### THE FINNISH SOCIETY FOR THE HISTORY OF TECH-NOLOGY AND ITS JOURNAL *TEKNIIKAN WAIHEITA* MILESTONES, 1980–2010

#### Petri Paju

For nearly thirty years, Finns interested in the history of technology have been able to enjoy a journal dedicated to that field. The journal publication, the Finnish Society for the History of Technology, and the field at large, have developed side by side influencing each other. Thanks to their transformations during this time, the society and its publication have been able to fruitfully bring together both engineers and scholars of various disciplines.

# BACKGROUND AS A MUSEUM ASSOCIATION

Somewhat surprisingly, the present Finnish Society for the History of Technology has roots going back more than eighty years. This is mainly because it continues the work of an earlier organisation devoted to preserving the history of technology. In 1926-28, the Finnish Society for the Museum of Technology (Suomen Teknillinen Museoyhdistys) was founded jointly by several government ministries and engineering associations. At the time, this was undoubtedly an act with nation-building connotations. In 1926 Finland as an independent state was only nine years old, having become detached from Russia in 1917. The new Society started recruiting members and collecting objects for the museum. After several stages, hampered by war and by a continuous shortage of engineers in the country, its goal of establishing a permanent Museum of Technology was achieved: first on paper in 1969 and concretely in the early 1970s, when the museum gradually opened its exhibitions to visitors in Helsinki.<sup>1</sup>

This can be compared to the technological exhibitions in the town of Tampere. Their long history dates back to the nineteenth century; the Tampere museum activity was originally based on the European ideal of educating the public by means of museums in order to foster further industrialization. At present, technological history is displayed in Tampere in particular by the Museum Center Vapriikki, the Rupriikki Media Museum and the Textile Industry Museum at "Werstas".<sup>2</sup>

In the late 1970s the Helsinki-based Museum of Technology at first supported research, but the time soon came to decide what the purpose of the Society should be now that its original goal had been accomplished. Some members continued with museum work nation-wide; some went their own way, with railway history; yet others saw research in the history of technology as the way of the future. As part of this era of change, the society began journal publication.

### THE START OF JOURNAL PUBLICATION

The Finnish Society for the Museum of Technology became joint publisher of *Resilina* magazine with its third issue in 1980. 'Resilina' is Finnish for a railway inspection trolley or handcar. The journal was first published in 1969 and is still today run by railway history organisations. In the early 1980s their co-operation with those interested in the history of technology continued for two and a half years, until a joint decision was made to split the magazine into two separate publications. *Resilina* continued as before, while the history-of-technology people founded a journal of their own.<sup>3</sup>

In this first phase of journal publication, during 1980-1982, serious attempts were already being made to develop Finnish research in the history of technology. One example: Svante Lindqvist, later Professor, from Sweden (KTH Royal Institute of Technology in Stockholm) had been invited to lecture on the study of the history of technology in the industrial countries, and his presentation was published in Resiina.4 On the whole, writings related to the history of technology had close ties to the Museum of Technology. The Society was still truly the Finnish Society for the Museum of Technology. Nevertheless, while many of articles had been presented as talks at the museum's events, their content can be counted as 'history of technology' as it is known today. Thus these early publications should be kept in mind by present-day researchers.

## *Tekniikan Waiheita* founded in 1983

However, it was time for the society to have a journal of its own. The new periodical *Tekniikan Waiheita*, the Finnish Quarterly The cover of the third issue of Resiina magazine in 1980 in which the Finnish Society for the Museum of Technology first started as a journal publisher.



3.1980



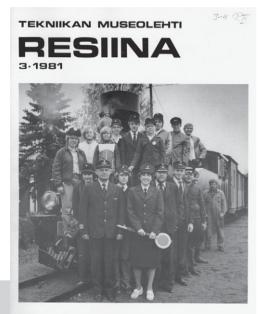
IASSA NUMENOSSA: TEKNIIKAN HISTORIAN TUTKIMUS TEOLLISUUSMAISSA TEKNIIKAN JA TEKNIIKAN MUSEOTOIMINTA VALTIONRAKUTATEIDEN KOEVETURIUUTUUDET KUVAKATSAUKSESSA ISOJA AMERIIKKALAISIA MAANALAISTA TOIMINTAA VIHANNIN KAIVOKSESSA

for the History of Technology, was founded in 1983 by members of the society who were devoted to the study of the history of technology. The first editor-in-chief was Matti Krank, whose academic training was in political science and who at the time was employed as editor-in-chief to an engineering magazine.<sup>5</sup>

Undoubtedly the new journal meant a further turn towards present-day history of technology in Finland. The first theme issues appeared already in the second year: one for instance in number three of 1984, dealing with industrial heritage, and another on the history of information technology in Finland.

