"This book will shake your preconceptions about the deaf, about language, and about thought."
—*Los Angeles Times Book Review*

OLIVER SACKS

AUTHOR OF THE MAN WHO MISTOOK HIS WIFE FOR A HAT

SEEING VOICES

First Vintage Books Edition, November 2000

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Library of Congress Cataloging-in-Publication Data

Sacks, Oliver W.
Seeing Voices: a journey into the world of the deaf / Oliver Sacks.
1st Vintage Books ed.
p. cm.
ISBN 0-375-70407-8
Includes bibliographical references and index.
1. Gallaudet University—Student strike, 1988.
2. Deaf—History. 3. American sign language.
HV2370.S23 2000
305.9'08162—dc21
00-042340

Book design by Jo Ann Metsch

www.vintagebooks.com

Printed in the United States of America
10 9 8 7 6 5 4 3 2 1

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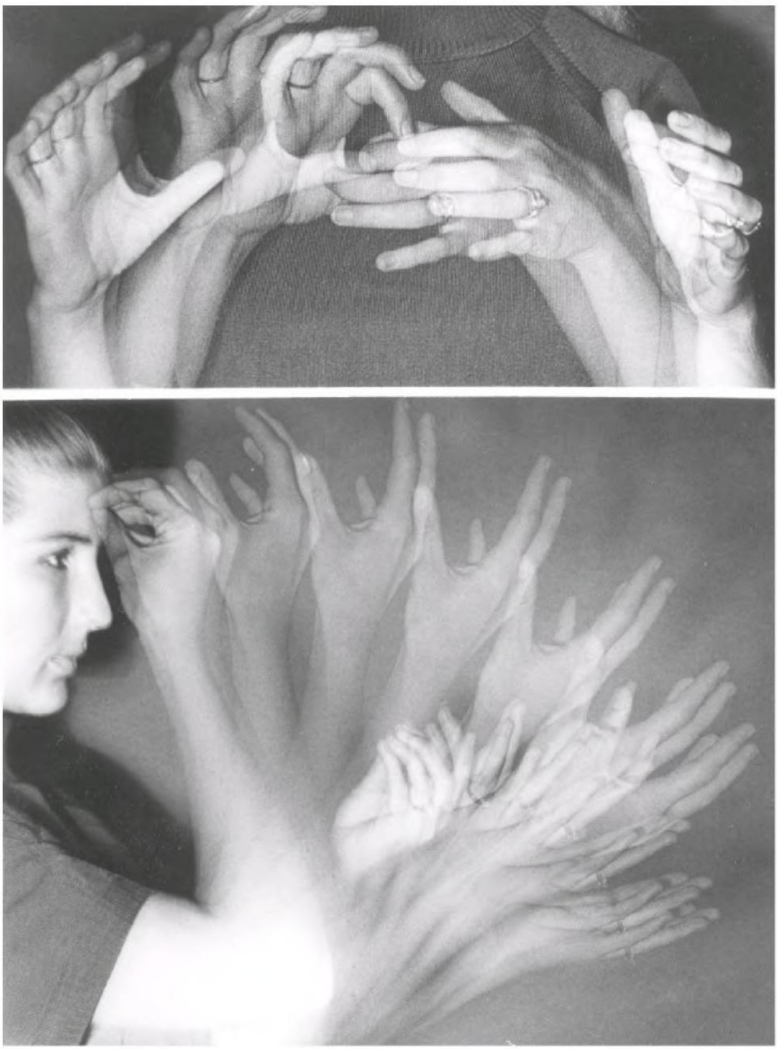

Strobe photograph of ASL signs "join" and "inform." (Reprinted by permission from *The Signs of Language*, E. S. Klima & U. Bellugi. Harvard University Press, 1979.)

PREFACE

THREE years ago I knew nothing of the situation of the deaf, and never imagined that it could cast light on so many realms, above all, on the realm of language. I was astonished to learn about the history of deaf people, and the extraordinary (linguistic) challenges they face, astonished too to learn of a completely visual language, Sign, a language different in mode from my own language, Speech.[1] It is all too easy to take language, one's own language, for granted—one may need to encounter another language, or rather another *mode* of language, in order to be astonished, to be pushed into wonder, again.

When I first read of the deaf and their singular mode of language, Sign, I was incited to embark on an exploration, a journey. This journey took me to deaf people and their families; to schools for the deaf, and to Gallaudet, the unique university of the deaf; it took me to Martha's Vineyard, where there used to exist a hereditary deafness and where everybody (hearing no less than deaf) spoke Sign; it took me to towns like Fremont and Rochester, where there is a remarkable interface of deaf and hearing communities; it took me to the great researchers on Sign, and the conditions of the deaf—brilliant and dedicated researchers who communicated to me their excitement, their

sense of unexplored regions and new frontiers. My journey has taken me to look at language, at the nature of talking and teaching, at child development, at the development and functioning of the nervous system, at the formation of communities, worlds, and cultures, in a way which was wholly new to me, and which has been an education and a delight. It has, above all, afforded a completely new perspective on age-old problems, a new and unexpected view onto language, biology, and culture . . . it has made the familiar strange, and the strange familiar.

My travels left me both enthralled and appalled. I was appalled as I discovered how many of the deaf never acquire the powers of good language—or thinking—and how poor a life might lie in store for them.

