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Gestures

The importance of non-verbal communication

Scientists developing a computer game for the American soldiers, designed to facilitate their learning of local customs in places like Afghanistan and Iraq, unraveled the importance played by gestures. "Gesturing is not merely hand-waving. It conveys substantive information - thoughts that often are not conveyed in words," said Susan Goldin-Meadow, a professor of psychology at the University of Chicago. "People naturally tend to rely heavily on nonverbal communication when they are learning a foreign language," said Lewis Johnson, the director of the Information Sciences Institute of the University of Southern California. "When having a conversation face to face, people rely on spontaneous nonverbal clues," said Hannes Högni Vilhjálmsón, the designer of the computer system. "Puzzled or offended expressions are much more intuitive clues than a printed message saying, 'Your words not understood.'" Nonverbal communication is as important as what is spoken. However, nonverbal gestures can also be a source of confusion, since people in different cultures use different gestures. This shows that, in fact, gestures form a language similar to the spoken language or rather that the language includes both spoken words and gestures. The significance of gestures is not genetically predetermined, but learned. The computer game's gesture training includes several common Arabic mannerisms easily misinterpreted by a Westerner as well as Westerner's gestures that could easily be misinterpreted by Arabs. For example, Arabs roll their eyes to mean "no". The researchers also revealed the importance of gestures in other types of learning. Susan Goldin-Meadow has shown that students who mimic a math teacher's gestures learn new problem-solving strategies more quickly compared to their peers who do not gesture. "If you move your hands - if you represent your ideas not only in the mouth but in the hands as well, you are more likely to benefit from instruction than you will if you don't move your hands," Goldin-Meadow said. Gesturing also may make thinking easier by lessening the "cognitive burden" of having to receive or convey a message solely with the spoken word, she said. In order to test the importance of gestures researchers asked children and adults to do two things at once - solve a math problem and remember a short list of words. They have found that those who gestured outperformed the ones who did not. Moreover, children who use gestures not simply to represent what they're saying but to convey additional information, different from what is spoken, tend to learn faster than their peers. "I am trying to argue here gesturing is facilitating learning," Goldin-Meadow said.