The next editor was Martti Kajaste, who managed the journal during 1987–1993. The content indicates that there was much greater focus than today on museum work and museums abroad. Nevertheless there was room even for imagined technology, for instance in Pekka Laaksonen's article on the history of fictional perpetual-motion machines in Finnish literature.<sup>6</sup>

In 1994, the new editor-in-chief Karl-Erik Michelsen, a scholar in the history of technology, noted the beginning of a new phase in the journal. That same year a new sub-editor, Panu Nykänen, was also appointed. *Tekniikan Waiheita* already resembled the present-day journal in form, and its main articles usually had proper scholarly references. At this point the editors also further professionalized the production of the journal, hiring specialists in graphic design.<sup>7</sup> The journal also kept an eye on up-todate developments: thus the third issue of 1995 contained an article on the Internet.



TÄSSÄ NUMEROSSA: MUSEORAUTATIEYHDISTYS 10 VUOTTA TEKNISIÄ MUSEOITA LONTOOSSA AUTON HISTORIAA

"Resilina" is Finnish for a railway inspection trolley or handcar. This was a rather typical cover of the journal which is still today run by railway history organisations. This issue included articles on technical museums in London and on automobile history.

#### The society renamed: Finnish Society for the History of Technology

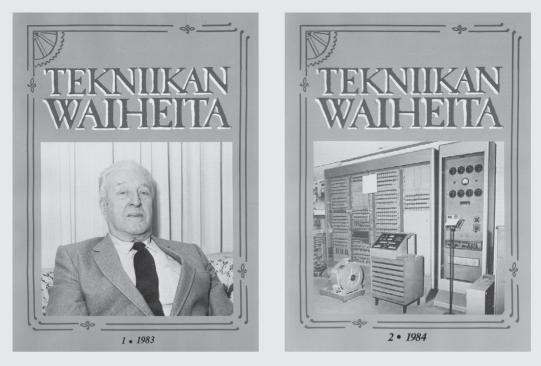
In 1995, the society changed its name to the 'Finnish Society for the History of Technology' (Tekniikan Historian Seura – Teknikhistoriska Samfundet, in Finnish and in Swedish, respectively). To be precise, the Finnish title does not include the concept of 'technology' as such; the Finnish term *tekniikka* is slightly ambiguous. In fact, the term can have two meanings: 'technology' and 'technique'. Finns nevertheless also regularly use the loanword 'teknologia', the Finnish form of 'technology'.

Both terms, 'tekniikka' and 'teknologia', have been used in the journal and in the society, partly implying the different academic traditions and influences represented by Finnish researchers. At the risk of serious oversimplification, one could say that some of the writers are more familiar with German and/or internalist history of technology and thus prefer the concept 'tekniikka', while others lean towards a more Anglo-American and/or externalist approach, in the spirit of the flagship American journal Technology and Culture. Overall, and most importantly for the Finnish research community, the society and the journal have had room for both 'technique-technik' and 'technology' as central concepts.

According to its new constitution, the purpose of the Society is to increase general knowledge of and interest in the history of technology, engineering and industry, and to promote research and museum activity in this field. Important individuals behind this major change for the society were its three successive presidents, Osmo Simola (1986–91), Aarre Terho (1992–93), and Lars Hukkinen (1994–2002) all with an academic degree in Technology.<sup>8</sup>

Thus the year 1995 became an official turning point for the society, although the

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Left: The cover of the first Tekniikan Waiheita journal depicting Professor Edvard Wegelius at 80. He was the President of the society during 1970–1985.

