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Spring 1996

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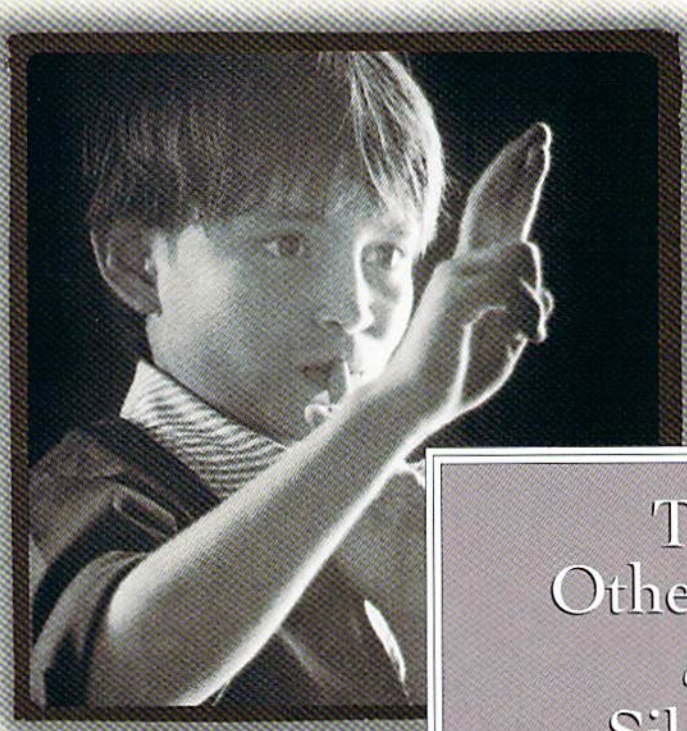
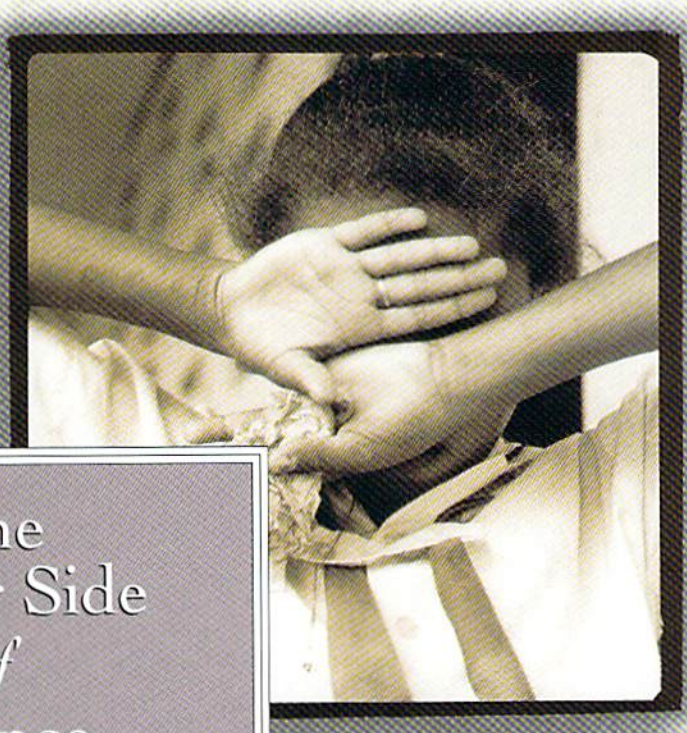
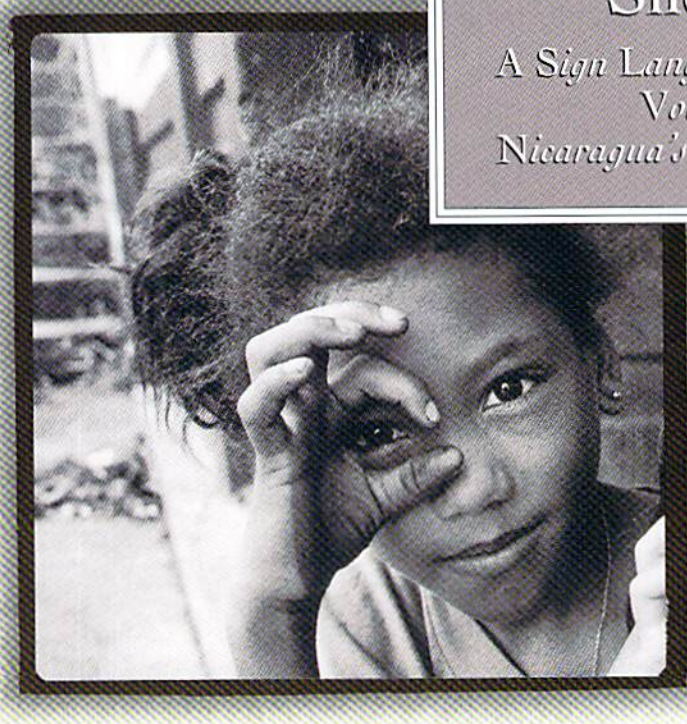
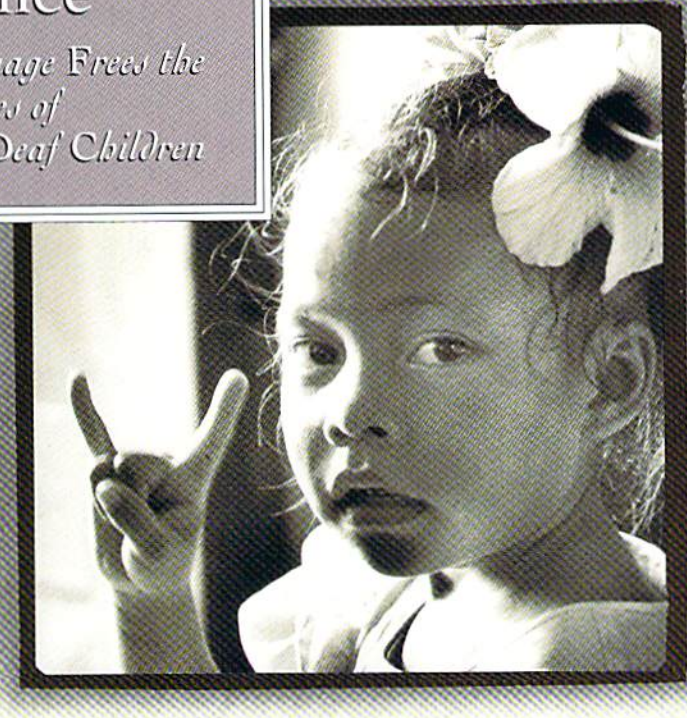




