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Lost in translation

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Machine translation (MT) is a process during which text in one natural/human language is automatically translated into text of another language (Hutchins, 1995). MT was first conceptualised in 1947 by Warren Weaver and work on MT started in the early fifties. This was the beginning of computational linguistics, artificial intelligence, formal linguistics and non-numeric programming languages (Hutchins, 1995). When MT proved to be a more complex task than was initially anticipated, almost all work in this field was abandoned after the publication of the ALPAC report (1966), which advised governments against investment in MT research. The 1980s saw a revival of work in MT and since then MT has come to be known as the holy grail of HLT, as it has been impossible to automatically generate a translation that is comparable to a human translation (Dirix *et al.,* 2005). The errors produced by MT systems vary in nature and severity, and include incorrect/ inconsistent translations (i.e. distortion of the message) and poor target language documents (i.e. distortion/disregard of the linguistic features of a language).

This project, *Lost in Translation*, explores reasons for the inadequate performance of MT by highlighting one of the main differences between man and machine, namely sensory perception, by focussing on aspects that are lost in automatic translation. Since a computer lacks senses, it is impossible for it to gain experience from the world around it and therefore also, from the viewpoint of experientialism, to acquire knowledge. Therefore, even though an MT system is based on various linguistic and programming models, it lacks the knowledge gained through sensory experience; knowledge which is necessary to correctly and accurately translate. CTexT hypothesises that MT can be perfected by giving/teaching a computer sensory perception, which will enable it to gain the experience and knowledge needed to bear output comparable to that of human translators.

Sensory perception was illustrated through various media in the artist book. The "book" is an empty computer base unit with yellow folders (representing the yellow folders in Microsoft® Windows), arranged to resemble the pages of an open book. The content was put in these folders ("saved") and was created with digital media, paint and objects. In it, the senses are portrayed in a playful, tongue-in-cheek manner. An example is the Sight/Insight imagery. Reading (seeing the text, having it in sight) provides insight. Book reading can be enhanced with glasses, but digital reading can be enlarged substantially by means of the zoom function. There is therefore a play on words between sight and insight, and it is assumed that digital media can provide more and faster access to information, and therefore insight. The poem that was used could also be touched, since it is written in Braille (the touching brings sight and insight). Touching one's keyboard can bring insight (as it is a tool with which to access information by using one's hands), and a playful "touchpad" was provided to underline this.

This project had seven team members from CTexT (a linguist, project manager, computer programmer, communications officer and three computational linguists), each of whom made valuable (and varied) contributions. The most creative part of the process was the various brainstorming sessions that often had ideas snowballing into brand-new directions. The team first decided on the message and overall theme before planning the layout and details. Each member produced a piece of the work.