

# MAKING EUROPE

Technology and Transformations  
1850-2000



An international research and publishing programme coordinated by the Foundation for the History of Technology and Eindhoven University of Technology

## A NEW EUROPEAN HISTORY

### Making Europe

The coming years will witness the publication of a new history of Europe. The project, entitled *Making Europe: Technology and Transformations, 1850-2000* takes the form of an accessible book series aimed at a broad scholarly community, ranging from historians, to social scientists, and engineers, officials and policy makers, students, and those who are simply fascinated by European history. A virtual exhibit accompanies the book series and opens up the research results to an even wider audience. *Making Europe* comes at an opportune time. The future of European integration is a prominent issue on the political agenda yet seems to be fully restricted to the European Union. But Europe goes far beyond that, which is why the time has come to place the history of its integration within a broader context.

### Experiencing Europe

How did people build, explore, communicate and oppose 'Europe' over the past century and a half, and how did their actions contribute to Europe's future? To find the answers to these questions the authors of the book series have analysed the emergence of various economic, political and cultural European spaces while avoiding the traditional state or nation-centred modes of analysis. This approach allows them to place the history of European integration within a much deeper and broader history of various 'Europes' since 1850.

### Technology as an agent of change

Technology - and the skills and knowledge that make it work - has operated as an agent of change in the creation of European spaces. Technological change is understood as a political, economic and social process involving people and institutions. Using this definition as a starting point, the book series examines how various groups have contested, projected, performed and reproduced 'Europe'. In particular, the authors will focus on network technologies, knowledge intensive technologies, consumer technologies and large scale technological European projects.

## BUILDING A PROGRAM

The research has been carried forward by Tensions of Europe, an international scientific network consisting of over two hundred scientists from all over Europe and the United States. Since 1999, it has explored a broad range of themes, focusing on the linking and delinking of infrastructures, the emergence of transnational technical communities and the circulation of artefacts, systems and knowledge.

In 2006, the network's activities resulted in the research programme *Inventing Europe: Technology and the Making of Europe, 1850 to the Present*, which is sponsored by the European Science Foundation. There are four ongoing collaborative research projects, with more than eighty scholars working on 45 sub-projects.

In addition, the work of several other nationally funded research programmes will also feed into the published research agenda. To this end also a PhD program has been initiated with partners in Bulgaria and the Czech Republic.

The richly illustrated book series will be produced by a team of researchers and authors and published by a top quality publisher. Additional research will be completed in 2009/10, while in 2010/11 the authors will have the opportunity to work together at the Dutch Institute for Advanced Studies (NIAS). The book series will be published from 2012 onwards.

A prototype for the virtual exhibition has already been built in collaboration with seven European science museums. The aim is to expand this prototype in the coming years by translating the book series into web content and enlisting more museum partners.

### MORE INFORMATION

Detailed information about *Making Europe: Technologies and Transformations, 1850-2000* can be found on our website:

[WWW.TENSIONSOFEUROPE.EU](http://WWW.TENSIONSOFEUROPE.EU)

## BOOK SERIES OVERVIEW

The book series consists of six co-authored volumes:

1. Maria Paula Diogo, Dirk van Laak, and Matthias Middell, *Europe in the Global World* – How Europe was imagined and experienced in colonial, developmental, and other global circulations and exchanges
2. Arne Kaijser, Erik van der Vleuten and Per Høgselius, *From Nature to Networks: the Infrastructural Transformation of Europe* – How Europe (and its landscape) was constituted by the construction and use of transnational communication, energy and transport infrastructures
3. Mikael Hård and Ruth Oldenziel, *European Technological Dramas: Histories of Consumption and Use* – How European transnational spaces emerged in the process of producing, distributing and using a range of consumer goods
4. Andreas Fickers, and Pascal Griset, *Eventing Europe: Electronic Information and Communication Spaces in Europe* – How Europe was experienced in the production and use of (mass) media
5. Helmut Trischler and Martin Kohlrausch, *Knowledge Societies, Expert Networks and Innovation Cultures in Europe* – How Europe became articulated through efforts to construct European standards, expert knowledge, networks - from city planning to computer science - and large-scale projects and artefacts
6. Wolfram Kaiser, Johan Schot and Dagmara Jajiesniak-Quast, *Governing Europe: Technology, Experts and Networks* – How the emergence of multiple European transnational spaces since 1850 shaped the European integration process. This volume will focus explicitly on a reinterpretation of the European integration process.