The Other Side of Silence

A Sign Language Frees the Voices of Nicaragua's Deaf Children





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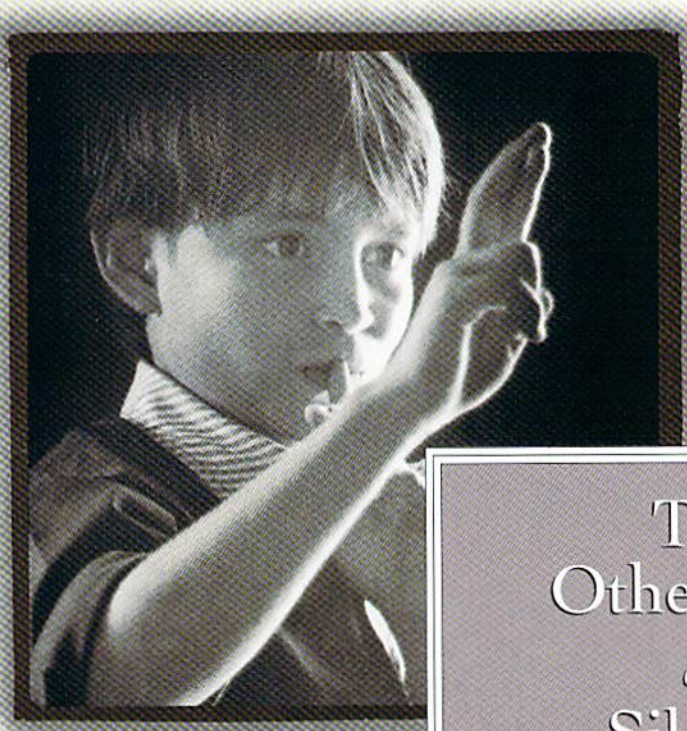

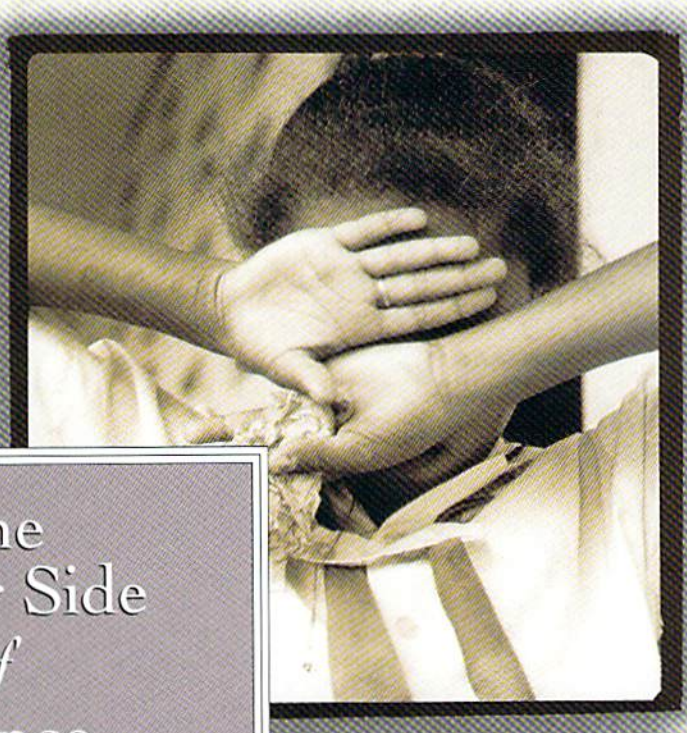

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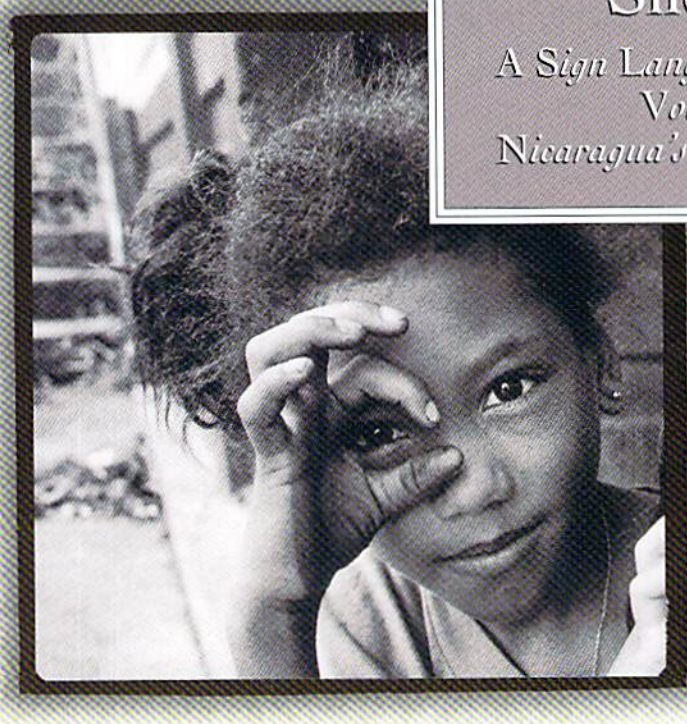

