Colloque international - Unix en France et aux États-Unis: innovation, diffusion et appropriation

International symposium - Unix in France and in the United States: innovation, diffusion and appropriation

19 octobre / October 19th 2017
9h - 17h30

Conservatoire national des arts et métiers, 292 rue Saint Martin - 75003 Paris

Amphi C – Abbé Grégoire

Voir le programme en ligne / *See program online* :

http://technique-societe.cnam.fr/colloque-international-unix-en-france-et-aux-etats-unis-innovation-diffusion-et-appropriation--945215.kjsp

Résumés des contributions / *Contributions abstracts*

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Laurent Bloch (Institut de l'Iconomie)

« La conversion à Unix : un exemple de prophétisme informatique ? » : Unix survient une vingtaine d'années après l'invention de l'ordinateur, et une dizaine d'années après que quelques pionniers eurent compris qu'avec l'informatique une nouvelle science naissait, qu'ils eurent tenté de la faire reconnaître comme telle, et qu'ils eurent échoué dans cette tentative. Certains traits d'Unix et certains facteurs de son succès procèdent de cet échec, et c'est de cette histoire qu'il va être question ici, selon la perception que j'en ai eue de ma position de praticien. Cette perception me venait de façon rétrospective, aussi l'ordre chronologique n'est-il pas toujours respecté dans cet exposé. Ce qui suit est le récit de l'élaboration d'une vision personnelle, qui assume sa part de subjectivité.

« *Converting to Unix. An instance of technological prophetism ?* » : *Unix arrived some twenty odd years after the invention of digital computers, and a decade after a few pionneers had understood that with computing a new science was emerging – and whom had failed to make it ackowledged as such. Some features of Unix and some reasons for its success proceed from this failure, and this will be the topic discussed here from my point of view as a pratician. As a retrospective view on Unix history, it will not necessarily be told in a chronological matter, so what follows is the story of a personal vision assuming its subjectivity.*

Thomas Haigh (Associate Professor of History, University of Wisconsin—Milwaukee ; et Comenius Visiting Professor of the History of Computing, Siegen University)

« Contextualizing UNIX: Cooperative Software Development Practices From the 1950s to the 1970s » : *Open source software projects are conventionally traced to Linux in the early 1990s and to GNU, BSD, and the Free Software Foundation in the mid-1980s. This positions the origin of open source software within an ideological commitment to oppose the corporate dominance of the conventional software industry, which to Richard Stallman was exemplified by the efforts of AT&T to commercialize UNIX. I present an alternative story, grounded in development practices rather than licensing models. Most of the formal characteristics and informal practices involved in open source projects can be traced back to early corporate users of IBM mainframes during the 1950s, centered on the military aerospace industry. By 1956 the SHARE user group had adopted a software library, distribution of standards for coding and documentation, mechanisms to support discussion between project members, mechanisms to report bugs back to the authors of routines, and mechanisms for users to contribute improvements back into a common code base. Creating these routines was laborious but brought little proprietary advantage, so firms realized they would benefit by pooling their efforts. Later mathematical software projects of the 1970s, such as EISPACK and LINPACK, established comparable mechanisms for packaging and distributing packages produced by academic experts. Taken together, these stories suggest that the quasi-academic way in which UNIX was developed at Bell Labs was more broadly representative of software development practices in the 1970s than is often assumed. They also suggest that the practices now associated*

with open source development have a long history in business. These continuities with established corporate and scientific work challenge us to reconsider the assumed centrality of "hacker" culture to the origins of open source practice.

