From PRECIS to precis:
The design of an expert system for the text analysis and retrieval of controlled abstracts using PRECIS as a model

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An investigation into the possible use of the PRECIS Index System as a model in the design of an expert system for text analysis has revealed that not the actual PRECIS operators and codes, but the analytico-synthetic rules which go into the formation of both the syntactic and thesaural relationships in the system, have the most potential relevance. A further area of relevance, contingent upon the first, is the close affinity of PRECIS indexing with abstracting. These conclusions are explained, and a research project to design an expert system based on them is outlined. The project consists of four parts:

1) the creation of a database of carefully controlled abstracts, constructed on the basis of the PRECIS rules;

2) the creation of a thesaurus of the terms utilized in the abstracts, constructed to accommodate additional information so as to function as the knowledge base;

3) the design of an inference mechanism, based both on the PRECIS analytico-synthetic rules and the rules of case grammar (i.e. a set of logico-linguistic rules);

4) the design of an enriched Boolean search strategy, capable of responding to queries based on the relevant syntactic functions of terms in the abstracts. Thus, for example, a search for documents or other information on "teachers as agents", rather than "teachers as objects", would retrieve a listing under the relevant "Evaluation of students by teachers", but not under the irrelevant "Evaluation of teachers by students".

Progress to date on this research project is described.