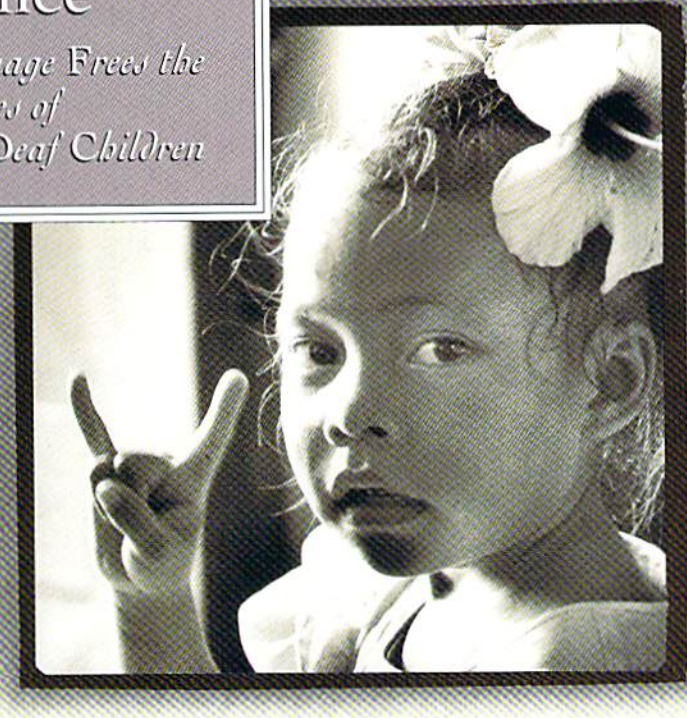

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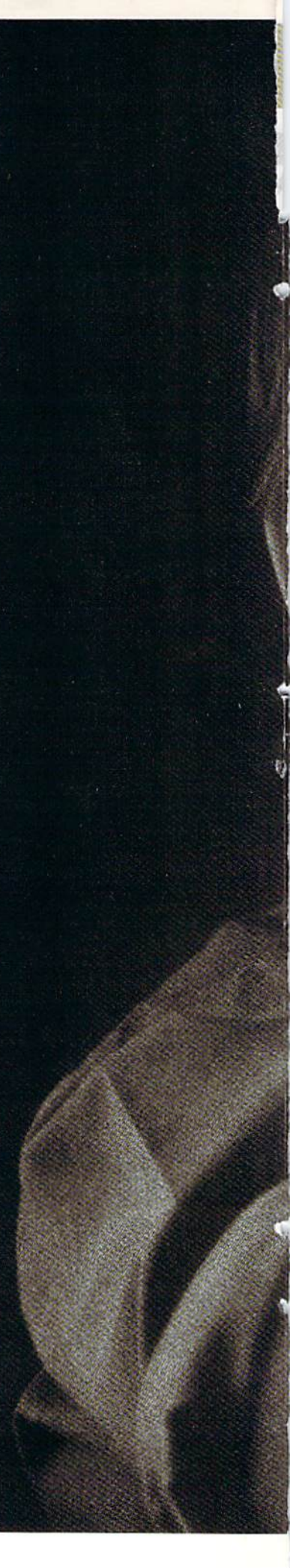
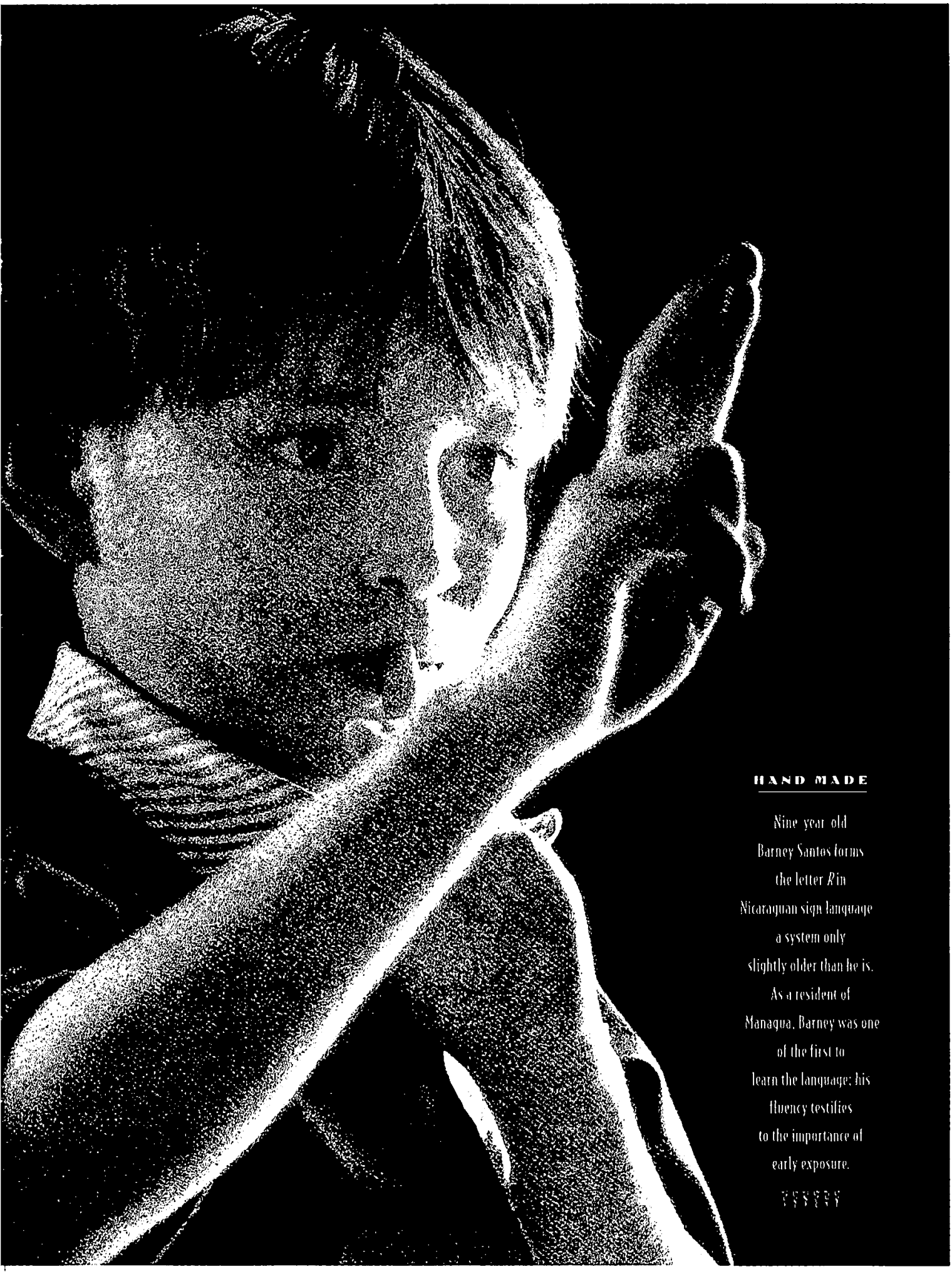
In the hands of a child

