, 1.8 and 2.2, and 1.9 and 2.1. Let us check that their areas are less than 4, which is the area of the square with side 2 (and therefore perimeter 8):

$$\begin{aligned} 1.7 \times 2.3 &= 3.91 \\ 1.8 \times 2.2 &= 3.96 \\ 1.9 \times 2.1 &= 3.99 \end{aligned}$$

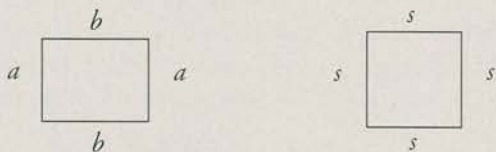
Indeed, they all have areas of less than 4. Psychologically, these numbers give us more confidence in the general case,

but mathematically, they would serve no purpose beyond themselves unless we can extract from them a common thread that sheds light on all other rectangles. An inspection of these numbers suggests that as the shorter side of the rectangle increases toward 2 (from 1.7 to 1.8 to 1.9)—so that correspondingly the longer side also decreases toward 2—the area of the rectangle increases toward 4. To put this hypothesis to the test, we look at the areas of rectangles with sides 1.99 and 2.01, and 1.999 and 2.001:

$$\begin{aligned} 1.99 \times 2.01 &= 3.9999 \\ 1.999 \times 2.001 &= 3.999999 \end{aligned}$$

The new numerical data, therefore, support this hypothesis. Of course, more numerical data should be compiled if this discussion takes place in a classroom. Certainly rectangles with other perimeters should be considered, for example, those with sides 2.7 and 3.3, 2.8 and 3.2, and 2.9 and 3.1 (all with perimeter 12), etc. They will be seen to give further corroboration of this hypothesis. The numerical evidence therefore suggests that if d denotes the deficit of the shorter side of the rectangle compared with the length of a side of the square with the same perimeter, then as d gets smaller, the area of the rectangle gets bigger. This tells us that we should concentrate on this deficit in developing the general case.

Thus, let the sides of a rectangle be a and b ($a < b$), and let the side of the square with the same perimeter be s :



The area of the rectangle is then ab and the area of the corresponding square is s^2 . What we want to show is therefore:

$$ab < s^2. \quad (4)$$

Because the rectangle and the square have the same perimeters, $2a + 2b = 4s$, or what is the same thing, dividing all terms by 2,

$$a + b = 2s. \quad (5)$$

Now define a positive number d as the deficit of a compared with s , i.e., d is the difference between the side of the square and the shorter side of the rectangle:

$$a = s - d$$

Now if a is less than s by the amount d , then the longer side b must exceed s by the same amount because, from (5), a and b must add up to $2s$. Thus,

$$b = s + d.$$

Now that we know that side $a = s - d$, and side $b = s + d$, we can compute the area ab of the rectangle using identity (3), which you will recall, in its general form, is $a^2 - b^2 = (a + b)(a - b)$:

$$ab = (s - d)(s + d) = s^2 - d^2$$

Naturally, $s^2 - d^2 < s^2$ because d^2 is always a positive quantity. Therefore, ab (the area of the rectangle), which we now see is equal to $s^2 - d^2$, must be less than s^2 (the area of the square), and this is exactly what we had set out to prove.

One fact easily stands out in the preceding considerations: Fluency with the basic skills, both at the arithmetic and symbolic levels, is a *sine qua non* of this demonstration. Fluent computation with numbers lies at the foundation of the symbolic manipulations and the ultimate solution because the numerical experimentations furnished the platform to launch the idea of writing ab as $(s - d)(s + d)$. In addition, of course, identity (3), the difference of squares, had to have been at one's fingertips before such an idea would surface in the first place. Now, it could be argued that fluency with arithmetic operations is irrelevant in this discussion because all the numerical evidence we accumulated above could have been easily obtained by use of a calculator. Such an argument may seem to be valid, but it overlooks a hidden factor. If students are not sufficiently fluent with the basic skills to take the numerical computations for granted, either because they lack practice or rely too frequently on technology, then their mental disposition toward computations of any kind would soon be one of apprehension and ultimately instinctive evasion. How, then, can they acquire the necessary confidence to confront the kind of symbolic computations associated with identities (1)-(3)? In other words, is it reasonable to expect a person to run well if his walk is wobbly?

Having made the point that computational facility on the numerical level is a prerequisite for facility on the symbolic level, we must not oversimplify a complex issue by equating the two kinds of facility. There is a sizeable distance between them, and students in arithmetic need a gradual acclimatization with the concepts of generality and abstraction before they can learn to compute on a symbolic level. In terms of the school curriculum, we can describe this progression in greater detail. It is difficult to teach students in whole number arithmetic about symbolic notation other than to write down in symbolic form the commutative laws, the distributive law, etc., because the basic computational algorithms for whole numbers do not lend themselves to be explained symbolically. However, the subject of fraction arithmetic—usually addressed in grades 5 and 6—is rife with opportunities for getting students comfortable with the abstraction and generality expressed through symbolic notation. Consider for example the addition of fractions. If one stays away from the concept of the lowest common denominator—a topic we will discuss later on—then for whole numbers a , b , c , and d , the following is true:

$$\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd} \quad (6)$$

Pedagogically, we can approach this formula in the following way: Once the concept of addition for fractions has been clearly defined, then this formula could be shown to be true, first for small numbers such as $a = 1$, $b = 3$, $c = 2$, and $d = 5$, and then for larger numbers such as $a = 3$, $b = 12$, $c = 5$, and $d = 18$. After a sufficient amount of practice, the

proof of (6) for *arbitrary* whole numbers a , b , c , and d can eventually be given. Here is an abstract situation where students can slowly build up their intuition from concrete cases to the general case, thereby gaining a gentle introduction to symbolic computations. The importance of good teaching in fractions as an introduction to algebra does not stop here, however. As students get to understand the division of fractions so that $\frac{a}{b}$ becomes meaningful even when a and b are now themselves fractions, one goes on to prove that formula (6) remains valid, *as it stands*, when a , b , c , and d are fractions. Then it follows that (6) is also valid for finite decimals. One can go further. A standard topic in algebra is *rational expressions*, which are quotients of the form $\frac{a}{b}$, where a and b are now polynomials in a variable x , such as $a = x^3 - 3x + 4$ and $b = 5x^2 + 2$. Then the addition of rational expressions is also given by (6) for *polynomials*, a , b , c , and d .

The message is now clear: Formal abstraction is at the heart of algebra. The addition-of-fractions formula (6) is an example because the same formula is seen to encode seemingly disparate information. If we look at the school mathematics curriculum longitudinally, the development of formula (6) from whole numbers a , b , c , d to polynomials as described above takes place over a period of three to four years, and it starts with the teaching of fractions. Without this foundation in fractions, students who come to the study of rational expressions in algebra are severely handicapped.

The importance of fluency with symbolic computations in algebra can be reinforced from a slightly different angle. Let us revisit the problem about the area of rectangles and give it a new proof. Still assuming that the sides of the given rectangle are a and b , with $a < b$, we wish to show as before that its area is less than the area of the square with the same perimeter $2a + 2b$. Again let s be a side of the square in question. Then, because the rectangle and square have the same perimeter, we have $2a + 2b = 4s$, so that, dividing all terms by 4, $s = \frac{1}{2}(a + b)$. Now the area of the rectangle is ab and that of the square is $s^2 = [\frac{1}{2}(a + b)]^2 = \frac{1}{4}(a + b)^2$. What we want to prove, in symbolic language, is that $ab < \frac{1}{4}(a + b)^2$, which, multiplying by 4, can be rewritten as:

$$4ab < (a + b)^2 \quad (7)$$

Why should we believe (7) is true for any two numbers a and b ? Let us try some special cases. If $a = 2$ and $b = 3$, (7) says $24 < 25$; if $a = 5$ and $b = 2$, (7) says $40 < 49$; if $a = 4$ and $b = 11$, (7) says $176 < 225$; and if $a = 7$ and $b = 9$, then (7) says $252 < 256$. These are all true, of course. Let us also try some small numbers: if $a = \frac{1}{2}$ and $b = 3$, (7) says $6 < (3\frac{1}{2})^2$, which is true because $6 < 9 = 3^2 < (3\frac{1}{2})^2$. If $a = \frac{1}{3}$ and $b = \frac{1}{10}$, then (7) says $\frac{2}{15} < (\frac{13}{30})^2$.

This is a more difficult case. There is no way, even for an experienced mathematician, to take a quick glance at $\frac{2}{15}$ and $(\frac{13}{30})^2$ and determine which is larger. Furthermore, it does us no good to compute the square of $\frac{13}{30}$ because then we wind up with a fraction even less receptive to intuition. So what we do is look for something a little easier to work with. For example, instead of $(\frac{13}{30})^2$, we will try $(\frac{12}{30})^2$. If

$(\frac{12}{30})^2$ proves to be larger than $\frac{2}{15}$, then so of course will $(\frac{13}{30})^2$. Now, $(\frac{12}{30})^2$ can quickly be simplified to $(\frac{2}{5})^2$, which computes to $\frac{4}{25}$. Then by converting $\frac{2}{15}$ to $\frac{4}{30}$ to make the comparison more obvious, we can easily see that $\frac{4}{25} > \frac{4}{30}$ and therefore $\frac{4}{25} > \frac{2}{15}$. So, we have now shown that (7) is true for this more difficult case. (Of course one could have checked $\frac{2}{15} < (\frac{13}{30})^2$ directly by pushing buttons on a calculator, converting the fractions to decimals and then comparing them, but if you want to see in a substantive mathematical context what estimation can do for you, this is a good example.) So we have some evidence that (7) must be true, although it may be difficult to see from these computations *why* it is true. We recall, however, that identity (1) gives a different expression to the right side of (7). Why not make use of (1) and see if we can simplify (7) to the point where we know what to do next. By (1), the right side of (7), which is $(a + b)^2$, computes to $a^2 + 2ab + b^2$. Thus (7) is the same as $4ab < a^2 + 2ab + b^2$. This is, of course, the same as

$$a^2 + 2ab + b^2 > 4ab \quad (8)$$

So proving that (7) is true is the same as proving that (8) is true. If we subtract $4ab$ from both sides of (8), then we would arrive at

$$a^2 - 2ab + b^2 > 0 \quad (9)$$

Conversely, if (9) is true, then (8) would also be true, because by adding $4ab$ to both sides of (9) we would obtain (8). It follows that our task of proving the truth of (7) has been reduced to proving the truth of (9). If we now recall identity (2), which is $(a - b)^2 = a^2 - 2ab + b^2$, then (9) is obviously true because

$$a^2 - 2ab + b^2 = (a - b)^2 > 0.$$

This is so because, as readers will recall, b is greater than a , and so $a - b$ yields a negative number. And since the square of any negative number always produces a positive number, $(a - b)^2$ has to be greater than zero. So we have again proved the desired assertion that the area of a rectangle with unequal sides is less than the area of a square with the same perimeter.

This proof differs from the previous one in its greater reliance on formal symbolic manipulations. If you retrace the steps from (7) to (8) to (9), and then onto the final step of invoking identity (2), you would recognize that those computations are quite different from the ordinary numerical computations one encounters in both whole number and fraction arithmetic. The former depends more on detecting formal patterns of the kind exemplified by identities (1)-(3) and less on brute-force calculations. *This kind of skill is important in algebra*, and students need lots of practice with simpler symbolic computations before they can deal with problems of this nature. It is in this context that we can put in perspective the recent attempt at solving the algebra-learning problem by introducing "algebraic thinking" in the early grades. At the risk of slight oversimplification, we can say that the main characteristic of the "early algebraic thinking" approach is to focus exclusively on the conceptual-understanding aspect of abstract symbols. Such an approach re-

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lies heavily on the use of concrete objects, “real-life examples,” and graphs as aids to help students come to grips with the abstract reasoning in algebra. This is an important first step in the learning of algebra, but the learning must go on to encompass the skill component as well, i.e., the mastery of symbolic computation. Anecdotal evidence abounds of students who can demonstrate a conceptual understanding of the use of symbols but who nevertheless fail to manipulate them correctly in computations. Is there, perhaps, a danger that the “early algebraic thinking” approach would be taken by teachers (and therefore by students as well) as the *only* step needed to prepare students for algebra? In the absence of firm data, one can only offer an educated guess: Such a danger is very real because, in the words of Roger Howe of Yale University, “You have elementary school teachers who do not know what algebra is about, so they’re not in the position to think about how the arithmetic they’re teaching will mesh with algebra later.”²

How would the good teaching of fractions help students acquire the symbolic computational skills necessary for success in algebra? The addition of fractions was presented earlier as an example, but that is a small example. A more substantial example is how the well-known cross-multiply algorithm can be used to advantage for this purpose. Of course, when students are first taught the cross-multiply algorithm, they would use concrete numbers not abstract symbols. But at some point—perhaps sixth

grade—they need to be introduced to the symbolic representation of this algorithm and its proof. This, again, prepares them for the concept of generality in algebra. The cross-multiply algorithm asserts that the equality of two fractions

$$\frac{a}{b} = \frac{c}{d}$$

(where a, b, c, d are whole numbers) is the same as the equality of a pair of whole numbers

$$ad = bc.$$

The reason is very simple: By the equivalence of fractions, we have

$$\frac{a}{b} = \frac{ad}{bd} \quad \text{and} \quad \frac{c}{d} = \frac{bc}{bd}.$$

Therefore, the equality

$$\frac{a}{b} = \frac{c}{d}$$

is the same as

$$\frac{ad}{bd} = \frac{bc}{bd},$$

which is therefore the same as $ad = bc$.

Note first of all that the preceding proof uses symbolic notation. The other thing of note is that this algorithm seems to get caught in the crossfire between two schools of thought. On the one hand, the older curricula tend to ram the algorithm down students’ throats with little or no explanation but otherwise make use of it quite effectively. On the other hand, the more recent curricula would try to make believe that there is no such algorithm, and would at best hold it gingerly at arm’s length. Both are defective presentations of a piece of useful mathematics. Let us illustrate a good application of this algorithm by proving:

$$\frac{a}{b} = \frac{c}{d} \quad \text{is the same as} \quad \frac{a}{a+b} = \frac{c}{c+d} \quad (10)$$

You may be wondering why you should be interested in such an arcane statement. Because there is no point in explaining something you don’t care about, let me begin by showing you its usefulness.

Consider a standard problem: If the ratio of boys to girls in an assembly of 224 students is 3:4, how many are boys and how many are girls? This is an easy problem, but what is important is that we are going to present a solution to this problem using (10), which is strictly mathematical and free of any psychological overtone connected with the concept of a “ratio.” Here “ratio” would mean *division*, and just that. No more and no less. So the given data that the ratio of boys to girls being 3:4 means exactly that if B denotes the number of boys and G denotes the number of girls in the audience, then

$$\frac{B}{G} = \frac{3}{4}$$

(We have just made use of the *provable* interpretation of a fraction $\frac{a}{b}$ as “ a divided by b .”)

Let us proceed. According to (10), we now also know that $\frac{B}{B+G} = \frac{3}{3+4}$. We are given that $B + G = 224$ and of course $3 + 4 = 7$. So

$$\frac{B}{224} = \frac{3}{7},$$

and from this one readily solves for $B = 96$. There are 96 boys and, therefore, $224 - 96 = 128$ girls.

If you are now convinced that (10) may be interesting, it is time to prove its validity. By the cross-multiply algorithm,

$$\frac{a}{a+b} = \frac{c}{c+d}$$

is the same as $a(c + d) = (a + b)c$, which upon expanding both sides using the distributive law becomes $ac + ad = ac + bc$. Taking ac away from both sides, we are left with $ad = bc$, so the equality

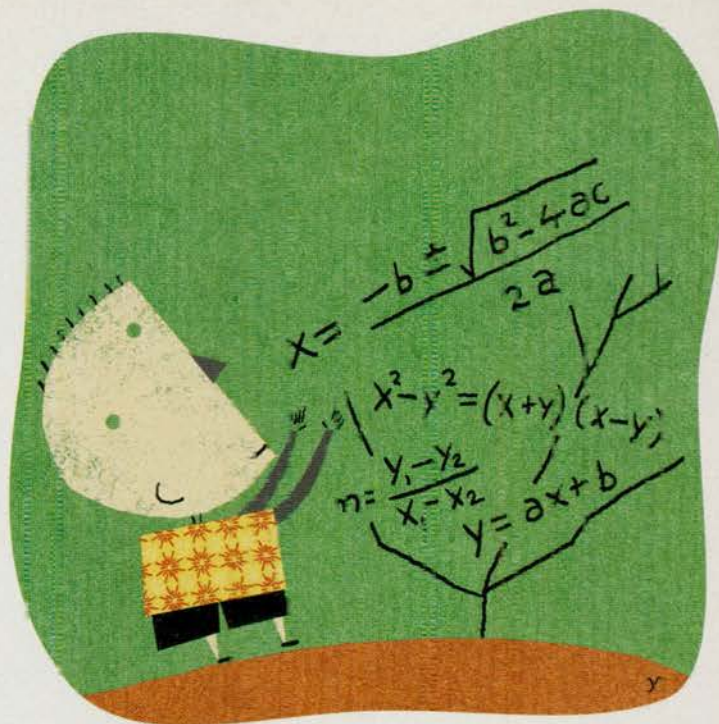
$$\frac{a}{a+b} = \frac{c}{c+d}$$

is the same as $ad = bc$. But the cross-multiply algorithm also tells us that $ad = bc$ is the same as $\frac{a}{b} = \frac{c}{d}$. So (10) is now fully justified.

The proof of a statement such as (10) is the kind of lesson that should be a regular part of the teaching of fractions. It is not only a useful piece of mathematical information, but also—and this is important to our argument here—it exposes students to a small amount of symbolic computation naturally. If fractions are taught properly, how can one hope for a better preparation for algebra? Unfortunately, the state of the teaching of fractions is anything but proper at the moment. If we believe that the subject of mathematics is a logical unfolding of ideas starting with clear and precise definitions and assumptions, then mathematics education in grades five through seven—where the teaching of fractions and decimals dominates—has not been about mathematics for quite some time.

It is impossible to catalogue all the wrongs in the way fractions are taught, in all kinds of curricula, in a few paragraphs. Perhaps we can give two clear cut examples. The first transgression is that a fraction is never defined in textbooks or professional development materials. We have children who are completely lost as to what a fraction is, and educators who publicly bemoan students' failure to grasp the concept. Yet strangely enough, no clear definition of a fraction is ever offered. It is sobering to realize that in elementary education, the importance of having precise definitions of key concepts such as fractions or decimals is not recognized.

The pedagogical problem is, in fact, far worse than this, because it is not only that a fraction is never defined but that very confusing information is impressed on the children. First, children are told that a fraction such as $\frac{3}{5}$ is an activity: When they see a pie, if they slice it into 5 equal parts and take 3 of them, what they get will be $\frac{3}{5}$ of the pie. They can do the same to an apple, a square, etc. The problem is that if a fraction is an activity, how to tell a child to add or divide two activities? Second, children are told that a fraction is a very complicated concept and they must know that the symbol $\frac{3}{5}$ comes equipped with many interpretations. It is 3 parts of a division into 5 equal parts; it is 3 "divided" by



5 (students understand that 10 divided by 5 is 2, but 3 divided by 5?); it is an operation that reduces the size of anything from 5 to 3, and it is also a "ratio" of 3 to 5. At this point, it is fair to say that learning fractions ceases to be a mathematical exercise because what is required is not intellect but an uncommon supply of faith.

A second example is the addition of fractions. What would a child experience when she is exposed to a typical lesson on adding fractions? Because she already knows how to add whole numbers—where intuition is strongly grounded on the counting on her fingers—she expects the addition of fractions to be similar. But then she is told that adding $\frac{3}{4}$ to $\frac{1}{6}$ requires finding the least common multiple of 4 and 6, which is 12. Then she is supposed to change $\frac{3}{4}$ to $\frac{9}{12}$ and $\frac{1}{6}$ to $\frac{2}{12}$, and add $\frac{9}{12}$ to $\frac{2}{12}$ by adding only the numerators, thereby obtaining.

$$\frac{3}{4} + \frac{1}{6} = \frac{9}{12} + \frac{2}{12} = \frac{11}{12}.$$

This kind of education completely disrupts a child's normal mathematical development. Instead of building on what she knows about the addition of whole numbers—as it should—this "explanation" confuses her by instilling the false belief that whole numbers and fractions are completely different objects.

Some of the more recent curricula have improved on this dismal situation by making better sense of adding fractions. Where they still fail is in not having formulated a clear definition of a fraction that includes whole numbers as a special kind of fraction. As a result, students do not see that there is a smooth continuum from whole numbers to fractions. A more serious concern is the failure of the newer curricula to emphasize the computational algorithms such as formula (6) for the addition of any two fractions. In these curricula, adding fractions remains a "conceptual" preoccupation: Un-

Understanding the *idea*, the *concept*, is deemed sufficient. Being able to fluently execute the operations until they become second nature and thus effortlessly available when needed is downplayed. We have said it once before, but we should say it again: Fluency in computation is very important for the learning of algebra, and formulas such as (6) provide conceptual continuity between grades. If we are allowed to look further ahead, we can say that the computational aspect of numbers is essential for the learning of both higher mathematics and science.

Grades five through seven are supposed to prepare students for algebra. But children who come through two or three years of the usual kind of instruction in fractions are in reality refugees from an educational devastation. Mathematically starved and intellectually demoralized, they harbor a deep distrust of mathematics as a whole. How, then, do we expect them to learn algebra?