But almost at once I was to be made aware of another dimension, another world of considerations, not biological, but cultural. Many of the deaf people I met had not merely acquired good language, but language of an entirely different sort, a language that served not only the powers of thought (and indeed allowed thought and perception of a kind not wholly imaginable by the hearing), but served as the medium of a rich community and culture. Whilst I never forgot the "medical" status of the deaf, I had now to see them in a new, "ethnic" light, as a people, with a distinctive language, sensibility, and culture of their own.[2]

It might be thought that the story and study of deaf people, and their language, is something of extremely limited interest. But this, I believe, is by no means the case. It is true that the congenitally deaf only constitute about 0.1 percent of the population, but the considerations that arise from them raise issues of the widest and deepest importance. The study of the deaf shows us that much of what is distinctively human in us—our

capacities for language, for thought, for communication, and culture—do not develop automatically in us, are not just biological functions, but are, equally, social and historical in origin; that they are a *gift*—the most wonderful of gifts—from one generation to another. We see that Culture is as crucial as Nature.

The existence of a visual language, Sign, and of the striking enhancements of perception and visual intelligence that go with its acquisition, shows us that the brain is rich in potentials we would scarcely have guessed of, shows us the almost unlimited plasticity and resource of the nervous system, the human organism, when it is faced with the new and must adapt. If this subject shows us the vulnerabilities, the ways in which (often unwittingly) we may harm ourselves, it shows us, equally, our unknown and unexpected strengths, the infinite resources for survival and transcendence which Nature and Culture, together, have given us. Thus, although I hope that deaf people, and their families, teachers, and friends, may find this book of special interest, I hope that the general reader may turn to it, too, for an unexpected perspective on the human condition.

THIS book is in three parts. The first, "A Deaf World," was written in 1985 and 1986, and started as a review of a book on the history of the deaf, Harlan Lane's *When the Mind Hears*. This had expanded to an essay by the time it was published (in the *New York Review of Books*, March 27, 1986), and has since been further enlarged and revised. I have, however, left certain formulations and locutions, with which I no longer fully agree, in place, because I felt I should preserve the original, whatever its defects, as reflecting the way I first thought about the subject. Part III, "The Revolution of the Deaf," was stimulated by the revolt of the students at Gallaudet in March 1988, and was

published in the *New York Review of Books* on June 2, 1988. This too has been considerably revised and enlarged for the present book. Part II, "Thinking in Sign," was written last, in the fall of 1988, but is, in some ways, the heart of the book—at least the most systematic, but also the most personal, view of the whole subject. I should add that I have never found it possible to tell a story, or pursue a line of thought, without taking innumerable side trips or excursions along the way, and finding my journey the richer for this.[3]

I am, I should emphasize, an outsider in this field—I am not deaf, I do not sign, I am not an interpreter or teacher, I am not an expert on child development, and I am neither a historian nor a linguist. This is, as will be apparent, a charged (at times embattled) area, where passionate opinions have contended for centuries. I am an outsider, with no special knowledge or expertise, but also, I think, with no prejudices, no ax to grind, no animus in the matter.

I could not have made my journey, let alone written about it, without the aid and inspiration of innumerable others: first and foremost deaf people—patients, subjects, collaborators, friends—the only people who can give one an inside perspective; and those most directly concerned with them, their families, interpreters, and teachers. In particular I must acknowledge here the great help of Sarah Elizabeth and Sam Lewis, and their daughter Charlotte; Deborah Tannen of Georgetown University; and the staffs at the California School for the Deaf at Fremont, the Lexington School for the Deaf, and many other schools and institutions for the deaf, most especially Gallaudet University—including David de Lorenzo, Carol Erting, Michael Karchmer, Scott Liddell, Jane Norman,

John Van Cleve, Bruce White, and James Woodward, among many others.

I owe a central debt to those researchers who have made it their lifelong concern to understand and study the deaf and their language—in particular, Ursula Bellugi, Susan Schaller, Hilde Schlesinger, and William Stokoe, who have shared their thoughts and observations fully and generously with me, and stimulated my own. Jerome Bruner, who has thought so profoundly about the mental and language development of children, has been an invaluable friend and guide throughout. My friend and colleague Elkhonon Goldberg has suggested new ways of considering the neurological foundations of language and thought, and the special forms this may take in the deaf. I have had the special pleasure, this year, of meeting Harlan Lane and Nora Ellen Groce, whose books so inspired me in 1986, at the start of my journey, and Carol Padden, whose book so influenced me in 1988—their perspectives on the deaf have enlarged my own thought. Several colleagues, including Ursula Bellugi, Jerome Bruner, Robert Johnson, Harlan Lane, Helen Neville, Isabelle Rapin, Israel Rosenfield, Hilde Schlesinger, and William Stokoe, have read the manuscript of this book at various stages and offered comments, criticism, and support, for which I am particularly grateful. To all these and many others, I owe illumination and insights (though my opinions—and mistakes—are wholly my own).

In March of 1986, Stan Holwitz of the University of California Press instantly responded to my first essay, and urged and encouraged me to expand it into a book; he has given patient support and stimulus during the three years it has taken to realize his suggestion. Paula Cizmar read successive drafts of

the book, and offered me many valuable suggestions. Shirley Warren has guided the manuscript through production, dealing patiently with ever more footnotes and last-minute changes.

I am much indebted to my niece, Elizabeth Sacks Chase, who suggested the title—it derives from Pyramus's words to Thisbe: "I see a voice. . . ."

Since completing this book, I have started to do what, perhaps, I should have done at the start—I have begun to learn Sign. I owe special thanks to my teacher, Janice Rimler, of the New York Society for the Deaf, and to my tutors, Amy and Mark Trugman, for struggling valiantly with a difficult, late beginner—and convincing me that it is never too late to begin.

