Machine translation and signed languages

◻ In the early 2000s, options for machine translation between spoken and signed languages were severely limited. It was a common belief that deaf individuals could use traditional translators. However, stress, intonation, pitch, and timing are conveyed much differently in spoken languages compared to signed languages. Therefore, a deaf individual may misinterpret or become confused about the meaning of written text that is based on a spoken language.[56]

◻ Researchers Zhao, et al. (2000), developed a prototype called TEAM (translation from English to ASL by machine) that completed English to American Sign Language (ASL) translations. The program would first analyze the syntactic, grammatical, and morphological aspects of the English text. Following this step, the program accessed a sign synthesizer, which acted as a dictionary for ASL. This synthesizer housed the process one must follow to complete ASL signs, as well as the meanings of these signs. Once the entire text is analyzed and the signs necessary to complete the translation are located in the synthesizer, a computer generated human appeared and would use ASL to sign the English text to the user.[56]