Clem Cole (Intel/Usenix) :

« UNIX : A View from the Field as We Played the Game » : *UNIX is a classic example of a "Christensen Disruptive Technology." It was a cost-effective solution, produced at the right time, built by researchers at AT&T for themselves, and was not originally seriously considered by its competition. The UNIX Operating System had simple goals. It ran on modest hardware, and was freely shared as a result of AT&T legal requirements. As a result, a new computing customer developed, a different one than was being targeted by the large firms of the day. UNIX was targeted at the academically-inclined; it was economically accessible, and since its IP was published in the open literature and implementation was available to the academic community fundamentally without restriction, the IP was thus "free" and able to be examined/discussed/manipulated/abused by the target users. While its creators wrote UNIX for themselves, because the freely shared it with the widercommunity that sharing fed on the economics in a virtuous circle as this community developed into a truly global one. I will trace a little of the history of a small newsletter to today's USENIX Association and some of its wider social impact.*

Philippe Dax (Telecom Paristech/ex-ENST) :

« L'Abbaye de Thélème Tribunixienne » : Cette présentation retrace l'histoire de la revue *Tribunix*, bulletin de liaison de l'AFUU pendant 14 ans. De manière chronologique on y découvre ses origines, sa naissance, ses influences, son public, son modèle, son évolution jusqu'à sa disparition et son futur. Le titre "Abbaye de Thélème Tribunixienne" vient de la devise de Rabelais "Fais ce que voudras" transformé en "Ecris ce que voudras" qui présidait à la ligne éditoriale de Tribunix en devenant une passerelle sans freins pour la transmission des connaissances.

« An Tribuxian Abby of Theleme » *: This presentation traces the history of the* Tribunix *magazine, the information bulletin of the French Association of Unix users (AFUU) for 14 years. In a chronological fashion we will present its origins, birth, influences, readership, model, evolution until it disappeared, and also its future. The title is inspired by French Renaissance writer Rabelais' motto « Do what you please », turned into « Write what you please », a sying that presided the editorial policy of* Tribunix, *that became an obstacle-free course for the spreading of knowledge.*

Jacques Talbot (ex-Bull Grenoble) :

« UNIX vu de province 1982-1992 » : On a choisi de relater la période 1982-1992 qui est bornée par deux événements importants. En 1982, Bull acquiert à la sauvette la licence de la SM90 qui fonctionne sous UNIX. En 1992, l'accord Bull IBM autour d'AIX ouvre une nouvelle ère. Ces épisodes couvrent une phase pré-UNIX, la décision d'aller sur UNIX, la problématique de le "vendre" en interne, une digression sur UNIX distribué, le processus de standardisation mondiale, un épisode de développement franco-italien pour finir sur UNIX multiprocesseur.

« Unix from the provinces 1982-1992 » : *We have chosen to retrace the 1982-1992 period, marked out by two important events. In 1982, the French Computer manufacturer BULL acquires hastily the SM90 licence running under UNIX. In 1992, there is an agreement between IBM and Bull on the AIX system opeining a new era. These episodes tell the tale of a pre-UNIX moment, the decisions leading to UNIX, and the issue to « sell it » inside the company, a digression on distributed UNIX, the process of global standardisation, a franco-italian episode on development, and, finally, evoking UNIX multiprocessing.*

Jean-Yves Brucker (ex-IBM) :

« Unix à IBM : le système AIX » – résumé en attente / *pending abstract* : Développement d'AIX à IBM à partir de 1982 ; réticences à l'adoption d'Unix chez IBM, les raisons du choix…

« Unix at IBM : the AIX system » - pending abstract : *The development of AIX at IBM from 1982, resistances to the adoption of UNIX at IBM, the reasons for the choice,…*

Ginevra Sanvitale (Doctoral candidate, Technical University, Eindhoven)

« The History of Free Software in the History of Computing » *: Amongst the many Unix-like systems which were produced between the eighties and nineties, GNU/Linux is one of the projects which made it to the third millennium. In this paper I will present a tentative state of the art on the research on the history of free software. With the term "free software" I refer both to a technical product and to a social movement. Given the actual scarcity of historical accounts on both interpretations of the term, I will combine history scholarships with materials from different academic disciplines and non academic sources, providing a critical analysis of the narratives which are produced and reproduced within them. Finally, a reflection will be made on what History of Computing can contribute to the academic literature on free software, and what history of free software can contribute to the history of computing.*