Finally I must acknowledge the deepest debt of all to four people—two colleagues and two editors—who have played a central part in making possible my work and writing. First to Bob Silvers, editor of the *New York Review of Books*, who sent me Harlan Lane's book in the first place, saying, "You've never really thought about language; this book will force you to"—as indeed it did. Bob Silvers has a clairvoyant sense of what people have not yet thought about, but should; and, with his special obstetric gift, helps to deliver them of their as-yet-unborn thoughts.

Second, to Isabelle Rapin, who has been my closest friend and colleague at the Albert Einstein College of Medicine for twenty years, and who herself has worked with the deaf, and thought deeply about them, for a quarter of a century. Isabelle introduced me to deaf patients, took me to schools for the deaf, shared with me her experience of deaf children, and helped me understand the problems of the deaf as I could never have done unaided. (She herself wrote an extensive essay-review [Rapin, 1986] based chiefly on *When the Mind Hears.*)

I first met Bob Johnson, chairman of the linguistics department at Gallaudet, on my first visit there in 1986, and was introduced by him both to Sign, and to the world of the deaf—a language, a culture, that outsiders can scarcely enter or imagine. If Isabelle Rapin, with Bob Silvers, launched me on this journey, Bob Johnson then took over as my traveling companion and guide.

Kate Edgar, finally, has filled a unique role as collaborator, friend, editor, and organizer, inciting me at all times to think and write, to see the full aspectuality of the subject, but always to hold on to its focus and center.

To these four people, then, I dedicate this book.

New York O. W. S.
March 1989

A Deaf World

We are remarkably ignorant about deafness, which Dr. Johnson called "one of the most desperate of human calamities"—much more ignorant than an educated man would have been in 1886, or 1786. Ignorant and indifferent. During the last few months I have raised the subject with countless people and nearly always met with responses like: "Deafness? Don't know any deaf people. Never thought much about it. There's nothing *interesting* about deafness, is there?" This would have been my own response a few months ago.

Things changed for me when I was sent a fat book by Harlan Lane called *When the Mind Hears: A History of the Deaf,* which I opened with indifference, soon to be changed to astonishment, and then to something approaching incredulity. I discussed the subject with my friend and colleague Dr. Isabelle Rapin, who has worked closely with the deaf for twenty-five years. I got to know better a congenitally deaf colleague, a remarkable and highly gifted woman, whom I had previously taken for granted.[1] I started seeing, or exploring for the first time, a number of deaf patients under my care.[2] My reading rapidly spread from Harlan Lane's history to *The Deaf Experience,* a collection of memoirs by and about the first literate deaf, edited by Lane, and then

to Nora Ellen Groce's *Everyone Here Spoke Sign Language*, and to a great many other books. Now I have an entire bookshelf on a subject that I had not thought of even as existing six months ago, and have seen some of the remarkable films that have been produced on the subject.[3]

One more acknowledgment by way of preamble. In 1969 W. H. Auden gave me a copy, his own copy, of *Deafness*, a remarkable autobiographical memoir by the South African poet and novelist David Wright, who became deaf at the age of seven. "You'll find it fascinating," he said. "It's a wonderful book." It was dotted with his own annotations (though I do not know whether he ever reviewed it). I skimmed it, without paying more attention, in 1969. But now I was to rediscover it for myself. David Wright is a writer who writes from the depths of his own experience—and not as a historian or scholar writes about a subject. Moreover, he is not alien to us. We can easily imagine, more or less, what it would be like to be him (whereas we cannot without difficulty imagine what it would be like to be someone born deaf, like the famous deaf teacher Laurent Clerc). Thus he can serve as a bridge for us, conveying us through his own experiences into the realm of the unimaginable. Since Wright is easier to read than the great mutes of the eighteenth century, he should if possible be read first—for he prepares us for them. Toward the close of the book he writes:

> Not much as been written about deafness by the deaf.[4] Even so, considering that I did not become deaf till *after* I had learned the language, I am no better placed than a hearing person to imagine what it is like to be born into silence and reach the age of reason without acquiring a vehicle for thought and communication. Merely to try gives weight to

> the tremendous opening of St. John's Gospel: In the beginning was the Word. How does one formulate concepts in such a condition?

It is this—the relation of language to thought—that forms the deepest, the ultimate issue when we consider what faces or may face those who are born, or very early become, deaf.

The term "deaf" is vague, or rather, is so general that it impedes consideration of the vastly differing degrees of deafness, degrees that are of qualitative, and even of "existential," significance. There are the "hard of hearing," fifteen million or so in the U.S. population, who can manage to hear some speech using hearing aids and a certain amount of care and patience on the part of those who speak to them. Many of us have parents or grandparents in this category—a century ago they would have used ear trumpets; now they use hearing aids.

There are also the "severely deaf," many as a result of ear disease or injury in early life; but with them, as with the hard of hearing, the hearing of speech is still possible, especially with the new, highly sophisticated, computerized, and "personalized" hearing aids now becoming available. Then there are the "profoundly deaf"—sometimes called "stone deaf"—who have no hope at all of hearing any speech, whatever imaginable technological advances are made. Profoundly deaf people cannot converse in the usual way—they must either lip-read (as David Wright did), or use sign language, or both.

It is not merely the degree of deafness that matters but—crucially—the age, or stage, at which it occurs. David Wright, in the passage already quoted, observes that he lost his hearing only after he had acquired language, and (this being the case) he

cannot even imagine what it must be like for those who lack or have lost hearing before the acquisition of language. He brings this out in other passages.

