# Inbound versus outbound translation

## Localization World Bonn Conference

**29 June – 1 July 2004**

**Presentation in panel: Localization in customer support**

Jeff ALLEN

Mycom France &

MultiLingual Computing & Technology magazine

**Member of Editorial Advisory Board**

**E-mail: jeff@multilingual.com**

**Web: www.geocities.com/jeffallenpubs/**

# Outline

- **Analyzing needs for customer support**
- **Translation approaches**
- **Translation system types**
- **Capturing human knowledge in translation systems**

# Factors to Consider

**Categories below are a list of guideline topics to evaluate one's real need (ie, online customer support)**

- ∧ Translation approach

- ∧ Documentation (or speech) type

- ∧ User/audience type

- ∧ Number and types of language directions

- ∧ (Semi-)Automated translation system types

- ∧ Levels of human-machine interaction

- ∧ Means to capture human knowledge and recycle it

- ∧ Mapping system features/modules to translation approach types and needs

# Needs analysis questions

- What translation approach(es) to use (Inbound, Outbound, or both)?

- What types of documentation (or speech) to translate?

- What is the expected throughput quality?

- What is the threshold of error tolerance by users?

- What is the level of language (ie, language register) to be used?

- What are language skills of users?

- What are the types of (semi-)automated translation systems? Do these fully or partially correspond to my need?

- Is human-machine interaction part of my intended process? Can the existing software/systems cover the necessary interaction?

- What human knowledge capture/insertion channels in system/process

- What features and modules in commercial tools (MT, TM, etc) correspond to one or more needs, and which ones do NOT?
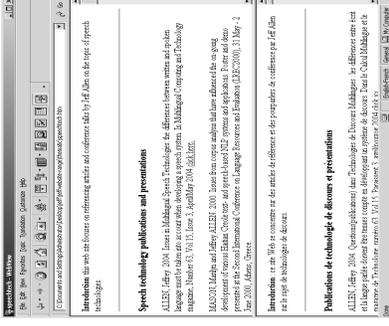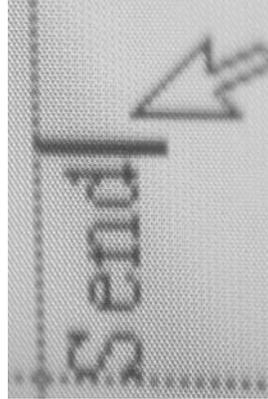
# Inbound Translation

Medium 3

Medium N

Medium 1

Medium 2

# Translation approaches

## Inbound Translation approach

- MT Browsing-Information/Content Gisting (no post-editing)

  ▲ online (published and frozen) documents (general: newspapers, brochures; customer support: technical overview, feature guide, specifications, white papers)

  ▲ e-mails

  ▲ internet / intranet web pages

  ▲ MS Powerpoint presentation for understanding only

  ▲ draft translation of doc to determine relevance and make preliminary decision

  ▲ voice-driven online help menus (phone voice box, immigration service, health dept, hospital, pharmacy, etc)