We have not dealt with decimals thus far, but the problems there are entirely parallel to those in fractions. Students are generally not told, forcefully and clearly, that (finite) decimals are merely a shorthand notation for a special type of fractions, namely, those whose denominators are 10, 100, 1,000, or, more generally, a power of 10. Therefore, 0.12 is nothing but an alternate notation for $\frac{12}{100}$, as 1.76 is for $1 + \frac{76}{100}$. The failure to provide a clear definition of a decimal leaves students groping in the dark for the meaning of this mysterious piece of notation.³ No wonder they resort to such wild guesses as $0.19 > 0.4$ on account of the fact that $19 > 4$. A clear definition of decimals would also help explain the usual rules about “moving the decimal point,” e.g., $0.5 \times 0.43 = 0.215$ because we can see in a straightforward manner that

$$0.5 \times 0.43 = \frac{5}{10} \times \frac{43}{100} = \frac{5 \times 43}{10 \times 100} = \frac{215}{1000} = 0.215.$$

There is no need to memorize this rule by brute force, not here and not anywhere else in mathematics. Incidentally, notice how the understanding of decimals is founded on an understanding of fractions.

The mathematical defects in the usual presentation of fractions and decimals can be remedied in a straightforward manner without appealing to any heroic measures. Details are not called for in an article of this nature, but it would be appropriate to mention briefly that one can, for example, begin with a definition of a *number* (which includes whole numbers and fractions) as a point on the number line. Of course, to do so would require that the number line be introduced early, say in the third and fourth grades. One could then *gradually but carefully* raise the level of abstract reasoning and increase the use of symbolic computations to explain the more subtle aspects of fractions, such as the interpretation of fractions as quotients, as well as the more formal concepts such as the division and multiplication of fractions or operations with complex fractions.⁴ With the proper infusion of precise definitions, clear explanations, and symbolic computations, the teaching of fractions can eventually hope to contribute to mathematics learning in general and the learning of algebra in particular.

It remains to supplement these curricular considerations of mathematics in grades five through seven with two observations. One is the glaring omission thus far of the basic reason why fractions are critical for understanding algebra: The study of linear functions, which is the dominant topic in beginning algebra, requires a good command of fractions.⁵ The slope of the graph of a linear function is by definition a fraction, to cite just one example. The solution of simultaneous linear equations leads inevitably to the use of fractions, to cite another. Thus on the skills level alone, there is no escape from fractions in algebra.

The other observation is that no matter what the curricular improvement may be, its implementation rests ultimately with the teacher in the classroom. Liping Ma's pathbreaking book, *Knowing and Teaching Elementary Mathematics*, did away with the myth that elementary mathematics is simple. Nowhere is Ma's observation more apparent than in the teaching of fractions. Fractions are difficult not only for students, but also for their teachers, who, for the most part, are themselves the victims of poor mathematics education.

This, then, brings us full circle. If we are to prepare millions of students to successfully open the gate of algebra, we must prepare their teachers as well. This will require that college math courses for prospective teachers be drastically overhauled, so that they directly address teachers' *mathematical* needs in the classroom. For those already teaching, we will need a massive commitment to inservice development, with classes that do not waste teachers' valuable time. In addition, we should allow teachers who like math to specialize in the field at an earlier grade level. This specialization could begin at grade five—when fractions are introduced—or even earlier, as is done in many other countries. As Richard Askey pointed out in the pages of this magazine two years ago, the use of math specialists would unburden other teachers from a task many of them “now find difficult and unpleasant.”⁶

All this can be done. It will require resources, good will, and political resolve. Whether these are forthcoming depends on how seriously we take the slogan “Algebra for All.” □

References

- ¹ Cf. Askey, R.A. (1995) Cube Root Algorithms, *Mathematics in School*, Vol. 24, 42-43. Sad to say, this algorithm has completely disappeared from school mathematics curricula.
- ² Quoted in Hoff, D.J., Introduction to Algebra: It's Elementary, (2001) *Education Week*, March 28.
- ³ Many textbooks introduce third or fourth grade students to decimals as “numbers with a decimal point” without explaining what a decimal point is.
- ⁴ See, for example, Wu, H. (2001) Fractions (Draft), <http://www.math.berkeley.edu/~wu/>.
- ⁵ Unfortunately, students actually need a much more sophisticated version of the theory of fractions in algebra than the one currently being taught in K-12; they must know the meaning of $\frac{a}{b}$, and how to work with it when a and b are allowed to be irrational numbers. This issue has been systematically ignored in the mathematics curriculum of K-12.
- ⁶ Askey, R.A. (1999) *Knowing and Teaching Elementary Mathematics*, *American Educator*, Vol. 23, No. 3.

Religious Freedom in the World

*A Global Comparative Survey
Sponsored by Freedom House*

Editor's note:

Thomas Jefferson was a man of many accomplishments, including being president, secretary of state, governor of Virginia, and ambassador to France. But when he composed his own epitaph for his tombstone, Jefferson asked that only three items be included: that he was author of the Declaration of Independence, founder of the University of Virginia, and that he wrote the Virginia Statute for Religious Freedom. That statute, which took Jefferson and others of like mind nine years to convince the Virginia legislature to pass, reads in part:

“We the General Assembly of Virginia do enact that no man shall be compelled to frequent or support any religious worship, place, or ministry whatsoever, nor shall be enforced, restrained, molested, or burthened in his body or goods, or shall otherwise suffer, on account of his religious opinions or beliefs.”

Religious freedom holds a special place in the history of the United States. From the earliest days of this country, countless immigrants have come to our shores to escape religious persecution. Many did so at the risk of life and limb. We continue today to be graced by what Jefferson called “freedom of conscience.”

Not all people in the world are so fortunate. This past fall, the human rights organization Freedom House—which has a long pedigree of monitoring political rights and civil liberties—published the first comparative global survey of religious freedom ever compiled. The report, entitled *Religious Freedom in the World: A Global Survey of Freedom and Persecution*, provides profiles of the state of religious freedom in seventy-five nations representing 90 percent of the world's population.

The survey's editor, Dr. Paul Marshall, recently described the major findings:

“Worldwide, religious freedom is deteriorating. A

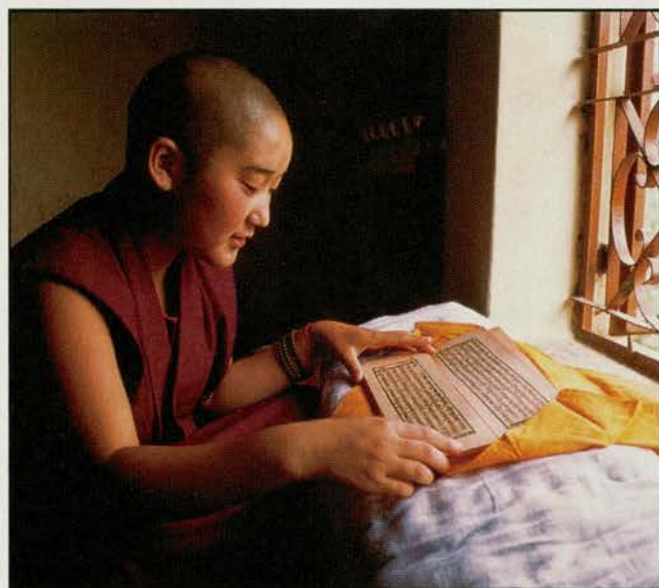


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Opposite page: Women pray during the celebration of Little Saint Mary at an old church in the village of Rozavlea, Romania. Above, from left to right: Lobsang Dolma, Tibetan nun; Wailing Wall, Jerusalem; Choirboys singing, Varanasi, India; Men praying in a mosque in Karaganda, Kazakhstan.



PHOTO: S. YAKOVLEV



PHOTO © TRIVIA K. NICHOLS

Above: Caodai sect worshippers praying in Tay Ninh, Vietnam. Below: Young Masai Ladies Pentecostal service, Tanzania.



PHOTO © 1997, D. BUTCHER

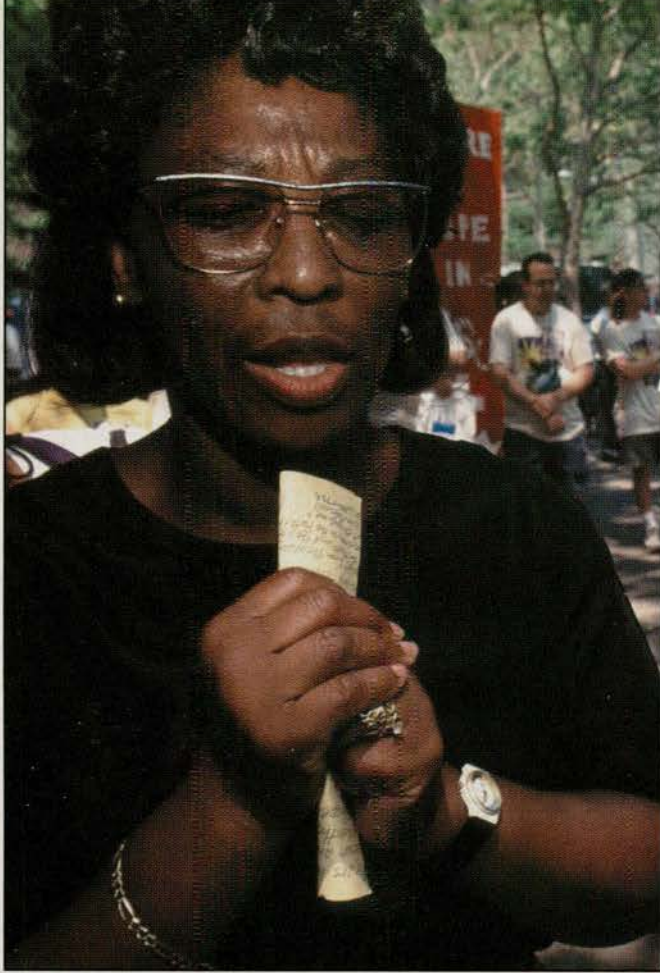


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At left: Pentecostal woman in prayer, USA. Above: Christian boys praying in Urfu, Turkey. Below: Pope John Paul II visits his homeland: Poland, June 8, 1987.



PHOTO © BERNARD BISSON / CORBIS SYGMA

world is a difficult thing to summarize, but the trend shows that repression of religious minorities is widespread in countries with large populations, such as China, India, Pakistan, Indonesia, Sudan, and Nigeria, and that religion is increasingly a key element of modern wars in the Balkans, Israel, Chechnya, and Kashmir.

“While overall the situation is worse, however, there is also good news. Latin America has become one of the most religiously free areas in the world. And, except for the former Yugoslavia, the countries of Eastern Europe have also become largely free. One great story of the last quarter century is the victory of free-

dom in the traditionally Catholic world. There are also many free countries in Africa, especially in the south, while several smaller Asian countries are also free. Nevertheless, the dominant pattern in the world is the increasing political influence of religion coupled with increasing religious repression.”

Drawing on Freedom House’s half century of expertise in surveys of democracy, human rights, economic freedom, and press freedom, *Religious Freedom in the World* is the product of a multi-disciplinary and multi-religious group of more than sixty scholars from the U.S. and abroad. In addition to the seventy-five country profiles, the report includes regional surveys, background essays on religious freedom, and charts





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Above: Holy Kaaba pilgrims in Mecca, Saudi Arabia. Below: Schoolgirls pray at the funeral of a classmate, Java, Indonesia. At Right: Hindu girl praying at Diwali Festival. Below right: Cuban woman kneels before a small shrine.



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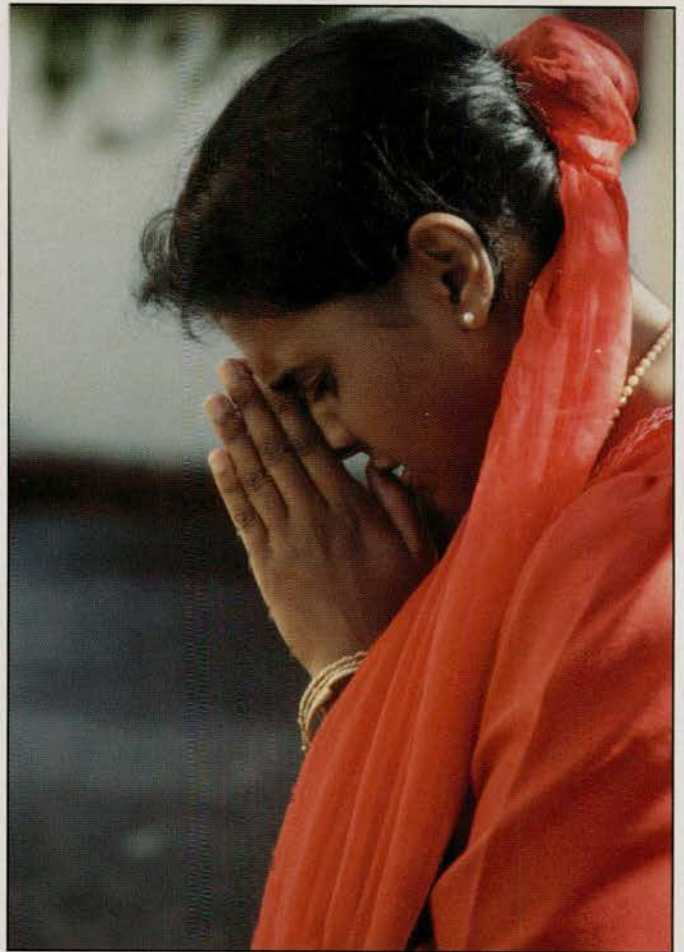


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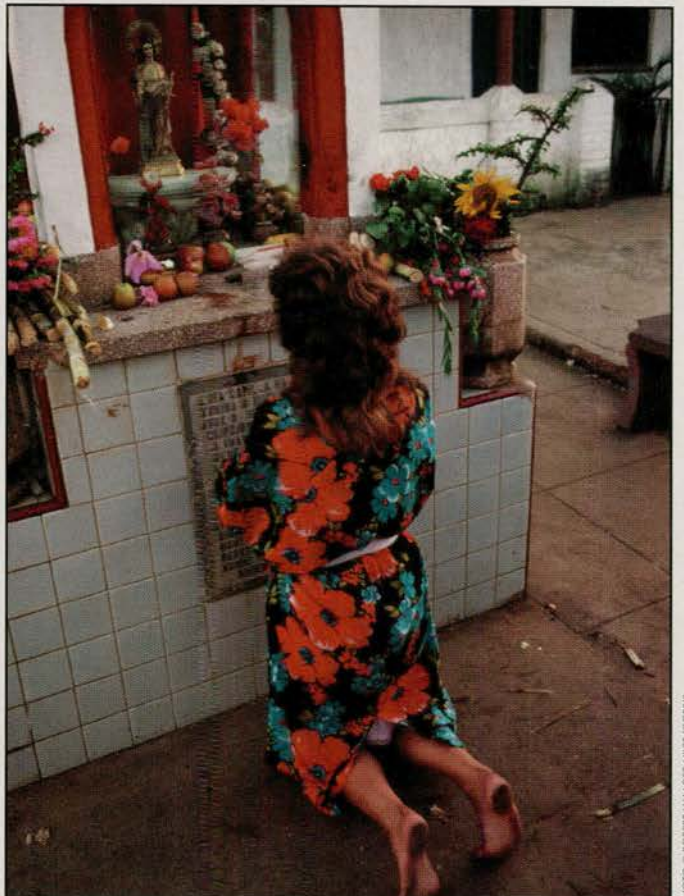


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that summarize the findings by geographic area and by religious background. Each nation is given a religious freedom rating from one to seven, with one denoting “free” and seven denoting “unfree.”

In the pages that follow, we have reprinted the chart, “Religious Freedom by Area,” and four of the country profiles: Russia, because it remains an important country and because it is interesting to see what is happening in that nation’s troubled post-Communist era; India, also because of its size and importance but also because of the worsening conditions there; North Korea, because it presents a rather pure view of what happens to religious liberty under Communist totalitarianism; and Sudan—the largest country in Africa—where it is estimated that two million people have been killed as part

of a brutal pattern of religious persecution over the past twenty years. China, one of the world’s worst religious persecutors, is not included because the situation there tends to be covered in some detail by the mainstream press.

The criteria used by Freedom House to judge countries were developed from the International Covenant on Civil and Political Rights, the United Nations Declaration on the Elimination of All Forms of Intolerance and of Discrimination Based on Religion or Belief, the European Convention on Human Rights, and from a list of criteria developed by Willy Fautre, the head of Human Rights without Frontiers in Brussels. The authors of the report are careful to point out that (1) The ratings are based on “the situation in countries, not the conduct of governments. In some cases, such as

Religious Freedom by Area

Religious Freedom Rating	Former Soviet Union and Eastern Europe	North Africa and West Asia	Western Europe and North Atlantic	Asia	Africa	Latin America
1	Estonia		Finland Ireland Netherlands Norway United States			
2	Lithuania Poland		Austria Sweden United Kingdom	Japan South Korea Taiwan	Botswana Namibia South Africa	Brazil
3	Hungary Latvia Romania Ukraine	Israel	Belgium France Germany Spain	Mongolia Philippines	Zimbabwe	Argentina Chile El Salvador Guatemala
4	Armenia Bulgaria Georgia Kazakhstan Kyrgystan Macedonia Moldova Russia	Greece Lebanon Morocco		Malaysia Singapore Sri Lanka	Tanzania	Colombia Mexico
5	Azerbaijan Belarus	Egypt Turkey		East Timor India Indonesia Nepal	Nigeria	
6	Uzbekistan	Mauritania Pakistan		Bangladesh Bhutan China Vietnam		Cuba
7	Turkmenistan	Iran Saudi Arabia Sudan		Burma North Korea Tibet (China)		

“free”
 “partly free”
 “unfree”

in civil war, there may be little religious freedom, but a government may be able to do little about it"; (2) Freedom of religion includes the right not to be religious: "The persecution of all people of any or no religion should be equally as offensive in our eyes as that of believers in any particular religion"; and (3) "In line with most human rights treaties, this survey covers freedom of 'religion or belief.' There are beliefs that, functionally, take the place of explicitly religious beliefs, and these, too, should be protected."

Religious Freedom in the World, published by Broadman &

Holman Publishers, may be ordered through your local bookstore, or it is available online through the Freedom House website for \$16.99, including postage: www.freedomhouse.org/religion.

Paul Marshall, the general editor of *Religious Freedom in the World* and the author of several background essays in the report, is a former professor of political philosophy at the University of Toronto and the author of *Their Blood Cries Out*. He currently is a senior fellow at Freedom House's Center for Religious Freedom.

Country Profiles

Russia

Population	146.5 million
Russian Orthodox	55%
Muslim	9%
Protestant (Baptist, Pentecostal)	1%
Shamanist/Animist	0.8%
Buddhist	0.6%
Roman Catholic	0.5%
New Religions (e.g., Hare Krishna)	0.5%
Jewish	0.4%
Old Believers	0.1%
Agnostics/Atheists/Other	32.1%
Religious Freedom Rating	4

The nine-hundred-year official Christian status of the Russian Empire was replaced in 1917 by an atheist ideology, which was not abandoned until the late 1980s, although it was enforced with varying degrees of severity. This was the first time in history that a state adopted the abolition of religion as official policy, and all the main political parties now abjure the former atheist policies.

In 1990, with a new religion law, the government of Mikhail Gorbachev established *de jure* the *de facto* religious liberty that had slowly emerged since 1986. Already at the celebration of the "Millennium of the Baptism of Rus" (June 1988), Gorbachev had personally sanctioned these new freedoms and encouraged the Russian Orthodox Church to plan public events, with full nationwide and international media coverage. Gorbachev forecast cooperation between Christians and Communists as one cornerstone of the new Soviet Union.

However, when the USSR collapsed three years later, the new law on religion was only a year old. In fact, there were two laws—one for the Soviet Union as a whole and one for the RSFSR (Russia). Both had repealed Stalin's 1929 Law on Religious Associations and embraced religious liberty in a form acceptable in any Western democracy. The Soviet government sought advice from Western lawyers in drafting this law. The most significant difference between the laws was that the Russian one allowed the teaching of religion in state schools. Internal church statutes, which previously could not conflict with state atheism, were also changed to conform to the new freedom. Particularly notable was the new statute

for the Russian Orthodox Church, promulgated at the "sobor" (church council) held to coincide with the millennium celebrations.

The role of religion in society changed in every essential aspect during these years. Very important was the abolition of the Council for Religious Affairs, the government body that officially acted as a "liaison" between church and state, but which, in fact, exercised atheist controls on religious life and took its orders from the KGB. At the same time, there were multiple incursions into Russia by all kinds of proselytizing groups. These groups included cults such as Aum Shinrikyo, implicated in nerve gas attacks in Tokyo, but also included many who sincerely wished to work with existing Russian religious groups.

The tens of thousands of now unemployed atheist lecturers and government operatives (*upolnomochennyye*) throughout Russia's eighty-nine administrative divisions were discontented and soon worked to reestablish some form of government control over religion throughout the regions. They found it difficult to accept that the new Russia could permit religion to proliferate without even the requirement of registration. As early as 1993, there were discussions about establishing an "Experts' Council" on religion to investigate—not whether—but *how* the government could impose order on the apparent chaos brought about by religious freedom. Various drafts of a new law were mooted at different parliamentary levels, culminating in a long, detailed, and discriminatory new law passed in September 1997. More than twenty-five regions had earlier introduced their own local legislation, all of it variously restrictive, but with no two identical and none in complete conformity with Duma legislation. Nor were these regional laws abolished when the federal one came into being. To add further contradictions, the new Russian Constitution of 1993 guarantees freedom of conscience to all citizens, in conformity with the international agreements to which Russia is signatory.

The imposition of new legislation is so uneven, and sometimes ignored, that much more religious freedom exists than the letter of the law implies. In the current administrative chaos, the law, in effect, signals to distant officials that they have *carte blanche* to act as they wish, without laws or bodies to which they are in practice answerable. On the ground the situation is different in every one of the eighty-nine regions, varying from almost complete religious liberty

in Sakha (Yakutia) to considerable controls in Moscow or Khakassia.