SILENCE WAS THE ONLY WORLD KNOWN TO THE DEAF CHILDREN OF NICARAGUA—UNTIL A RUTGERS PROFESSOR BROUGHT THEM THE GIFT OF LANGUAGE.

BY BILL GLOVIN
PHOTOGRAPHS BY HOLLY MARVIN

Before the American strangers came, eight-year-old Dorbie Hurlston Halford seemed to be living under a terrible curse. Born deaf to hearing parents on remote Corn Island, 50 miles off the Atlantic coast of Nicaragua, Dorbie lived in a world without language. She used simple gestures to communicate and pretended not to notice the merciless teasing of the children who mimicked her. Each day, she dutifully put on her uniform and trudged in silence to school,





HAND MADE

Nine year old Barney Santos forms the letter *R* in Nicaraguan sign language a system only slightly older than he is. As a resident of Managua, Barney was one of the first to learn the language; his fluency testifies to the importance of early exposure.

where she watched her classmates learn their lessons. But the letters and numbers on the blackboard meant little to Dorbie, and with each passing year she grew increasingly restless and frustrated.

Then, last July, two women from the United States came to visit the Halford family. They had flown to Corn Island on a mission to find deaf children and young adults in Nicaragua's remote regions. The visitors, Judy Shepard-Kegl, a linguist from Rutgers University, and Jill Morford, a psychologist from McGill University, convinced Dorbie's mother to accompany her daughter on a four-hour boat ride to Bluefields, a port city of 20,000 residents on the mainland coast, where a delegation from the Nicaraguan Sign Language Project (NSLP) was conducting a sign-language school for the summer.

DORBIE'S DILEMMA

Although Dorbie Hurlston Halford, 8, learned sign language at a summer workshop, she lives too far from the Bluefields school to receive regular training. Her teachers fear she may lose all the progress she has made.

Dorbie's residence in Bluefields did not start out well, admit the two professors. Terrified and unable to communicate, Dorbie could not understand that she wasn't being abandoned. On her first night away from home, the frightened girl snuck away from the school and fled through the planks, narrow alleys, and muddy paths of a Bluefields barrio in search of the sea of corrugated metal shacks where she knew her mother was staying with a family friend. "We had half the city looking for her," says Morford, who helped find Dorbie and bring her back to the house later that night.

For the next five weeks, Dorbie lived there with Shepard-Kegl, her husband James, and other support staff of the school. At first, Dorbie would do no more than observe the workshop's classes from the safety of the doorway. But over time she became acclimated, joined in classes, and began to learn sign language. When Shepard-Kegl had to leave Bluefields a week before the workshop ended, Dorbie made it a point to find her and say good-bye with the signs she had learned at the school.

"Not only were deaf children like Dorbie geographically isolated in many parts of the country, but there was no formal sign language in Nicaragua and no sign-language tradition," says Shepard-Kegl, director of NSLP, which works to document and teach sign-language skills to the country's deaf citizens. In Nicaragua, where deafness is generally the result of birth defects and disease rather than hereditary factors, there is no generational handing-down of coping skills from deaf parent to deaf child. And because there is virtually no socialization between the deaf people of this rural country cut by rivers, mountains, and volcanoes, a sign language never developed. "We have learned that if we don't reach children like Dorbie before age 15, which is the end of what we call 'the critical period,' it is unlikely that they will ever fully comprehend language," she adds.

