Ideas & Trends

Written Notice

Another Language for the Deaf

By MARGALIT FOX

IMAGINE a language that can't be written. Hundreds of thousands of people speak it, but they have no way to read a newspaper or study a schoolbook in the language they use all day long.

That is the situation of the quarter-million or more deaf people in North America whose primary language is American Sign Language. Although they form a vast linguistic minority, their language, as complex as any spoken one, has by its very nature defied most attempts to write it down.

In recent years, however, a system of graphic symbols based on dance notation has allowed the world's signed languages to be captured on paper. What's more, the system's advocates say, it may furnish deaf children with a long-sought bridge to literacy in English and other spoken languages, often a great struggle for signers.

But despite its utility, the system, called SignWriting, has yet to be widely adopted by deaf people: for many, the issue of whether signed languages need to be written at all remains an open question. "The written form is used by a small number of educated people," Valerie Sutton, the creator of SignWriting, said in a telephone interview from her office in La Jolla, Calif.

Little by little, though, SignWriting is gaining footholds in individual homes and classrooms in America and abroad. Disseminated by Ms. Sutton's nonprofit organization (www.signwriting.org), it can now be found in 27 countries, including Italy, South Africa, Nicaragua, Japan and Saudi Arabia.

American Sign Language is not English. Spoken in the United States and parts of Canada, it uses word orders and grammatical constructs not found in English (in certain respects it resembles Navajo).

For a deaf child whose first language is A.S.L., English — that is, *written* English — must be learned as a foreign language, just as a hearing person might study Sanskrit. But there is a catch: "The letters of the alphabet are based on sounds they can't hear," Ms. Sutton explained. For this reason, many deaf students never become fully literate in English, a perennial concern of educators. According to a long-term study by the Gallaudet Research Institute in Washington, deaf high school seniors score, on average, just below the fourth-grade level on standardized reading tests.

Dawn McReynolds of Clinton Township, Mich., ran into the problem three years ago, when she discovered her 12-year-old did not know what "bread" meant. Born deaf, and fluent in A.S.L., Nicole McReynolds, then a sixth-grader in public school, was clearly bright. But standardized tests put her academic skills at a first- to second-grade level. As her stunned mother discovered after she pulled Nicole from the classroom and began home schooling, though Nicole had learned by rote to spell simple English words — "bread," "map," "yell" — she had little idea what they actually meant.

"Anything I could draw a picture for, she was O.K. with," Mrs. McReynolds said. "But things like 'what,' 'where,' 'when,' 'who' — she had no idea. It was horrible. It was as if she'd never been educated."

ADVOCATES of SignWriting hope the system can help bridge the literacy gap. Though no formal studies have been published, anecdotal evidence from parents and teachers suggests its potential. "It's made English come alive for her," said Mrs. McReynolds, who introduced Nicole to SignWriting two and a half years ago, after seeing it on local television.

Where spoken languages operate acoustically, signed languages work spatially. Each sign is a compact bundle of data, conveying linguistic information by three primary means at once: the shape of the signer's hands, the location of the hands in space and the direction in which the hands move. (Facial expression also matters.)

Devising a writing system that can capture this blizzard of data for each of A.S.L.'s thousands of signs is no simple task. "When you write English, we're using two-dimensional paper to represent a one-dimensional language, because English is just a series of sounds in a sequence, and we write down the sounds in the order we say them," said Karen van Hoek, a linguist who helped develop SignWriting. "But with sign language, it's the reverse: we're trying to get a three-dimensional language compressed down onto two-dimensional, flat paper."

Other writing systems have been created for A.S.L. during its century-and-a-half-long history. Some, used by linguists, are too abstract for everyday communication. Another, developed recently at the University of Arizona, is meant to help teach written English but not to handle literary traffic, like novel-writing, entirely in A.S.L.

SignWriting, which grew out of a system for transcribing movement that Ms. Sutton developed in the 1970's to notate choreography, can be handwritten, or typed using special software. Written vertically, it uses simple geometric forms to collapse a sign's three basic parameters — hand shape, location and movement — into a streamlined icon, topped by a stylized face.

Few embraced the system at first. Many signers, mindful of a long paternalistic history of hearing people tampering with A.S.L., questioned Ms. Sutton's motives. Educators feared it would deter the deaf from learning English.

Though hostility has subsided, SignWriting is used today by only a small fraction of the deaf population, between 5,000 and 8,000 people worldwide, Ms. Sutton estimates. As Jane Fernandes, the provost of Gallaudet University, the prestigious school for the hearing impaired, said in an e-mail interview: "There are many deaf adults who were raised with Sign Language in their homes and schools and who have learned to read and write English quite fluently. They were able to navigate between Sign Language and English, without a system for writing their signs down."

While acknowledging SignWriting's potential usefulness in teaching English, Dr. Fernandes, who is deaf, expressed doubt about the larger need for written A.S.L. "English is the language of society," she wrote. "It works well for us and I believe English will remain the language in which we write in America."

Nicole McReynolds mastered SignWriting fairly easily, and the English words that eluded her began gradually to fall into place. Now 15 and a ninth-grader, she is back in public school, maintaining a B average in a program for hearing-impaired students conducted in English.

Before SignWriting, Mrs. McReynolds said, "I didn't think she would be able to live an independent life." These days, Nicole talks of college. "We believe that SignWriting is going to accompany her through her life," her mother said. "There is so much more hope for the future for her because she has this ability now."

Week in Review

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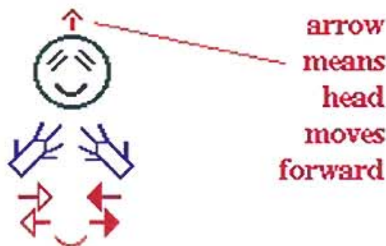
what?



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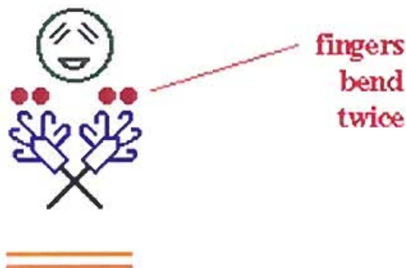

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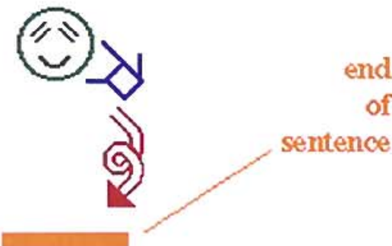
Goldilocks



Center for Sutton Movement Writing

The opening page of the storybook "Goldilocks," told in American Sign Language by Darline Clark Gunsauls, a left-handed signer, and written in SignWriting. A word-for-word English translation appears to the left of each frame; in idiomatic English, the passage reads, "The title of this story is 'Goldilocks and the Three Bears.'"

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Southern California: Sunny and unseasonably warm. Highs, 70-75 at the beaches, 85-95 in the interior lowlands, except 100-105 in the deserts. Weather map is on Page 18 of Sports.

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