### THE PARTNERS IN THE ESF INVENTING EUROPE PROGRAMME

European Science Foundation (Strasbourg, France)  
The Netherlands Organisation for Scientific Research (NWO) (The Hague, The Netherlands)  
The Czech Science Foundation (GACR) (Prague, Czech Republic)  
Danish Agency for Science, Technology and Innovation (DASTI) (Copenhagen Denmark)  
Academy of Finland, Research Council for Culture and Society (Helsinki, Finland)  
National Centre for Scientific Research (CNRS) (Paris, France)  
Research Council of Norway (NFR) (Oslo, Norway)  
Foundation for Science and Technology (FCT) (Lisbon, Portugal)  
Ministry of Education and Science (MEC) (Madrid, Spain)  
Swedish Research Council (VR) (Stockholm, Sweden)  
The Scientific and Technological Research Council of Turkey (Tübitak) (Ankara, Turkey)

Economic and Social Research Council (ESRC) (Swindon, United Kingdom)  
Eindhoven University of Technology (Eindhoven, The Netherlands)  
University of Plovdiv (Plovdiv, Bulgaria)  
Charles University Prague (Prague, Czech Republic)

### THE VIRTUAL EXHIBITION PARTNERS (INVOLVED IN BUILDING THE PROTOTYPE)

Science Museum (London, United Kingdom)  
Deutsches Museum (Munich, Germany)  
Norsk Tekniskmuseum (Oslo, Norway)  
National Museum of Science and Technology (Stockholm, Sweden)  
Museum Vaipirikki (Tampere, Finland)  
Technisches Museum (Vienna, Austria)  
Hungarian Museum of Natural Science (Budapest, Hungary)  
Imperial College (London, United Kingdom)

### FOUNDATION FOR THE HISTORY OF TECHNOLOGY (SHT)

SHT seeks to develop and communicate knowledge that increases our understanding of the critical role of technology in the history of the western world. It is supported by Eindhoven University of Technology.

### Research programmes

Since its establishment in 1988, SHT has initiated and coordinated two national research programmes focusing on the history of technology in The Netherlands in the nineteenth and twentieth centuries. This resulted in two book series, several dissertations, articles, exhibitions, and educational projects.

### Internationalisation

In recent years, the scope of the research and the scholarly network fostered by SHT has become increasingly international. In collaboration with Eindhoven University of Technology, SHT coordinates the international research network Tensions of Europe while supporting ongoing international research projects and efforts to establish the international book series and the virtual exhibition.

# FOCUSING ON THREE THEMES

## NETWORK TECHNOLOGIES: MANAGING FLOWS

Since the middle of the nineteenth century Europe has been covered by a wide range of cross-border networks for transport, power, gas, communication, broadcasting and so on. Some of these networks stretched to other parts of the world and were essential for the management of colonial empires. The development, use and intertwining of these infrastructures plays an important role in European history, showing how flows in and out of Europe were controlled and how Europe was interacting with the rest of the world. *Making Europe* analyses the emerging of transnational networks and reveals the way they were used and governed.

## THE BREAKTHROUGHS OF SCIENCE AND TECHNOLOGY

Driven by the breakthroughs of science and technology, knowledge – and the circulation of knowledge – became a crucial factor in European history. This is true for the process of colonial expansion and for the post-colonial world. Over time a new phenomenon emerged: the expert. Along with ‘the expert’ came portals for the exchange of knowledge and technology – world fairs, schools, international organisations, harbours, airports, and so on. The book series will analyse the history of intellectual networks and innovation cultures. Case studies will reveal the role of scientists, engineers, architects, urbanists and environmentalists, and shed light on the part played by large European knowledge-based institutions such as CERN, EURATOM and ESA, as well as the relationship between experts and the state.

## CONSUMER TECHNOLOGIES: TECHNOLOGY IN USE

The book series also analyses the history of technology in use. Case studies will be presented to illustrate the processes involved, telling us much about the historical use of technologies in Europe. These will include the use of international train lines (such as the Orient Express) in the nineteenth century, the introduction of a broad range of electrical appliances such as vacuum cleaners, electric cookers and washing machines during the interwar period, the final breakthrough of the automobile in the 1950s and 1960s, and the computerisation and development of cell phones during the last decades of the twentieth century.

# VIRTUAL EXHIBITION

## TEXT AND VISUAL

Historians involved in the projects have teamed up with museums to tell stories about the way technology has helped and hindered the circulation of people, things and ideas in modern Europe. To do this a virtual exhibition has been developed. The exhibition can be found at: [www.inventingeurope.eu](http://www.inventingeurope.eu)

**Inventing Europe**  
**EUROPE, INTERRUPTED**  
 Introduction  
 "Europe, Interrupted" is a collaboration between historians and museums to tell stories about the way technology has helped and hindered the circulation of people, things and ideas in modern Europe. To do this, we have developed a "virtual exhibition", a multimedia web environment that combines text and visual material from a wide range of sources throughout Europe. The exhibition consists of thirteen stories, five thematic tours and over two hundred images of events and artefacts for you to view and explore. Select a line or stop from the map to begin the tour. You can also leave feedback here.  
 Find out more  
 What's related  
 In addition to the exhibition, the site allows you to explore the stories further by finding related content on other websites.  
 Find out more

**WEST**      **EAST**

Key to lines  
 - Traffic jam  
 - Accessibility and its disorders  
 - Local or transitional?  
 - Feeding the European standard  
 - How 'good' was the Durban?  
 - Technology and politics in the Car line  
 - Breaking points  
 - Seeking the weakest link  
 - Waiting for the Train?  
 - Hurry up and wait  
 - The promise of technology and Europe