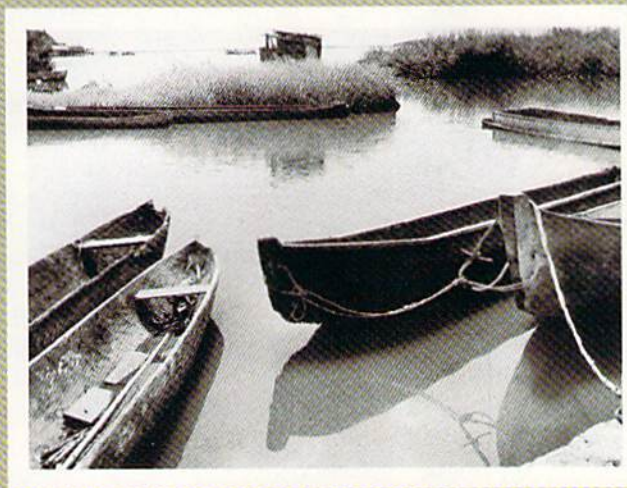
Dorbie was one of the lucky ones; she now has a chance in life, says Shepard-Kegl, who is home from Nicaragua and—for now—far removed from its threats of dengue fever, cholera, and civil war. To illustrate Dorbie's progress, she sets up a videotape at her office in the Center for Molecular and Behavioral Neuroscience at Rutgers–Newark. On screen, Dorbie and Adela Bigman, 4, enthusiastically sign a story from a Spanish-language book. In a second scene, Dorbie and Adela join other children and young adults in singing a national song for their parents and an audience. Throughout the scene—a graduation ceremony celebrating the end of the summer sign-language workshop—the pupils wear the kind of ear-to-ear grins that family members seldom saw before.

Today, life has new meaning for many deaf citizens in and around Bluefields. Shepard-Kegl can't help but beam with pride as videotape after videotape follows the evolution of her deaf students as she helps them learn human language for the first time.

When the Sandinistas overthrew the U.S.-backed government of Anastasio Somoza in 1979, they instituted a revolutionary education program in the largely illiterate country. Believing that education and literacy were fundamental rights owed to every citizen, the Sandinistas built new schools for children and instituted programs to teach basic skills to adults. Much of the new educational emphasis was centered in the capital city of Managua, home to about one-quarter of the nation's 4

HAND TO HAND

Adela Bigman, 4, who traveled by ponga boat from her village to attend the summer workshop, was the youngest child enrolled. As she learned sign language, Adela gained confidence in expressing herself. One day, she brought her dinner into the kitchen and signed to Judy Shepard-Kegl (right), "These beans are lousy—I don't like the way they taste."



ON THE WATERFRONT

Bluefields, once dominated by the Moskito Indians, is named after a 17th-century Dutch pirate, who, legend holds, buried his treasure there. Today, Bluefields residents still travel by boat to reach neighboring villages along the coast.

million residents. In one year, the illiteracy rate in Nicaragua dropped from 50 to 13 percent, and UNESCO awarded its 1980 literacy prize to the National Literacy Crusade of Nicaragua.

The Sandinista government extended their education efforts to Nicaragua's deaf children, who had always been isolated socially and considered mentally handicapped. Although schools for the deaf were formed in Managua, León, El Viejo, Granada, San Marcos, Jinotepe, and other cities, there was no formal sign language, nor were there teachers who understood the many "home signs," or gestural systems developed by deaf children within their families. In 1985, the Nicaraguan Ministry of Education set out to find a specialist to develop an education program for deaf citizens.

SILENT CRUSADER

Judy Shepard-Kegl chose not to impose an adaptation of the American system on the deaf community of Nicaragua, but to let a sign language evolve naturally among its members.

Shepard-Kegl was working as a faculty member at Northeastern University in Boston when the education ministry found her through Linguists for Nicaragua, an advocacy organization based at the Massachusetts Institute of Technology, where she had received her doctorate. Shepard-Kegl had joined Linguists for Nicaragua because she was impressed with the country's commitment to educational reforms; she never imagined that her membership in the organization would lead to what she calls "a once-in-a-lifetime opportunity for a linguist." She readily accepted the education ministry's offer. "It turned out to be a chance to explore the virtual birth of a language and the question of whether humans—without any input or outside influence—have the capacity to generate language on their own. Linguists had never explored up close exactly what happens when hundreds of deaf strangers without a common language suddenly come together and form a social group."

Before setting foot in Nicaragua, Shepard-Kegl was faced with two obstacles: She had to pay her own way and she couldn't speak Spanish. She received a boost over the second hurdle when one of her Spanish-speaking students, Cynthia Norman, volunteered to go to Managua and lay the groundwork for her. "When I first arrived, we went to a vocational school called Villa Libertad," recalls Shepard-Kegl. "We asked the staff how we could help. They pointed to a group of deaf kids gesturing to each other and said, 'We want to know what they're talking about.' Then and there we made a deal."

The staff of Villa Libertad agreed to give Shepard-Kegl unrestricted access to the classes and activities of the school so that she could establish a rapport with the deaf students and eventually understand the gestural system they had developed. In return, Shepard-Kegl would help the students teach their teachers the sign language so that the two groups could communicate.