The Moscow Patriarchate, the administrative center of the Russian Orthodox Church, had an active hand in drafting the 1997 bill and lobbying senior government officials to pass it. Both President Clinton and Pope John Paul II intervened with President Yeltsin, who asked the drafting committee to modify it. This was not satisfactorily done, but Yeltsin received assurances that it had been and signed it anyway. All this occurred during the summer holiday period, with no discussion in the press, and no adequate consultation with the bodies most affected—the representatives of the Protestant and Catholic churches.

The purpose of the law, as stated by the Orthodox Church, is expressly to control “sectarian” groups, particularly those funded from the outside and promoted by foreign nationals. However, it can in practice be used as a tool against religion in general. If the Communist Party were reestablished and it renounced its positive view of religion, the legal tool is already at hand to begin another atheist campaign.

All religions, including the Orthodox Church, are paradoxically constrained to restrict their mission and educational work to their existing membership. By contrast, every atheist or secular group has the right to propagate its beliefs within society as a whole. There is a distinction between religious organizations (recognized churches) and “religious groups.” Only the former can enjoy tax privileges, have their clergy exempt from military service, set up educational institutions, or receive state subsidies for the restoration of historic buildings.

Within the “religious groups” there is further discrimination. Those that cannot produce documentation to prove their registered existence fifteen years ago must re-register every year for fifteen years and obey every state requirement as a condition of achieving legal status eventually. This makes 1982, the end of the Brezhnev era, when religion was severely repressed, the benchmark. Some groups, such as Jehovah’s Witnesses, Eastern-Rite Catholics, and Methodists (on Russian soil, not in Estonia) were completely illegal at the time; others, such as Pentecostals, Adventists, some Baptist groups, and even the mainstream Catholics, existed in a penumbra between legality and illegality, the unwritten or secret restrictions being applied in arbitrary ways in different parts of the Soviet Union. In the interim, until 2012, these groups may not own, rent, or hire property; or publish, print, import, or distribute religious literature, even for their own worship. They may not open educational institutions or make provision for training their leadership; they may not invite foreigners to preach or work alongside them or conduct services of worship or public prayer in hospitals, orphanages, prisons, or mental institutions. At the end of 1999, Putin extended the deadline for registration for one year, but threatened that those groups not registered by then would be “liquidated.”

Most seriously affected by these provisions are those groups that refused cooperation with the old regime and refused to apply for registration on the grounds that this was in itself a restriction on religious liberty. Paradoxically, there-

The future of religious liberty in Russia depends on the development of a democratic and peaceful society.

fore, those that historically stood strongest for religious freedom are now the most disadvantaged by the new legislation.

In practical, as distinct from legal, terms, there is tremendous variety across Russia’s vastness. In general, the gains since the Brezhnev era are immense. Teaching religion to children is possible in practice where teachers are available; most denominations—Protestant, Catholic, and Orthodox—have their theological seminaries (in the latter case some thirty are now operative, as compared with two on Russian soil in 1980 and none for any other denomination). Printed literature is widely available, and imports continue. Churches are free to appoint their own pastors without state interference. Charitable work has developed from zero in 1980 to a nationwide network today. Much church property has been returned, and Orthodox churches are open virtually everywhere. For other groups the record is less good; for example, many Catholic churches are still in state hands, and the Orthodox Church has refused to return some churches to the Old Believers.

In law, there is theoretically less religious liberty today than in Gorbachev’s heyday, but the restrictions are carried out haphazardly and they affect minority groups more than the mainstream churches. Islam and Judaism receive named protection under the law as “traditional religions.”

Where there is physical violence, it is caused more by a breakdown in law and order than by state policy, as had occurred in Communist days. Two respected politicians, members of the Orthodox Church, were murdered in 1995 (Vitali Savitsky) and 1998 (Galina Starovoitova), but this seemed to result from their anticorruption activities rather than action specifically connected to their faith. The 1990 murder of Fr. Alexander Men, the apostle of the new deal for religion, was apparently an isolated incident (possibly revanchism by the KGB). Sanctions against individual Orthodox clergy for their criticism of the Moscow Patriarchate are internal church matters, unconnected with state interference. There has been considerable violence against such breakaway groups as the True Orthodox Church, including accusations that their clergy have been murdered for their stance.

In Chechnya, nominally Russian but, until the latest military assault, in practice virtually independent, all Russian Orthodox priests have been kidnapped or have fled. The two pastors of the Baptist church in Grozny, the capital, have been beheaded, and their successor kidnapped, and virtually all Protestants have fled.

Muslims cannot regain their mosque in Stavropol (a unique situation in today's Russia); Jehovah's Witnesses are fighting the removal of their registration in Moscow; the Perm administration is attempting to force registration on the local Pentecostal church; the Lutheran community in Khakassia was deprived of registration in 1998; few Catholic priests are ethnic Russians (no seminary education was available in the Communist period), while foreign priests are forced to leave the country every three months in order to renew their visas. In October 1998, Communist lawmaker Albert Makashov blamed the country's problems on *zhidy*, a derogatory term for Jews. Anti-Semitism is growing rapidly with bombings and attempted bombings of synagogues and physical attacks on Jewish leaders. The situation is in flux and the future of religious liberty in Russia depends not only on the future of the 1997 legislation but also on the development of a democratic and peaceful society with a less corrupt administration.



India

Population	986 million
Hindu	78%
Muslim (mostly Sunni)	12%
Christian	3%
Indigenous	2.5%
Sikh	2%
Buddhist	0.9%
Jain	0.5%
Parsi	0.3%
Baha'i	0.2%
Jewish	0.1%
Nonreligious	0.5%

Religious Freedom Rating 5

Part from the ancient set of religions collectively known as Hinduism, several other world religions have also exerted considerable influence on India. Islam's influence began with the Arab contacts of the ninth century, followed by a succession of Muslim conquests, which have left their mark on Indian society. Christianity first came to India in the first century A.D. but long remained confined to the coastal area of Kerala. With the arrival of the Portuguese in the fifteenth century and the British in the eighteenth century, Christianity's influence increased.

The constitution describes India as "a sovereign socialist secular democratic republic." It also contains detailed provisions for religious rights for all citizens. The constitution also empowers the courts to declare invalid any law passed by the parliament or a state government that contravenes the constitution. Article 25 guarantees freedom of conscience, free profession and practice of religion, as well as the right to propagate religion. Article 28 states that no religious instruction shall be provided in any wholly state-funded establishment, and parental consent in other institutions is required. This constitutional provision is currently under threat as a

result of demands by Hindu nationalists for all schools in the country to conform to the concept of India as a Hindu nation. Article 30 guarantees religious minorities the right to establish and administer educational institutions. While minority institutions have enjoyed a certain degree of autonomy in the past, in recent years they have been increasingly subjected to restrictions and scrutiny, and there have been cases in which the courts have unjustly intervened in their internal affairs. Article 51 of the constitution also imposes a positive duty on citizens to promote harmony and the spirit of common brotherhood among all people of India transcending religious boundaries, but failure to abide by these provisions cannot be challenged in the courts.

Provision is made in the area of personal law for Hindu, Muslim, and Parsi communities. These personal law provisions are intended to safeguard religious liberty by providing for accepted religious differences. While, in 1965, the Indian government removed some of the anomalies of Hindu personal law, Muslim personal law remains strictly governed by the principles of *shari'a*. Among other disputes that have arisen surrounding the issue of religious freedom for Muslims, an Allahbad High Court ruling in 1994 is significant: It states that unilateral divorce (*Talaq*) initiated by a Muslim husband is unconstitutional. This followed a ruling by the All-India Muslim Personal Law Board, which had upheld this provision as "a legitimate Islamic provision" for Muslim men. There is no separate personal law for Christians or the microscopic Jewish community. Under the 1869 Indian Divorce Act, Christian women are not usually entitled to seek divorce from their husbands even if they are mistreated. However, a court in Kerala State did allow a Christian woman to divorce her husband on the grounds of cruelty and desertion. Changes to the law have been proposed, but many Christians fear that these could become means of legal control.

Because of legal confusion over the status of religious personal law, matters affecting the religious freedom of minority groups are likely to remain unresolved until amendments are passed that clearly outline the rights and responsibilities obtained under different personal laws. In general, India—with its constitutional guarantees of religious freedom and its ambiguous provisions to protect sensitive religious feelings—can be called a moderate secular state and not a radically or avowedly secular one. As Dr. Radhakrishnan, the former president of India, noted, "Secularism is not a positive religion, or the state would assume divine prerogative. We hold that no religion should be given preferential treatment."

In reality, however, the religious freedom of Sikhs, Buddhists, and Jains, who are distinct religious communities, is not guaranteed under the constitution. Although, like other minorities, Sikhs, Buddhists, and Jains enjoy absolute freedom of worship and the freedom to establish and govern their own institutions, the government's refusal to recognize these three traditions as separate from Hinduism has been the subject of controversy. While Buddhist and Jain leaders have made fewer efforts to achieve separate constitutional recognition as religious entities distinct from Hinduism, Sikhs have strongly protested, and it is widely believed that

this helped give rise to the Sikh Separatist movement in Punjab State in the 1980s. This has caused considerable bloodshed, including the assassination of then prime minister Mrs. Gandhi in 1983 by two of her own Sikh security guards.

Similar controversy concerning the religious identity of the indigenous (*Adivasi*) people has arisen because of the Indian government's consistent refusal at the United Nations to recognize that the religion of its indigenous people is distinct from Hinduism. This has led to the formation of the Indian Council of Indigenous and Tribal People in 1987. Members of officially scheduled tribes are about 8 percent of the population.

In the last few years, India has witnessed a rise in Hindu nationalism and of militant groups such as the RSS (*Rashtriya Swayameseva*), *Wishua Hunadu Parishad* (VHP), Shiv Sena, Bajrang Dal, and the BJP (*Bharatiya Janata Party*). The rise of *Hindutva* has led to the coming to power of the BJP, the political wing of Hindu nationalism. This ideology encompasses the vision of India as a Hindu state in which minorities must assimilate to the majority culture and language, revere the Hindu religion, and glorify the Hindu "race" and culture. Meanwhile the Indian Supreme Court has held that there is no real legal content to the term "Hindu." In the run-up to fall 1999 national elections, the BJP has criticized Sonia Gandhi's foreign roots, and some of its supporters have complained that she is a "Christian" tool.

The presence of a substantial Muslim minority in India has always been perceived by radical Hindus as a threat to national unity because of the alleged potential loyalty of Muslims to Pakistan, which was formed as a separate land for Muslims in 1947. Although, since partition, Muslims have enjoyed freedom of worship, they often complain of discrimination in employment, education, and business. India has a long history of Hindu-Muslim riots, and thousands of people have lost their lives and property. Rising Hindu militancy and anti-Muslim sentiment resulted in the destruction of the sixteenth-century Babri mosque in Ayo-dha in 1992 by a Hindu mob, with the open support of the BJP state government. This destruction was followed by well-organized communal violence across the country, in which thousands of people were either killed or disappeared. This raised questions as to whether India will be able to remain a secular country or become a Hindu nation, particularly when the election slogan of some radical Hindu nationalists was "Muslims have only two abodes—Pakistan or the graveyard."

In recent years the smaller Christian minority has also become a scapegoat for many of the ills prevailing in Indian society. While Christians are generally regarded as peace loving, they are still perceived by Hindu nationalists to be loyal to a "foreign religion." Systematic antiminority propaganda, fueled by the hate speech of right-wing Hindu nationalists, has unleashed a recent campaign of terror against Christians, especially in Gujarat. Incidents of persecution of Christians include destruction of churches, burning of Bibles in schools, torture in police custody, mob violence to disrupt church services and Christian meetings, rape, and brutal murder. In early 1997, Father Thomas, a Jesuit priest from

Belgium and a Christian human rights activist, was brutally killed by militants disguised as police officers. Father Christudas was severely beaten and then paraded naked through the streets by Hindu fundamentalists, in full view of the police.

Since late 1998, the number of attacks has increased. In 1999, nationalists burned to death, along with his two sons, an Australian who worked with lepers. On June 22, India's Central Bureau of Investigation filed charges against eighteen men for this murder. The United Christian Forum for Christian Human Rights has released a document under the title *Open White Paper* detailing 113 reported incidents of attacks, including the rape of four nuns and the murders of twelve Christians by Hindu militants in the last two years. In March 1999, attacks on Christians in the state of Orissa left twelve hundred homeless. In September a Roman Catholic was killed by a mob in Orissa, and a nun was kidnapped in the eastern state of Bihar, while on October 2, a priest was killed in Orissa by Hindu fundamentalists. In November a Christian gathering in Delhi was attacked, and at least twelve people were injured. Muslim and Christian leaders have jointly protested anti-Christian violence. Attacks have increased in the new year.

Since Indian independence, conversion to Christianity and Islam has been a cause of tension. Despite demands for legislation by radical Hindu nationalists for a ban on conversion to religions of "foreign origins," the constitutional right to choose and propagate a religion has been safeguarded. However, the courts have eroded this right. In 1977, the Supreme Court ruled that the constitutional right to *propagate religion* did not include the right to convert any person to one's *own religion*. While attempts to introduce a bill in the national parliament have failed, in the last five years some state governments have passed acts that outlaw conversion to Islam and Christianity from low-caste Hindu and tribal backgrounds, but they do not prohibit conversion to Hinduism.

Part of the ancient economic and religious system of Hinduism, known as the caste system, has been a dominant force of the socioeconomic life of India for more than two thousand years. A Hindu majority means that the caste system still plays an important part in Indian life, dividing the society according to a strict hierarchy. A majority of converts from Hinduism are outcasts who embrace Islam or Christianity as a way to escape the traditional religious sanctions imposed on them under the Hindu caste system. In November 1999, two hundred *dalit* families near New Delhi threatened to convert to Christianity unless the government reserved more slots for *dalits* in medical and engineering colleges. However, while conversion to Islam or Christianity is perceived by some as an emancipation from the bondage of Hinduism, many converts from a low-caste Hindu background, especially women, still suffer a certain degree of discrimination from their "high-caste" Christian and Muslim coreligionists.

Hindu rules ban *dalits* (formerly called "untouchables," and about 16 percent of the population) from entering the temples. Although, since independence, legal forms of affirmative action have been introduced, it is an open secret that

the great majority of low-caste Hindus in India still continue to be treated as *dalit*. In many parts of the country, it is socially unacceptable to allow low-caste Hindus to visit a Hindu temple or participate in a Hindu religious festival. In 1994, the national parliament was informed that between 1991 and 1993, more than sixty-two thousand cases of atrocities were registered against *dalit* and indigenous people. This, together with legal limitations on their right to convert, adds up to serious violations of religious liberty and creates a system akin to religious apartheid. If *dalits* convert to Christianity or Islam, they lose their eligibility for affirmative action programs, though not if they convert to Buddhism, Jainism, or Sikhism, as these faiths are legally regarded as subsets of Hinduism.

Along with constitutional guarantees of religious freedom and respect for the religious feelings of all, there are restrictions in the penal code intended to protect religion. These include injuring or defiling places of worship with intent to insult the religion of any class, disturbance of religious assemblies, and utterances intended to wound the religious feelings of others. These laws are being increasingly violated, often with the connivance of the authorities. The authorities have consistently failed to take action in the face of mob attacks on religious properties belonging to the minority groups. Despite a Supreme Court ruling in 1995 outlawing hate speech, many Hindu leaders and politicians continue to use antiminority propaganda (particularly against Muslims and Christians) for political gain with virtual impunity. Government figures have denounced those who report on religious violence. Undoubtedly, the ineffectiveness of the judicial system is compounded by the certain degree of independence exercised by some state governments ruled by Hindu groups. For example, in 1998, the Shiv Sena government of Maharashtra decided to disband the National Commission for Minorities, which had been set up to investigate cases of violence against minorities.

While the vernacular press has always been biased against the minorities, the English press has historically had the reputation of being fairly balanced toward all religious communities. With the rise of Hindu nationalism, this has changed, and some leading Hindu intellectuals and journalists, such as Arun Shoorie, have shown increasing sympathy for the cause of fundamentalist Hindu nationalism. While constitutional and legal provisions to safeguard religious freedom remain, the rise of Hindu nationalism and Hindu militancy, along with measures to increase public order, have seriously threatened those tenets.



North Korea

Population	22.2 million
Atheist	68%
Ch'ondogyo	15%
Other Traditional	14%
Buddhist	2%
Christian	1%
Religious Freedom Rating	7

Documenting human rights abuses in North Korea is extraordinarily difficult because it is one of the most closed places in the world. The few Westerners permitted into the country are largely confined to the Pyongyang area, where they are carefully supervised. The government's extremely tight security makes defections of North Korean citizens rare. As a result, little is known about the full extent of religious persecution and the extent of underground activity. The statistics used above reflect this uncertainty. What can be said unequivocally is that, as the U.S. State Department asserted, "genuine religious freedom does not exist."

When Kim II-sung took power, he began a systematic campaign of indoctrination in his own Stalinist ideology, in which religion had no place. Today, virtually all outward vestiges of religion have been wiped out, and North Korea is regarded as the most hard-line atheistic nation in the world. The government relies on relentless propaganda and a comprehensive surveillance system to control virtually every act, belief, and desire of its citizens. North Koreans are prohibited from making even the slightest deviation from the Communist Party's rigid ideology.

Kim considered religion to be "superstition" and "a hindrance to the socialist revolution." By the early 1960s, his secret police had begun an intense effort against religious believers. All temples, shrines, churches, and other religious sites were closed, and all religious literature and Bibles were destroyed. Religious leaders were either executed or sent to concentration camps.

In place of Buddhism, Christianity and other religions, Kim imposed an alternative religion, a personality cult built around himself and his son. From early childhood, North Koreans were taught to look on the "Great Leader" Kim II-sung, and now Kim Jong-il, as infallible, godlike beings and the progenitors of the Korean race. The practice continues to the present, long after Kim II-sung's death.

The government allows and controls three religious organizations: the Buddhist Federation, the Korean Christian Federation, and the Korean Catholic Association. The Buddhist Federation says that there are about four hundred thousand Buddhists, the Protestant Federation claims to have ten thousand members, and the Catholic Association claims about three thousand members. Ch'ondogyo, a traditional Korean religion taken over by the government through the Ch'ondogyo Youth Party, is said to have three million adherents. Another three million are said to practice other forms of traditional worship. Nearly 70 percent of the population is said by the government to be atheist.

Visitors report that some Buddhist temples are operating, and Buddhist practices are probably carried out in homes across North Korea. Although fifty years ago the North Korean capital city of Pyongyang was nicknamed "Asia's Jerusalem" because of the strong influence of Christianity and some two thousand churches dotted the northern countryside, since 1988, in the capital, only three Christian church buildings—two Protestant and one Catholic—have been erected by the government. They seem to be used solely to impress Western observers. No Catholic priests live in the country, so the sacraments cannot be administered

even in the showplace church. Foreign journalists who have attended services in the three churches reported that neither the congregants nor the national leader of the Protestant Federation could name the first three books of the Bible. Others who went unannounced to the churches on Easter Sunday found them locked and empty. Some foreign observers have even questioned whether Christianity still exists behind North Korea's tightly guarded frontiers, though recent reports indicate that there may be many thousands of North Korean Christians who continue to meet secretly in homes. They have almost no access to Bibles, religious literature, or teaching materials.

Christianity is perceived by authorities to be a dangerous threat, with the potential of undermining the Kim dynasty. Underground Christians have told foreign groups that if they are caught in possession of the Scriptures they fear being executed on the spot. Defectors report that Christians are given the heaviest work, the least amount of food, and the worst conditions in prison. Those caught praying in prison are beaten and tortured. A recent defector reports that she saw some Christians working in a foundry put to death with hot irons. Defectors also report that children and grandchildren of Christians also face life imprisonment for the religious beliefs and activities of their forebears. There were reports at the end of 1999 and the beginning of 2000 that up to twenty-three converts to Christianity (some returning from China) had been executed by firing squad.



Sudan

Population	28.9 million
Sunni Muslim	70%
Christian	19%
Traditional	10%
Other/None	1%

Religious Freedom Rating 7

Sudan—Africa's largest country—is one of the world's worst religious persecutors. It practices forced conversion, represses those who do not subscribe to its version of Islam, has applied *shari'a* law to the entire population, enslaves its opponents, and is engaged in a war that the U.S. Congress, East African Bishops Conference, the U.S. Commission on International Religious Freedom, and many other observers have explicitly labeled "genocidal." Sudan's conflict broadly pits the country's Arab Muslim north against the black African Christian and animist south.

Egyptian Christians fled to Sudan during their persecution by the Romans in the first centuries. The churches in Sudan became firmly established in Nubia (northern Sudan) in the sixth century A.D., and Christianity was adopted by the inhabitants of the Nubian kingdoms of Muqurrah, Nobatia, and Alwah. Churches flourished along the Nile until the arrival of Muslim Arabs in the seventh century. The final collapse of the Alwah kingdom in the 1500s saw the end of the predominantly Christian era. Christianity reemerged in 1848 with the arrival in the north of a group of Catholic

missionaries who then traveled south. The British Closed Districts Ordinance of 1936 restricted contact between northern and southern Sudan and the Nuba Mountains. Christian missionaries were all channeled to the south.