Right: This issue from the second volume of the journal Tekniikan Waiheita was a special issue of the history of information technology. The cover features the ESKO computer from 1960. For more information on that topic, see the other article by the same author in this journal.

shift had been in the making earlier, perhaps since the end of the 1980s. In this the society followed developments in the field; the 1980s witnessed the first Finnish research projects in the history of technology. Timo Myllyntaus in particular has surveyed these research projects in English previously, so they will not be presented here.<sup>9</sup> It is safe to say, however, that since the mid-1990s the field has grown significantly in size and has become increasingly diversified and international.<sup>10</sup>

### THE JOURNAL IN RECENT TIMES

Since 1995 there have been three editors-inchief for *Tekniikan Waiheita* before the current one: Panu Nykänen 1996–2001, Kimmo Antila 2001–2005, and Sampsa Kaataja 2006–2009. All three started their editorial post as junior scholars in the field. In addition, several other people have contributed to the journal as sub-editors or collaborators. As of the start of 2010 the journal has its first female editor-in-chief, Teija Försti.

For the journal, these last fifteen years have witnessed both continuity and change. To represent these, and to indicate something of the content of the journal, we might mention the first conference reports and the first article in English. When were these published?

The first conference report on an international event was published already in 1984, and concerned the fifth TICCIH conference (International Committee for the Conservation of the Industrial Heritage) in the US. In those early years there were also regular reports on museum visits in the Baltic states of Estonia, Latvia and Lithuania, at the time all part of the Soviet Union. Reports from the annual SHOT (Society for the History of Technology) and ICOHTEC (International Committee for the History of Technology) conferences have been published regularly from at least the year 2000 onwards.<sup>11</sup>

Also in the year 2000, the first article(s) in English were published in Tekniikan Waiheita. Importantly, since 2000 several foreign scholars have also published articles in the journal. These include Ulrich Wengenroth, Håkon With Andersen, Thomas J. Misa and Jeffrey Meikle.<sup>12</sup> Wengenroth's article was translated into Finnish, but the others were published in English. Håkon With Andersen's article was presented at an international conference, "Wired to Technology", in Helsinki in 2002; the conference was co-organized by the society, and its speakers included David Nye and John Staudenmaier.<sup>13</sup> In 2008, one of the journal's issues was a theme issue on "Universities and cultural heritage"; it contained articles by Nordic scholars, written in Finnish, Swedish and English.<sup>14</sup>

In 2008, Sampsa Kaataja, then editor of Tekniikan Waiheita, surveyed the journal's content during 1996-2008. During those twelve years, the journal published 200 research articles, by 162 authors. The writers formed a highly heterogeneous group, from retired engineers to doctoral students to scholars in various disciplines. Seventy percent of the writers were male; in the last half decade, however, the proportion of women has been on the rise. The topics covered have been predominantly Finnish and have concentrated on the twentieth century. There have been only few articles with more theoretical focus, but several have dealt with the development of the history of technology in Finland.<sup>15</sup> It is likely that many of these findings reflect the journal's readership and the membership of the society; as yet, however, there has been no study of the journal's readers and its use (references etc).

During recent years the society has had some 320 members and the circulation of its journal has been around 1100 copies. Given the small population of Finland (approximately 5.2 million), this makes its distribution and availability quite high in international terms, compared with other history- of-technology journals.

Publication of the journal is funded by membership fees and by financial support from various organisations and societies, with regular support from the Academy of Finland and with grants for specific purposes from private foundations, such as the grant from the Emil Aaltonen Foundation in 2009.<sup>16</sup>

#### OTHER ACTIVITIES OF THE SOCIETY

In 1999, the society co-established a publication series under the title 'Suomen Tekniikan Historia – Finlands Teknikhistoria – History of Technology in Finland'. As of 2009, the series comprised thirteen monographs.

In addition to its publication activities, the society has periodically been active in organizing conferences and seminars, at both the national and the international level. For its biannual meetings the society regularly invites speakers, usually scholars who have recently finished their doctoral dissertations.

Obviously, the majority of Finnish scholars in the history of technology publish their findings in one of the two national languages, Finnish or Swedish. This has been and continues to be an important emphasis of the society. At the same time, however, the society encourages Finnish scholars to be more international and to publish in foreign languages to reach a wider academic audience.

Recently the society has launched a wiki source based project to share information on international publications in the history of technology by Finns or concerning Finland (http://fi.wikisource.org/wiki/Bibliography\_of\_Finnish\_Histories\_of\_Technology).

