March '94 ARPA workshop on Machine Translation
Summation and Plans
(George Oddifors)

The ARPA R&D Mission in Machine Translation

Mission: To develop "core MT technology," rather than total system-level functionality. The objective is to leverage R&D by making strategic advances that are broadly applicable.

R&D Paradigm: Direct R&D efforts through careful choice of MT task and objective evaluation of MT performance on it.

- TASK: Fully Automatic Machine Translation (FAMT) of newspaper articles
  - French-to-English
  - Spanish-to-English
  - English-to-English

- EVALUATION: Judgments supplied by monolingual speakers of English in 3 dimensions:
  - Accuracy
  - Fluency
  - Comprehensibility

Participation in the Evaluation by Production Systems

Thank you!
Your participation added immensely to the value of the evaluation. The ARPA MT program has benefited greatly from your participation and from your sharing, of both your perspective and your technical ideas.

A question to the production system participants:
- Do you judge that this evaluation and evaluation process was valuable to you?
- If so, how?
- If not, why?

EVALUATION Criticism

The current ARPA MT evaluation methodology was criticized because:

- It doesn't address overall system evaluation (which is sorely needed by a host of users)
- It doesn't allow the linguistic competence of a system to be upgraded by learning based on the source translation text.

- Effort is focused on the strategic R&D issues - those which are inherently high payoff (high risk). This includes high performance and comprehensive lexicons. Effort is NOT focused on application and system development issues such as computing resource and human interfaces.