In 1957 the missionary schools and institutions were nationalized. This left the church with only theological colleges, and these could not function properly since qualified teachers were denied the necessary visas to enter the country. In 1960, Fridays legally became a public holiday and day of rest for all, regardless of faith. The Missionary Society Act of 1962 legalized the expulsion of missionaries and placed curbs on their activities, particularly in the south. Huge numbers were expelled in the following years. Following this, many Islamic schools were established in the south, and Arabic replaced English as the medium of teaching. African languages were forbidden. Parents could no longer choose children's schools, and many were forced to send them to the local Islamic school. The same Act declared it illegal to baptize a child before age eighteen. The teaching of Islamic and Arabic history was given priority in all schools, and African, even Sudanese, history was discouraged. All Sudanese from the south who applied to study secular law were made to sit for an Islamic law exam in order to be admitted to the law faculty. It is reported that, during the Anya Nya wars of the 1960s and early '70s, Christian African Sudanese were slaughtered by the hundreds. Pastors and other leaders were specifically targeted.

Shari'a law was imposed in 1983 and was made applicable to southerners and northerners alike. The Sudan Charter of 1987 stated that the Muslim community was the majority one within Sudan. (While religious statistics for all countries must be treated with care, in the case of Sudan this is even more so because much of the country is a war zone and there has been no census for decades. Muslims appear to be about 70 percent of the population, but Christianity is growing rapidly in the south where animist views were formerly dominant.) It also gave personal, social, and family autonomy to non-Muslims. However, while a Muslim man may marry a non-Muslim woman, a non-Muslim man may not marry a Muslim woman. Similarly, Muslims may adopt a child of any background, whereas non-Muslims are forbidden to adopt a child whose parents were Muslims or where the child was abandoned.

The 1992 National Assembly issued a document setting out fundamental rights, including a statement of respect for all "heavenly revealed religions and sacred beliefs" and prohibiting religious intolerance. Sudan's Constitutional Decree No. 7 (1993) affirms that Islam is the guiding religion for the overwhelming majority of the Sudanese people but accepts the adoption and practice of other faiths. Article 24 of the draft constitution of 1998 accords to all the freedom of creed, worship, education, practice of ceremonies, and choice of religion. However, it is still widely held that the practice of religions other than Islam is perceived as more a privilege than a right. A new dress code was imposed on women in January 1999, requiring them to wear Islamic attire and a head scarf, irrespective of faith. Even before this, Christian women and others had been detained and whipped for not dressing according to Islamic custom.

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In January 1995, Pierre Sane, Secretary General of Amnesty International, said the regime had “embarked on an armed crusade to mould its society into its own version of a radical Islamist agenda.” Others have described the regime as a missionary one seeking to Islamize not only Sudan but also the whole of Africa. There are numerous calls to *jihad* against the south by government figures including Turabi and Vice President Osman Taha as well as regularly televised war footage accompanied by a stirring call to the holy struggle against the south. Nevertheless the majority of Sudanese Muslims do not share the regime’s view of Islam.

The war methods adopted by the government include the bombing of civilian targets, a scorched-earth policy, looting of cattle, destruction of property, fueling of inter-ethnic and factional fighting, the arming of militias, and encouraging the taking of slaves as booty by these militias. Firsthand accounts of raids note the specific targeting of churches. The government has engaged in calculated starvation by vetoing international flights, a tactic that in 1998 brought 2.6 million to the brink of starvation. The United Nations umbrella group for delivering international relief, “Operation Lifeline Sudan,” has been criticized by human rights groups for abiding by Khartoum’s veto.

Islamization is accompanied by an equal drive toward Arabization. Many women from the south in the relocation camps have been raped or forced to marry soldiers. The macabre slave trade, which reemerged in Sudan in the mid-1980s, now involves several tens of thousands of individuals, mostly women and children. Many women are raped by their “owners” and the children brought up as Muslims, given Islamic names, taught Arabic, forced to say the salat (five daily prayers), and given a Quranic education. This process destroys the ethnic and religious identity of the south.

The government’s prosecution of the war was intensified in late 1999 after oil developed by the regime in partnership with Canadian, Chinese, and other foreign companies came onstream in mid-1999. The oilfields, located in the south, were subject to a scorched-earth campaign by the government in late 1999 and were the scene of many atrocities. The oil has brought substantial revenues and new international contacts for the formerly bankrupt regime.

The Lord’s Resistance Army, a rebel group operating in Uganda and funded by the Sudanese government, is notorious for the abduction of civilians and children. It has been

fighting since 1988 to overthrow President Museveni’s secular government. UNICEF estimates that up to fifteen thousand children have been kidnapped in the past decade; many girls turned into sex slaves and boys brutalized, including being forced to drink the blood of weaker captives. In December 1999, Sudan signed an agreement with Uganda that it would stop supporting the LRA and Uganda would cease to support the Sudan People’s Liberation Army (SPLA).

Churches in the north are badly overcrowded because of the government’s systematic refusal of applications for repairs or new buildings. This accentuates the shortages created by the demolition or confiscation of existing buildings. However, mosques and Islamic centers are freely constructed.

Church buildings are destroyed in government-held towns on the pretext that land is needed for houses and roads. However, in the same clearances mosques can be left untouched. On January 8, 1997, three churches at Thoura were razed. In December 1997, the Catholic Club (a study and recreation center for members of the Catholic church) was confiscated and subsequently occupied by the Sudan security. The influx of refugees from the south has led to new churches being established, and churches, albeit makeshift operations, do exist in many of the camps. Christians are also allowed access to prisons to pray with Christian prisoners. Government sources claim that the Catholic Church is still a major landowner in Khartoum and is free to operate unhindered. Christmas and Easter are recognized as public holidays. Muslims are given one day’s holiday on December 25 in contrast to the three given to Christians. At Easter, only Christians are granted a public holiday.

A number of Christian schools operate in the north. They are primarily Roman Catholic, although evangelicals operate some. The Catholic schools (Comboni order) provide a high quality education, attracting Muslims and Christians, predominantly those from the south and Nuba Mountains. Arabic is a prerequisite for access to higher education. In the south a whole generation has been denied education as a result of the war. The church continues to try to take the lead in promoting and organizing whatever education it can.

In 1994, the present government repealed the 1962 Missionary Societies Act, which had obliged missionary groups to obtain an annual license for their activities. Many Christian groups work unhindered in Sudan, and evangelistic events, including a large rally, have been held without problems. Christian marches have also been authorized, and the police have assisted by clearing the road of vehicles. Missionaries cannot work openly, and individuals have been detained in this connection. Reports suggest that others working farther south have been forcibly deported. In 1992, missionaries were expelled from South Kordofan while the mass arrests and torture of local priests and catechists were carried out. Tight limitations are placed upon church relief efforts in the north, in contrast to the privileges enjoyed by Islamic relief organizations.

Individual Christians and Muslims have been targeted by the regime in incidents that clearly relate to their beliefs. Some individuals are routinely required to report to the security forces, and most clergy face travel restrictions.

Roman Catholic Archbishop Gabriel Wako is frequently harassed by the authorities with complaints ranging from importing communion wine and hymn-books to going outside Khartoum to visit his "flock." In July 1993, the Anglican Bishop, the Rt. Rev. Peter El Birish was publicly flogged for the alleged crime of adultery. Observers suggest that charges against both clergymen were contrived. Catholic Chancellor of the Archdiocese of Khartoum, Father Hilary Boma, and his colleague Father Lino Sebit were detained in late July and early August 1989 and charged with various offences relating to a bombing attack in the capital in June 1989. More than twenty others were also detained, three of whom died of torture. It is believed that Father Boma "confessed" to the crime after seeing Father Sebit tortured. They were released in December 1999 after refusing a pardon. Other priests are believed to have been detained and tortured for their faith in prison, including some in government-held towns in the south.

Coptic Orthodox Christians, who can be found predominantly in the north, number under two hundred thousand. Following the introduction of *shari'a* law in 1983, the Copts, though not subject to the worst excesses of the new law, found their status as court witnesses reduced. Many joined a "Christian Alliance" to defend Christians and encourage secular candidates. This led to a concerted effort to encourage the Copts to leave the country. After 1989, hundreds of Copts were dismissed from the civil service and the judiciary, and their previous ease of access to Sudanese nationality was undermined. Compulsory conscription has forced many to fight against fellow Christians in the south. In one case a Coptic child was flogged for failing to recite a Quranic verse. Many Coptic businessmen have fled the country as a result of more subtle harassment, such as access to licenses and inspections of properties followed by fines and/or closure of businesses on spurious grounds.

In February 1999, an exhibition put on by the Association of Christian Students at the University of Khartoum was attacked and destroyed. Following this incident, the Omdurman Islamic University Student Union issued a statement referring to "the suspicious movement of Christianity in Sudan" and called for stricter controls on Christian missionary work and church land and property. Threats of violence against Christians in other universities ensued.

Reports abound of incidents in which those in the so-called peace camps in the north and the Nuba Mountains refusing to convert to Islam have been denied aid. In May 1995, the *UN Rapporteur* reported the execution of twelve civilians by Government of Sudan (GOS) soldiers at Lobonok because they refused to convert to Islam. Whole villages in the Nuba Mountains have been held for ransom by security forces and forced to reconvert to Islam. Christians and animists alike have been affected. Atrocities against the people of Nuba have also included the burning of a church with all the people inside and the extrajudicial killing of church pastors. Catholic Bishop Macram Gassis has been forced into exile for having testified about the atrocities in the Nuba.

Reports of persecution in areas held by the SPLA are rare but do occur. On one occasion in 1996, six missionaries

who complained to the SPLA about forced recruitment of children were detained and the priest beaten by a local SPLA military intelligence officer. More recently a number of chaplains have been appointed to the SPLA.

Apostasy from Islam is punishable by death under Section 126 of the Sudan Criminal Code. Although Turabi has allegedly stated that "if a Muslim wakes up in the morning and says that he doesn't believe any more, that's his business," his views are recognized as unorthodox, and the law still exists. In 1990, a Muslim imam who had converted to Christianity was tried and sentenced to six months in prison and dismissed from work. One of the most publicized recent cases was Ali-Faki Kuku Hassan, a former Muslim sheik who converted in 1995. He was imprisoned for fourteen months before being released following a stroke.

Not only Christians have faced this charge. In 1985, Muslim scholar Mahmoud Mohammed Taha was accused of apostasy and executed. He represented a modernist Islamist group that recognized the *shari'a* as a historical interpretation of the Qur'an and the Sunna, allowing change according to circumstances. Section 126 also refers to those who give up organized religion or profess to be agnostic or atheists. Members of the Communist Party, which has now been banned, have been identified as atheists and a number detained and tortured. The Muslims in the Nuba are perceived as disloyal to the regime and have been targeted on religious grounds by the military.

Despite constitutional guarantees of nondiscrimination, Christians experience marginalization in employment. This has caused many to flee to Egypt and beyond. Non-Muslims are theoretically excluded from high-level government office, the judiciary, and the military, but some do remain in such positions. Many southerners have fled the country because of conscription requirements, which would force them to fight against their own kin. Military training includes Islamic education, regardless of the conscript's religion. Some of those conscripted have been unaccompanied minors in the capital, and non-Muslim boys in other northern cities have been picked up in sweeps by the police, subjected to the regime's version of Islamic indoctrination, and forcibly inducted into the military. Christians face problems receiving social welfare despite the fact that the tax to fund this is levied on all regardless of faith. Severe limitations exist on the time given to Christian programs on radio and TV, and the media frequently scapegoat Christians and Jews in the same breath as the West for many of Sudan's economic, social, and political problems.

Several members of an influential Muslim religious brotherhood, the Ansar sect, were arrested in June 1999, on the eve of an important Muslim festival. Previous acts of violence against the sect had taken place in 1994 and 1997. In the latter attack, two people were killed and ten wounded when worshipers were attacked as they left a mosque. The Sudan Human Rights Organization has reported that, in April 1998, more than seventy-four children were gunned down by the NIF military as they attempted to leave a conscription camp to spend time with their families on the occasion of the Muslim Eid festival. □

A Forgotten Hero of Liberal Education

There should perhaps be a special place of honor for those whose ideas are distorted or caricatured or derisively categorized, who come to the public square expecting a fair fight, only to find that their opponents have taken up the easy weapons of name-calling and labeling. The Hall of Fame for the Unjustly Maligned, we could call it. In the last issue of this magazine, we paid tribute to one such person—Jeanne Chall. Some thought they could shake Professor Chall from her pathbreaking work in reading research by dubbing her “reactionary” and “right-wing.” They were wrong, of course, both in their characterization and in their hope that it would scare her off. Now we look back a half century earlier, to another figure in the history of education who challenged prevailing wisdom, faced similar attack, and stood his ground.

—EDITOR

By Diane Ravitch

Some are heroes because of their physical courage. William Chandler Bagley (1874-1946) is an example of moral and intellectual courage. For more than three decades, he challenged popular educational fashions, risking the disdain of his peers. But the possibility of being ostracized never deterred him. By all accounts, he was always civil and reasonable when engaged in intellectual combat; he criticized ideas, not persons. Despite the significant role that he played, few educators today know his name; he is seldom mentioned in histories of American education. Yet historical retrospect suggests that he deserves recognition for his role as a dissenter and a voice of reason.



Bagley was born in Detroit in 1874. His parents were from Massachusetts and apparently moved a few times, because Bagley attended elementary school in Worcester, Massachusetts, and high school in Detroit. He graduated from the Michigan Agricultural College (later known as Michigan State College), where students were required to do farm work two and a half hours each weekday. His plans for a career in agricultural science were frustrated when he graduated in the midst of an economic depression in 1895; the only job he could find was teaching in a one-teacher school in rural Garth in the Upper Peninsula of Michigan. He was fascinated by both the challenge of the job and its lack of any scientific basis. He wrote to a friend that vastly more was known “about the raising of pigs than about the minds of children.”

Determined to study the science of the mind, he earned a master’s degree at the University of Wisconsin in 1898 and a doctorate at Cornell University in 1900, both in psychology, which was then a new field of study. He earnestly believed that it was possible to develop a science of education, one that would be as precise and predictable as any of the physical sciences. In February 1901, he was hired as principal of

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an elementary school in St. Louis, and a few months later, he married a fellow student at Cornell, Florence MacLean Winger.

Because the climate in St. Louis was not good for his wife's health, he accepted an invitation in 1902 to teach psychology at the State Normal College in Dillon, Montana, and direct the training school. From 1903 to 1906, he also served as superintendent of the Dillon public schools, and in 1904 he became vice president of the college as well. In the midst of all these responsibilities, he published his first book, *The Educative Process* (1905) and founded *Intermountain Education*, the first school journal in the northern Rocky Mountain region.

In 1906, Bagley left Dillon to teach educational theory at the State Normal School in Oswego, New York, and to direct its training school. In 1907, he published *Classroom Management*, which remained in print for the next forty years. Based on the success of his books, he was offered several university professorships, and in 1909 he became a professor of education at the University of Illinois and director of the University's School of Education.

Bagley spent nine years building the faculty of the School of Education at the University of Illinois. He also published several books, was one of the founders of the *Journal of Educational Psychology*, founded a professional honor society for educators, and was president of the National Society for the Study of Education. Although deeply immersed in profession-building activities, Bagley always preferred to be addressed as "Mister Bagley" rather than "Doctor" or "Professor."

Bagley's early career offered no hint of his future role as a dissident. Admired by his peers as a leader in the field, he tirelessly advocated a sound education for future teachers, a proposition that no one disputed. Yet as early as 1907, in *Classroom Management*, he lamented "the waves of fads and reforms that sweep through the educational system at periodic intervals," and he worried about reformers who would "leave teacher and pupil to work out each his own salvation in the chaos of confusion and disorder."

Clearly Bagley was alarmed by the espousal of untested theories by his fellow professors of education. But he was not regarded as a controversialist until 1914, when he engaged in a celebrated debate with David Snedden, commissioner of education for Massachusetts, at the annual meeting of the National Education Association. Bagley was known as a genial teacher-educator; Snedden was a national leader in the vocational education movement, which was widely recognized as the leading edge of progressive reform. Snedden advocated the creation of separate vocational schools for the vast majority of adolescents.

Bagley defended liberal education for all children. He insisted that all young people should have access to the knowledge, skills, habits, and ideals that would equip them for changing situations, not just for a particular job. He contended that young people needed the historical perspective that would enable them to rise above local, sectional, or partisan points of view; the knowledge of science that would free them from superstition and error; and engagement in literature and art to enable them to understand human mo-

tives and conduct. To denigrate liberal education as a leisure activity for the few, as so many educators did, Bagley said, "is a sin against the children of the land, and it is a crime against posterity." Bagley claimed that the American people were dedicated to "the theory that talent is distributed fairly evenly among the masses and that it is the special prerogative of no especial class or group. . . . We mean to keep open the door of opportunity at every level of the educational ladder. It is a costly process, but so are most other things that are precious and worth while."

At the next annual meeting of the National Education Association in 1915, attended by more than three thousand educators, Bagley criticized the next progressive reform: the junior high school. The U.S. commissioner of education, Philander P. Claxton, maintained that the typical eight-year course should be reduced to six years, after which children as young as twelve could begin vocational and industrial training. When the leaders of the National Education Association endorsed a resolution in support of the junior high school, knowing that its purpose was to sort children into academic and vocational tracks, Bagley dissented: "Hitherto in our national life we have proceeded on the assumption that no one has the omniscience to pick out the future hewers of wood and drawers of water—at least not when the candidates for these tasks are to be selected at the tender age of twelve."

One positive result of Bagley's debate with Snedden was that he caught the attention of Dean James Russell of Teachers College, Columbia University, the nation's leading school of education. Russell reportedly said that Bagley should be representing Teachers College in such debates instead of fighting on the outside. In 1918, Bagley joined the faculty of Teachers College as head of the Department of Teacher Education. Having abandoned his earlier belief in the possibility of a science of education, Bagley was convinced that education is an art, dependent on an adequate supply of skillful, well-educated teachers. Most of the profession, however, endorsed the scientific movement in education, whose chief feature was mental testing.

World War I offered the mental testers a remarkable field for experimenting. Invited to help classify some 1.7 million recruits, leading psychologists developed group intelligence tests (IQ tests) to determine whether men were fit to be officers or infantry, or rejected. Prominent academic psychologists, including Robert Yerkes of Harvard, Carl Brigham of Princeton, Lewis Terman of Stanford, and Edward Thorndike of Teachers College, developed the army tests. The psychologists asserted that their instruments measured innate intelligence, which they proclaimed was fixed and unchanging. After the war, Yerkes and Brigham reported that the average mental age of Americans was only about thirteen or fourteen and that the continued influx of non-Nordic groups from Europe threatened the nation's future because of their low IQs. Their claims provided fodder in the 1920s for nativists, racists, and eugenicists, as well as for efforts to restrict immigration from southern and eastern Europe.

Only two men responded forcefully to the intelligence testers. One was Walter Lippmann, whose blistering attacks

Bagley's continuing insistence that all children should have access to a liberal education, regardless of their IQ, branded him as a reactionary, hopelessly behind the times.

appeared in the *New Republic*. The other was William Chandler Bagley. The overwhelming majority of educators endorsed intelligence tests, but Bagley warned that they posed grave "educational and social dangers." He rejected the testers' assumption that intelligence is innate and unchanging; whatever they measured, he asserted, could well be the result of environment and education. He predicted that IQ tests would be used to slam the doors of educational opportunity on large numbers of children.

Bagley feared that the IQ test, cloaked in the neutral but impressive language of science, would be an instrument of social stratification, threatening democracy itself. He insisted that the army test results actually proved the importance of environment and educational opportunity. He pointed out, for example, that many northern blacks scored higher than many southern whites and that the scores of immigrants increased in relation to their length of residency in this country.

Bagley summarized his charges against the testers and the misuse of IQ tests in *Determinism in Education* (1925). He argued that the role of schools in a democracy is not to sort students for their future careers but to improve the intelligence of everyone who comes to be educated. He wrote:

I make no absurd claim that if I teach a common man the principle of gravitation, let us say, I am making the common man equal to Newton. . . . I do maintain that I have enabled this common man to participate in a very real measure in the experiences of one of the most gifted men of all time; I maintain that I have given him one control over his environment equal in a substantial way to that which this gifted man himself pos-

sessed; and I maintain that *in respect of this possession* I have made this common man the equal of all others who possess it. There are undoubtedly some men who could never grasp the principle in question, but I should wish to refine my teaching processes far more . . . before reaching any fatalistic conclusions as to where the line is to be drawn.

As in his earlier critique of vocational education, Bagley insisted that education is powerful and that virtually everyone could become better informed and more intelligent if education aimed to make them so. His complaint against the tests was not that they were invalid but that they would be used to restrict educational opportunity to those who needed it most.

Bagley was again out of step with the field, and his arguments were ignored. Intelligence testing spread rapidly among the nation's schools and was accepted as a reliable instrument to sort children into different curricular tracks, affording different educational opportunities.

Because of his defense of liberal education in 1914 and his attack on intelligence testing in the 1920s, Bagley got a reputation among his fellow educationists as a conservative who was opposed to progressive education and hostile to modern, scientific education. His continuing insistence that all children should have access to a liberal education, regardless of their IQ, branded him as a reactionary, hopelessly behind the times.

In the 1930s, when progressive educators like Harold Rugg and William Kilpatrick—Bagley's colleagues at Teachers College—led a national movement to promote classroom methods based on children's interests instead of subject matter, Bagley was their leading critic. Kilpatrick believed that curriculum should not be set out in advance and that children were best motivated if they learned through activities that interested them; his idea, christened the "activity movement," was the hottest idea in education in the 1930s. Rugg's 1928 book, *The Child-Centered School* (co-authored with Ann Shumaker), described schools using Kilpatrick's methods as makers of an "Educational Revolution" that would free American society from Puritanism and authoritarianism.

