

Archival perspective on the history of CPSR

Shinji R. Yamane †

Akira Baba ‡*

Abstract

This paper discusses archival issues in grassroots community from the viewpoint of our ongoing project for the collectively accessible institutional memory since 2005. CPSR (Computer Professionals for Social Responsibility) has provided various types of resources including seriously researched reports or academic symposiums. Archiving those activities requires developing archiving strategies. Examining the pilot project, we consider the future problem for archiving the community activities.

1 Introduction

Safety-critical software is a core topic of computing in the aspects of the computer ethics, social aspect of computing, and software engineering. From this viewpoint, Kevin Bowyer developed a curriculum module around SDI (Strategic Defense Initiative) announced by President Reagan in early 1983, for undergraduate Information Systems, Information Technology, Computer Science, or Computer Engineering programs [4] [3]. To develop a curriculum module, Bowyer had used the video clip of a Reagan-era SDI debate sponsored by the CPSR (Computing Professionals for Social Responsibility), the oldest non-profit membership organiza-

tion working on social impacts of computer technology. This lesson shows an example of computer professional groups' valuable resource in the history of computing. They had provided seriously researched debates and writings not only on safety-critical software but a variety of fields, however, the total amount of this historical resource has never been clear yet.

In this paper, we especially focus on the archiving practice in CPSR.

2 Related Study

Some recent studies on the history of computing focus on the human agencies rather than products or technology [6]. Rebecca Slayton had pointed out the unique role of computer professionals in the SDI debate compared to the Physicist organization [14]. Slayton looked out the debate from a wide perspective, comparing the physics and computing communities, Slayton also used a wide range of archives — personal collections, interviews, news media, and Net-News articles. Hers is the first research based on the analysis of historical resources, and these resources illustrate the early position of CPSR in its first years.

3 Record of CPSR activities

Early period CPSR members also had analysed their position themselves. Formed in 1982 and become non-profit organization in 1983, the early effort of CPSR on SDI debate is compiled and published as a book *Computers in Battle* [1] in 1987. In this

*†Graduate School of Interdisciplinary Information Studies, University of Tokyo. ‡Interfaculty Initiative in Information Studies, University of Tokyo. This paper is to presented at International Symposium on Technology and Society (ISTAS 2005) held in June 8–10 at Loyola Marymount University, Los Angeles, California.

book, Jonathan Jacky reported CPSR initial members' activities in a historical context in 1980s [7].

CPSR had been originally conceived as a group concerned about the arms race and nuclear war, however, its activities are not limited to military application of computing. Subsequently, CPSR expanded its educational and scientific activities from its early years. Past president Terry Winograd described the CPSR mission as: "We don't need a single statement of faith, but we need more of a common ground than 'We think people should be educated about technology.'" [17][18]. Along with this slogan, CPSR did not limit its activities.

Wide range of activities CPSR membership newsletter has been publishing CPSR members' reports and news ¹, CPSR members' articles also appeared in other organizations' magazines such as *Bulletin of the Atomic Scientists* or *Communications of ACM*. Some articles were also reprinted in textbooks such as *Computers under Attack* [5], *Computer-related Risks* [10], and *Computers, Ethics & Social Values* [8]. CPSR publication is not limited to the articles. CPSR itself had organized research conferences and published those proceedings. In July 1987, CPSR had organized and sponsored its first research conference on Directions and Implications of Advanced Computing (DIAC). It had been hosted by CPSR Seattle chapter and become one of the regular conferences by CPSR.

There are many relationships between CPSR and other associations, for example, the First Conference on Computers, Freedom, and Privacy (CFP) in 1991 was spon-

¹ *CPSR Newsletter* has changed its formats. It began as the quarterly report printed for CPSR members since 1983. Later it was edited by guest editors, turned to *CPSR Journal* from 2001, then to monthly emailed newsletters *The Compiler* since 2003. CPSR also had quarterly newsletter *PING!* printed for both members and non-members from 2000 to 2002.

sored by CPSR [2] and the primary sponsorship moved to ACM later. CPSR members consisted a majority of the 11 members of ACM Committee on Computers and Public Policy (USACM) [11]. From late 1980s to mid 1990s, some special interest projects spun off from CPSR, for example, Electronic Privacy Information Center (EPIC) from CPSR Washington Office, Seattle Community Network (SCN) and Public Sphere Project from CPSR Seattle chapter, and 21st Century Project. These records on coordination and incubation also characterize CPSR activities.

Globalization Compared to policymaking process in the United States, CPSR was not so influential at the international policy table. In the United States, CPSR has advised to the policymakers in all government levels — federal, states, and local governments [9]. Although CPSR had joined the international events since 1980s, it didn't directly involve in the policymaking process in other countries. This international gap faced with "Laundering Policy" on cryptography policy in mid-1990s. After CPSR's electronic petition had gathered nearly 50,000 signatures against the Clipper Chip [13, p. 493–494], U.S. government approached the OECD (Organization for Economic Cooperation and Development) to adopt key escrow as an international standard [13, p. 322]. The more U.S. telecommunications policy exported, the more computer professionals in other countries noticed CPSR and the other organizations in U.S. Then CPSR foreign chapters began to provide the analysis to the public and advise the policymakers in their own counties. CPSR also covered other global issues including Internet governance. Getting Special Consultative Status with ECOSOC (Economic and Social Council) in United Nations in 2004 and attending WSIS (World Summit on the Information Society) with other international NGOs is one

of those global activities.

