A Rapidly Extensible Language System
(Rel English)

- B. Dostert
- F. B. Thompson

INTERNATIONAL CONFERENCE
ON
COMPUTATIONAL LINGUISTICS
↓
COLING
1969

RESEARCH GROUP FOR QUANTITATIVE LINGUISTICS
Address: Fack Stockholm 40, SWEDEN
REL: A RAPIDLY EXTENSIBLE LANGUAGE SYSTEM

II. REL ENGLISH

Bożena Dostert
Frederick B. Thompson

California Institute of Technology
Pasadena, California
June 1969

This work was supported by grants from the National Institutes of Health and the Carnegie Corporation
Table of Contents

Abstract

I REL English in terms of modern linguistics
   The REL dialect and idiolects
   REL English as a formal language
   Ambiguities
   Nature of restrictions
   Organization of the REL English grammar

II REL data structures
   Structural power of language and structural power
   of data organization
   Ring structure of REL English data bases
   Features and their functions

III Building of linguistic structures
   Name modification
   Relation modification
   The verb
   Clause processing
   Quantifiers
   Conjunctions

IV A few inclusive examples
Abstract

REL, a Rapidly Extensible Language System, is an integrated information system designed to facilitate conversational access to a computer. It permits the use of large data bases by means of highly idiosyncratic languages. One of these languages is a subset of natural English with an extensive capability for defining new concepts and structures. REL English is a formal language, essentially unrestricted in surface structure and restricted by the structural limitations of the memory forms. The structural power of this language is matched by the extremely flexible organization of data into interrelated rings. The REL grammar consists of rewrite rules and associated semantic transformations, and includes general rewrite and transformational rules. A number of aspects of the grammar are discussed in detail, including features, name and relation modification, verbs, subordinate clauses, time modification, quantifiers and conjunctions.