> My becoming deaf when I did—if deafness had to be my destiny—was remarkably lucky. By the age of seven a child will have grasped the essentials of language, as I had. Having learned naturally how to speak was another advantage—pronunciation, syntax, inflexion, idiom, all had come by ear. I had the basis of a vocabulary which could easily be extended by reading. *All of these would have been denied me had I been born deaf or lost my hearing earlier than I did.* [Italics added.]

Wright speaks of the "phantasmal voices" that he hears when anyone speaks to him provided he can *see* the movement of their lips and faces, and of how he would "hear" the soughing of the wind whenever he saw trees or branches being stirred by the wind.[5] He gives a fascinating description of this first happening—of its *immediate* occurrence with the onset of deafness:

> [My deafness] was made more difficult to perceive because from the very first my eyes had unconsciously begun to translate motion into sound. My mother spent most of the day beside me and I understood everything she said. Why not? Without knowing it I had been reading her mouth all my life. When she spoke I seemed to hear her voice. It was an illusion which persisted even after I knew it was an illusion. My father, my cousin, everyone I had known, retained phantasmal voices. That they were imaginary, the projections of habit and memory, did not come home to me until I had left the hospital. One day I was talking with my cousin and he, in a moment of

> inspiration, covered his mouth with his hand as he spoke. Silence! Once and for all I understood that when I could not see I could not hear.[6]

Though Wright knows the sounds he "hears" to be "illusory"—"projections of habit and memory"—they remain intensely vivid for him throughout the decades of his deafness. For Wright, for those deafened after hearing is well established, the world may remain full of sounds even though they are "phantasmal."[7]

It is another matter entirely, and one that is essentially unimaginable, by the normal (and even by the postlingually deafened, like David Wright), if hearing is absent at birth, or lost in infancy before the language is acquired. Those so afflicted—the prelingually deaf—are in a category qualitatively different from all others. For these people, who have never heard, who have no possible auditory memories, images, or associations, there can never be even the illusion of sound. They live in a world of utter, unbroken soundlessness and silence.[8] These, the congenitally deaf, number perhaps a quarter of a million in this country. They make up a thousandth of the world's children.

It is with these and these only that we will be concerned here, for their situation and predicament are unique. Why should this be so? People tend, if they think of deafness at all, to think of it as less grave than blindness, to see it as a disadvantage, or a nuisance, or a handicap, but scarcely as devastating in a radical sense.

Whether deafness is "preferable" to blindness, if acquired in later life, is arguable; but to be born deaf is infinitely more serious than to be born blind—at least potentially so. For the prelingually deaf, unable to hear their parents, risk being

severely retarded, if not permanently defective, in their grasp of language unless early and effective measures are taken. And to be defective in language, for a human being, is one of the most desperate of calamities, for it is only through language that we enter fully into our human estate and culture, communicate freely with our fellows, acquire and share information. If we cannot do this, we will be bizarrely disabled and cut off—whatever our desires, or endeavors, or native capacities. And indeed, we may be so little able to realize our intellectual capacities as to appear mentally defective.[9]

It was for this reason that the congenitally deaf, or "deaf and dumb," were considered "dumb" (stupid) for thousands of years and were regarded by an unenlightened law as "incompetent"—to inherit property, to marry, to receive education, to have adequately challenging work—and were denied fundamental human rights. This situation did not begin to be remedied until the middle of the eighteenth century, when (perhaps as part of a more general enlightenment, perhaps as a specific act of empathy and genius) the perception and situation of the deaf were radically altered.

The *philosophes* of the time were clearly fascinated by the extraordinary issues and problems posed by a seemingly languageless human being. Indeed, the Wild Boy of Aveyron,[10] when brought to Paris in 1800, was admitted to the National Institution for Deaf-Mutes, which was at the time supervised by the Abbé Roch-Ambroise Sicard, a founding member of the Society of Observers of Man, and a notable authority on the education of the deaf. As Jonathan Miller writes:[11]

> As far as the members of this society were concerned the "savage" child represented an ideal case with which to investi-

> gate the foundations of human nature. . . . By studying a creature of this sort, just as they had previously studied savages and primitives, Red Indians and orangutans, the intellectuals of the late eighteenth century hoped to decide what was characteristic of Man. Perhaps it would now be possible to weigh the native endowment of the human species and to settle once and for all the part that was played by society in the development of language, intelligence, and morality.

Here, of course, the two enterprises diverged, one ending in triumph, the other in complete failure. The Wild Boy never acquired language, for whatever reason or reasons. One insufficiently considered possibility is that he was, strangely, never exposed to sign language, but continually (and vainly) forced to try to speak. But when the "deaf and dumb" were properly approached, i.e., through sign language, they proved eminently educable, and they rapidly showed an astonished world how fully they could enter into its culture and life. This wonderful circumstance—how a despised or neglected minority, practically denied human status up to this point, emerged suddenly and startlingly upon the world stage (and the later tragic undermining of all this in the following century)—constitutes the opening chapter of the history of the deaf.

But let us, before launching on this strange history, go back to the wholly personal and "innocent" observations of David Wright ("innocent" because, as he himself stresses, he made a point of avoiding any reading on the subject until he had written his own book). At the age of eight, when it became clear that his deafness was incurable, and that without special measures his speech would regress, he was sent to a special school in

England, one of the ruthlessly dedicated, but misconceived, rigorously "oral" schools, which are concerned above all to make the deaf speak like other children, and which have done so much harm to the prelingually deaf since their inception. The young David Wright was flabbergasted at his first encounter with the prelingually deaf.

