## Computer Assisted Interpretation System /Cassis/

IT supported system for synchronous and consecutive interpretation.

The purpose of the project is to assist the work of synchronous and consecutive interpreters in real time with a system - prototype - which displays the lecturer's speech in writing on a computer monitor and searches for bilingual word pairs and terminologies in the databases in accordance with preliminarily determined criteria.

The text and the terminology together make it unnecessary for the interpreter to make notes in the target language, or searches for difficult terms. It is not machine interpreting, the goal is to provide support for the interpreters. As a result of the development, difficulties in speech comprehension can be solved, problems related to information flow can be reduced, and the interpreter will have more time to formulate the target language text, thus reducing the burden on the interpreters as they have a written text that can be relied upon during their work.

At present, there is no widely available IT support for interpretation, as opposed to translation, where you can choose from a wide range of computer tools, and even machine translation techniques are becoming more and more widespread.

Below you can find a non-exclusive list of our research goals:

- In what areas can interpreters be assisted, even after only a little practice, by IT tools, with an engineered interpretation supporting application that works similarly to CAT tools regarding its concept of operation?
- Is it possible to significantly improve the work of simultaneous interpreters, to avoid misinterpretation and to tackle or reduce falling behind?
- Whether displaying the text you hear can really help to make the interpreter's working memory more economical?
- Whether the method and the tool improve the psychological capacity of the interpreter?

The system is currently set in English, French, German, Spanish and Hungarian input languages

The number of selectable languages are determined by the options of Speech to Text application.

The language of interpretation - currently with Latin letters - depends on the given task and the selected language of the available terminology database (TB). You do not need to set them separately.

In the model under development, before starting the work, the source language must be set and the TB(s) must be uploaded or selected. TB input options: all extensions supported by memoQ or simply CSV format (Text files that contain a table: Each row is an entry from the term base and each column is a term. These are called tab-separated or comma-separated (CSV) files.)

The size of letters, spacing, and the size of the 4 boxes can be adjusted on the fly.

The voice of the speaker is recognized either through cable or laptop microphone. The process starts in the background, and after finding the right word pair, it will be highlighted and displayed on the left side of the screen.

With the current version of CASSIS, we are planning to carry out qualitative and quantitative measurements. The measurements will be made by a language technology lab, using an interpreter booth (to create conditions as close as possible to real working conditions) for recording and practice. The results of qualitative and quantitative measurements are supported by the evaluation of answers given to the questionnaires and personal opinions.

In the next phase of development, we intend to carry out tests under real interpretation conditions.

We are also looking for contact with other language research laboratories to carry out control measurements and to validate the results.

Measurements and tests are based on the interpretation of multiple sample texts (whether text and translation are identical) in two test situations: with and without CASSIS.

We intend to use the results of the previous test series to design a newer version of the development.

We are looking for partners for multiple purposes.

Participation in developing tests

- Improving the frequency and availability of the tests
- Participation in theoretical and practical research
- Testing different versions in interpretation trainings
- Participation in the implementation of "H2020 SME INSTRUMENT" Phase 2
- Further development of the model: interpreter training in distance learning, practicing at home

We would like to specify the conditions of partnership with the candidates in a specific meeting.

For contact please use one of the following availabilities:

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