SURVEYS OF NEW TECHNOLOGIES FOR EUROPEAN LIBRARIES

A series of surveys on the application of new technologies in European libraries

1. IMPLEMENTATION OF NEW TECHNOLOGY IN LIBRARIES

Ever since library automation began in the USA in the middele of the sixties, the LIBRARY TECHNOLOGY REPORTS(1) published by the American Library Association have been very useful to the American libraries. These reports have throughout the two decades which have elapsed since then contained the results of a series of thorough investigations in fields of special interest to the libraries and of investigations on the new technical equipment marketed. This has been particularly important because of the fast development of the technology and the multiplicity of products on the market. Another reason why the LTR can be of considerable help to the libraries is that with a new technology suitable equipment and suitable methods may often be found outside the field in which the libraries will usually look around.

In Europe the process of automation has been slower. This applies of course not only to the library field, but that is what we are considering here. One consequence of this is that European libraries have had opportunity to learn from the American examples and also have been able to profit by the investigations published in the LTR. But then it has often appeared that the solutions that were chosen in American libraries and the equipment that was described in LTR were not directly transferable to European libraries. UK may here be an exception because both as regards language and libraries it is more closely related to the US.

But in most European countries apart from the UK, there are special circumstances which will necessarily exert an influence upon the technique and the equipment to be chosen for the optimum performance of the library functions. Several factors are of significance when technique or equipment or both are to be selected for use in European libraries.
2.1 Linguistic problems

The linguistic composition of the European library collections is not without significance. If you look at the information retrieval systems for use in online catalogues, it is essential to remember that the records among which you search will be in a mixture of various languages. Certainly English literature does dominate in many Western European academic libraries, but if you look at the linguistic composition of the literature e.g. in Danish academic libraries it may typically be as follows:

abt. 50% English
- 20% Nordic
- 10% German
- 8% Roman
- 8% Eastern European
- 4% Other languages.

If you want to use a retrieval system which is based upon the contents of information in the documents themselves as for instance in the titles, then the structure of the languages will play a significant role. This can be illustrated by a single term:

<table>
<thead>
<tr>
<th>English</th>
<th>French</th>
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<tbody>
<tr>
<td>freedom of speech</td>
<td>liberte de parler</td>
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<tr>
<td>but:</td>
<td>liberte de discussion</td>
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<tr>
<td>German</td>
<td>Danish</td>
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<tr>
<td>Redefreiheit</td>
<td>Talefrihed</td>
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<tr>
<td></td>
<td>Ytringsfrihed</td>
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So in a Danish or a German retrieval system with free text search it will be of importance whether left truncation is among the facilities of the system, while this may be of minor importance in this context if English or French is the language of the database.

2.2 The library environment and the University structure

Many European countries will differ in this respect from the Anglo-American countries. This of course has a bearing on what technology is suitable for the individual library.

The design of the catalogue system, the circulation system, and other library routines when they are automated will depend on the library structure, size user groups and frequency of use. Here the conditions in Europe will often