In his last major book, *Education and Emergent Man* (1934), Bagley took issue with the central doctrines of progressive education, especially its claim that the only knowledge of value was instrumental and useful. Bagley contended that although knowledge for immediate use is important, so is knowledge for understanding and interpretation. Only a fraction of what one needs to know, he maintained, can be learned by participating in activities and solving problems; a broadly educated person also needs a large fund of background knowledge drawn from the systematic and sequential study of history, geography, science, mathematics, literature, and the arts. He did not reject the progressives' preference for activities, but he did reject their contempt for organized subject matter.

Bagley insisted on a necessary balance between interest and effort. Not everything in the classroom, he argued, should be fun and interesting; such an appeal taught students to respond only to pleasure and self-gratification in-

(Continued on page 53)

The Education of Laura Bridgman

And the Epistemological Debates of the 19th Century

A month past her second birthday, Laura Bridgman was stricken with scarlet fever. The fever killed her two older sisters and left Laura blind and deaf, and "almost completely obliterated" her sense of taste and smell. In a fascinating and deftly written new book, Ernest Freeberg weaves together several stories: of Laura herself, of course; of Samuel Gridley Howe, the director of the Perkins Institute for the Blind in Massachusetts, who eagerly took up Laura's case both because he was a dedicated educator and because it allowed him to test his ideas about human nature and cognition; of the lively philosophical debates of antebellum American culture; of the early attempts at empirical psychological research; and of 19th century attitudes toward the disabled.

Although the story of Laura Bridgman was soon eclipsed by that of Helen Keller, Laura was the first deaf and blind person ever to learn to communicate through language. Indeed, as Freeberg reports, "Keller's parents first realized that their own daughter could be taught when they read an account of Laura's education." As we look in on Laura's journey, she has just arrived at the Perkins Institute. She is not quite eight years old. To follow the unfolding events of Laura's development and of the outcome of Samuel Howe's famous "experiment," you will just have to visit your local library or bookstore this summer, and then settle in for a compelling read.

—EDITOR

By Ernest Freeberg

Laura's parents delivered her to the Perkins Institution on October 12, 1837. Confused and frightened, the young girl burst into "bitterest tears" when they left her. She soon recovered, however, and within a week began to develop strong attachments to the house matron and to Miss Drew, the instructor who had been assigned by Howe to work closely with Perkins' first deaf-blind pupil. She spent her first days engrossed in her knitting and showed obvious signs of pleasure when the women praised her work by giving her a caress on the cheek.¹

The maternal bond of trust between Laura and her female instructor was balanced by Howe's role as the child's new father figure. During Laura's first weeks at the institution, Howe established his paternal authority by attempting to lead her around the room by the hand. When she resisted, he held her hand firmly, forcing her compliance. She soon submitted, and three weeks after her arrival a visitor to the school noted that she was "very much under the command of the Doctor." If Laura ever felt compelled to submit to Howe's superior strength, those feelings were soon superseded by intense affection toward him, and Howe never had to rely on force again. Once this bond of trust and affection was established and the child grew more comfortable in her new surroundings, he felt ready to begin his experiment to reach her intellect.²

Today, growing up as we do hearing the story of the marvelous accomplishments of Helen Keller, we may take for granted the inevitable success of Howe's experiment. It requires an effort of historical imagination to recognize that, as he sat down with the eight-year-old to begin her first lessons, his faith that there was a mind "in there," capable of learning, was an unproven intuition, one running counter to a century of failed efforts to reach other deaf-blind children. Many years later Howe's wife, the writer and suffragist Julia Ward Howe, would capture the excitement of that moment: "The personage within was unknown to him and to all, save in her outer aspect. What were her characteristics? What her tendencies? If he should ever come to speech with her, would she prove fully and normally human? Would her spirit be amenable to the laws which govern our thoughts and conduct for mankind in general?"³ For searching out the

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Laura quickly became the star pupil of Samuel Gridley Howe.

answers to these questions, Howe earned a reputation among his contemporaries as the “Columbus” of the mind.⁴

Unlike Columbus, Howe was not venturing into entirely uncharted waters. Although his educational techniques were untested, his understanding of the human mind was guided along the well-worn tracks of Anglo-American moral philosophy. Like most educated Americans of his day, Howe’s notions about human psychology were drawn from the writings of the widely influential thinkers of the Scottish Enlightenment, particularly Thomas Reid and his disciple Dugald Stewart. Howe had encountered these “common sense” philosophers in his undergraduate courses in moral philosophy at the orthodox Brown University, as well as in sermons preached from Unitarian pulpits in Boston.⁵

Following in the philosophical tradition of Descartes, these Scottish philosophers were dualists, insisting that the mind is distinct from, and superior to, the body. Their strong defense of the existence of a nonmaterial human mind is one reason why their writings were so popular with American religious leaders, serving as a cornerstone of American theology and moral philosophy well into the nineteenth century. The historian Daniel Walker Howe has suggested that Boston’s Liberal Christians found the mind-body dualism of the Scottish philosophers particularly compatible with their Christian theology. In their view, the philosophers’ concept of an immaterial “mind,” distinct from the body, was just another way of talking about what Christians had always called the eternal “soul.”⁶

Along with dualism, the Scots were strong believers in faculty psychology, the view that the mind is composed of various “faculties.” In the common sense tradition, this mind (or soul) was not a passive and ethereal abstraction but an active agent, possessed of certain “powers” of intuition and reason that allow us to clearly and directly perceive the world around us. This idea that the mind is a collection of

distinct “faculties,” each attuned to a corresponding part of the external world, was first developed by the Greeks and had been commonplace since the Middle Ages. But Scots like Thomas Reid offered a particularly strong defense of the mind’s innate “faculties, dispositions, and powers,” in response to the epistemological skepticism of David Hume.

Though Howe cared little about the philosophical controversy that had produced the common sense philosophy, he accepted Reid’s conclusion that the mind is endowed with a range of distinct faculties.⁷ Pained by philosophical complexities, Howe was particularly attracted to a simple and practical variation of faculty psychology, the “new philosophy” of phrenology. According to phrenologists, the common sense philosophers had correctly identified many of the faculties of the mind but had failed to ground their psychological theory in empirical observation. Phrenologists dismissed the philosophers’ concept of “mind” as only an intellectual abstraction, found between the covers of weighty tomes and prone to the abuse of unfounded metaphysical speculation. Fashioning themselves to be scientists and practical reformers rather than philosophers of the mind, the phrenologists argued that a truly scientific and useful psychology had to be grounded in the observable, verifiable material world. Accordingly, they claimed that the careful examination of hundreds of human skulls and brains had revealed that each of the various faculties of the mind has a *physical* existence, embodied in one of the dozens of separate “organs” of the brain, and usually reflected in the various “bumps” on each individual’s skull.⁸

One of the founders of phrenology, Dr. Joseph Spurzheim, arrived in Boston in 1832, the same year that Howe began his career as an educator of the blind. As a young and relatively inexperienced physician cast suddenly in the role as Boston’s “expert” on the education of the blind, Howe was no doubt searching earnestly for some firm intellectual foundation. His undergraduate education at Brown had been largely wasted, he later confessed, in the pursuit of

Howe required his students to take part in a rigorous daily exercise regimen.



youthful pranks. Growing more serious while taking his medical training at Harvard, he found that he had particular talents as a dissector and anatomist. Thus, given his interest in anatomy and his own temperament, long on action and short on systematic reflection, Howe was understandably attracted to this new science, with its self-proclaimed virtues of simplicity and practical utility, all grounded in the science of dissection.⁹

Howe maintained his allegiance to phrenology long after most of his peers abandoned the cause, distancing themselves as the science degenerated into carnival sideshow quackery. Yet in the 1830s, his fascination with “craniology” cannot simply be attributed to his peculiar training or his intellectual naiveté. In these years, his interest in the new science put him in the company of some of the most respected medical minds of Boston, including many of his former professors at Harvard’s medical school. Howe was not the only one who was attracted to the prospect of replacing the wrangling of the philosophers with an outline of the mind that was “clear, simple [and] natural.”¹⁰

Thus, as Howe contemplated the prospect of educating Laura Bridgman, he consulted the phrenologists’ charts of the brain. There his attention was drawn to one particular “organ,” the “intellectual faculty” of “Language.” This organ, according to Howe’s favorite manual on the new science, “gives a facility in acquiring a knowledge of arbitrary signs to express thoughts—a facility in the use of them—and a power of inventing them.” In short, Howe’s general education in Scottish mental philosophy supported what his more recent explorations in phrenology confirmed with more precision: that Laura Bridgman’s brain contained an innate ability to understand and create language. Guided by this premise, Howe reasoned that this power of the mind lay dormant, but unimpaired, inside the child’s damaged body.¹¹

Of course, Laura had already shown a desire to communicate and had even developed some of her own sign language. In Hanover, Howe had seen her family speak to her through a series of gestures—a pat on the head signaled approval, rubbing her hand meant the opposite, and pushing and pulling were used to tell her which direction to move. Laura had also invented her own signs: fingers held to her face referred to a man with a beard; a hand revolved in the air meant the spinning wheel. Howe recognized that, if left on her own, she would probably continue to develop this non-verbal language, learning to communicate many of her basic needs. But he decided that in the long run this language of gestures would be too limiting, putting blinders on her intellect, shutting her off from the knowledge of more complex, subtle, and sublime human emotions and ideas, locking her in a state of permanent mental and moral childhood.¹²

Howe was determined, instead, to bring Laura into the conversation of human society as an equal, and to prove to the world that, within a damaged body, her mind was intact and fully human. To do that, he felt that he must teach her the use of an arbitrary language, in this case English, founded on an alphabet. She needed, he explained, “a knowledge of letters, by the combination of which she

might express her idea of the existence, and the mode and condition of existence, of anything.”¹³

The plight of Julia Brace at the Hartford Asylum seemed to prove his point. Her education had failed, Howe believed, because her instructors had allowed her to rely on a “natural language” of simple gestures, rather than the abstract and man-made language of the alphabet. Howe expected that, without this help, Laura would also rely on a primitive language of simple signs, as automatically as water flows downhill by the easiest course. His goal, then, was to guide the stream of Laura’s communication into the man-made channel of an arbitrary alphabet.¹⁴

This distinction between the “natural” language of gesture and the artificial language of the alphabet was not original with Howe but was another theme developed by Scotland’s common sense philosophers. In his *Inquiry into the Human Mind*, Thomas Reid devoted considerable attention to the language of pantomime, arguing that this form of communication proved the existence of an innate linguistic faculty in man. Those gestures—the pat on the back for approval, the frown to suggest displeasure, the knitted brow of anger—come instinctively to all human beings, in all cultures. Even the youngest infant, the uncivilized tribesman, and the linguistically isolated deaf person automatically understand the meaning of a smile or a frown or tears. Reid suggested that this natural language of posture and facial expression was the alphabet of humanity’s first language, providing the common ground necessary for the subsequent invention of the arbitrary language of words.¹⁵

Reid believed that this evolution from natural gestures to artificial words came with a price. Our original language of gestures, he argued, was peculiarly well suited to expressing the inner world of emotions. When societies developed artificial languages, their instinctive vocabulary of physical gestures atrophied. By his own time, Reid believed, only orators and stage actors could still speak the true language of the emotions. While such an evolution drew human society farther away from the language of its feelings, the transition was a necessary step in the fuller realization of human intellect. “As ideas multiply,” Reid’s disciple Dugald Stewart explained, “the imperfections of natural language are felt and men find it necessary to invent artificial signs, of which the meaning is fixed by mutual agreement.”¹⁶

Echoing Reid and Stewart, Howe summarized the distinction between natural and arbitrary language by comparing the former to a “man in his wild state, simple, active, strong, and wielding a club.” The spoken language of an arbitrary alphabet, by comparison, was “subtle, flexible, minute, precise [and] is a thousand times more efficient and perfect instrument for thought; it is like civilized man, adroit, accomplished, well-trained, and armed with a rapier.”¹⁷

Howe reasoned that Laura could only develop this facility for language if her one remaining sense of touch could be developed to the point where she could use it to read a manual version of the alphabet. Howe’s plan was anticipated by the French philosopher Denis Diderot almost a century earlier. The sense of sight uses a written alphabet, Diderot ex-

plained, and hearing relies on symbolic sounds. But he saw no reason why the sense of touch might not develop its own medium of symbolic language. "For lack of this language," he speculated in his *Letter on the Blind*, "there is no communication between us and those born deaf, blind, and mute. They grow, but they remain in a condition of mental imbecility. Perhaps they would have ideas, if we were to communicate with them in a definite and uniform manner from their infancy; for instance, if we were to trace on their hands the same letters we trace on paper, and associated always the same meaning with them. Is not this language...as good as another?"¹⁸

Diderot's conjecture about the possibility of a manual alphabet was confirmed by a later generation of French educators who worked with the deaf. Until the Abbé de l'Épée began his pioneering work with the deaf in the late eighteenth century, most philosophers who speculated on the subject believed that thought, even the written word, was impossible without sound; signs of intelligence in deaf persons were often greeted as little short of miraculous. But the Abbé's success in teaching a manual alphabet to the deaf proved that the sense of hearing is not an essential component of thought. The manual alphabet cut language loose from its presumed moorings in the voice and the ear.¹⁹

The Abbé pushed even further. If hearing could be dispensed with, he reasoned, why not sight as well? Anticipating Howe by a half-century, he published speculations on a possible method of instruction for the deaf and blind, a problem more hypothetical than real to him since he did not know of any person so afflicted. Sicard, the Abbé's successor at the Parisian school for the deaf, went on to prove that even the blunt sense of touch could become refined enough to serve as the medium of thought. In fact, he had actually used such a language, conversing with one of his students in the pitch darkness of midnight by impressing the signs of the manual alphabet into the outstretched hand of his companion.

Thus, as Howe began his unprecedented experiment with Laura Bridgman, he was guided by the theories of Scottish philosophers and phrenologists, whose map of the brain showed him that the child's mind was endowed with a linguistic "faculty," a capacity to learn and use an arbitrary language. Their theories assured him that, if he could find a way to speak to her through the lone sense of touch, she would eagerly meet him half-way. French educators provided Howe with that language, the manual alphabet of the deaf. Howe's work as a pioneer in the education of the deaf and blind must be understood in the context of these European precedents. Presented with a rare opportunity to help a young deaf-blind student, Howe turned Old World theory into New World practice.

Howe began Laura's education by trying to teach her to associate simple objects with their names, imprinted in raised letters. He attached embossed paper labels on a few simple objects—a knife, a pin, a pen, and others. Laura was first presented with the label itself, detached from its corresponding object. She was then made to

feel the object, on which Howe had attached an identical label. To express the idea that the embossed letters "p-i-n" were somehow identical with the pin she held in her hand, Howe resorted to one of Laura's own signs for likeness—he held his two forefingers together, suggesting identity. According to Miss Drew, Howe's assistant in these lessons, Laura "readily perceived the similarity of the two words." And, rewarded by pats on the head for correct answers, "the natural sign of approbation," the student learned within a few days to match the labels to their appropriate objects. The teachers knew they had succeeded in this first crucial step of Laura's education when they saw that "a light of intelligence lighted her hitherto puzzled countenance." However, Howe recognized that, though his pupil was evidently bright and eager to learn, she had not yet grasped the mysterious power of language. She matched words and objects not in order to communicate but merely as an intellectual exercise of "imitation and memory."²⁰

Once she had this first inkling about "words as a whole," Howe then tried to teach her to create words herself. He broke the paper labels up into their component letters. Laura soon learned to arrange these slips of paper in their proper order, recreating the label and matching it to its object. At first she spelled out these words in a "mechanical" fashion. Howe compared her skills at that point to those of "a very knowing dog" who was eager to perform tricks only in order to win approval, the reward of loving pats on the head. Howe reached for a sign that she was beginning to truly appreciate the communicative power of those patterns at her fingertips, and it came at last, after several months of patient, methodical instruction.

The truth began to flash upon her, her intellect began to work, she perceived that here was a way by which she could herself make up a sign of anything that was in her own mind, and show it to another mind, and at once her countenance lighted up with human expressions; it was no longer a dog or parrot,—it was an immortal spirit, eagerly seizing upon a new link of union with other spirits! I could almost fix upon the moment when this truth dawned upon her mind, and spread its light to her countenance. I saw that the great obstacle was overcome.²¹

Howe's 1841 account of Laura Bridgman's linguistic breakthrough—described as a lightning-like burst of spiritual insight—bears remarkable resemblance to the better known story of the great turning point in Helen Keller's education. Howe suggested that, in spite of months of preparation, the obstacle was overcome "at once." The wide threshold, he suggested, between the "knowing dog" and the human spirit was crossed almost instantaneously. Her sudden understanding of the value of language seemed to induce a new birth within her, the creation of an "immortal spirit" right before Howe's eyes.

In her autobiography, Helen Keller described a similar rapid transformation, in the often-told story of her trip to the well. Understanding for the first time that the letters "w-a-t-e-r" spelled into her hand corresponded to the cool water that flowed over her hand, she suddenly realized that all objects have names, and that the manual alphabet was her key to expressing them to others. Keller later described that moment as "in the nature of a revelation."



Laura was an eager reader, despite the discomfort caused by the large size of books with raised letters.

There was a strange stir within me,—a misty consciousness, a sense of something remembered. It was as if I had come back to life after being dead...I understood it was possible for me to communicate with other people by these signs. Thoughts that ran forward and backward came to me quickly,—thoughts that seemed to start in my brain and spread all over me...Delicious sensations rippled through me, and sweet strange things that were locked up in my heart began to sing.

These two accounts of a miraculous and immediate transformation of the soul, of a spiritual birth through language, are remarkably similar. Yet they also share the fact that they were written years *after* the events actually occurred. Setting aside consideration of Helen Keller's experience, it is important to notice that Howe's version of Laura Bridgman's linguistic apotheosis was first published in his annual report of 1841, at least three years after the events he describes. All of his accounts prior to this time failed to mention this singular and powerful moment of intellectual and spiritual birth, and instead described a much more subtle and painstaking process of gradual enlightenment.²²

Howe's 1841 report of a great spiritual apotheosis exaggerated the contrast between the pre- and postlinguistic child. While Laura's introduction to arbitrary language was undoubtedly of profound importance to her subsequent intellectual development, she arrived at Perkins with an intellectual curiosity that could hardly be described, as Howe had done, as "mechanical" or animal-like. Howe himself noted, in his first report on her in 1838, that she was extremely curious about her surroundings, "constantly active," evidently "intelligent," able to express affection, take part in imaginative play, and mind her manners while at the table.²³

Howe's later account also ignored his previous testimony about the child's slow and painstaking introduction to language. In his 1838 report, he announced that his pupil had succeeded in learning the nature of words and could use letters to express the names of "substances." In this first published version of the story, Howe found her accomplishment "gratifying," but did not suggest, as he did later, that "the great obstacle was overcome." Rather, he remained cautiously optimistic that her grasp of language could be advanced through the "slow and tedious" process of education.²⁴

The only other eyewitness observer of Laura Bridgman's introduction to language was Miss L. H. Drew, her daily instructor during this period. In an account also written much later, Drew made no mention of any single moment of apotheosis, noting only that "whenever she overcame a difficulty, a peculiarly sweet expression lighted up her face, and we perceived that it grew daily more intelligent."²⁵

In short, some of the contours of Howe's account of Laura's education seem to have taken shape over the course of his first few years with her. His role as a disinterested observer and reporter of an important psychological experiment may well have been eclipsed by his inclinations as a journalist and a publicist to adorn a tale that might better capture the sympathy and imagination of his growing reading public.

While the story of Laura Bridgman's first breakthrough into the world of language may have developed over the course of her first few years at Perkins, Howe moved much more quickly to assert the important philosophical conclusions to be drawn from his successful experiment. In his first public reports on her progress, he confidently announced that Laura Bridgman was not, as might be supposed, "but a blank." He had broken through her damaged body to discover a soul, "active, and struggling continually not only to put itself in communication with things without, but to manifest what is going on within itself."²⁶

In this report, given four months after her arrival at Perkins, Howe believed that he was already beginning to discern the basic outline of that spirit that was "shut up in a dark and silent cell." He marveled at her playfulness and affection for her teachers and classmates, and he took a parent's pride in her physical skills, her ability to sew and knit and dress herself "with quickness and precision"—all skills she had learned prior to coming to Perkins. But most importantly, he rejoiced at what he called her "mental phenomena."

She has a quick sense of propriety; a sense of property; a love of approbation; a desire to appear neatly and smoothly dressed, and to make others notice that she is so; a strong tendency to imitation, insomuch that she will sit and hold a book steadily before her face in imitation of persons reading... The different states of her mind are clearly marked upon her countenance, which varies with hope and fear, pleasure and pain, self-approbation and regret; and which, when she is trying to study out anything, assumes an expression of intense attention and thought.²⁷

At this early stage, Howe felt that he could not say conclusively that his young pupil had a clear sense of right and wrong, apart from the love of approval that she so eagerly sought. But he was convinced that her mind, her conscience, her soul showed all signs of being in healthy working order, unimpaired by her physical infirmity. The mind, Laura's case already seemed to prove, was not only at least partially independent of the body but showed every sign of being able to overcome the most horrendous physical barriers imaginable. "The immortal spirit within her," Howe wrote in the first month of his experiment to a supporter in Maine, "although in darkness & stillness like that of a tomb, is full of life & vigor, is animated by innate power & triumphantly refutes the doctrine that the soul is but a blank sheet upon which education & experience write everything."²⁸

By insisting that Laura's mind was not a "blank sheet" but was driven by an "innate power" to communicate, Howe was entering the child as a crucial piece of evidence in one of the most important scientific and theological debates of his time. For more than a century, the role that the senses play in determining human nature and creating human knowledge had been *the* crucial debate in philosophical circles, the sticking point that had divided the various competing branches of Enlightenment thinking about the human mind.