  ▲ restaurant menus on trips

  ▲ way finding directions received in foreign language
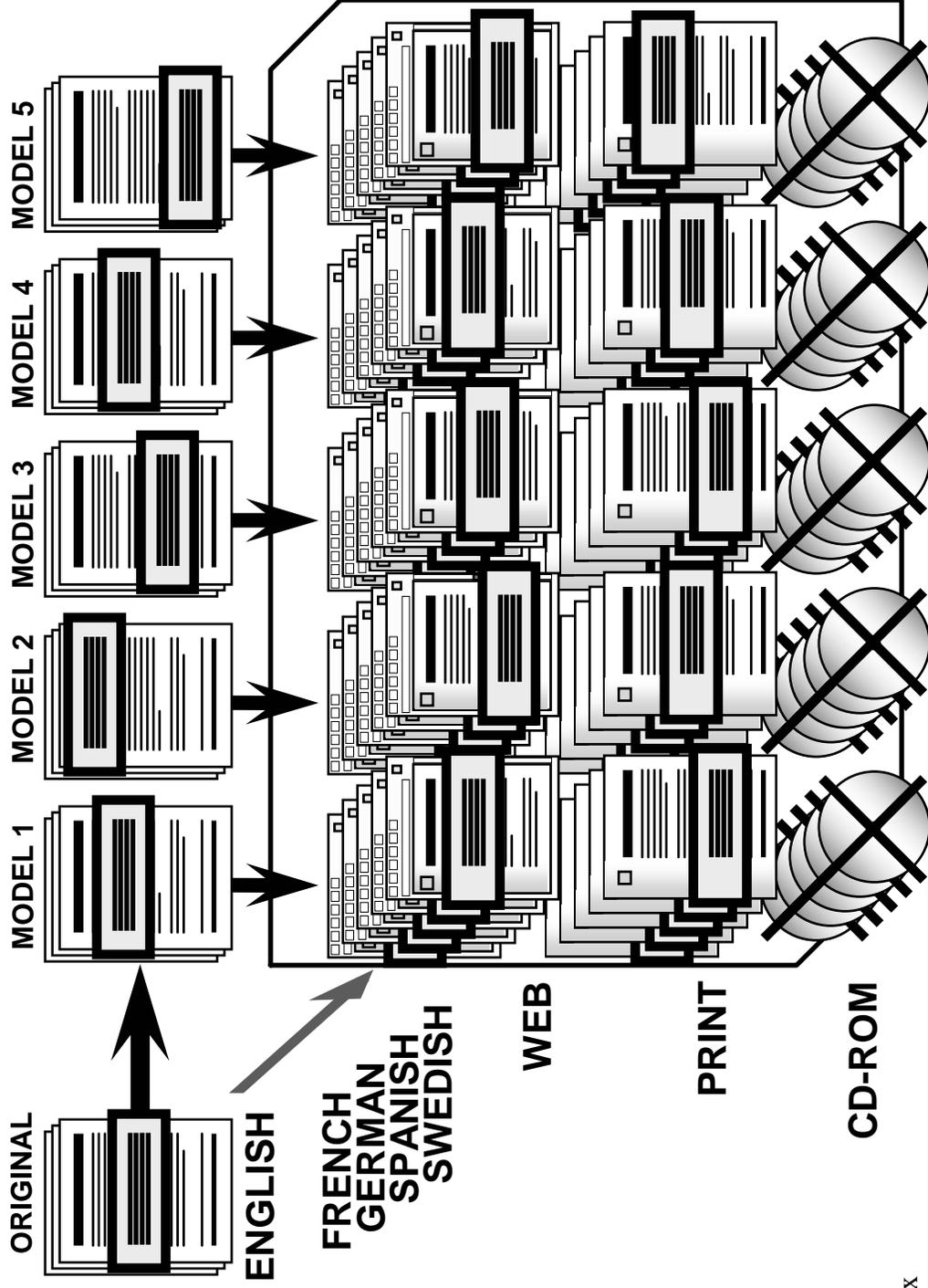
MultiLingual

# Translation approaches

## Inbound Translation approach

- Rapid Postediting

  ▲ European Commission (EC) Post-édition rapide (PER) / Rapid PE (RPE) Translation service to translate urgent texts "for information only"

    - *internal meeting working papers*
    - *meeting minutes*
    - *technical reports or annexes*
    - *short-life documents*
    - *etc*

# Outbound Translation

ORIGINAL

ENGLISH

MODEL 1  MODEL 2  MODEL 3  MODEL 4  MODEL 5

FRENCH
GERMAN
SPANISH
SWEDISH

WEB

PRINT

CD-ROM

Slide courtesy Xerox

MultiLingual

# Translation approaches

## Outbound Translation approach - Translation for publication

- MT with no post-editing (PE)

  ▲ General: basic survival communication (travel and lodging reservations, interactive way finding, purchase food necessities at bakery, grocery store, etc)

  ▲ Customer support area: rapid internal company e-mail queries from set of communication guidelines + training

MultiLingual

# Translation approaches

## Outbound Translation approach - Translation for publication

• Partial PE (minimal and/or rapid)

▲ Urgent huge document translation requests impossible to complete without translation tools (remember the 1998 Clinton-Starr report: 500 pages).