One important purpose of this bibliographical project is to assist scholars in internationalizing their results. By the summer of 2010 the society hopes to be able to publish the bibliography on its website, at http://www.ths.fi. This bibliography will then present information and material on various aspects of the history of technology from Finland.

#### GOING INTERNATIONAL

A recent ICOHTEC report on the state of the history of technology in Finland concludes as follows: "we are inclined to claim that the Finnish research in the history of technology made its breakthrough at the turn of the millennium."17 Perfect cases in point were three international conferences organized in Finland in 2007, all of which were closely linked to the history of technology and which displayed its many dimensions and heterogeneity. One conference dealt with the history of the bicycle and another with water history, both held in Tampere; the third, held in Turku, dealt with the history of information technology in the Nordic countries. All three conferences resulted in international publication, either as a proceedings volume or as a journal issue.<sup>18</sup> In addition, conferences on related fields, such as environmental history, have been organised in Finland in recent years. Finnish scholars have also been active in international societies and in several European networks, such as the Inventing Europe research programme funded by the European Science Foundation in 2007–2010.<sup>19</sup> These examples make it easy to keep in mind that the history or histories of technology are not a homogenous field, but increasingly represent a range of approaches towards history in general.

Thanks are due to the present board of the Finnish Society for the History of Technology for comments on this article, especially to Kimmo Antila, Mikko Kylliäinen, and Panu Nykänen.

The author Petri Paju holds a Ph.D. and has been President of the Finnish Society for the History of Technology since 2009.

<sup>1</sup> Antila & Nykänen 2000.

<sup>2</sup> For more in Finnish see Antila & Nykänen 2000, and articles by Timo Myllyntaus and Panu Nykänen in the jubilee issue of *Tekniikan Waiheita* for the 80th anniversary of the society, *Tekniikan Waiheita*, vol. 26, 4/2008.

<sup>3</sup>*Resilina* has a archive of article titles at their website: http://www.resilinalehti.fi/

<sup>5</sup> Antila & Nykänen 2000, 40–43; Matti Krank, personal communication (email) 30.3.2010. The engineering magazine he edited was called *Tekniikka*.

<sup>6</sup> Laaksonen 1992; 1993.

<sup>7</sup> In particular Terhi Ketolainen and Katja Savolainen were (and Ketolainen continues to be) essential for the appearance of the journal. See Antila & Nykänen 2000, 41.

<sup>8</sup> http://www.ths.fi/historia.htm (accessed 27.4.2010).

<sup>9</sup> See Myllyntaus 1985; Myllyntaus 1996; see also Antila & Nykänen 2000.

<sup>10</sup> Myllyntaus & Männistö & Jalonen 2007, ICOHTEC Country report, accessed 24.3.2010.

<sup>11</sup> Contents of past issues of *Tekniikan Waiheita* can be found at: http://www.ths.fi/sis\_arkisto.htm

<sup>12</sup> Wengenroth 2000; With Andersen 2003; Misa 2004; Meikle 2004.

<sup>13</sup> See Tekniikan Waiheita 2/2003.

<sup>14</sup> This issue was *Tekniikan Waiheita* 2/2008 and published on the occasion of the centennial of the Helsinki University of Technology.

<sup>15</sup> Kaataja 2008.

<sup>16</sup> Emil Aaltonen (1869-1949) was a self-made Finnish industrialist who established several companies, including the Tampere Shoe Factory, and who subsequently created a foundation to support Finnish scientific research.

<sup>17</sup> Myllyntaus & Männistö & Jalonen 2007, ICOHTEC Country report, accessed 24.3.2010.

<sup>&</sup>lt;sup>4</sup> Lindqvist 1980.

<sup>18</sup> See Plas, van der & Oddy & Clayton 2008; Impagliazzo & Järvi & Paju 2009. In addition to a book of abstracts, the water history meeting produced a theme issue, "Pasts and Futures of Water" in the journal *Environment and History* (Vol. 16, No. 2, May 2010), edited by guest editors Petri S. Juuti, Tapio S. Katko and Eija M. Vinnari.

<sup>19</sup> For the ESF EUROCORES programme "Inventing Europe: Technology in the Making of Europe, 1850 till the present", see http://www.esf.org/activities/ eurocores/running-programmes/inventing-europe. html .

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