She started by absorbing and recording their signs, which were called *mimicas* by the hearing community. When the students realized that she was trying to document their language, about 10 teenaged girls circled her. "They began to point to things to see if I knew the signs," she says. "When I didn't, they gave me the sign." The group responded with absolute glee when Shepard-Kegl was able to figure out their sign for a sanitary napkin.

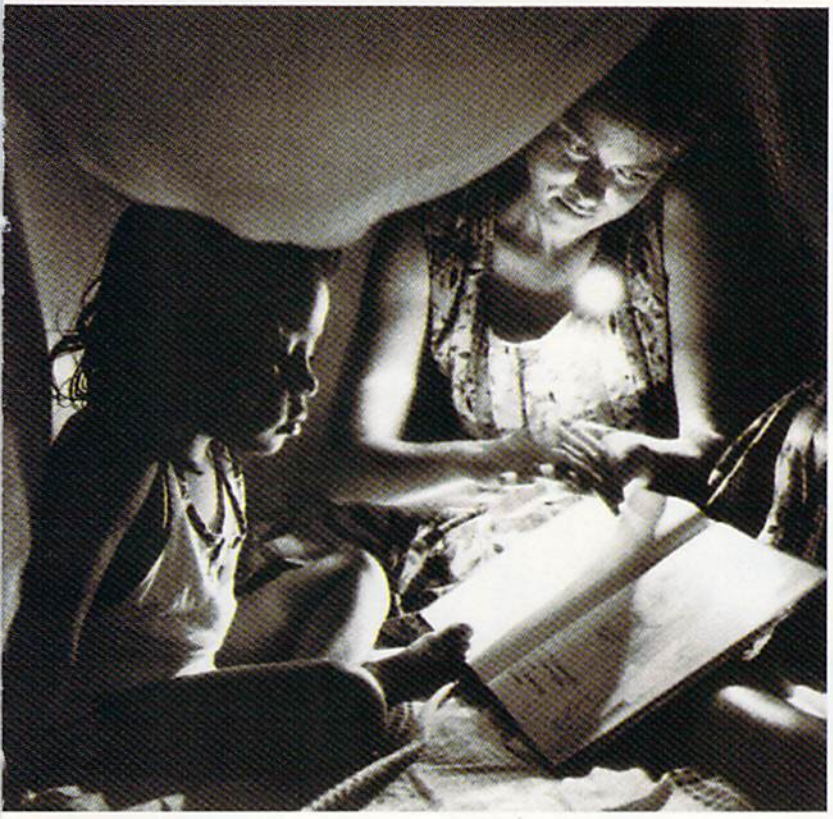
The signs the girls had developed were not based on the alphabet but on the physical characteristics of the thing or person. When naming individuals, no two signs were alike and a few were compounds of two or more signs. To indicate Shepard-Kegl, the girls used a combination of handshakes, rubbing of the forearm, and tapping at the side of the eye. She later learned that her name sign meant "white skin/glasses." As Shepard-Kegl's skin began to show the effects of the Nicaraguan sun, the teenagers changed her name sign from white to pink to red.

The deaf students soon adopted Shepard-Kegl as their own, teaching her their signs and helping her learn the ins and outs of Nicaraguan life. After only one week, she began guiding the deaf students as they taught their hearing teachers the system that came to be called Lenguaje de Signos Nicaraguenese, or LSN. This relatively crude, "pidgin" communication system that the teenagers had constructed on their own would become the basis for Nicaragua's national sign language. "Our goal was to document their language, not to impose a new language on them," says Shepard-Kegl. "Deaf Nicaraguans had naturally developed a considerable number of gestures and were able to communicate in a sign language that was evolving. Teaching them American Sign Language would have been like having people from the Australian outback come to the United States and make us all learn Warlpiri."

Within three weeks of her arrival in Nicaragua, Shepard-Kegl and three deaf students began workshops in sign-language training for 30 hearing teachers, students, and social-service and education officials. By the mid-

SWEET DREAMS

Protected by a mosquito net and darkness, home-sign specialist Jill Morford reads to Adela Bigman, 4. Storytelling is a vital component of the Bluefields curriculum. At the end of each day, a teacher signs a story from a book; the students then come forward to retell the story using the signs they know.



1980s, as more young home-signers were brought together and entered schools along the Pacific coast, LSN evolved into Idioma de Signos Nicaraguenese (ISN), which Shepard-Kegl calls "a truly rich language with a complex and consistent grammar." Eventually, these two coexisting systems became the sign language that has been adopted nationally but has yet to receive its official name. "Nicaraguans agree that the deaf community, rather than some group of hearing researchers, should officially name the language," says Shepard-Kegl, explaining the impasse. "But while it has a perfectly good name in signs—two hands with fingers spread, making alternating circles away from the signer—it simply does not have a counterpart in words.

"Labels and acronyms come from researchers and education officials," she continues feistily, "not from deaf kids or parents." Her measured words make it clear that she doesn't want anyone but the Nicaraguans to take an ounce of credit for the development of the sign language. "My role was to recognize and document the various stages of a sign language that the children developed themselves."

Initially, that was the only goal of NSLP. But in 1990, as its director, Shepard-Kegl undertook an ambitious population study that would, first, identify the entire deaf population of Nicaragua, estimated at approximately 3,300 individuals; and second, document the development of the sign language and the deaf community by profiling each and every member. This study, the first of its kind, will record the triumphs and challenges of deaf people providing themselves with the language skills necessary to lead productive, satisfying lives.

