

# **Twenty years of Translating and the Computer**

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# **The first conference 1978**

- **After ALPAC (1966)**
- **CEC acquires Systran (1976)**
- **Meteo starts (1977)**
- **EC conference “Overcoming the language barrier”, Luxembourg 1977**

# Aims of first conference (Barbara Snell)

- “to alert fellow translators in the Aslib TTG and the TG [Translator’s Guild] to this prospect [of computers in their work] and to encourage contact with computer people. We felt that some of the scientists whose primary interest lay in expanding the sphere of computer activity, including machine translation, might be unaware of certain basic aspects of translating... Maybe we could help to clarify their objectives and in return, learn what computers could do for us.”

# Speakers at 1978 conference

- **Juan Sager: policy of CEC**
- **Frank Knowles: evaluation of Systran**
- **John Elliston: use of Systran at Xerox**
- **Shiu-Chang Loh: CULT**
- **Eberhard Tanke: TEAM**
- **Jacques Goetschalckx: EURODICAUTOM**
- **Yorick Wilks: Machine translation and artificial intelligence**
- **Margaret Masterman: translators and machine translation**

# Peter J. Arthern (CEC)

- MT and aids for translators in the CEC translation service
- towards an ‘ideal’ tool
- “My hunch is that our translator... will continue to work at the same type of desk in the same time of office... with his standard dictionaries and reference works around him. Instead of a traditional type-writer, however, he will have a text-processing terminal with keyboard and screen so that he, or a secretary to whom he dictates, types his translations into the system memory so that they can be corrected on the screen before final “typing” on a separate printer... If he has access to a local term bank, he will be able to interrogate it simply by typing his question on the keyboard of his text-processing terminal, when the answer will appear on the screen...”

# Arthern and ‘Translation Memeory’

- “In a large organisation using my proposed new system of machine-aided “translation by text-retrieval” ... our translator will be given, when he reports for duty, not only the original of the text he is required to “process”, but ... [a] version of it in the target language... both presented on paper... [H]e will complete the target-language version of the text on paper, using his text-processing terminal to type any completely new passages. He will also use his terminal to get terminological information from the organization’s term bank if necessary, either on line or in the form of a text-related glossary... He would then check the complete translation and pass it on, either for revision... or straight for typing by a secretary into the text-processing system for storage in the text-memory and printing out... It would of course be technically possible to do all translating, editing and revision operations on the screen at the terminal, without printing the texts on paper at all...”

# Conferences of the early 1980s

- **Machine aids for translators (1980)**
  - wordprocessors, dictation machines, termbanks
- **Practical experience of machine translation (1981)**
  - Systran at CEC: evaluation, post-editing experience
  - Meteo, Weidner, Eurotra
- **Termbanks for tomorrow's world (1982)**
- **Tools for the trade (1983)**
  - wordprocessors, fonts, spelling checkers, modems, etc.
  - rapid post-editing
  - PAHO, Logos, TITUS
  - MT in translation agencies

# The later 1980s (1)

- **Widening perspectives**
  - Japan, Russia
- **Office automation**
  - Jean Datta:
    - “There are opportunities for computerisation in the language operations of organisations that do not call for such far-reaching changes in procedures as does MT, but which none the less can improve the flow of work, bringing about at least modest economies and at the same time serve as a training ground for staff who are not yet computer literate. Therefore, the best approach to MT in many organisations will be a gradual, ‘layered’ introduction of new technologies.”

# The later 1980s (2)

- **Economics, evaluation**
- **Controlled language**
  - Peter Pym (Perkins Engines)
- **Large-scale operations**
  - Logos, METAL
- **Software localisation**
  - LISA
- **Software for PCs**
  - database access, terminology software, desktop publishing, telecommunications

# The 1990s (1)

- **Translators workstation**
  - translation memories
  - TWB (EC project), Trados, STAR Transit, IBM TM/2, EURAMIS
- **New technologies**
  - OCR, speech input
- **Cheap PC software**
  - Globalink, STYLUS
- **MT on the Internet**
  - CompuServe, AltaVista

# The 1990s (2)

- **Large-scale production systems**
- **Evaluation**
- **Limitations of general-purpose MT**
- **Low quality PC translation software**
- **Research trends**
  - SUSY, GETA, Eurotra
  - Corpus-based research
- **MT in the information society**
  - multilingual access to databases
  - worldwide telecommunications

# Diversification: 1978

- mainframe, general-purpose, batch MT systems with post-editing
- termbanks
- Juan Sager: “The machine process is not an imitation of the human process but as we have different types of texts, different types of translation, and different translators, we must recognise that different machine processes are required for dealing with the considerable diversity of products and demands”

# Diversification: 1988

- Juan Sager (ten year review):
- “at least four functionally different types of MT – as a tool for translators; for monolingual writers; for readers of scientific and technical literature; and for databases”
- “electronic mail, factual databases, electronic books and journals will never be translated by conventional means; all these forms offer new challenges to machine translation.”

# Diversification: 1998

- **Systems for dissemination**
- **Systems for assimilation**
- **Systems for interchange**
  - electronic mail, correspondence, Web pages
- **Use of ‘rough’ MT**
- **Systems for authors: drafts, templates**
- **Language coverage**
  - English, French, German, Spanish, Japanese, Chinese, Korean
  - Arabic, African, Indian, S.E.Asian, E.European, UK minorities

# Future system types

- **MT on WP/Internet software (with speech I/O)**
- **MT via Internet services, multilingual access**
- **Authoring software and MT**
- **Summarisation, information extraction, and MT**
- **MT of television captions/subtitles**
- **Workstation facilities**
- **Custom-built systems**
- **Speech translation**

# Machine and human translation

- **Specialisation of software**
  - translator's workstation for professional
  - 'rough' translation for general user
- **criteria based on 'usability' rather than 'quality'**
- **increasing demand for high-quality 'value-added' translation**