

Ariane

- Developed by the University of Grenoble group in France in the 60s, continued to develop with new versions to the present day. Ariane-G5 and Ariane-Y available online.
- Originally designed for Russian-to-French translation and Russian-to-German translation, but in theory could incorporate rules for any language pair.
- Originally meant to be an interlingua system in the 60s, but moved to a transfer-based system in the 70s.

Transfer Method

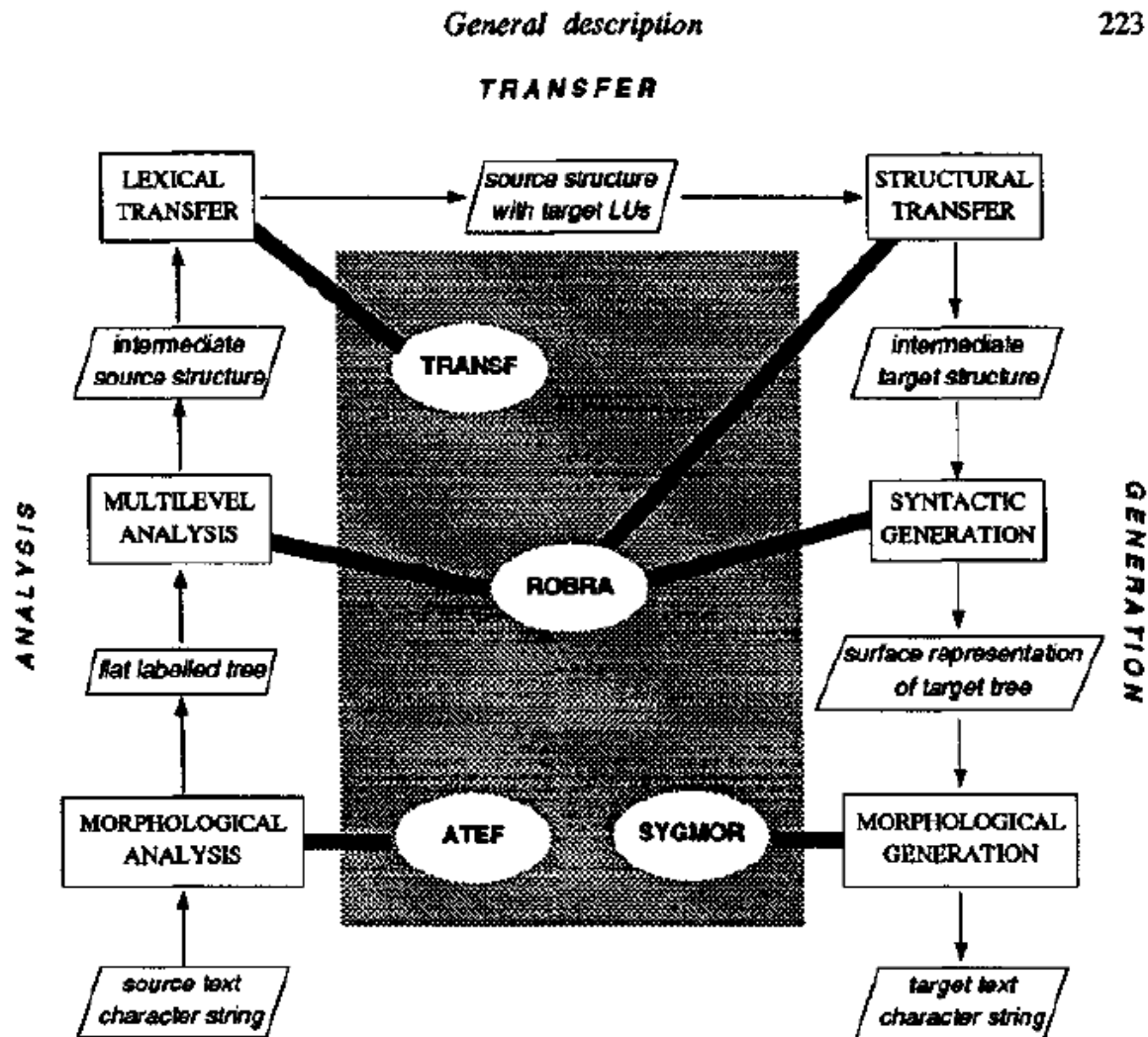


Figure 13.1 Configuration of the Ariane system

- Tree transducers ROBRA and ATEF analyze the input string and convert the syntax tree from source to target grammar.
- TRANSF relabels the nodes in the tree to effect the transfer from one language to the other.

Evaluation

- Ariane-78 was run on a collection of abstracts of Russian papers on space science and metallurgy, but there were only 7000 entries in the TRANSF system.
- Creators admit an "inadequate treatment of semantics".
- As linguists add more and more rules, system becomes too complex to predict the outcome of adding a rule, and computational complexity also increases.
- Poor handling of phrasal verbs leading to redundant or empty tree nodes. ("Will you back me up?")
- Mainly a theoretical rather than applied project, but had an influence on later Japanese MT systems and Eurotra.