

V. USERS AND USES

A. USERS

1) Historians

Regardless of how an archive for the history of software presents itself or what its collecting criteria emphasize, it will be of value to historians of science and technology and other academics, such as psychologists and philosophers, interested in the historical evolution of software embodied concepts. If the collections policies permit acquisition of software which was important to particular industries or sectors, specialist historians will, in time, also be attracted to conduct research in the archive.

2) Developers and their lawyers

If the software archive makes unique design concepts a focus of its collecting, and in some way indexes its holdings to reflect such conceptual linkages, it would be of great benefit to lawyers representing software developers and to software engineers themselves. While the utility of reusable code is still a matter of debate within the software community, the potential value of studying previous implementations of common underlying concepts is self-evident. This would be especially true if the holdings included software of recent vintage. Reciprocally, the holdings of patent attorneys and others representing software developers are also important sources for documenting the history of software.

3) General Public

In theory, the software archive could be a facility for non-scholarly, inquiry if some or all of the software collected could be run on either the devices for which it was designed or on systems emulating those devices. In practice, however, providing for casual inquiry may prove more complex than mounting an exhibit, since few if any software systems yet designed can be said to be accessible to naive users without substantial knowledge, on-line help and even pre-programming, which would have to be supplied by the curator. One exception to this rule is software documentation in the form of films, as the Computer Museum has shown in its collection of computer assisted animation movies from SIGGRAPH and elsewhere, which document the capabilities of the software which generated them, and in the acquisition of movies showing how software operated on machines for which it was initially designed. Another exception may be demonstration disks and

educational software products intended for consumers, both of which are becoming more common, but still represent only a tiny corner of the market.

B. USE

It seems, therefore, that the software archive must be viewed as a research facility above all else, and that its support will have to come from sources other than general visitors. However, with the exception of a tiny community of historians of computing, there is not yet any research interest in software, so the creation of a user community and the collecting of a software archive will need to go hand in hand. This is particularly important if other institutions, especially universities, are to be encouraged to collect software and its history and if scholarly foundations are to support part of the costs of building historical collections. On the other hand, reasons for retaining software documentation for evidential purposes abound, and the use of such records, especially in legal disputes, will increase over the coming years as a growing number of functions are performed by liable organizations under software control. Software archiving may find more uses in the corporate environment in the short term than in academia.

Nevertheless, one concern of any software archive program ought to be to assist in building up a scholarly research community. Among the (time-honored) activities which contribute to this end, many of which are already being conducted by the Charles Babbage Institute, are:

- Publication of a regular report on archival developments, including such new holdings deposited in Institutions throughout the world (such a column could appear in the CBI Newsletter, or a general publication read by historians of science and technology).
- Employing recent graduates of history of science and technology programs in projects of the software archives, or employing graduate students to encourage dissertations using software archives resources. This could possibly include the provision of research grants to post-doctoral students.
- Holding talks, seminars, or conferences on topics in software history, and possibly publishing proceedings of such conferences.
- Publishing bibliographies.
- Seeking funding from corporations with software to finance student help in organizing and describing their holdings. Seeking to encourage university R&D projects involved in developing new software to document their

initiatives.

It is in the interest of repositories which might collect the history of software, to have the field of software history recognized by the National Science Foundation and the National Endowment for the Humanities as a developing discipline, with practitioners to whom grants can be made. In addition support, even if very modest, for the implementation of a pilot program should be sought from the NEH and NHPRC, in order to give the program visibility and legitimacy.