> Sometimes I took lessons with Vanessa. She was the first deaf child I had met. . . . But even to an eight-year-old like myself her general knowledge seemed strangely limited. I remember a geography lesson we were doing together, when Miss Neville asked,
>
> "Who is the king of England?"
>
> Vanessa didn't know; troubled, she tried to read sideways the geography book, which lay open at the chapter about Great Britain that we had prepared.
>
> "King—king," began Vanessa.
>
> "Go on," commanded Miss Neville.
>
> "I know," I said.
>
> "Be quiet."
>
> "United Kingdom," said Vanessa.
>
> I laughed.
>
> "You are very silly," said Miss Neville. "How can a king be called 'United Kingdom'?"
>
> "King United Kingdom," tried poor Vanessa, scarlet.
>
> "Tell her if you know, [David]."
>
> "King George the Fifth," I said proudly.
>
> "It's not fair! It wasn't in the book!"
>
> Vanessa was quite right of course; the chapter on the geography of Great Britain did not concern itself with its political setup. She was far from stupid; but having been born deaf her

> slowly and painfully acquired vocabulary was still too small to allow her to read for amusement or pleasure. As a consequence there were almost no means by which she could pick up the fund of miscellaneous and temporarily useless information other children unconsciously acquire from conversation or random reading. Almost everything she knew she had been taught or made to learn. And this is a fundamental difference between hearing and deaf-born children—or was, in that pre-electronic era.

Vanessa's situation, one sees, was a serious one, despite her native ability; and it was helped only with much difficulty, if not actually perpetuated, by the sort of teaching and communication forced upon her. For in this progressive school, as it was regarded, there was an almost insanely fierce, righteous prohibition of sign language—not only of the standard British Sign Language but of the "sign-argot"—the rough sign language developed on their own by the deaf children in the school. And yet—this is also well described by Wright—signing flourished at the school, was irrepressible despite punishment and prohibition. This was young David Wright's first vision of the boys:

> Confusion stuns the eye, arms whirl like windmills in a hurricane . . . the emphatic silent vocabulary of the body—look, expression, bearing, glance of eye; hands perform their pantomime. Absolutely engrossing pandemonium. . . . I begin to sort out what's going on. The seemingly corybantic brandishing of hands and arms reduces itself to a convention, a code which as yet conveys nothing. It is in fact a kind of vernacular. The school has evolved its own peculiar language or argot, though not a verbal one. . . . All communications were sup-

> posed to be oral. Our own sign-argot was of course prohibited. . . . But these rules could not be enforced without the presence of the staff. What I have been describing is not how we talked, but how we talked among ourselves when no hearing person was present. At such times our behaviour and conversation were quite different. We relaxed inhibitions, wore no masks.

Such was the Northampton School in the English Midlands, when David Wright went there as a pupil in 1927. For him, as a postlingually deaf child, with a firm grasp of language, the school was, manifestly, excellent. For Vanessa, for other prelingually deaf children, such a school, with its ruthlessly oral approach, was not short of a disaster. But a century earlier, say, in the American Asylum for the Deaf, opened a decade before in Hartford, Connecticut, where there was free use of sign language between all pupils and teachers, Vanessa would not have found herself pitifully handicapped; she might have become a literate, perhaps even literary, young woman of the sort who emerged and wrote books during the 1830s.

The situation of the prelingually deaf, prior to 1750, was indeed a calamity: unable to acquire speech, hence "dumb" or "mute"; unable to enjoy free communication with even their parents and families; confined to a few rudimentary signs and gestures; cut off, except in large cities, even from the community of their own kind; deprived of literacy and education, all knowledge of the world; forced to do the most menial work; living alone, often close to destitution; treated by the law and society as little better than imbeciles—the lot of the deaf was manifestly dreadful.[12]

But what was manifest was as nothing to the destitution inside—the destitution of knowledge and thought that prelingual deafness could bring, in the absence of any communication or remedial measures. The deplorable state of the deaf aroused both the curiosity and the compassion of the *philosophes*. Thus the Abbé Sicard asked:

> *Why* is the uneducated deaf person isolated in nature and unable to communicate with other men? *Why* is he reduced to this state of imbecility? Does his biological constitution differ from ours? Does he not have everything he needs for having sensations, acquiring ideas, and combining them to do everything that we do? Does he not get sensory impressions from objects as we do? Are these not, as with us, the occasion of the mind's sensations and its acquired ideas? *Why* then does the deaf person remain stupid while we become intelligent?

To ask this question—never really or clearly asked before—is to grasp its answer, to see that the answer lies in the use of symbols. It is, Sicard continues, because the deaf person has "no symbols for fixing and combining ideas . . . that there is a total communication-gap between him and other people." But what was all-important, and had been a source of fundamental confusion since Aristotle's pronouncements on the matter, was the enduring misconception that symbols had to be speech. Perhaps indeed this passionate misperception, or prejudice, went back to biblical days: the subhuman status of mutes was part of the Mosaic code, and it was reinforced by the biblical exaltation of the voice and ear as the one and true way in which man and God could speak ("In the beginning was the Word"). And yet, over-

borne by Mosaic and Aristotelian thunderings, some profound voices intimated that this need not be so. Thus Socrates' remark in the *Cratylus* of Plato, which so impressed the youthful Abbé de l'Epée:

> If we had neither voice nor tongue, and yet wished to manifest things to one another, should we not, like those which are at present mute, endeavour to signify our meaning by the hands, head, and other parts of the body?

Or the deep, yet obvious, insights of the physician-philosopher Cardan in the sixteenth century:

> It is possible to place a deaf-mute in a position to hear by reading, and to speak by writing . . . for as different sounds are conventionally used to signify different things, so also may the various figures of objects and words. . . . Written characters and ideas may be connected without the intervention of actual sounds.

