

NHK develops an automatic sign language translation system for TV (w/ video)

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(PhysOrg.com) -- Researchers at the NHK Science & Technology Research laboratories in Japan have developed a new animated sign language translation system. The system takes a string of words, in Japanese obviously, and converts them into the gestures that make up sign language.

The goal of the project is to create more effective [sign language](#) broadcasts for deaf television viewers. The system could be used to allow for more effective communications in the event of a state of emergency or important breaking news, though it does have the potential to be used in entertainment capacity as well.

While there is a current form of communication in place, subtitles, they are not always an effective way of communicating with those who were born deaf, as research has shown that they may have more difficulty understanding the subtitles than they would seeing the message signed. This system can enhance the level of comprehension in the event of a disaster.

The system takes the text, and translates it to signing. The system can also convert the existing words directly to signing and replacing the words that do not have a direct translation with a synonym in order to get the word across. The system then shows the signing done by a virtual avatar that is dressed like a reporter.

Current testing of the system shows that the hearing impaired were able to get a basic message from the system, through the whole message may not be as fluid as a live translator would be in the same situation. The system will still have a built-in manual system where a human can go in and fix the translations for enhanced accuracy.

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