Through the late 1980s and early '90s, a strong support network for the deaf community evolved on the Pacific coast of Nicaragua, which is more settled than the Atlantic coast. ANSNIC, the nation's first association for the deaf, was founded as a self-advocacy organization for deaf citizens. In her role as director of the NSLP, Shepard-Kegl came to Nicaragua two or three times a year to document the structure and vocabulary of the sign language and its emergence.

Many projects, however, did not require her presence in the country. From Northeastern University, and, beginning in 1990, from Rutgers, she prepared and supervised students from other universities doing linguistics research in Nicaragua, coordinated efforts to obtain donations of hearing aids, and completed a video sign dictionary for the Villa Libertad school. She also began to work intensely on the country's first sign-language dictionary, which will be published this spring by the Swedish Association for the Deaf. Because she had yet to receive any funding, she used her evenings and weekends to analyze videotapes of interplay between deaf signers for her research on sign-language structure and the critical period and collaborated with researchers documenting the other indigenous languages of Nicaragua.

"Documenting the birth of a signed or spoken language is a totally unique and complex concept," explains Shepard-Kegl. "Besides breaking down and analyzing hundreds of hours of videotape of deaf individuals in various stages as the language becomes richer and more diverse, there are issues unfolding like social adjustment and development, educational reform, literacy and speech, curriculum considerations, and more." The work of many graduate students, who shared the results and data of their own research, went a long way toward filling in pieces of the puzzle. Other researchers who played important roles in the documentation of the language and community were Ann Senghas, a psycholinguist, and her brother, anthropol-

UNLIMITED POTENTIAL

When Anselmo Alvarado, 16, first came to the Bluefields school, he was unable to communicate; after only 10 weeks of sign-language training, he had become so proficient that he was placed in charge of the school's mentoring program.

SILENT REFLECTIONS

Shadows on a wall outside the Managua home of Barney Santos, 9, capture his signed conversation with Richard Senghas, an anthropologist from the University of Rochester. Because Managua is Nicaragua's capital and an urban center, Nicaraguan sign language was first introduced here. City children like Barney are therefore much more fluent than peers in more remote regions.

DAILY COMMUTE

At the end of each school day, the children return by the muddy paths of the overcrowded Bluefields barrio to their homes—corrugated metal shacks that lack plumbing, gas, and electricity.

ogist Richard Senghas, both from the University of Rochester; Gayle Iwata, a sociologist from the University of Pennsylvania; and Jill Morford, a specialist in home signs.

Today, the evolution of the educational system in Nicaragua and its day-to-day involvement of deaf adults surprises visitors from the United States—deaf and hearing alike. "They see deaf adults writing grant proposals, coordinating programs, and helping run their own schools," says Shepard-Kegl. "They're especially amazed to see deaf adults teaching deaf children, which is unheard of in the United States, where hearing people run almost everything associated with the deaf. In Nicaragua, it's different because there wasn't that prior entrenchment of hearing people running the show."

In 1993, with deaf education firmly in place on the Pacific coast, Shepard-Kegl was ready for the next big hurdle: bringing ISN to the sparsely populated, less settled Atlantic coast, where 8 percent of the country's population lives in small cities and villages that are separated from the rest of Nicaragua by mountains and a dense rain forest. Reinforcing its isolation is the absence of roads, gas and electricity, plumbing, and telecommunications. So remote is the area that native languages such as Miskitu, Sumu, Rama, and Ulwa, rather than Spanish, are spoken. In the 1980s, Contra guerillas conducted some of their heaviest fighting here; in 1990, a hurricane further devastated the area. Rebuilding the infrastructure was a higher priority than establishing schools and instituting programs for the deaf. Still, Shepard-Kegl knew that there were hundreds of people on the Atlantic coast whose deafness was more isolating than any mountain or forest.

But ANSNIC officials needed to be convinced that a significant number of deaf citizens lived on the Atlantic coast before they would support a sign-language program there. And Shepard-Kegl needed to learn if ISN had passed, hand to hand, from the Pacific to the Atlantic coasts. In December 1994, when Shepard-Kegl needed to find deaf residents and to document any indications of sign language on the Atlantic coast, her husband, James Shepard-Kegl, and Gene Mirus, a deaf anthropology graduate student at the University of Texas, volunteered to conduct a search. James, an attorney who first accompanied his wife to Nicaragua as a tourist in 1987, learned more about the culture and history following the couple's adoption of two Nicaraguan hearing children in 1989 and 1991. He had come to share his wife's passion for Nicaragua's deaf children and was eager to do his part.

Because no road stretches from one side of Nicaragua to the other, James Shepard-Kegl and Mirus took a small plane from Managua over the mountainous rain forest and the Río Escondido to complete the 200-mile trip to Bluefields, home to one of the Atlantic coast's two airports. In Bluefields, Shepard-Kegl and Mirus found no deaf children, so they traveled north for two hours by boat to Pearl Lagoon. There, English tourists told the pair that they had seen several deaf children—in Bluefields.

The two got back on the boat, returned south, and found that there were indeed deaf children in Bluefields; they had simply missed them. In fact, Los Pipitos, a private self-help organization for parents of children with disabilities, had enrolled these deaf children in a government-sponsored school designed for hearing children who had been injured in the nation's civil war. The school had no deaf teachers or sign-language instruction, but Los Pipitos believed that any educational program was better than none at all.

Brought together, the children had started a rudimentary system of home signs, and James and Mirus were struck by the similarity to the phenomenon that Judy had observed years before at Villa Libertad and other schools in Managua. When James and Mirus learned that there were other deaf children in the community not enrolled in the school, they recognized the full potential of bringing them into regular contact with each other: Researchers could begin to document the formation of a deaf community from its very roots.