In the sixteenth century the notion that the understanding of ideas did not depend upon the hearing of words was revolutionary.[13]

But it is not (usually) the ideas of philosophers that change reality; nor, conversely, is it the practice of ordinary people. What changes history, what kindles revolutions, is the meeting of the two. A lofty mind—that of the Abbé de l'Epée—had to meet a humble usage—the indigenous sign language of the poor deaf who roamed Paris—in order to make possible a momentous transformation. If we ask why this meeting had not occurred before, it has something to do with the vocation of the

Abbé, who could not bear to think of the souls of the deaf-mute living and dying unshriven, deprived of the Catechism, the Scriptures, the Word of God; and it is partly owing to his humility—that he *listened* to the deaf—and partly to a philosophical and linguistic idea then very much in the air—that of universal language, like the *speceium* of which Leibniz dreamed.[14] Thus, de l'Epée approached sign language not with contempt but with awe.

> The universal language that your scholars have sought for in vain and of which they have despaired, is here; it is right before your eyes, it is the mimicry of the impoverished deaf. Because you do not know it, you hold it in contempt, yet it alone will provide you with the key to all languages.

That this was a misapprehension—for sign language is not a universal language in this grand sense, and Leibniz's noble dream was probably a chimera—did not matter, was even an advantage.[15] For what mattered was that the Abbé paid minute attention to his pupils, acquired their language (which had scarcely ever been done by the hearing before). And then, by associating signs with pictures and written words, he taught them to read; and with this, in one swoop, he opened to them the world's learning and culture. De l'Epée's system of "methodical" signs—a combination of their own Sign with signed French grammar—enabled deaf students to write down what was said to them through a signing interpreter, a method so successful that, for the first time, it enabled ordinary deaf pupils to read and write French, and thus acquire an education. His school, founded in 1755, was the first to achieve public support. He trained a multitude of teachers for the deaf, who, by the time of

his death in 1789, had established twenty-one schools for the deaf in France and Europe. The future of de l'Epée's own school seemed uncertain during the turmoil of revolution, but by 1791 it had become the National Institution for Deaf-Mutes in Paris, headed by the brilliant grammarian Sicard. De l'Epée's own book, as revolutionary as Copernicus' in its own way, was first published in 1776.

De l'Epée's book, a classic, is available in many languages. But what have not been available, have been virtually unknown, are the equally important (and, in some ways, even more fascinating) original writings of the deaf—the first deaf-mutes ever able to write. Harlan Lane and Franklin Philip have done a great service in making these so readily available to us in *The Deaf Experience*. Especially moving and important are the 1779 "Observations" of Pierre Desloges—the first book to be published by a deaf person—now available in English for the first time. Desloges himself, deafened at an early age, and virtually without speech, provides us first with a frightening description of the world, or unworld, of the languageless.

> At the beginning of my infirmity, and for as long as I was living apart from other deaf people . . . I was unaware of sign language. I used only scattered, isolated, and unconnected signs. I did not know the art of combining them to form distinct pictures with which one can represent various ideas, transmit them to one's peers, and converse in logical discourse.

Thus Desloges, though obviously a highly gifted man, could scarcely entertain "ideas," or engage in "logical discourse," *until* he had acquired sign language (which, as is usual with the deaf,

he learned from someone deaf, in his case from an illiterate deaf-mute). Desloges, though highly intelligent, was intellectually disabled until he learned Sign—and, specifically, to use the word that the British neurologist Hughlings-Jackson was to use a century later in regard to the disabilities attendant on aphasia, he was unable to "propositionize." It is worth clarifying this by quoting Hughlings-Jackson's own words:[16]

> We do not either speak or think in words or signs only, but in words or signs referring to one another in a particular manner. . . . Without a proper interrelation of its parts, a verbal utterance would be a mere succession of names, a word-heap, embodying no proposition. . . . The unit of speech is a proposition. Loss of speech (aphasia) is, therefore, the loss of power to propositionize . . . not only loss of power to propositionize aloud (to talk), but to propositionize either internally or externally. . . . The speechless patient has lost speech, not only in the popular sense that he cannot speak aloud, but in the fullest sense. We speak not only to tell other people what we think, but to tell ourselves what we think. Speech is a part of thought.

This is why, earlier, I spoke of prelingual deafness as being potentially far more devastating than blindness. For it may dispose, unless this is averted, to a condition of being virtually without language—and of being unable to "propositionize"—which must be compared to aphasia, a condition in which thinking itself can become incoherent and stunted. The languageless deaf may indeed be *as if* imbecilic—and in a particularly cruel way, in that intelligence, though present and perhaps abundant, is locked up so long as the lack of language lasts. Thus the Abbé

Sicard is right, as well as poetic, when he writes of the introduction of Sign as "opening up the doors of . . . intelligence for the first time."

Nothing is more wonderful, or more to be celebrated, than something that will unlock a person's capacities and allow him to grow and think, and no one praises or portrays this with such fervor or eloquence as these suddenly liberated mutes, such as Pierre Desloges:

> The [sign] language we use among ourselves, being a faithful image of the object expressed, is singularly appropriate for making our ideas accurate and for extending our comprehension by getting us to form the habit of constant observation and analysis. This language is lively; it portrays sentiment, and develops the imagination. No other language is more appropriate for conveying strong and great emotions.