Locke had established the starting point of that debate,

with his efforts to place the study of the human mind on the same scientific footing that Newton had placed the study of the heavens. The view held by Descartes and his fellow rationalists that humans are born with certain innate ideas that the Creator plants, fully formed, into the human mind was, for Locke, an unfounded superstition, a remnant of the discredited vagaries of medieval scholasticism and mystical neo-Platonism. Searching instead for the observable mechanisms of mental activity, Locke posited that the mind contains no innate ideas but develops them from the sensory input of the external world and from self-reflection on its own activity. Prior to receiving these sensory impressions, the child is born, in Locke's famous phrase, into a state of *tabula rasa*.

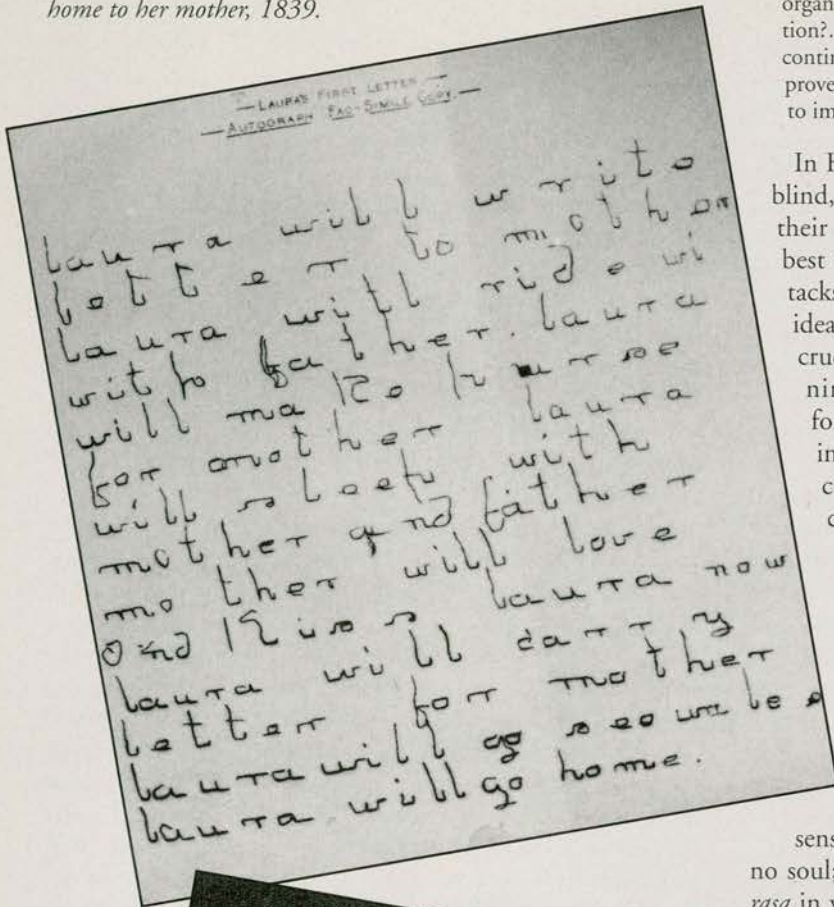
Down to Howe's own time, American intellectuals revered Locke's accomplishment, and college students dutifully worked their way through his *Essay Concerning Human Understanding*. But some also worried that a group of Locke's disciples, particularly among the French, had mistaken him to mean that the "mind is the result of sensation." The mind, these French materialists argued, is born passive and inert and is shaped entirely by its external environment. Today, Locke scholars point out that this has been a common misreading of the philosopher's famous metaphor of *tabula rasa* and show that Locke actually credited the mind with a more active role in converting sensory input into knowledge through certain innate reasoning "faculties." But in Howe's time the materialistic implications of Locke's sensationalist psychology were made dangerously clear by some of the radical thinkers of the French Enlightenment. Condillac, for example, felt that he was only carrying Locke's psychology to its logical conclusion when he tried to prove that the mind contains no innate faculties and that thought is therefore purely the product of physical sensation. Explaining all mental phenomena as byproducts of the senses, the materialists seemed prepared to dismiss the immaterial mind and the immortal soul as unscientific superstitions.²⁹

In Howe's time, this philosophical radicalism was not easily dismissed as another Old World madness, safely contained on the far side of the Atlantic. In the 1830s, the fruits of French materialism were ripening in the midst of pious New England. Two years before Howe met Laura Bridgman, he set down his own fears about the rise of an "infidel party" in Massachusetts in a two-part article called "Atheism in New England," published in his own *New England Magazine*. Howe warned his readers that the freethinkers of his day enjoyed growing congregations who gathered each week to hear their "ministers" ridicule Christianity, foment envy and class hatred among the poor, undermine the institution of marriage, and promote "degrading profligacy."³⁰

At the bottom of all these threats to "the foundations of the social-fabric" lay the theory of materialism, what Howe called "the doctrines of the French infidels." In an effort to make this perfectly clear, Howe quoted verses from the infidels' "Bible of Reason":

The soul is [only the] principle of sensibility. To think, to suffer, to enjoy—is to feel. When the body, therefore, ceases to live, it cannot exercise sensibility. Where there are no senses,

Below: Laura's first letter home to her mother, 1839.

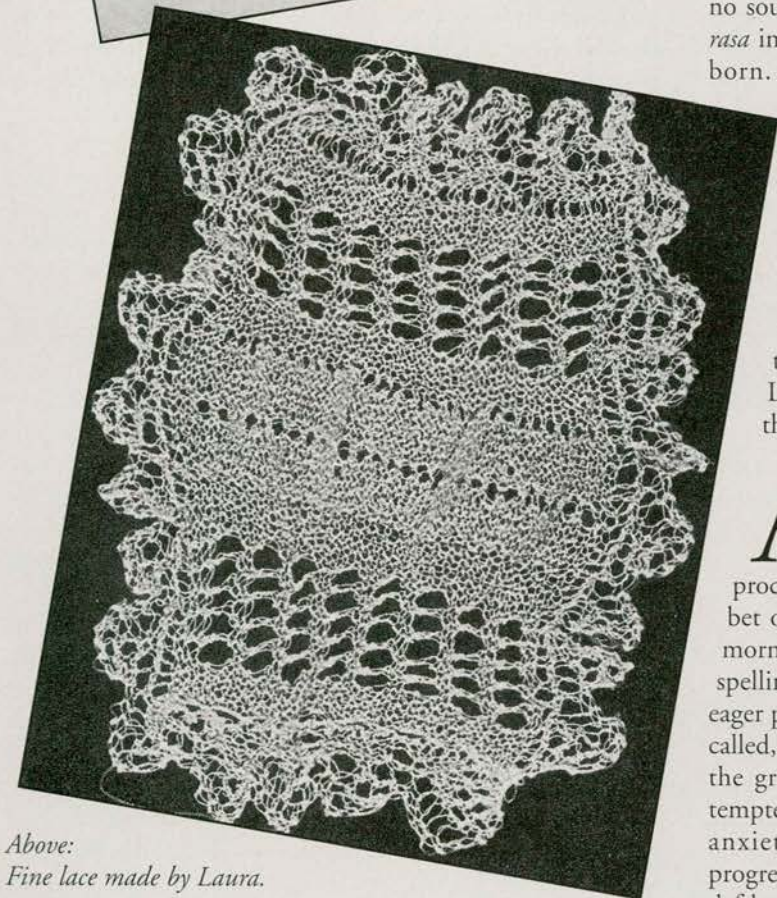


there can be no ideas. The soul only perceives by means of the organs; how then is it possible for it to feel after their dissolution?... That the effect, called mind, ceaseth, and is entirely discontinued, is manifest; because, it hath a beginning, and is proved to be nothing without the body; how great a folly it is to imagine what is mortal can be immortal!

In Howe's opinion, New Englanders had "too long been blind, and deaf, and dumb" to this threat of materialism in their midst.³¹ He disagreed with those who felt that the best way to contain infidelity was to ignore it, that attacks only stirred up public interest in the freethinkers' ideas. In his opinion, American society was arriving at a crucial juncture, a time when education was "just beginning to be general" and the impressionable, "half-formed minds" of the American people were ripe for influence, either for good or ill. "It is light and purification that the public mind requires," Howe proclaimed.³²

And so when he succeeded in teaching Laura Bridgman language, Howe seized the chance to instruct his fellow citizens, while dealing a scientific deathblow to the impious doctrines of materialism. If the materialists' ideas about the human mind were correct, Howe reasoned, a person in Laura Bridgman's predicament would be incapable of thinking, since she lacked most of the sensory input essential to the formation of ideas. In a sense, a deaf and blind person would have no mind and no soul; she would be trapped in the vacant state of *tabula rasa* in which Locke had supposedly suggested all babies are born. Howe liked to point out that this bleak view of human nature had even insinuated its way into English common law. Blackstone had classed the blind-deaf as "in the same state as an idiot; he being supposed incapable of any understanding, as wanting all those senses which furnish the human mind with ideas." Now that he had shown that Laura could learn and communicate, Howe believed that no person could take seriously the radicals' claim that "the soul is merely the result of sensation." As Laura reached out to the world around her, Howe thrilled to witness the triumph of mind over matter.³³

At first, Laura read and spelled out words on a set of raised-letter metal types that Howe had specially made for her. This slow and cumbersome process was soon abandoned in favor of the manual alphabet of the deaf. Laura's instructor, Miss Drew, began each morning's lesson by introducing the child to a new object, spelling out its name in finger letters pressed into Laura's eager palm. "She placed her right hand over mine," Drew recalled, "so she could feel every change of position, and with the greatest anxiety watched for each letter; then she attempted to spell it herself; and as she mastered the word, her anxiety changed to delight." Laura made remarkable progress with this finger language, using it "so fast and so deftly, that only those accustomed to this language can follow with the eye, the rapid motions of her fingers." Within a year, Laura was also learning to write, her pencil guided by a



Above:
Fine lace made by Laura.

grooved pasteboard placed underneath her paper. Before long she was conducting a simple but voluminous correspondence with her family, and recording her daily lessons in a journal.³⁴

As Laura's grasp of language continually improved, Howe grew more confident that his protégé had dealt a knockout blow to the doctrine of materialism. He wrote to the English writer Harriet Martineau that "her whole nature seems changed & the now triumphant mind begins to speak out in her countenance with a natural eloquence surprising to those who remember her former situation."³⁵

Howe drew his philosophical conclusion emphatically in his 1838 report.³⁶ In the sentimental prose style that Howe used to appeal to the deepest sympathies of his readers, he painted the scene of a chance meeting in the institution's hallway between Laura and one of her classmates. He described "an intertwining of arms—a grasping of hands—and a swift telegraphing upon the tiny fingers (which communicated) exchanges of joy and sorrow...kissings and partings." Moving to the moral, he concluded that such a scene was "a better refutation of the doctrine, that mind is the result of sensation, than folios of learned argument. If those philosophers who consider man as only the most perfect animal, and attribute his superiority to his senses, be correct, then a dog or a monkey should have mental power quadruple that of poor Laura Bridgman."³⁷

Howe was fully prepared to give the senses their due. The "French philosophers," he conceded, were correct in asserting that "all ideas of sensible objects are derived immediately or remotely from impressions made upon the senses." In other words, our knowledge of the material world must come from our experience of it, through the senses. Thus, for example, a deaf and blind person could never learn anything about the true nature of color or sound. Where the empiricists had erred, Howe claimed, was in their attempt to overapply this "doctrine of sensation," claiming that *moral* and *spiritual* knowledge were also produced by sensory experience. "All the higher and nobler attributes of the soul, all that part of man which is truly in the likeness of God, is independent of sensation," Howe concluded. "The hope of immortality, the love of goodness, the veneration of justice, the desire of sympathy, the yearning for affection, are all independent of external sensations." Though such claims carried Howe far beyond the evidence provided by his experiment thus far, he was confident that Laura would reveal all of these symptoms of the soul in due course.³⁸

If popular press accounts of Laura's breakthrough into language may be taken as a measure of general public reaction, Howe's audience was eager to accept his claim that the child's story proved the existence of an immaterial soul. Countless writers echoed Howe's argument that Laura's education was a profound tribute to the human spirit's power to overcome physical barriers. However, very few writers for the popular press took a serious interest in the more intricate philosophical details of Howe's battle against the philosophy of materialism or his hasty attempt to enter Laura's story as evidence in the philosophers' ongoing epistemological debate. Popular Christian belief at the time led most people to accept dualism, a clear distinction between body and soul, as

a matter of course, untroubled by the arcane epistemologies of European radicalism.

But the intellectual community took Dr. Howe's contribution to the mind/body problem quite seriously and praised his vindication of "this imperial mind of ours." Dr. John Kitto, author of a widely read book on the senses, called the moment of Laura Bridgman's linguistic breakthrough proof that "wherever there *is* mind, there is no imprisonment from which it cannot be freed." Kitto praised Howe's work as a "great discovery in the history of man" and urged that the specific moment of the child's linguistic breakthrough should be carefully recorded for posterity. One of Howe's professors at Harvard's medical school, visiting Perkins less than a month after Laura's education began, wrote that the child's "power of ratiocination" was sufficient evidence "to convince the greatest skeptic of the existence of the soul."³⁹

The most thoughtful endorsement of Howe's attack on materialism came from the *Christian Examiner*, the leading journal of Boston's Unitarians. Mrs. L. Minot explained to her readers that there were "two grand divisions of metaphysical systems," one which attributed knowledge to the senses and the other which held that the intellect, the human mind, is an essential and active agent in the formation of ideas. Like Howe, Minot freely acknowledged that the input of the senses was necessary to the formation of most human knowledge about the world. But she claimed that the materialists, those prodigal heirs of Locke who had so troubled Howe, were guilty of exaggerating the importance of the senses, downplaying or dismissing altogether the crucial, even "godlike" role that the mind must play. Already anticipating Kant's influence on America's emerging Romantic movement, Minot greeted Howe's experiment as part of a broader intellectual revolution against materialism. "The senses, which in philosophy have long been lord of the ascendant, and claimed to be the source of all the godlike thoughts of the soul, are now hiding their diminished heads. The ideal is regaining its rightful domain, and restricting them more and more to the mere threshold of the soul's temple."⁴⁰

As important as Howe's experiment was for the vindication of the intellect and the ideal, Minot was more impressed by the breakthrough he had made in applying the scientific method to the study of the human mind. Rationalists and empiricists, she explained, had been deadlocked for centuries in an armchair debate over the origin of human ideas in large part because they lacked the techniques for investigating the matter first-hand. Infants, Minot suggested, offer an ideal testing ground for resolving these questions about the workings of the human mind, yet this fertile field of scientific investigation was abandoned to mothers, their own minds hopelessly distracted by the "petty cares and duties" of child-rearing. Facts were needed, data gathered by "the closest attention of a cautious and philosophic observer."⁴¹

Howe's experiment, Minot suggested, represented an entirely new and scientific approach to ancient moral questions, the chance at last to gather "details such as the

philosopher has long sought in vain." Howe had found in Laura Bridgman an ideal specimen to study. Even infants learned at lightning speed, but Laura's mental processes were slowed by her handicaps. "The steps of her progress are laborious," Minot explained, "which enables a careful observer to note them accurately." She added that it was the scientific community's great fortune that fate had entrusted this case to Howe, a philosopher and "a man of candid and accurate habits of mind."⁴²

In spite of all the praise heaped upon Howe by his contemporaries for his scientific credentials and careful observation, the flaws in his famous "experiment" on the role the senses play in creating mind seem glaringly obvious to even a casual observer today. To refute the doctrine that "the mind is the result of sensation," Howe would necessarily have had to show that Laura Bridgman's mental life existed independent of *all* sensory input. After her illness, Laura enjoyed considerably less outside stimulation than the average person, but with her single sense of touch her mind was never devoid of a sensory connection with the world around her.

Perhaps sensitive to this flaw in his experiment, Howe often minimized the importance of the sense of touch, dismissing it as the least articulate and the crudest of senses. He portrayed the girl, prior to her education at Perkins, as little more than a cartesian corpuscle, bouncing in a cold and barren world made up only of space and matter. Even her own younger brothers and sisters, Howe wrote, "were but forms of matter which resisted her touch, but which differed not from the furniture, save in warmth and in the power of locomotion. And not even in these respects from the dog and the cat."⁴³

Yet Laura's sense of touch was undeniably an essential stimulus to her mind after her illness; and, judging from the affection she expressed to her family and the number of household duties she performed, the sense of touch conveyed a great deal more to her mind than Howe acknowledged. Without downplaying the severity of the child's plight or the value of Howe's humanitarian act, it seems clear that at no point during her illness and isolation did Laura ever resemble the child which he described as a "soul buried a thousand fathoms deep—so deep that no one could reach it or make a sign to it."⁴⁴

The most important challenge to Howe's claim that his experiment had proven that the mind operates independent of the senses comes from the fact that Laura Bridgman experienced the full range of sense experience for more than two years before her illness, and had even begun to develop her powers of language. Howe repeatedly probed his pupil for evidence that she remembered any of the impressions she received in those years, even resorting to experiments with hypnotism, then known as the new science of "animal magnetism." He concluded that, "to the best of my judgement, she has no recollection." Since she was unable to recall anything of the world of sights and sounds from her first two years of life, Howe concluded that the influence of these sensations had been completely erased from her brain, at least "for all practical purposes."⁴⁵

As years went by, his accounts of the child's earliest years

usually omitted mention of her early language skills, or even her experience of sight and sound. She had been deaf and blind, he began to write, "from her tender infancy." When some of his contemporaries expressed skepticism, suggesting that Laura's remarkable progress in learning language was due to "some remembrance of oral language," Howe could only accuse them of being "metaphysical hairsplitter[s]."⁴⁶

Today, with the benefit of a century and a half of empirical research, psychologists tell us that the sensory impressions gathered in the first two years of life are both indelible and enormously important to proper mental development. In fact, subsequent work with the deaf and blind has shown that those *born* into this state face nearly insurmountable barriers to mental development. Howe's breakthrough to Laura was a remarkable achievement of pedagogy, and a great act of human kindness, but in the end it could not resolve the ancient complexities of the role that the senses play in forming human knowledge.⁴⁷

The efforts Howe made to explain away these flaws in his experiment suggest that he was well aware of them. Yet, in all the scientific discussion of Howe's work during his lifetime, there was little explicit criticism of his methodology. Not until the next generation of more empirically sophisticated psychologists arose were the flaws in Howe's experiment made plain. In 1879, G. Stanley Hall, the last scientist to examine Laura Bridgman in person, concluded that she could remember nothing of her first two years. But he added, "Yet, when we reflect on the amazingly rapid self-education of infantile life through the senses and its fundamental nature, it is impossible to believe that its effect can ever be entirely obliterated." Hall conjectured that Bridgman's "insatiable curiosity" about a world she could neither see nor hear was one crucial remnant from her first two years.⁴⁸ Perhaps even more important, her relatively rapid understanding of the nature and use of language was no doubt a product of her early linguistic development.

One possible explanation for the widespread uncritical acceptance of Howe's method and conclusions is the fact that they accorded so well with the prevailing wisdom of his time. Laura Bridgman delighted the Anglo-American intellectual community because she seemed to prove what they had already believed. Defenders of the Christian faith welcomed what they took to be scientific evidence of an immaterial soul. Others in this era of democratic reform, individualism, and expansion embraced Howe's claim that Laura Bridgman proved that the human spirit, however humble, could conquer the most formidable physical obstacles. Steven Jay Gould, the historian of science, has suggested that scientific attempts to describe and measure the human mind have often been "virtually free from the constraints of fact." One reason, says Gould, is that the study of the mind is typically "invested with very little reliable information. When the ratio of data to social impact is so low, a history of scientific attitudes may be little more than an oblique record of social change."⁴⁹

According to Gould, the likelihood that an observer's bias will corrupt the objectivity of an experiment is increased not only by the social significance of the results but also by the scarcity of reliable scientific evidence. In this re-

gard, the obvious flaws in Howe's experiment reveal the primitive state of experimental psychology in the antebellum period. In the previous century, the thinkers of the Enlightenment had called for a new, scientific study of the human mind. Locke, as a pioneer in psychological speculation, founded his new science of the mind on the method of "introspection," the careful observation of the processes of one's own mind. This approach was vulnerable to the charge that each observer's self-reflections are inevitably subjective, even solipsistic.⁵⁰

Howe, like many in his time, dismissed the introspective approach used by Locke and, later, the common sense philosophers, as hopelessly flawed. "They all hold up consciousness as a mirror before them," he wrote two years before finding Laura Bridgman, "and think they see there an image of man which they attempt to describe; but alas! the mirror is so narrow that it will admit but one image at a time, and that the image of him who holds it up." Echoing the prevailing scientific wisdom of his day, Howe concluded that such an approach "must ever err."⁵¹

Thus it was left to Howe and other nineteenth-century heirs of the Enlightenment to devise a new model of psychological investigation, based on the systematic observation of the minds of others. Howe's work, flawed as it was, must be understood in this context—as an early attempt to find a new method of empirical psychological research. By attempting to study the processes of Laura's mind rather than those of his own, Howe anticipated the course of future experimental psychological research. But clearly his own biases, and those of his society, compromised his observations and his conclusions, making his work no more objective than that of his predecessors.

Because Howe's earliest findings confirmed his society's cherished belief in an immaterial soul, many observers hailed him as a profound philosopher and a pioneering scientist of the human mind. But Howe's work with Laura was just beginning at this point. He vowed to carry on, learning what he could of the operations of the mind as he studied the gradual unfolding of "the moral and intellectual nature of this interesting child." Having proven the existence of the soul, he now proposed to dissect it, to search for clues to its internal nature.