Such global and topical expansion of CPSR made its activities appear everywhere. On the other hand, it also made CPSR's mission invisible or harder to understand, as there is no central control in CPSR and each project and local chapter has their own initiative. Archiving CPSR history should support making those institutional memory collective and accessible.

4 Pilot Project

4.1 Plan

In this section, we describe our plan of archiving CPSR historical resources and report our pilot project.

First of all, we should develop documentation strategies from archival viewpoint [15]. Like other organizations, CPSR has not taken an active role in preserving their own history. There are a bundle of documents and file cabinets but neither detailed bibliography nor table of contents. So we must start from describing the location list of resources CPSR has. We already had a pilot test to archive representative samples and developed the documentation strategies for organization by archiving representative samples. Then we would set three themes: 1)What to save (What to digitize), 2)How to save it, 3)How to provide access to it.

4.2 What to save

CPSR resources include many types of publications (book, newsletters, proceedings, project reports, video/audio tapes, etc.), official report(annual report and financial report), online resources(mailing list, Net-News, etc.), local chapters' publications, administrative resources (budgets, personnel, etc.), and some goods(T-shirts, etc.). As the representative sample, we digitized the official report and newsletters of the initial year. Original form of CPSR Newsletters volume

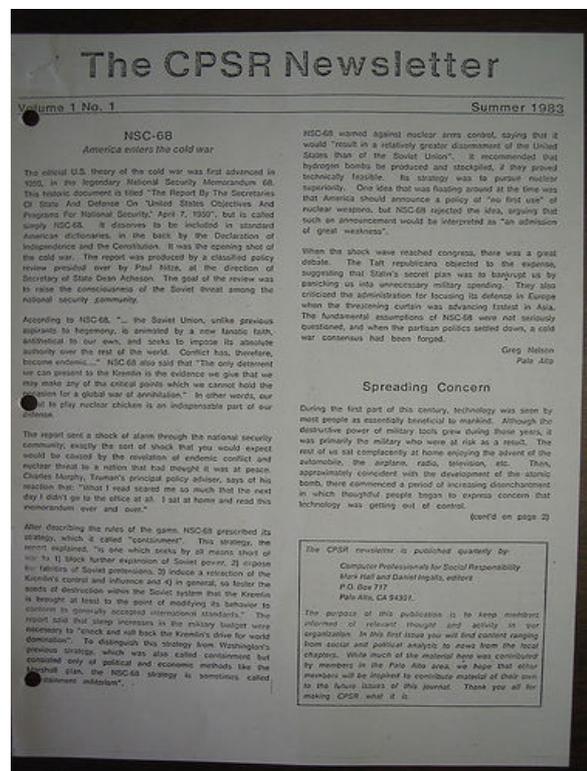


Figure 1: A sample of injured photocopies

1 in 1983 are lost, and only injured photocopies (Figure1) are available ². Most CPSR papers are stored, however, many video titles are lost. Searching original early newsletters and video titles outside of CPSR office will be the future work. For historical and educational reuse, we will digitize early newsletter articles and video tapes.

4.3 How to save it

Digital scanning of samples is suitable to reuse. Especially video/audio tapes and collected newspapers are not suitable for long-term preservation, so should be processed by digital re-mastering.

4.4 How to provide access to it

So archived resource should be catalogued and provided for worldwide members and non-members in various countries via the Internet. Some CMS(Content Management Systems) are usable with internationalized

²Some pictures are available at <http://www.flickr.com/photos/s-yamane/9296978/> (visited April 30, 2005).

interface, moreover, they support building contents, categorizing, and syndication by users themselves. This may introduce self-archiving strategies available for not only archivists but also CPSR members in local chapters and active projects.

5 Consideration and Future work

After the pilot project, many archiving strategies become clear. There are many resources outside of CPSR office: active members' personal collections, autobiography [12], and interviews by researcher [16]. Integrating personal collections is important, especially in the case of original resources that had been lost.

Archiving early electronic communication will become important as many CPSR members had online communication since the early 1980s. For example, Google provides NetNews archive since 1980s and there are CPSR-related newsgroups including `comp.org.cpsr.announce`, `fa.arms-d`, and `comp.risks`. Although some of them seem incomplete, it may be useful for historical researchers.

6 Summary

We discussed the new direction of the social history computing focused on glass-roots community of computer professionals. Then we pointed out the archiving problem. In our archiving project of CPSR activities, we have archived some early resources as a pilot project and then started archiving the personal collections and early electronic communications. We continue to develop the archiving strategies through for preserving computer professionals communities' heritage.