But even de l'Epée was unaware, or could not believe, that sign language was a complete language, capable of expressing not only every emotion but every proposition and enabling its users to discuss any topic, concrete or abstract, as economically and effectively and grammatically as speech.[17]

This indeed has always been evident, if only implicitly, to all native signers, but has always been denied by the hearing and speaking, who, however well intentioned, regard signing as something rudimentary, primitive, pantomimic, a poor thing. De l'Epée had this delusion—and it remains an almost universal delusion of the hearing now. On the contrary, it must be understood that Sign is the equal of speech, lending itself equally to the rigorous and the poetic—to philosophical analysis or to

making love—indeed, with an ease that is sometimes greater than that of speech. (Indeed, if learned as a primary language, Sign may be used and maintained by the hearing as a continuing and at times preferred alternative to speech.)

The philosopher Condillac, who at first had seen deaf people as "sentient statues" or "ambulatory machines" incapable of thought or any connected mental activity, coming incognito to de l'Epée's classes, became a convert, and provided the first philosophic endorsement of his method and of sign language:

> From the language of action de l'Epée has created a methodical, simple, and easy art with which he gives his pupils ideas of every kind, and, I daresay, ideas more precise than the ones usually acquired with the help of hearing. When as children we are reduced to judging the meaning of words from the circumstances in which we hear them, it often happens that we grasp the meaning only approximately, and we are satisfied with this approximation all our lives. It is different with the deaf taught by de l'Epée. He has only one means for giving them sensory ideas; it is to analyze and to get the pupil to analyze with him. So he leads them from sensory to abstract ideas; we can judge how advantageous de l'Epée's action language is over the speech sounds of our governesses and tutors.

From Condillac to the public at large, who also flocked to de l'Epée's and Sicard's demonstrations, there came an enormous and generous change of heart, a welcoming of the previously outcast into human society. This period—which now seems a sort of golden period in deaf history—saw the rapid establishment of deaf schools, usually manned by deaf teachers, through-

had swept France between 1770 and 1820, thus continued its triumphant course in the United States until 1870 (Clerc, immensely active to the end and personally charismatic, died in 1869). And then—and this is the turning point in the entire story—the tide turned, turned against the use of Sign by and for the deaf, so that within twenty years the work of a century was undone.

Indeed, what was happening with the deaf and Sign was part of a general (and if one wishes, "political") movement of the time: a trend to Victorian oppressiveness, and conformism, intolerance of minorities, and minority usages, of every kind—religious, linguistic, ethnic. Thus it was at this time that the "little nations" and "little languages" of the world (for example, Wales and Welsh) found themselves under pressure to assimilate or conform.

Specifically, there had been for two centuries a countercurrent of feeling, from teachers and parents of deaf children, that the goal of deaf education should be teaching the deaf how to speak. Already, a century earlier, de l'Epée had found himself in implicit if not explicit opposition to Pereire, the greatest "oralist" or "demutizer" of his time, who dedicated his life to teaching deaf people how to speak; this was a task, indeed, for which dedication was needed, for it required years of the most intensive and arduous training, with one teacher working with one pupil, to have any hope of success, whereas de l'Epée could educate pupils by the hundred. Now, in the 1870s, a current that had been growing for decades, fed, paradoxically, by the immense success of the deaf-mute asylums and their spectacular demonstrations of the educability of the deaf, erupted and attempted to eliminate the very instrument of success.

There were, indeed, real dilemmas, as there had always been, and they exist to this day. What good, it was asked, was the use of signs without speech? Would this not restrict deaf people, in daily life, to intercourse with other deaf people? Should not speech (and lipreading) be taught instead, allowing a full integration of the deaf into the general population? Should not signing be proscribed, lest it interfere with speech?[22]

But there is the other side of the argument. If the teaching of speech is arduous and occupies dozens of hours a week, might not its advantages be offset by these thousands of hours taken away from general education? Might one not end up with a functional illiterate who has, at best, a poor imitation of speech? What is "better," integration or education? Might one have both, by combining both speech and Sign? Or will any such attempted combination bring about, not the best, but the worst, of both worlds?

These dilemmas, these debates, of the 1870s seem to have been gathering force beneath the surface throughout a century of achievement—an achievement that could be seen, and was seen, by many, as perverse, as conducive to isolation and a set-apart people.

Edward Gallaudet himself was an open-minded man who traveled extensively in Europe in the late 1860s, touring deaf schools in fourteen countries. He found that the majority used both sign language and speech, that the sign language schools did as well as the oral schools as far as articulating speech was concerned, but obtained superior results in general education. He felt that articulation skills, though highly desirable, could not be the basis of primary instruction—that this had to be achieved, and achieved early, by Sign.

Gallaudet was balanced, but others were not. There had been a rash of "reformers"—Samuel Gridley Howe and Horace Mann were egregious examples—who clamored for an overthrow of the "old-fashioned" sign language asylums and for the introduction of "progressive" oralist schools. The Clarke School for the Deaf in Northampton, Massachusetts, was the first of these, opened in 1867. (It was the model and inspiration of the Northampton School in England, founded by the Reverend Thomas Arnold the following year.) But the most important and powerful of these "oralist" figures was Alexander Graham Bell, who was at once heir to a family tradition of teaching elocution and correcting speech impediments (his father and grandfather were both eminent in this), tied into a strange family mix of deafness denied (both his mother and his wife were deaf, but never acknowledged this) and, of course, a technological genius in his own right. When Bell threw all the weight of his immense authority and prestige into the advocacy of oralism, the scales were, finally, overbalanced and tipped, and at the notorious International Congress of Educators of the Deaf held at Milan in 1880, where deaf teachers were themselves excluded from the vote, oralism won the day and the use of Sign in schools was "officially" proscribed.[23] Deaf pupils were prohibited from using their own "natural" language, and thenceforth forced to learn, as best they might, the (for them) "unnatural" language of speech. And perhaps this was in keeping with the spirit of the age, its overweening sense of science as power, of commanding nature and never deferring to it.

