

The Attic and the Parlor: A Workshop on Collecting Historical Software

The suddenness of the leap from hardware to software cannot but produce a period of anarchy and collapse, especially in the developed countries.

--Marshall McLuhan

Not everything that can be counted counts, and not everything that counts can be counted.

--Albert Einstein

This outline describes several themes to be explored during a Workshop on Collecting Historical Software that will be held in the spring of 2006 at the Computer History Museum. The workshop's purpose is to gather a small group of leading thinkers and practitioners in this area who will help shape the strategic direction and practical next steps for long-term software collection and preservation efforts, particularly at CHM but also elsewhere.

What is meant by "The Attic and Parlor?"

We suggest that the issue of software preservation may have a dualistic ethos: first, that of a broad, community-based effort to collect for preservation with little or no curatorial/interpretive layer; and, second, that of a more narrowly-focused effort to collect, preserve *and present* the more seminal instances of software as coherent, scholarly artifacts available for interrogation and display.

The broad-based effort we here term 'the attic;' the narrowly-focused one, 'the parlor.' The analogy, firstly, is to that of a home's attic, where many undifferentiated, unsorted items often are placed, awaiting further examination at some later date, perhaps by later generations; secondly, the parlor as that area of the home in which the most important items of a person's life are kept lovingly-preserved, and shown with pride as embodiments of the owner's collecting prowess, interpretive expertise, and desire to enlighten others.

In our view, both philosophies are necessary and mutually-reinforcing but we offer the contrasting approaches as a useful way to open up a conversation about collecting and strategy.

The Attic

The attic represents a community-based collecting function. It is a mission to collect items of relevant interest in as broadly-based manner as possible. This effort makes use of traditional methods of artifact collecting (both passive and active) by which donors approach collectors and collectors approach known holders of software, but which is also, excitingly, able to use the Internet to attract donors from around the world, greatly increasing the reach and quantity of materials that can be collected.

The goal is the creation of a massive repository of software of all kinds and in all forms. There are obvious scalability and quality control issues in such a strategy, which this workshop can explore in detail.

The attic is a messy place; among the gems will be duplicates, trash, counterfeits, incomplete works, and objects of questionable provenance. Since the large volume of material requires that operational procedures be distributed, implementation of standards will be inconsistent.

One allied view of the attic is that of the archaeological midden¹ from which objects can be extracted and promoted to the Parlor, now or later.

The Parlor

The distinguishing features of the parlor are that of thoughtful selection and interpretation. Items move into the parlor only by careful, deliberate volition of their owner. The analog to the parlor in the Museum is its curated and cataloged collection, which provides the source material needed for exhibitions and historical research. The Museum ought to pursue in depth the origin and development of specific, highly-important software in a scholarly fashion, as items that befit its own parlor.

The parlor is not a messy or necessarily voluminous place. It needs only a small number of significant collections or objects — ones that reflect the deeper archeology of software — in order to be a resource for quality research and exhibition. High priority is placed on collecting not only the software itself, but a wide variety of other related objects and documents that contribute to the historical record.

Common features

Museums are often unfairly accused of being a 'black hole,' a place where many physical items that are donated seem to not re-appear for use. To be fair to museums, this usually reflects a poor understanding on the part of the plaintiffs of what a Museum really is (viz. the fraction of items that are collected vs. those that are displayed) as well as the staffing challenges that museums typically face.

Because software is different, both the Attic and the Parlor can serve as a means of countering this problem by making all contributed material accessible to the extent permitted by law and technology. This directly serves the public mission of the museum, and helps in attracting still more donations of software (particularly among scholarly donors) by establishing itself as an institution which will make meaningful use of such donations.

Both collections encourage and enable the exploration of the history of software and its 'impact on the human experience.'

The actors

Creating both attics and parlors takes considerable effort. Who does the work? It is tempting to be simplistic and declare that parlors are created by professionals within institutions, and attics are assembled by enthusiastic and independent amateurs. In fact this is neither true nor desirable.

Many exquisite and comprehensive parlors (shrines, actually) for software systems have been created with passion and enthusiasm by knowledgeable users or creators of those systems. Conversely, many institutions — the Computer History Museum among them — have, at least as part of their archive/attic, poorly documented and incomplete assemblages of randomly-acquired but potentially valuable software.

Perhaps the institutions' best course is to embrace and encourage both activities and expect to have a monopoly on neither. The institution can uniquely provide stability, organization,

¹ Midden: "A mound or deposit containing shells, animal bones and other refuse that indicates the site of a human settlement. A midden can be a rich source of information about the prior human activity at the site."

resources, and the promise of long-term preservation. Non-institutional participants can provide energy, expertise, passion and access to otherwise hidden materials.

As a distributed group effort, both parlor and attic collecting can learn techniques and pitfalls from other collaborative initiatives such as open source software development and wikipedia-like resource creation.

Organization of the Workshop

The workshop is intended to be stimulated by the questions below for workshop participants to consider. Participants will answer one or more (or new questions inspired by them) during 5-15 minute presentations, perhaps complemented by a short paper that would be distributed to participants ahead of the workshop.

These presentations will take place in the morning. A free-ranging discussion period will follow after lunch, for perhaps two hours. Near mid-afternoon, the main conclusions of the workshop, including action-oriented policies for use by the Computer History Museum in software preservation, will be summarized.

The Questions:

- What is the structure of, and what are the arguments for, the Attic?
- What is the structure of, and what are the arguments for, the Parlor?
- Which notion is a better metaphor for how to put together a collection now?
 - Should we just try to create a repository for collectors to deposit bits, or do we focus on carefully crafted projects?
 - What is the balance of attic and parlor?
 - Is it necessary/reasonable/possible to do both?
- Who does the work?
 - What roles should/can institutions like CHM (ACM, LOC, IEEE etc) play?
 - What roles should/can individuals play?
 - What roles should/can software companies or corporations play?
 - If collecting software is a distributed ("open source") activity,
 - How are rules established for selection, standards, cataloging, etc.?
 - How is quality maintained?
- In the year 2050, what should the software archive covering the era from 1950 to 2000 look like?
 - What can we do now to create a foundation for such an archive?
- What existing collections are endangered and could be rescued?
 - How do we conduct these rescue operations?
- How do we manage the absorption of existing attics and parlors into ours?
 - (There are organizational as well as technical versions of this question.)
- How do we encourage and organize more informal/amateur collecting activity?
- Is software collecting an activity where collaboration among multiple institutions is helpful, or would the coordination overhead impede progress?
- Do we need to create a new institution or independent initiative to succeed, or would that be counter-productive?
- Who are likely collaborators? If CHM were to take the lead in creating a network of institutional collaborators right now, who would they be?
- How do we ensure international participation?
- What is your advice to CHM?
- What role would you like to play?
- What are the next steps?