Acknowledgment

CPSR office staff Susan Evoy welcomed sudden visitor. CPSR President William Drake made me recognize the idea and importance of "institutional memory capacity building." in private email in March 2005. CPSR activist Rodney Hoffman helped rewriting this report.

This work is funded by Telecommunications Advancement Foundation in Japan in 2005.

References

- [1] David Bellin and Gary Chapman, editors. *Computers in Battle: Will They Work?* Harcourt Brace Jovanovich, 1987.
- [2] Sally Bowman, Jonathan Budd, Dorothy Denning, John Gilmore, Richard Hollinger, Donn B. Parker, and Terry Winograd(Chair). Ethics & education. Conference Transcripts of Panel on Thursday, March 28, 1991 in First Conference on Computers, Freedom and Privacy. <http://archive.cpsr.net/conferences/cfp91/winograd.html> (visited April 13, 2005).
- [3] Kevin Bowyer. Video resources for use in teaching ethics and computing. In *SIGCSE '00: Proceedings of the thirty-first SIGCSE Technical Symposium on Computer Science Education*, pp. 217–221. ACM Press, 2000.
- [4] Kevin W. Bowyer. "Star Wars" revisited: Ethics and safety-critical software. *IEEE Technology and Society Magazine*, Vol. 21, No. 1, pp. 13–26, March 2002. Earlier versions were appeared in *Proceedings of 31st ASEE/IEEE Frontiers in Education conference (FIE'01)* available online at <http://fie.engrng.pitt.edu/>

- file2001/papers/1082.pdf, and *Proceedings of International Symposium on Technology and Society (ISTAS'01)*.
- [5] Peter. J. Denning, editor. *Computers under Attack: Intruders, Worms, and Viruses*. ACM Press/Addison-Wesley, 1990. Reprinted with corrections in August 1991.
- [6] Nathan L. Ensmenger. Power to the people: Toward a social history of computing. *IEEE Annals of the History of Computing*, Vol. 26, No. 1, pp. 96, 94–95, January-March 2004.
- [7] Jonathan Jacky. The strategic computing program. In Bellin and Chapman [1], pp. 171–208.
- [8] Deborah G. Johnson and Helen Nissenbaum, editors. *Computers, Ethics & Social Values*. Prentice-Hall, 1995.
- [9] Jeff Johnson. CPSR's approach to advising policymakers. In *ACM POLICY '98: Proceedings of the Ethics and Social Impact Component on Shaping Policy in the Information Age*, pp. 9–13. ACM, 1998. Also reprinted in *ACM SIGCAS Computers and Society*, Vol. 28, No. 2, 1998. pp. 9–13. Earlier version in 1996 is available at <http://archive.cpsr.net/cpsr/advising.html> (visited January 30, 2005).
- [10] Peter G. Neumann. *Computer-related Risks*. ACM Press/Addison-Wesley, January 1995. Reprinted with corrections in January 1995.
- [11] Peter G. Neumann. Notes on receiving CPSR's Norbert Wiener Award. *CPSR Newsletter*, Vol. 15, No. 4, 1997. An address given at CPSR Annual Conference in October 1997. Also available at <http://archive.cpsr.net/publications/newsletters/issues/1997/Fall1997/neumann.html> (visited November 5, 2004).
- [12] Severo M. Ornstein. *Computing in the Middle Ages: A View from the Trenches 1955–1983*. Authorhouse, electronic book edition, 2002.
- [13] Bruce Schneier and David Banisar, editors. *The Electronic Privacy Papers: Documents on the Battle for Privacy in the Age of Surveillance*. John Wiley & Sons, August 1997.
- [14] Rebecca Slayton. Technical Authority in the Media: Public Debate on the Strategic Defense Initiative. In *Proceedings of the International Symposium on Technology and Society (ISTAS'01)*, pp. 137–144. IEEE Society for the Social Implications of Technology, IEEE, 2001.
- [15] Helen R. Tibbo. Archival perspectives on the emerging digital library. *Communications of the ACM*, Vol. 44, No. 5, pp. 69–70, 2001.
- [16] Morten Thanning Vendelø. An interview with Terry A. Winograd. Working Paper no. 02–7, 2002. Department of Informatics, Copenhagen Business School. Interview on February 29, 2000. Available online at <http://ep.lib.cbs.dk/paper/ISBN/x656165188> (visited February 9, 2005).
- [17] Terry Winograd. Computers, ethics, and social responsibility. In Johnson and Nissenbaum [8], chapter 1, pp. 25–39. Firstly appeared in *Computing and Human Values: Proceedings of the 1991 Conference*, Research Center on Computing and Society, New Haven, 1992.
- [18] Terry Winograd. CPSR's mission. An email message later modified as “Terry Winograd's Thoughts on CPSR's Mission” and available at <http://www.cpsr.org/about/mission/mission2> (visited March 31, 2005), October 1996.