One of the consequences of this was that hearing teachers, not deaf teachers, now had to teach deaf students. The proportion of deaf teachers for the deaf, which was close to 50 percent in 1850, fell to 25 percent by the turn of the century, and to 12

percent by 1960. More and more, English became the language of instruction for deaf students, taught by hearing teachers, fewer and fewer of whom knew any sign language at all—the situation depicted by David Wright, at his school in the 1920s.

None of this would have mattered had oralism worked. But the effect, unhappily, was the reverse of what was desired—an intolerable price was exacted for the acquisition of speech. Deaf students of the 1850s who had been to the Hartford Asylum, or other such schools, were highly literate and educated—fully the equal of their hearing counterparts. Today the reverse is true. Oralism and the suppression of Sign have resulted in a dramatic deterioration in the educational achievement of deaf children and in the literacy of the deaf generally.[24]

These dismal facts are known to all teachers of the deaf, however they are to be interpreted. Hans Furth, a psychologist whose work is concerned with cognition of the deaf, states that the deaf do as well as the hearing on tasks that measure intelligence without the need for acquired information. He argues that the congenitally deaf suffer from "information deprivation." There are a number of reasons for this. First, they are less exposed to the "incidental" learning that takes place out of school—for example, to that buzz of conversation that is the background of ordinary life; to television, unless it is captioned, etc. Second, the content of deaf education is meager compared to that of hearing children: so much time is spent teaching deaf children speech—one must envisage between five and eight years of intensive tutoring—that there is little time for transmitting information, culture, complex skills, or anything else.

Yet the desire to have the deaf speak, the insistence that they speak—and from the first, the odd superstitions that have always clustered around the use of sign language, to say noth-

ing of the enormous investment in oral schools, allowed this deplorable situation to develop, practically unnoticed except by deaf people, who themselves being unnoticed had little to say in the matter. And it was only during the 1960s that historians and psychologists, as well as parents and teachers of deaf children, started asking, "What has happened? What *is* happening?" It was only in the 1960s and early 1970s that this situation reached the public, in the form of novels such as Joanne Greenberg's *In This Sign* and more recently the powerful play (and movie) *Children of a Lesser God* by Mark Medoff.[25]

There is the perception that something must be done. But what? Typically, there is the seduction of compromise—that a "combined" system, combining sign and speech, will allow the deaf to become adept at both. A further compromise, containing a deep confusion, is suggested: having a language intermediate between English and Sign (i.e., a signed English). This category of confusion goes back a long way—back to de l'Epée's "Methodical Signs," which were an attempt to intermediate between French and Sign. But true sign languages are in fact complete in themselves: their syntax, grammar, and semantics are complete, but they have a different character from that of any spoken or written language. Thus it is not possible to transliterate a spoken tongue into Sign word by word or phrase by phrase—their structures are essentially different. It is often imagined, vaguely, that sign language *is* English or French. It is nothing of the sort; it is itself, Sign. Thus, the "Signed English" now favored as a compromise is unnecessary, for no intermediary pseudo-language is needed. And yet, deaf people are forced to learn the signs not for the ideas and actions they want to express, but for phonetic English sounds they cannot hear.

pause and then, "Now you come to mention it, yes, Ebenezer *was* deaf and dumb." But Ebenezer's deaf-and-dumbness had never set him apart, had scarcely even been noticed as such: he had been seen, he was remembered, simply as "Ebenezer"—friend, neighbor, dory fisherman—not as some special, handicapped, set-apart deaf-mute. The deaf on Martha's Vineyard loved, married, earned their livings, worked, thought, wrote, as everyone else did—they were not set apart in any way, unless it was that they were, on the whole, better educated than their neighbors, for virtually all of the deaf on Martha's Vineyard were sent to be educated at the Hartford Asylum—and were often looked at as the most sagacious in the community.[30]

Intriguingly, even after the last deaf Islander had died in 1952, the hearing tended to preserve Sign among themselves, not merely for special occasions (telling dirty jokes, talking in church, communicating between boats, etc.) but generally. They would slip into it, involuntarily, sometimes in the middle of a sentence, because Sign is "natural" to all who learn it (as a primary language), and has an intrinsic beauty and excellence sometimes superior to speech.[31]

I was so moved by Groce's book that the moment I finished it I jumped in the car, with only a toothbrush, a tape recorder, and a camera—I had to see this enchanted island for myself. I saw how some of the oldest inhabitants still preserved Sign, delighted in it, among themselves. My first sight of this, indeed, was quite unforgettable. I drove up to the old general store in West Tisbury on a Sunday morning and saw half a dozen old people gossiping together on the porch. They could have been any old folks, old neighbors, talking together—until suddenly, very startlingly, they all dropped into Sign. They signed for a minute, laughed, then dropped back into speech. At this

moment I knew I had come to the right place. And, speaking to one of the very oldest there, I found one other thing, of very great interest. This old lady, in her nineties, but sharp as a pin, would sometimes fall into a peaceful reverie. As she did so, she might have seemed to be knitting, her hands in constant complex motion. But her daughter, also a signer, told me she was not knitting but thinking to herself, thinking in Sign. And even in sleep, I was further informed, the old lady might sketch fragmentary signs on the counterpane—she was dreaming in Sign. Such phenomena cannot be accounted as merely social. It is evident that if a person has learned Sign as a primary language, his brain/mind will retain this, and use it, for the rest of that person's life, even though hearing and speech be freely available and unimpaired. Sign, I was now convinced, was a fundamental language of the brain.