

38. It is highly impractical to require continual vocabulary checking, or to involve each specialist in maintaining the vocabulary. The solution has two components, the first being to make vocabulary access invisible to the specialists by automation. In this way any words chosen by the specialists would be converted to a standard descriptor complete with linkages. Ambiguous words could be indicated to the specialist who would clarify his requirements by displaying the various associated standard descriptors. Any previously unencountered words would be added to the vocabulary and flagged for further action. Here the second component comes into play. Vocabulary maintenance would be performed by a vocabulary control group whose main role would be to continuously monitor the vocabulary to provide:

- 1) new words (flagged automatically) with appropriate linkages;
- ii) to continually update old linkages as new usages become apparent; and
- iii) to assist in searching when normal access to the information banks has proven pointless.

39. It is important to allow automatic build-up of the vocabulary and to actually provide for continual growth and change. Numerous information systems have floundered because they have lacked such features and therefore fell into disuse when they were no longer able to cater to current word usage. The effort required in developing a comprehensive, all encompassing vocabulary at the outset resulted either in excessive development costs and time delays or too cumbersome a vocabulary for efficient use and maintenance.

40. Setting aside the problem of how best to enforce vocabulary control, one is left with the problems of input, storage and retrieval of the descriptive information and associated pointers to full textual material.

#### Input

41. The simplest form of input would be to have indexers fill in standard forms and forward these to a central location for subsequent processing. Assuming a large volume of information is involved, such processing will consist of converting the form into computer-readable input and having appropriate computer programmes check and produce the required cross-references, bibliographic files, etc. Such an approach introduces time delays into information availability and requires a fairly high operating cost in the form of a keypunch pool.

42. A better approach would be to provide direct input from the indexers into the computer. This might be carried out either by providing interactive entry to allow immediate error corrections under the main computer's control or provide the indexer with "intelligent terminals" which would provide some immediate correcting capability and then convey the information to the main computer. The latter is most attractive as it would alleviate the load on the main system and should the main system fail indexers would still perform a major portion of their work until the main system is back in action.