As ever, Howe brought his own biases into this investigation. But at this point his assumptions about what he expected to find veered off from the broad intellectual consensus shared by Anglo-American Christendom. He would find in his exotic pupil a mind and soul that operated according to phrenological laws that mirrored his own liberal faith. While Howe's famous experiment began with universal admiration and acclaim, the doctor would soon find himself mired in controversy. □

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- ¹ Mary Swift Lamson, *Life and Education of Laura Bridgman* (Boston, 1881; New York, 1975), 5; Laura Bridgman, "Earliest Autobiography," 1849, Laura Bridgman Papers, Perkins (hereafter BPP).
- ² William Ingalls, M.D., *A Lecture on the Subject of Phrenology Not Opposed to the Principles of Religion; Nor the Precepts of Christianity* (Boston, 1839), 10. Howe never publicly mentioned using force,

however mild, to win Laura's submission.

- ³ Samuel Gridley Howe, *The Education of Laura Bridgman*, ed. Julia Ward Howe (Boston, 1892), 4. The extent of the novelty of the Laura Bridgman experiment is exaggerated by Julia Ward Howe's description and her husband's own public interpretation of Laura's education. In the previous century a great deal of attention had been paid to similar cases of deaf-blindness, most notably the case of James Mitchell, a Scottish boy born deaf and blind. While those cases excited a great deal of philosophical interest, there was little doubt that James Mitchell was, in spite of his handicaps, "capable of reflexion and reasoning." Likewise, Laura Bridgman's own behavior prior to meeting Howe clearly suggested that she contained active powers of reasoning. Perhaps the drama of the Laura Bridgman experiment was heightened by more immediate comparison with the case of Julia Brace at the American Asylum in Hartford, whose physical infirmities were accompanied by apparent mental ones.
- ⁴ Maude Howe Elliott and Florence Howe Hall, *Laura Bridgman: Dr. Howe's Famous Pupil and What He Taught Her* (Boston, 1904), 157.
- ⁵ For general works on the influence of Scottish philosophy in America, see Sydney E. Ahlstrom, "The Scottish Philosophy and American Theology," *Church History* 24 (1955): 257-272. Daniel Walker Howe, *The Unitarian Conscience: Harvard Moral Philosophy, 1805-1861* (Cambridge, 1970); Donald Myer, *The Instructed Conscience* (Philadelphia, 1972); Richard Petersen, *Scottish Common Sense in America, 1768-1850* (Washington, DC, 1963).
- ⁶ Daniel Walker Howe, *Unitarian Conscience*, passim; Ahlstrom, "Scottish Philosophy and American Theology," 257-269.
- ⁷ Samuel Gridley Howe, *An Address Delivered at the Anniversary Celebration of the Boston Phrenological Society* (Boston, 1836), 18.
- ⁸ For a fuller discussion of the tenets of phrenology, see John D. Davies, *Phrenology, Fad and Science: A Nineteenth-Century Crusade* (New Haven, 1955); David Gustino, *Conquest of Mind: Phrenology and Victorian Social Thought* (London, 1975); and Robert M. Young, *Mind, Brain and Adaptation in the Nineteenth Century* (Oxford, 1970).
- ⁹ Howe to Horace Mann, 1857, Howe Papers, Houghton; typescript copy in Howe Papers, Perkins (hereafter HPP).
- ¹⁰ Howe, *Address*, 18. On the central role of phrenology on nineteenth-century discussions of psychology, see Young, *Mind, Brain and Adaptation in the Nineteenth Century*, passim.
- ¹¹ George Combe, *The Constitution of Man Considered in Relation to External Objects* (Boston: Allen and Ticknor, 1834; rpt. Delmar, NY: Scholars' Facsimile Press, 1974); see Alfred Young, ch. 4, for a discussion of nineteenth-century ideas about the link between the brain and language ability.
- ¹² Howe, *Ninth Annual Report* (Boston, 1841) (hereafter *Ninth AR*), 24.
- ¹³ *Ibid.*, 25. Howe's conclusion that Laura's own language of gestures, no matter how well developed, would have restricted her intellectual range seems supported by modern research on the linguistic development of the deaf. Most deaf children who are not taught a form of Sign or oral language will instinctively improvise a symbolic system of their own. These self-made languages, researchers have found, are never able to attain the complexity and power of more abstract symbolic language—either signed or spoken. "The deaf mute who has not been taught to speak," one study concluded, "does not possess all those forms of reflection which are realized through speech...[He] indicates objects or actions with a gesture; he is unable to form abstract concepts, to systematize the phenomena of the external world with the aid of abstract signals furnished by language but which are not natural to visual, practically acquired experience." A.R. Luria and F. Yudovich cited in Oliver Sacks, *Seeing Voices: A Journey into the World of the Deaf* (Los Angeles, 1989), 43.

- ¹⁴ "Julia Brace," *Religious Magazine and Family Miscellany*, Aug. 1847, 347-355. The instructors at the Hartford asylum had, in fact, attempted to teach Julia Brace the use of the alphabet, in the hopes of eventually teaching her "moral and religious truth." Their own efforts largely parallel the technique later used by Howe, although Howe never publicly acknowledged this fact. Guided by carved wooden letters, Julia did learn to form the letters of "a few simple words." But, one writer reported, this cumbersome process of communication "soon became uninteresting to her," and apparently to her teachers as well, who abandoned the project as hopeless. After Howe's success with Laura Bridgman, Julia Brace was invited to come to Perkins to see if she might be able to learn to use the alphabet under Howe's instruction. The experiment produced a similar disappointing result, and Julia returned to Hartford. Howe claimed that this failure was probably due to the fact that she had passed the age when she could easily learn language. Considering that she did not enter the Hartford asylum until the age of eighteen, this seems like a likely reason why her initial language training in Hartford failed as well. Julia Brace's experience points to the importance of Laura Bridgman's young age as a crucial factor in the ultimate success of Howe's educational efforts.
- ¹⁵ Thomas Reid, *An Inquiry into the Human Mind on the Principles of Common Sense*, in *Thomas Reid's Inquiry and Essays*, ed. Ronald E. Beanblossom and Keith Lehrer (Indianapolis, 1983), 31-35. As educators of the deaf now point out, this scheme which divides language into a primitive system of manual gestures and a "higher" spoken language leaves out a third possibility; that a manual sign language may become as sophisticated, as capable of expressing abstract thought, as a spoken language. Because Howe accepted Reid's view of manual gestures, he became a leading proponent of teaching deaf children to speak and banning sign language from schools for the deaf. Historians of deaf culture now suggest that this "reform," fully realized a few years after Howe's death, set deaf education back for almost a century. Sacks, *Seeing Voices*, 27-28; Douglas C. Baynton, "Savages and Deaf-Mutes: Evolutionary Theory and the Campaign against Sign Language in the Nineteenth Century," *Deaf History Unveiled*, ed. John Vickrey Van Cleve (Washington, DC, 1993), 92-112.
- ¹⁶ Dugald Stewart, "Of Language," *Collected Works* (Edinburgh, 1854), 4:9.
- ¹⁷ Howe, *Tenth Annual Report* (Boston, 1842), 21.
- ¹⁸ Denis Diderot, *The Letter on the Blind*, trans. Margaret Jourdain, in *Diderot's Early Philosophical Works* (Chicago, 1916), 89.
- ¹⁹ Sacks, *Seeing Voices*, 15-17.
- ²⁰ Wright's description in Lamson, *Life and Education*, 5-6; *Ninth Ar*, 25.
- ²¹ *Ninth AR*, 26.
- ²² In his book, on the experience of deafness, Oliver Sacks cites several historic cases that seem to parallel Howe's 1841 observation that Laura's understanding of the symbolic power of language was learned quite rapidly and that it had a profound transformative effect on her mind and spirit. Reviewing the story of Massieu, Sicard's famous deaf pupil who learned sign language at the age of fourteen, Sacks writes that, "in this way, at the age of fourteen, he entered into the human estate, could know the world as home, the world as his 'domain' in a way he had never known before." Sacks describes the experience of Kaspar Hauser in similar terms. Hauser was a German man who grew to maturity without learning any language, because his abusive guardians had locked him in a dark room for most of his childhood. When he emerged and learned language, Sacks writes, "this awakening to the world of shared meanings, of language, led to a sudden and brilliant awakening of his whole mind and soul." Sacks, *Seeing Voices*, 48, 52.
- ²³ Howe, *Sixth Annual Report* (Boston, 1838) (hereafter *Sixth AR*), 11-12.
- ²⁴ *Ibid.*
- ²⁵ Lamson, *Life and Education*, 7.
- ²⁶ *Sixth AR*, 6.
- ²⁷ *Sixth AR*, 6-7.
- ²⁸ Howe to "Sec. of State of Maine," 18 Oct. 1837, HPP.
- ²⁹ Michael J. Morgan, *Molyneux's Question: Vision, Touch and the Philosophy of Perception* (Cambridge, 1977), 82, 96-97; John Yolton, *John Locke: An Introduction* (New York, 1985), 134-135; *Condillac's Treatise on the Sensations*, trans. Geraldine Carr (Los Angeles, 1930), xxii; S.G. Howe, *Seventh Annual Report* (Boston, 1839) (hereafter *Seventh AR*), 9-10.
- ³⁰ S.G. Howe, "Atheism in New England, I," *New England Magazine*, Dec. 1834; S.G. Howe, "Atheism in New England, II," *New England Magazine*, Jan. 1835.
- ³¹ Howe, "Atheism in New-England, I," 505-506, 509; "Atheism in New-England, II," 56-57.
- ³² Howe, "Atheism in New-England, II," 60.
- ³³ Sir William Blackstone, *Commentaries on the Laws of England* (Philadelphia, 1771) I, book I, 304; S.G. Howe, *Education of Laura Bridgman*, 212-213. In the Public Eye.
- ³⁴ Lamson, *Life and Education*, 8.
- ³⁵ Howe to Harriet Martineau, 27 Apr. 1838, HPP.
- ³⁶ Drew in Lamson, *Life and Education*, 7.
- ³⁷ *Seventh AR*, 9-10.
- ³⁸ Howe, "Notes on Laura Bridgman," in S.G. Howe, *Education of Laura Bridgman*, 213.
- ³⁹ Dr. John Kitto, *The Lost Senses* (New York, 1852), 210; Ingalls, "A Lecture on the Subject of Phrenology," 10.
- ⁴⁰ L. Minot, "Review of *Eighth Annual Report*," *Christian Examiner and General Review*, July 1840, 373.
- ⁴¹ *Ibid.*, 367.
- ⁴² *Ibid.*, 370.
- ⁴³ *Ninth AR*, 24. Also quoted in Kitto, *Lost Senses*, 207. Kitto, in one of the few contemporary accounts that treats Howe's account with a modest measure of skepticism, commented, "This is perhaps too highly colored."
- ⁴⁴ Howe quoted in Mary Howitt, "Laura Bridgman," *Howitt's Journal*, 9 Oct. 1847.
- ⁴⁵ *Ninth AR*, 36; S.G. Howe, *Education of Laura Bridgman*, 386.
- ⁴⁶ Howe, *Eleventh Annual Report* (Boston, 1843), 27; Howe, *Education of Laura Bridgman*, 386.
- ⁴⁷ Douglas L. Geenens, "Neurobiological Development and Cognition in the Deaf-blind," in *A Guide to Planning and Support for Individuals Who Are Deafblind* (Toronto, 1999), 152-153.
- ⁴⁸ G. Stanley Hall, "Laura Bridgman," *Mind* 14 (Apr. 1879), 152-153.
- ⁴⁹ Steven Jay Gould, *The Mismeasure of Man* (New York, 1981), 22.
- ⁵⁰ For a general summary of the phrenologists' attack on the method of introspection, see "On the Comparative Merits of Phrenology and the Philosophy of Reid and Stewart," *American Phrenological Journal and Miscellany* 3 (1 Sept. 1841).
- ⁵¹ Howe, *Address*, 11-12.

What Is a Man?

*3000 Years of Wisdom
On the Art of Manly Virtue*

As we ponder a graduation gift for that special young man—or search perhaps for a companion guide for ourselves as we go about the task of raising, teaching, and forming our boys—we could do no better than the inspiring new anthology of readings gathered and edited by Waller Newell. Drawn from a wide range of sources—Plato, Homer, Shakespeare, St. Augustine, Tolstoy, Yeats, Jane Austen, de Tocqueville, Tecumseh, Stephen Crane, Frederick Douglass, John F. Kennedy, Milan Kundera, and a host of others—the readings reveal “a nobly inspiring tradition of manliness that stretches more or less continuously” down the ages, an “unbroken pedigree” of agreement about what manly virtue entails, expressed in “vividly contrasting portraits” and an “enticing variety” of types. If we cut our boys off from this tradition, or allow the notion of manliness to be lost to simplification or caricature, Newell argues, our boys will turn to coarse, sometimes violent, substitutes. Need we look far to see the truth of which he speaks?

The essay that follows is a slightly condensed version of Mr. Newell’s introduction to What Is a Man?

—EDITOR

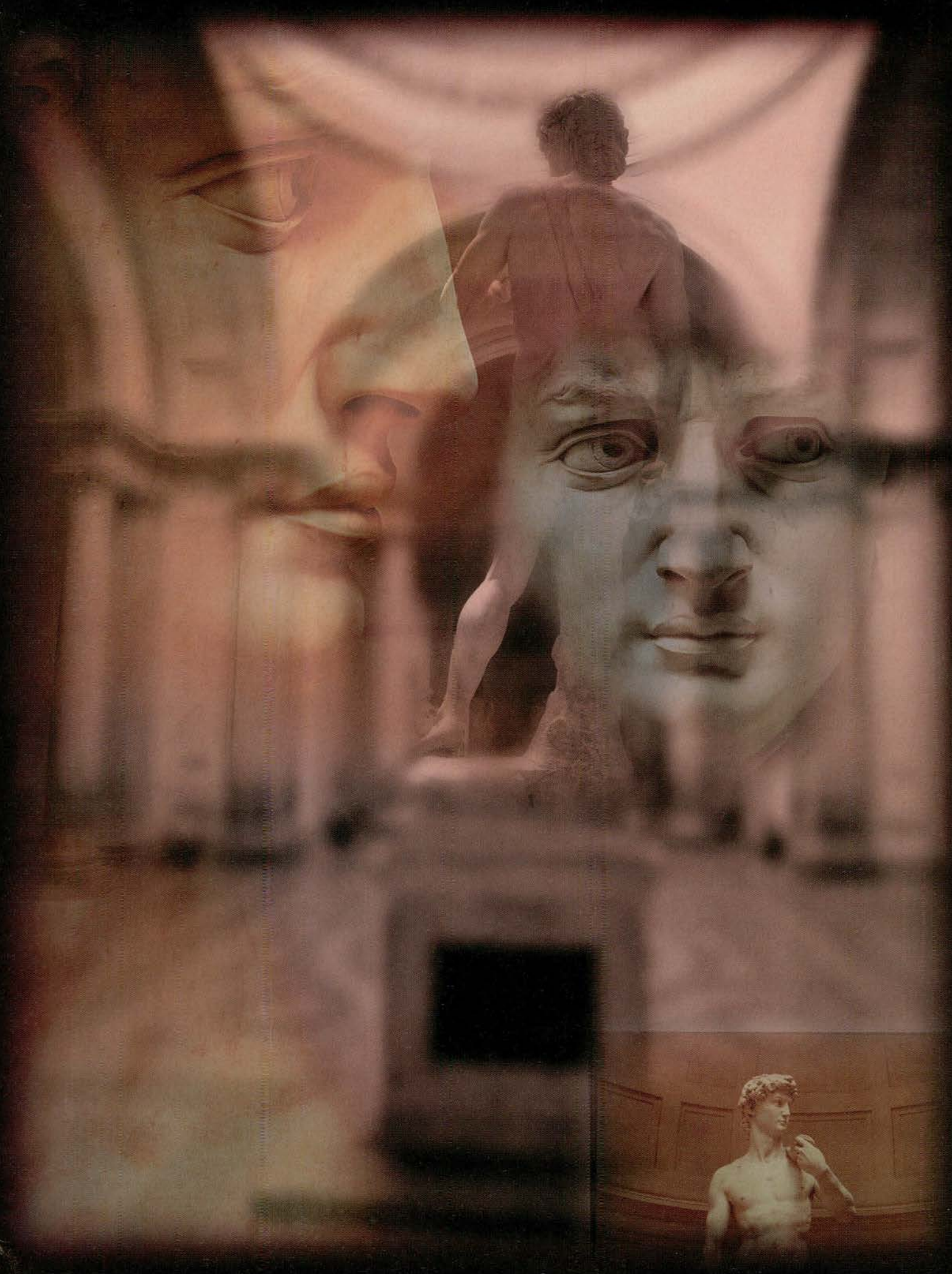
By Waller R. Newell

As America heads into the twenty-first century, there is an increasingly widespread feeling that we have forgotten the meaning of manliness. On first reflection, this might seem like an absurd proposition. Across the nation, millions of men do their daily best to meet their responsibilities as husbands, fathers, partners, friends, and citizens. We expect men to behave decently and honorably in those capacities and to pull their weight in families and relationships. But at the same time, we are curiously adrift as a society when it comes to knowing precisely what we mean by manliness—how to describe it, encourage it, and discourage its opposite. Especially in our public discourse, in the worlds of academia, government, the social welfare bureaucracy, the educational establishment, and the learned profes-

sions, an open discussion of manliness as a positive form of behavior is almost taboo. In many of these circles, to suggest without a sneer of irony that one should “be a man” would produce ripples of cringing embarrassment over the after-dinner decaf. There is a huge vacuum in our moral vocabulary about the whole subject of the manly virtues, a feeling that even to raise such a matter is retrograde or at least a *faux pas*, like ordering Chardonnay with beef. We feel manly passions and impulses, but we don’t know how to articulate them. This is especially noticeable among young men in their teens and twenties, or even older. They have the same strong passions, the same need for love, that youths their age have always experienced. But, much more so than with previous generations, their passions are sometimes baffled and stifling because they lack the means to express them in a refined yet heartfelt way.

The aim of the readings that comprise *What Is a Man?* is to help fill this vacuum, and to restore a sense of the positive meaning of manliness that we have somewhat mysteriously forgotten. I say mysteriously because, as the reader will see, there is an extraordinary continuity in the understanding of the manly virtues from their earliest origins in the ancient world until, so to speak, just yesterday. Despite considerable differences in content, style, and intrinsic quality among ancient and modern artists, thinkers, historians, poets, and

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statesmen from the classical era to the twentieth century, there is also an unbroken pedigree in the Western conception of what it means to be a man. Honor tempered by prudence, ambition tempered by compassion for the suffering and the oppressed, love restrained by delicacy and honor toward the beloved—from Plato to the twentieth century, there is a common store of richly textured observations, maxims, illustrations, and confirmations of this enduringly noble standard of conduct. Thus, although that tradition can be easily parodied and ridiculed today as something hopelessly out-moded and far away, in fact it is very close. Depending on our ages, many of us have parents and grandparents still living who embody the aspiration to those manly virtues; the rest of us, as adults, still carry their letters, their diaries, and their childhood influence on us. We don't need to reinvent manliness. We only need to will ourselves to wake up from the bad dream of the last few generations and reclaim it, in order to extend and enrich that tradition under the formidable demands of the present.

What are the tenets of manly pride and honor that we need to impart to young men? How might we recover an understanding of what it means to be a man in the positive sense—brave, self-restrained, dignified, zealous on behalf of a good cause, imbued with sentiments of delicacy and respect for one's loved ones? These are the questions explored by *What Is a Man?* In its pages, the reader will find a panoply of examples of manhood at its best. And among the cases made consistently throughout its pages is that the surest way of convincing men to treat women with respect is to expose them to those traditional virtues of manly character that make it a disgrace to treat anyone basely. Reclaiming the positive tradition of manly refinement and civility is the surest antidote to the much-decried balkanization of the sexes that has characterized the last thirty years. As *What Is a Man?* illustrates through a wide variety of sources, reverting to the blond beast of either sex is no answer to our present romantic ills. With all due respect to the proponents of "men's rights," such adversarial visions of our culture simply mirror the distortions of the most extreme, exclusionary versions of academic feminism. The answer is not to return to the worship of a primordial Mother Goddess, or to primeval fantasies of male shamanism and campfire dances, in order to breathe some life back into contemporary eros. Real and responsible friendships between men and women can only be lost in the pursuit of a sectarian and rejectionist "gender identity." Instead, we need a return to the highest fulfillment of which all people are capable—moral and intellectual virtues that are the same for men and women at their peaks—while recognizing the diverse qualities that men and women contribute to this common endeavor for excellence. We need a sympathetic reengagement with traditional teachings that stress that men and women share what is highest, while accepting that their passions, temperaments, and sentiments can differ, resulting in different paths to those high standards shared in common. This anthology is meant to be a contribution to genuine friendship between men and women, through a recognition that each makes a distinct contribution to this common feast of excellence.

What have past ages had to say about manliness? What

might we learn from history? Does it offer any consistent lessons? What I found as I burrowed into the annals of our Western literary heritage can only be described as buried treasure: hundreds of readings from every period on the theme of manliness—ancient, medieval, Renaissance, early modern and Romantic, down almost to today.

This chorus of voices presents a conjunction of timeless virtues that can still inspire us today with a series of vividly contrasting portraits of manliness and an appreciation for the enticing variety of manly types. In selecting the readings to include in this anthology, my aim has been to explore the manly virtues as the key to understanding the male psychology and character, and to refresh our acquaintance with the vibrant, fully rounded knights, lovers, gentlemen, thinkers, artists, statesmen, spouses, and warriors who people our history.

Fatherhood and manliness have always been closely connected, not only because fathering a child is a palpable proof of manhood, but because fathers are supposed to provide their sons with a model of how to live. And yet, as a culture, we have never been more unsure or conflicted about what we mean by manhood.