  • *Real example: translation of an 80-page user manual in less than 8 hours can only be done by computer-aided translation.*

▲ Customer support: need to send immediate reply by e-mail based on source-only documentation. Must have "technical support" knowledge, fully bilingual skills + basic mastery of translation tool

▲ Draft translation of document as preliminary step toward better quality translation: for example: "workaround" translated within the SLA timeframe.

# Translation approaches

## Outbound Translation approach - Translation for publication

- Full Postediting (PE)

  ▲ Bilingual "technical-level" customer support personnel (or Nth tier support/development) can translate and edit monolingual documentation and send complete reply e-mail to customer.

# Machine Translation System types

- **Interlingua-based**
- **Transfer-based**
- **Direct**
  - Example-based
  - Statistical

Interlingua

IL
–based

Transfer–
based

Direct

Target
Language

Source
Language
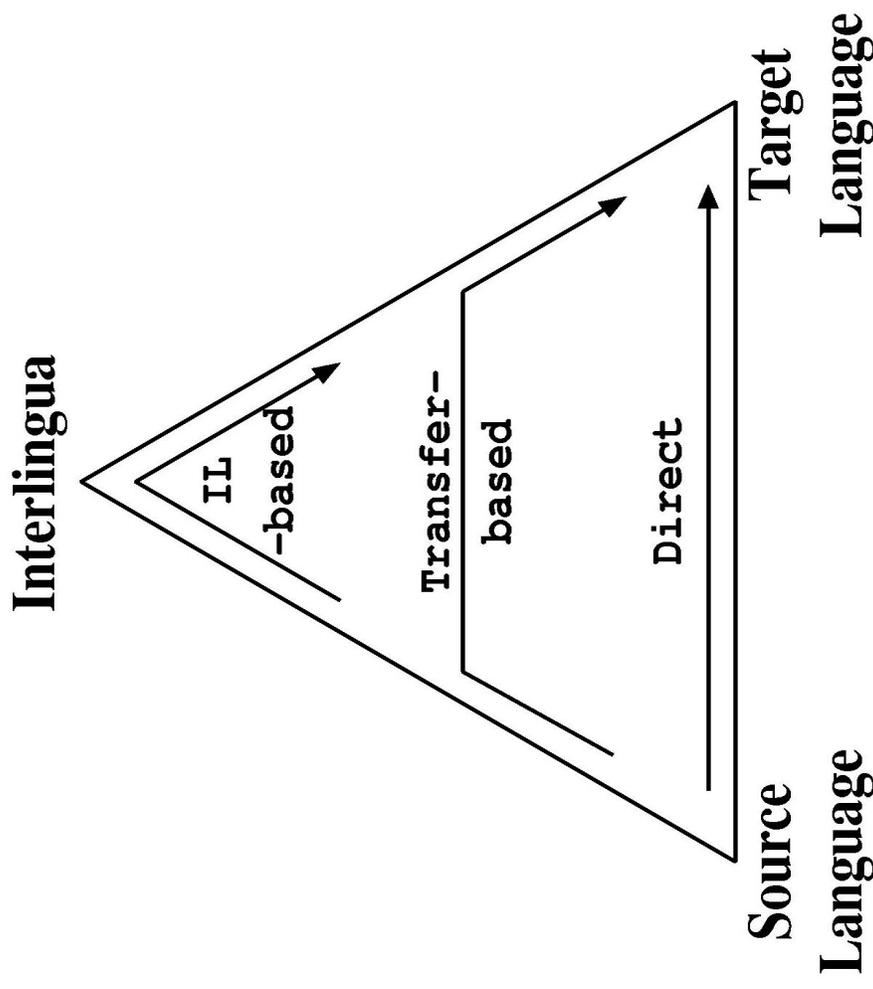
# Machine Translation system types

- **RBMT (Rule-based MT)**: majority of commercial MT systems

- **EBMT (Example-based MT)**: Translation Memory software and some academic and government funded research systems

- **KBMT (Knowledge-based MT)**: thematic/semantic role/category approach in some customized industrial MT systems (CMU KANT) & few commercial MT systems (CIMOS, Translingo)

- **S(B)MT (Statistical-based MT)**: many academic and government funded research systems, few commercial MT systems: Language Weaver, and Microsoft NLP group)

- **MEMT (Multi-engine MT)**: government funded research systems & some customized industrial MT systems. Many commercial MT & TM companies now combining TM plug-ins in MT software and MT-like features in TM software.

