

## Own Voice Helps to Learn Foreign Languages

### Ralph Warnke has developed a system by which one becomes a vocabulary trainer

“It is my vision, that, in the future, adults will be able to learn foreign languages as easily as infants do when learning their mother-tongue,” says visionary Ralph Warnke. “They should be able to learn a language without having to memorize vocabulary or study grammar. The problem today is that the process of learning foreign languages is approached in a much too intellectual manner.” His FLIC system uses a feedback system composed of a headset and a sound-processing device.

At the beginning of a FLIC-course, the participants read a text, while it is simultaneously read to them by a model-voice through headphones. Then they read the text again, this time silently, while they hear it a second time through the headphones. “The brain also works when silently speaking,” explains Warnke. In the third step, the participants read the text aloud, simultaneously speaking with the model-voice.

The system then repeats the read text-passage back to the participant, his own voice in one ear, and the model-voice in the other. “And the sound playback doesn’t always remain in the same ear, it rather moves from one to the other. That way the hemispheric communication is stimulated,” says Warnke. “Both brain hemispheres are very important for the learning of a foreign language. The left hemisphere is involved in word-recognition – it is the brain’s word-processor; the right hemisphere controls the sound of the speech. All in all a very lively decoding process, which exposes the not so apparent relevance of heard speech.”

Studies have shown that we focus most on voices that are similar to our own. Therefore, the learning process is supported by using the learner’s own voice in the education process. FLIC makes use of these studies in the next step by modifying the model voice.

This model voice is mixed with the learner’s voice, which is processed by software developed by FLIC-partner, the RIT (KTH) Stockholm, separated into different bands and analyzed based on speed, audio frequency, and many other attributes. “When learners hear this, they have the feeling that they can speak the foreign language much better than they expected,” says Warnke. “They are pleased by their apparent progress and continue learning the language more motivated.” The ability to remember vocabulary longer can also be improved by this learning technique.

The participants hear a word in the foreign language (target language) in one ear, and the word’s meaning in their mother tongue in the other ear. “During this process, the sound orientation constantly switches between the ears,” says Warnke. Without even visiting a grammar lesson, the participants learn the language structure by examples, mostly through dialogue, which they either listen to or actively participate in.

“They absorb the grammar structure naturally, just like infants learn a language,” mentions Warnke. “FLIC conveys an internal language scheme like no other system.” Warnke is convinced that FLIC uses a hidden neuronal skill. “Japanese babies can distinguish between eight different R- and L-sounds at the age of two months. At the age of eight months these babies are not able to accomplish this anymore, because the Japanese language contains no R,” he explains.

“Apparently though, the capability of hearing an R-sound is inborn. This proves that we are able to hear and reproduce any sound in any language, independent of our mother tongue. I think that we never completely lose this capability, yet it may be forgotten. This is why we offer a learning method, which creates an inner picture of the language and therefore teaches the brain to remember certain sounds, which are not available in our native tongue.”

“Testing was conducted at different locations in France, Germany, and Italy. Groups containing beginners and advanced attendees participated in courses with over 24 and 48 curricular hours, while control groups visited conventional courses.” First results indicate, that FLIC reduces the time required to learn a language by 50 percent. Teachers and students accepted this new method of learning very well. At present FLIC offers courses in English, German, and Italian – additional languages can be added without difficulty.

Warnke hopes to offer this product on the market in the near future. By offering a choice of either software or hardware formats, it will be suitable for individuals (home-users) and groups (language schools). “We are still faced with some technical challenges, which we hope to have worked out soon,” he adds.

“For example, we tried to integrate the dummy head stereophony in order to create a 3-dimensional audio effect. The highly complicated, yet necessary calculations have so far prevented its realization. We would like to solve this problem and therefore perfect the audio perception, as the illusion of a realistic environment would be very helpful to the student.”

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