In a recent novel by Chuck Palahniuk, *Fight Club*, a group of young men in their twenties, stuck in typical Gen-X jobs as office temps and couriers, relieve their boredom by meeting after hours in the basement of a bar and beating each other senseless. Sometimes they show up for work with black eyes and stitches as a warrior's badge of honor. Aside from their jobs—white collar, but holding out no clear career prospects—what these young men have in common is that they are underfathered, the product of divorce and of fathers who had no time for them. "I'm a thirty-year-old boy," says the novel's protagonist. "I knew my dad for about six years, but I don't remember anything...What you see at fight club is a generation of men raised by women."

In the absence of a clear idea from their distant, distracted fathers of what it means to be a man, these bored and frustrated youths react against their antiseptic jobs by reverting to the crudest stereotype of "macho" violence. The club's founder, Tyler, progresses from consenting violence among buddies to random murder—a slacker Raskolnikov. The novel is chillingly insightful about the unmapped psyche of young males in the nineties.

Given these signals from the culture, confirmed every day by real acts of mayhem, some hold that we should try to abolish ideals of manliness altogether and make more rigorous efforts to create a genderless personality free of male violence. The recent horrific shootings in American schools from Arkansas to Colorado, with little-boy killers waiting in army fatigues to ambush their classmates and teachers, might suggest that this view is right. Add to this the fact that the majority of violent crimes are committed by young men between the ages of fifteen and twenty-five, and there seems further good reason for discouraging male children from embracing any notion of manly pride.

But it is not so simple. The last thirty years have, in fact, witnessed a prolonged effort at social engineering throughout our public and educational institutions. Its purpose is to

How might we recover an understanding of what it means to be a man in the positive sense—brave, self-restrained, dignified, zealous on behalf of a good cause, imbued with sentiments of delicacy and respect for one's loved ones?

eradicate any psychological and emotional differences between men and women on the grounds that any concept of manliness inevitably leads to arrogance and violence toward women, and to rigid hierarchies that exclude the marginalized and powerless. This experiment was meant to reduce violence and tensions between the sexes. And yet, during this same period, "macho" violence and stress between men and women may well have increased. Recent crime statistics suggest as much in the United States, Canada, and the United Kingdom—the countries where the feminist social experiment stigmatizing manliness has had the greatest latitude to prove itself.

As a recent book by Barbara Dafoe Whitehead confirmed, the absence of a father is one of the strongest predictors of violence among young men in the United States, at least as important as poverty, lack of education, or minority status. The ease with which men of my baby boomer generation have abdicated their roles as fathers is undoubtedly connected with feminism and with the sexual revolution of the 1960s. Boomers were told not to be hung up about provid-

ing masculine role models for children, reassured that we should do whatever made us happiest, including escaping an unsatisfying marriage. After all, to hold things together for the sake of the children would restrict both men and women to old-fashioned "patriarchal" responsibilities. The casualties of this hard, bright credo of selfishness are today's underfathered young men, many of them from broken homes, prone to identify their maleness with aggression because they have no better model to imitate.

This generation's experience is summed up in a brilliant, pathetic scene from a film by Atom Egoyan called *Family Viewing*. The central character, a teenage boy, drifts in and out of his divorced father's house. The father is totally preoccupied with his relationship with a younger woman. The boy's only solid human contact is with his dying grandmother, shunted to a nursing home lest she spoil the father's swinging lifestyle. One day the boy digs out some family videos. At first, he sees a backyard barbecue with happy children and his parents when they were still together. Suddenly, the film jumps to the father and his new girlfriend having sex. The father simply taped over the family movies, literally erasing his son's connection with the only secure part of his childhood.

It seems plain enough that we are missing the boat about manliness. A strong case can be made that manly honor, and shame at failing to live up to it, are the surest means of promoting respect for women. Moreover, manly anger and combativeness can provide energy for a just cause. Horrified as we are by the cult of warrior violence in the Balkans or Rwanda, we may have gone too far toward the opposite extreme in the Western democracies. As Michael Kelly recently observed, "There are fewer and fewer people, and they are older and older people, who accept what every twelve-year-old in Bihac knows: that there are some things worth dying for and killing for." Abolitionism in the antebellum United States, the Allies' defeat of Nazi Germany, or the civil rights movement of the sixties would never have succeeded without the legitimate expression of anger against injustice. The point is not to eradicate honor and pride from the male character, but to rechannel those energies from the nihilistic violence of *Fight Club* or the Arkansas schoolyard to some constructive moral purpose.

To do this, we must recover a positive sense of manhood. For, if young men are cut off from this positive tradition of manly pride, their manliness will reemerge in crude and retrograde forms. Some thirty years ago, the Rolling Stones recorded a misogynist rant called "Under My Thumb." Today, it is one of the songs that fans most often request of these aging shamans of adolescent attitudinizing.

Hostility toward women is an aberration of male behavior. If, as the prevailing orthodoxy contends, the male gender were intrinsically aggressive, hegemonic, and intolerant, then by definition male behavior could never improve. The message young males receive from feminist reasoning is not *You should be ashamed of liking "Under My Thumb"* but *That's the way your gender thinks about women*.

So the first step toward a sensible debate about manly pride is to rescue the positive tradition of manliness from three decades of stereotyping that conflates masculinity with

violence, hegemony, and aggression. We have to recognize that men and women are moral and intellectual equals, that decent and worthy men have always known this, and that, while men and women share the most important human virtues, vices, and aptitudes, they also have different psychological traits that incline them toward different activities.

The gurus of sensitivity have tried to convince men to become open, fluid, genderless beings who are unafraid to cry. But little boys still want to play war and shoot up the living room with plastic howitzers, and we can't give them all Ritalin. Psychologists have begun to express concern about our educational institutions' readiness to pathologize what once would have been regarded as boyish high spirits—roughhousing, "hating" girls, locker-room language—and the use of powerful drugs to extirpate their perfectly ordinary immaturity.

Again, the point is to channel these energies into the development of character. Boys and young men still want to be heroes, and the way to teach them to treat girls and women with respect is to appeal to their heroism, not try to blot it out. Look at those kids performing daring flips on their skateboards, or sailing on their Rollerblades into downtown traffic like warriors contemptuous of fear or danger. Look at that squeegee kid with his shaved head and horsehair plume, decked out like some road-warrior Achilles. Walk into one of those high-voltage computer emporiums, selling our century's most potent icon for the extension of human mastery over the cosmos. Who are the salespeople? Almost always cocky young men, celebrities-in-waiting in dark suits and moussed hair, hooked on the sheer power of it all.

Channel surf on your television late at night and sample the rock videos. Nearly all the bands in rock videos are male, snarling or plaintive over the world's confusions and their erotic frustrations, oozing male belligerence alternating with Byronic alienation and a puppyish longing for attention. Their names (Goo Goo Dolls) and attitudes (the lead singer of Radiohead is wheeled around a supermarket in a giant shopping cart curled up like an overgrown five-year-old) combine an infantile longing to return to childhood with an in-your-face attitude of distrust and suspicion.

And what else would one expect, since so many of the families into which they were born ended in divorce? By denying and repressing their natural inclination to manliness, we run the risk of abandoning them to such infantile posturing. When they pierce their bodies, it is because they want to experience moral and erotic constraint. Having failed to find an authority they can respect, someone to guide them from boyish impetuosity to a mature and manly vigor of judgment, they confuse authority with oppression. Still, cast adrift in a world without any limitations, they long to pay a price for their hedonism. Since no one is leading them back to the great ethical and religious traditions that set these limits on the highest intellectual and spiritual level, they pierce their bodies in a crude simulacrum of traditional restraint. In that very gesture, they reveal not only the wondrous capacity of spirited young people to see through the aridity of the establishment, but also the potential for an ennobling transformation.

It is precisely in traditional understandings of manly pride

The best way of convincing young men to treat women with respect is to educate them in those traditional virtues of character that make it a disgrace to treat anyone basely, dishonestly, or exploitively.

and honor that we will find the only sure basis for respect between men and women. The best way of convincing young men to treat women with respect is to educate them in those traditional virtues of character that make it a disgrace to treat anyone basely, dishonestly, or exploitively. Moreover, the surest way of raising young men to treat young women as friends rather than as objects for sexual exploitation is to appeal to their natural longing to be honored and esteemed by the young women to whom they are attracted. When our erotic attraction to another is properly directed, it leads us to cultivate the virtues of moderation, honesty, gratitude, and compassion, all of which make us worthy of love in the eyes of the beloved. We try to be virtuous because we want to be worthy of being loved.

One thing is sure: Given our current confusion over the value and meaning of manliness, we have nothing to lose by reopening the issue. If academic feminism is correct that violence toward women stems from traditional patriarchal attitudes, our grandparents' lives must have been a hell of aggression and fear. Yet, if anything impresses us about our forebears, judging from their lives, letters, and diaries, it is the refinement of their affections for one another, and of men's esteem for women in particular. Perhaps we cannot return to that world. But boys and young men today need to be reintroduced to the tradition of manly civility, to supplement our contemporary insistence that all romantic stress between men and women can be solved by the adjudication of rights and the stigmatization of exclusively male traits of character.

Despite recent caricatures of the Western tradition as one long justification for the oppression of women, poets and thinkers from Homer to Rousseau have explored the delicate interplay of love and self-perfection. In Homer's *Odyssey*, Telemachus, son of the great war hero Odysseus, embarks on a search to find his missing father and thereby save his

mother from the oppressive noblemen who want her to give up her husband for dead and marry one of them. As he searches for his father, in an adventure parallel to Odysseus's own search for a way home to his long-lost wife and child, Telemachus is educated by his adventures and grows from a boy into a man, guided by the wise goddess Athena who is also his father's best friend among the gods. Telemachus's search for his missing father, guided by the goddess, in effect provides him with the upbringing Odysseus was unable to give him. Even so, Odysseus still inspires his son from afar, because Telemachus learns during his travels of his father's exploits and wants to prove himself the hero's worthy son.

Whenever I describe Telemachus, this boy from a broken home, forced at a too-early age to be his mother's protector from oppressive men, compelled to bring himself up in a way that he hopes his absent father will be proud of, the young men in my undergraduate classes tend to become very quiet and reflective. They are Telemachus.

* * *

As we enter the new millennium, the meaning of manliness is increasingly unclear and fragmented. The Rolling Stones' paean to alienation, "Shattered," might serve as an anthem for our disaffection with traditional ideals. Up until at least World War II, a more or less continuous tradition from Plato to Theodore Roosevelt had codified a subtle, complex, and yet common vision of manhood. In the last few generations, by contrast, the meaning of manliness seems to have exploded into a million shards of shrapnel. The last section of *What Is a Man?*, entitled "The Invisible Man," offers a sampling of those fragments, from a statement by rebel icon James Dean to a sketch of teenage Goth culture, as conveyed by fiction, lyrics, poetry, and journalism.

Some of these fragments are bleak indeed. They speak of homelessness both physical and spiritual, of aimlessness and despair; of young men who have forgotten what it is to feel, or who cannot put those feelings into words because no one has taught them the vocabulary of love and honor. Hence, while they have strong passions, and strong loves, those passions often remain mute, baffled, and stifling because they can find no release and relief in the expression of honest and delicate sentiments.

But the panorama isn't all bleak. Contemporary man may be an invisible man, but you can still see his shadow as he walks those lonely streets. As often as these fragments are depressing and nihilistic, just as often they are full of naïve wonder, generous feeling, a longing for heroism and adventure, and a burning desire to be decent toward others and be treated decently in return. Through the shadows there are occasional flares of brilliance, honest and authentic intimations of what men have lost, and of what it still could mean to be a good man, husband, parent, and citizen. No one who knows many young people today is likely to capitulate entirely to despair. Young men still want heroes, and they still want to be heroes. They still want to fall in love and prove themselves worthy of their beloved's affection. The young man who may be invisible today will soon reemerge into the sunlight. □

FORGOTTEN HERO

(Continued from page 35)

stead of learning self-discipline and the value of effort. There was a good deal to be said, he thought, for teaching children to complete difficult tasks; the reward was the self-confidence that children gained by conquering challenges. Bagley believed that some children would follow the line of least resistance and not learn as much as they would have if they had been instructed in subject matter by talented, insightful, and well-educated teachers.

Over the years, Bagley consistently argued that there was so much mobility in American society that a common national curriculum in basic subjects like arithmetic, history, geography, and science was needed. He believed that the federal government should support the schools to promote "equality of educational opportunity throughout the country, and the consequent protection of the stake that the people as a whole have in a literate, informed, and disciplined population." He called ignorance "a menace to national welfare." He consistently argued that the spread and improvement of education would contribute to social progress by reducing not only illiteracy, but crime, corruption, drunkenness, divorce, and poverty.

In 1938, Bagley helped organize the Essentialist Committee for the Advancement of American Education; it issued a platform advocating rigorous standards and a common curriculum to ensure a high level of a shared culture across American society. The essentialists were promptly rebuked. Although the statement was careful to praise John Dewey and to claim that his followers had distorted his teachings, Dewey told a *New York Times* reporter, "The movement is apparently an imitation of the fundamentalist movement, and may perhaps draw support from that quarter as well as from reactionaries in politics and economics." William Kilpatrick, Dewey's chief disciple, told the same reporter, "The essentialists represent the same sort of reactionary trend that always springs up when a doctrine is gaining headway in the country. The astonishing thing is not the fact of the reaction but that it is so small and on the whole comes from such inconspicuous people." *Time* magazine reported on the contretemps between essentialists and progressives by putting the president of the Progressive Education Association on its cover, accompanied by a laudatory article about progressive education.

Bagley died in 1946, never knowing that others would carry forward his lonely crusade for higher standards, equality of educational opportunity, liberal education for all, better-educated teachers, and abundantly supported schools. Widely known as a critic of fads, the only innovation that he fought for throughout his career was, in the words of his biographer, Isaac L. Kandel, to "put a competent and cultured teacher into every American classroom." Today, as the American education system is pressed to provide higher standards for the great majority of students, William Chandler Bagley's ideas deserve a hearing. And he deserves to be recalled by the term that he himself preferred: "stalwart educator," a man of outstanding vigor and commonsense. And uncommon courage. □

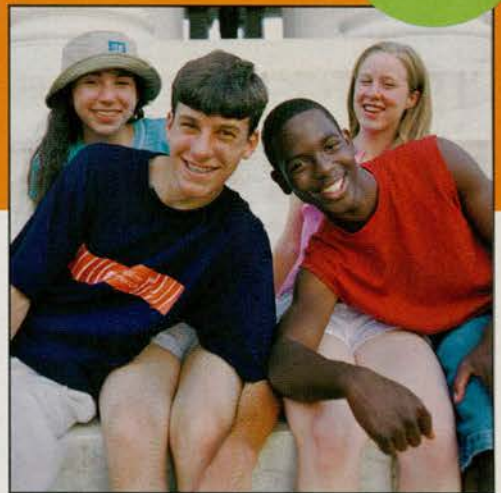
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LETTERS

(Continued from page 2)

The one thing lacking was a plan for improvement. How can we tell children and students that anything is wrong if we have no moral basis for doing so? I find it ironic that, as educators, we lament the lack of principle-based parenting while simultaneously eliminating moral absolutes from our curricula.

I hope that the courageous publication of this article will lead to a dialogue about the role of morals in our schools.

—JON TANNER
Prospect Heights, IL

I would like to express my appreciation for the article by Kay S. Hymowitz. As an elementary school educator, I have personally encountered every parent comment or quote Hymowitz penned.

Prior to reading this wonderfully accurate and direct article, I had spoken with a school worker who asked my opinion on the reason(s) for the lack of schoolchildren's respect. Without hesitation, I responded, "The breakdown of parenting and its direct effect on the family." I plan to share this piece with her.

I also wish it were published in a journal for parents, as most teachers already know the article's content, but (for reasons mentioned in the article itself) are unable to verbalize those thoughts to parents and community members. Thank you for your respected publication.

—JODIE SHARP
Basom, NY

Bravo! Your article "Parenting: The Lost Art" should be commended.

The breakdown of parenting occurs when our parents do not pass their religious heritages to their children. This is where the heart and core of our values lie. Every religious heritage has a variety of insightful teachings that our children can learn from, enriching their lives. Thus, today's children need to have high regard for themselves—to avoid drugs, alcohol, seeking love from all the wrong places, and hurting themselves or others.

I am a high school psychologist, and I have worked for twenty years with teenagers. The most well-adjusted stu-

dents I have seen were those teens involved with their parents in community service, youth groups, and regular attendance at temple, mosque, or church. These students were happy and exuded confidence. They were not easily swayed by the media or ills of society. Parents of today must realize their responsibility to teach their children core values. This was handed down to them by their parents, and must be passed to the next generation!

I hope today's parents take the time from their busy schedules to see the truth before it is too late.

—SHALOM MCGUIRE
New York, NY

JEANNE CHALL

Dear Editor:

I was greatly surprised and pleased to read the tribute to Jeanne Chall in the Spring 2001 *American Educator*. When I was in graduate school getting my master's degree in reading and writing, her research was totally ignored and she was misrepresented by the "indoctrinators of liberal education," as I came to refer to my instructors. Feeling as I always have, that one should never accept the precepts of one side only, I sought research that contradicted the whole language/top-down theories. I arrived at some research by Jeanne Chall that reaffirmed my personal beliefs in a bottom-up approach starting with phonics. Chall was made out to be a phonics-driven mad-woman, yet I found that unlike many whole-language advocates, she believed in a combination of approaches that emphasized comprehension once some basic decoding skills were learned. In other words, students need to read before they can read with understanding.

—JENNIFER TOMPKINS
Littleton, CO

WHY GEOGRAPHY MATTERS

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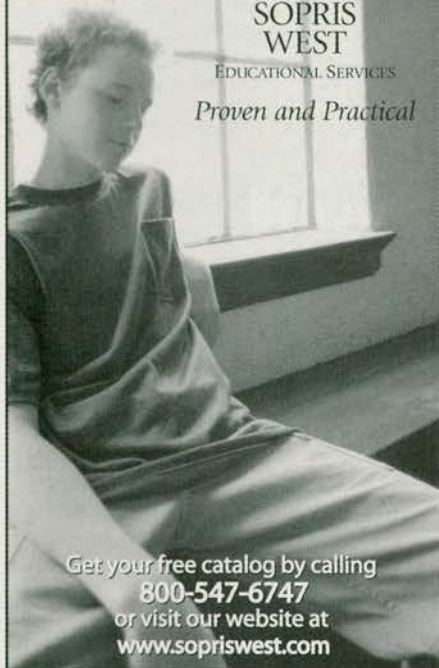
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cator. His essay implies that geography should be at the core of lessons, not an adjunct. The teacher consultants trained by the National Geographic Society's education program would totally agree.

Recognizing the lack of geography education in most schools, NGS has trained thousands of teachers to become turn-key trainers in their states and school districts. All fifty states have become "Geographic Alliance" states and continue this work by hosting geography institutes to promote more and better geography education. The institutes have three components: college-level geography instruction taught by professors, geography inclusion lessons taught by NGS-trained teacher-consultants, and a presentation method that turns teachers into competent professional presenters.

I have been privileged to be a part of the New York Geographic Alliance since 1989, and like many of my colleagues, I have presented geography programs at the local, state, and national levels. I have worked hard to make a difference in my own district to get more geography content incorporated in lesson plans. It is often an uphill battle to get funding for our Alliance activities and to make an impression on state education departments to include geography in the core curriculum, but progress has been made.

In my presentations, I ask teachers "to look at their classes through geography glasses" and be amazed how often geography can be incorporated. It is nice to have Mr. McDougall on the side of us "geo-evangelists" whose teaching methods have been affected by our association with National Geographic and our Alliances. There is much more work to do! We welcome "converts" to the joys of teaching such an exciting subject.

—VIRGINIA M. FIGURA
Buffalo, NY

Thank you for continually identifying the fads, follies, and delusions of contemporary education—and for standing steadfastly against them ("Why Geography Matters," Spring 2001).

My college students have long been profoundly ignorant of fundamental facts of the world (the number of states

in the U.S. is a matter of some controversy among them), and for the first time I have a class majority that contends that all theories and opinions are of equal value, as are all readings of works of fiction—regardless of the facts of the case. As I am told repeatedly, "My high school teacher told me that a poem can mean anything I want it to mean."

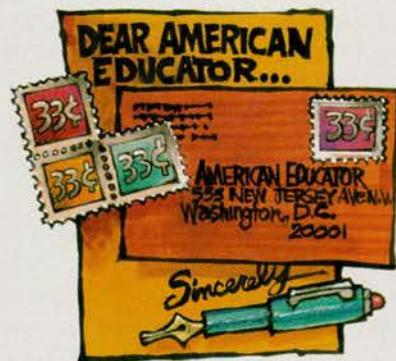
So whether the text is the Bible, Shakespeare, or Toni Morrison, students read only themselves over and over with the predictable results that the greater their ignorance the higher their self-esteem. Such a student once identified Hitler as the German Martin Luther King (The Holocaust? "It was right for him.") Such is the frightening legacy of instruction lacking focus, discrimination, and facts.

—K.J. WALTERS
Monroe, NY

KUDOS

The spring edition is truly exceptional; all the articles are excellent and educational. It makes me proud to be a teacher and AFT member. Thank you for this edition.

—RICHARD REAMES
Oklahoma City, OK



Write Us!

We welcome comments on *American Educator* articles. Address letters to Editor, *American Educator*, 555 New Jersey Ave., N.W., Washington, D.C. 20001 or via e-mail at amered@aft.org. Letters selected may be edited for space and clarity and must include a phone number or e-mail address so we may contact you if needed.

A young girl with blonde hair, wearing a white long-sleeved shirt with colorful polka dots, blue jeans, white socks, and white shoes, is sitting on a wooden staircase. She is leaning against a dark metal railing and reading a yellow book. The background is a yellow wall with a dark green curtain.

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