MultiLingual

# Capturing Human Knowledge in MT systems

- **Dictionary building**
  - "Mastering MT" tutorial at AMTA2004

- **MT postediting**
  - Read my "postediting" book chapter (see web site) and "Mastering MT" tutorial at AMTA2004

- **Thematic/semantic role assignments in a knowledge-based interlingua**
  - Interlingual semantic mapping is a heavy (and expensive) upfront task

- **Automatic machine learning from postedited texts**
  - Read my CLAW2000 paper (available at web site)

# Rapid overview of modules / features - MT systems

**Which features / modules in MT systems correspond to various translation approaches / needs**

- ePromt Expert / Professional

  - **Inbound: PromtE Web Translator, Clipboard translator, MS Plug-ins, File Translator, Promt Corporate Intranet, Promt Standard, PDF Plug-in**

  - **Outbound (basic): Promt Standard, QTrans, Dictionary Editor, File Translator**

  - **Outbound (advanced): Promt, Dictionary Editor, Promt for Trados, Associated Memory**

  **See my review of the product at http://www.geocities.com/jeffallenpubs/swreviews.htm**

# Rapid overview of modules / features - MT systems

○ Systran v4 Premium

› Inbound: SYSTRAN Toolbar (STB) MS plug-ins, SYSTRAN Clipboard Taskbar (SCT), SYSTRAN Multitranslate Utility (SMTU)

› Outbound (basic): SYSTRAN standard, Clipboard Taskbar (SCT), Multitranslate Utility (SMTU)

› Outbound (advanced): Translation Professional Manager (STPM), Dictionary Manager (SDM)

**See my review of the product at**
**http://www.geocities.com/jeffallenpubs/swreviews.htm**

# Rapid overview of modules / features - MT systems

○ Reverso Expert / Pro:

- ⌄ Inbound: Webview, Reverso Express, QTrans, MS Plug-ins, File Translator, Reverso Perso, Reverso Corporate Intranet

- ⌄ Outbound (basic): Reverso Express, QTrans, MS Plug-ins, File Translator, Reverso Perso, Dictionary Editor (basic level)

- ⌄ Outbound (advanced): Promt, Dictionary Editor

**See my review of the product at http://www.geocities.com/jeffallenpubs/swreviews.htm**

MultiLingual

# Rapid overview of modules / features - MT systems

○ SDL ETS and AutoTrans

⌄ Inbound: Enterprise Translation Server (ETS), AutoTrans (PC Desktop)

⌄ Outbound (basic): AutoTrans (PC Desktop)

⌄ Outbound (advanced): AutoTrans (PC Desktop), Dictionary Manager, KbT service

# Summary

- Know your needs
- Know your translation approach(es)
- Look carefully at what tool features/modules correspond to your approach(es)
- Know your environment well: user skills, roles, tasks, estimated workflow changes due to technology integration
- Choose your tool(s) carefully based on current needs
- Be careful to consider possible future needs that might currently be unexpressed or undefined
- If you use a module or tool for an inappropriate purpose, don't complain. You should purchase the appropriate module or tool

# Abstract

One of the factors resulting in the failure of implementation projects of translation systems seems to have been the mismatch between real user needs and what the translation system/software was designed to be used for.

This presentation provides the following: 1) an overview of both Inbound Translation (ie, information translation gisting, content browsing, assimilation) and Outbound Translation (ie, translation for publication, translation dissemination) approaches, 2) an overview of the types of (semi-)automated systems and a brief description to the extent in which knowledge is inserted into and/or captured by the system; 3) the range of different levels of human-machine interaction (ie, minimal, rapid, or full postediting) with respect to the previous points; and 4) how the various features and modules in different current commercial translation tools (machine translation, translation memory, etc) correspond to and are appropriate for meeting these different needs.

MultiLingual