A few weeks later, the Shepard-Kegls took videotapes that had been made at Bluefields to ANSNIC officials in Managua and encouraged them to send a delegation of instructors to see this seed of a deaf community. The Shepard-Kegls, arriving at Bluefields several days before the delegation, canvassed the city and nearby villages to inform families that a group was coming to conduct a workshop. The delegation, which comprised three deaf adults, an interpreter, and Mirus, provided instruction to 15 children, their families, and two deaf adults. For many of the children, it was their first day of school.

The four-day workshop was so successful that the group promised their new students that they'd return in June to conduct a more extensive workshop—

(Continued on page 44)

A Child's Hands

Continued from page 31

although they didn't know where the money to fund such an undertaking would come from. Says Shepard-Kegl: "I don't think they believed for a minute that we'd be back."

Much to the delight and surprise of the deaf community in Bluefields, James and two deaf teachers arrived in June 1995, just as they had promised. Judy came a few weeks later, and colleagues specializing in home sign, speech, audiology, and anthropology, as well as two other deaf teachers, came for shorter stays. "Twenty-six kids who had had no or very limited interaction before were suddenly brought together," says Judy. "As a way to understand the creation and development of human language in a controlled environment, it was a phenomenon."

Unfortunately, it was easier to find teachers who wanted to establish a school in a remote outpost of Nicaragua and researchers who wanted to study the formation of language skills among a group of deaf children than it was to find money to fund the excursion.

"We've received some small, private donations, but all along we've had to come up with the money on our own to pay our expenses and to keep the programs going," says Judy. Creative funding meant major sacrifices for the couple and their children: They gave up their rented home in Plainsboro and put their belongings in storage for the summer. "We returned to New Jersey homeless, but the money we saved on rent allowed us to take the trip," says James, who now serves as director of Escuelita de Bluefields, or Little School of Bluefields, as it is known in the community. "Amazingly, we were able to run the entire 10-week school for 26 kids on $7,000. That's less than what most school districts in New Jersey spend on one student per year."

A joint effort between the NSLP, ANSNIC, and Los Pipitos, the school was held four hours each weekday and was conducted by deaf teachers using ISN. A single room with a small kitchen and a storage area made up the entire school. It functioned despite the blinding summer heat that gave way each day to torrential afternoon rains; the daily deluge left Bluefields and the school grounds in a sea of mud. James, who suffered with dengue fever for a week, worked with the teachers on academic content, and Judy and Morford concentrated on communication skills. The children also received lessons in history, geography, and vocabulary.

"At the beginning of the summer, the kids knew just a few gestures, but by the end, they could hold entire conversations with each other," says Judy. "It was amazing to see their surprised faces when they learned things that they had never known—like that the Earth revolves around the Sun and that kings of nations had once been beheaded."

As the school wound down and the Shepard-Kegls prepared to return home, they realized that much of the progress their students had made might be lost in their absence. So they designed and launched education-support networks that could stay afloat without them: a mentoring program, a weekly parents' class, and a small library.

> "It was amazing to see their surprised faces when they learned things that they had never known—like that the Earth revolves around the Sun and that kings of nations had once been beheaded."

The Shepard-Kegls left the projects in the capable hands of 16-year-old Anselmo Alvarado, one of the workshop's star pupils. In addition to running the parents' class, Anselmo, as a mentor, traveled by boat across the bay to El Bluff to sign with Adela and Wanda Lee, 22. "We left him enough money so he could make the $1.50 boat ride twice a week, but somehow he managed to go there almost every day," says Judy, marveling at the boy's ability and dedication.

When Anselmo first came to the school, he displayed considerable artistic ability but had no way of assimilating knowledge. "We realized very quickly that Anselmo had amazing language and math skills, too," continues Judy. "Most of our kids could not conceptualize math, but Anselmo showed such aptitude. We offered him math tutoring every morning and he would show up three hours before it began. He has unlimited potential and an unquenchable thirst for knowledge. Anselmo is the kind of person who makes it all so worthwhile."

After years of struggling to meet expenses, the Shepard-Kegls were counting on two federal grants to keep their programs running. But with the federal budget crisis, the expected funding has not come through, and Judy and James have had to scale back their plans; Judy may have to cut her participation in this summer's school by as long as four weeks. Despite the bad news, James and one deaf teacher returned to Bluefields this past January to run a three-week refresher workshop, make plans for the summer, and restart the mentoring program, which ran out of funding in December.

This summer's school may contain as many outsiders as students. In addition to most of the researchers who took part last summer and two married, deaf professors from the United States who specialize in storytelling and bilingual education, a crew from the British Broadcasting Corporation will visit Bluefields to film a three-part series for its weekly magazine program, "See Hear." In addition, two deaf signers from the Center for Sutton Movement Writing in La Jolla, California, will spend the summer teaching students to write Nicaraguan sign language using a notation system.

While Dorbie Halford was unable to come from Corn Island for January's workshop, the Shepard-Kegls are optimistic that her mother will let her take part in the summer school. As bait, James has offered Mrs. Halford a paid position as the cook for Escuelita de Bluefields. While James spins his schemes for the friends he made last year, Judy plans to cast her net further afield. Taking her camcorder, she hopes to venture by boat from Bluefields several hours north to Puerto Cabezas and La Rosita, other small cities where the deaf are isolated. She knows that right now someone like Dorbie is waiting, wondering if the silence will ever end. ❑

Bill Glovin is the senior editor of Rutgers Magazine.