Technology and the Making of Europe

## TENSIONS OF EUROPE

# NEWSLETTER

## Content

NOVEMBER 2008

## Word from the editors

There is little doubt that change is in the air. The crisp, misty days and changing leaves we have been seeing here in the Netherlands are one pleasant part of it, and the results of the US elections have raised new hopes (and new trepidations) for the times to come.

Change is also in the air within the Tensions of Europe. Like the other changes, this is mostly positive. As we look back over what has happened since the last newsletter, as well as what is coming up, it becomes abundantly clear that the network has entered a new phase of its existence. What began with position papers, programmes (and more than one good party) is beginning to pay off in the form of research, books and new and innovative projects and products.

As reported earlier some of the first true 'Tensions' publications are coming out. In this issue, we are happy to announce not just books, but book *series*. Beyond that, ESF has approved the making of an 'Virtual Exhibit' that will combine ongoing research with the collections of some of the major science museums in Europe. Finally, as the book series workshop in Florence and the Inventing Europe meetings in Lisbon showed, the patented Tensions combination of serious scholarship and social networking continues to produce new work and attract new people into the Tensions fold.

In Lisbon we learned that the networking budget has been reduced, making it necessary to postpone our planned meeting in Sofia until 2010. In the meantime we are hopeful that the momentum that was strongly in evidence in Lisbon, in combination with a number of meetings, workshops and summer schools will carry us forward in fine fashion.

# WORKING PAPERS

## Inventing Europe/ Tensions of Europe Working papers

A note from the editors

Last summer, Inventing Europe and Tensions of Europe jointly launched a new internet-based publications medium, the "IE/TOE Working Paper Series." The aim is to publish work-in-progress that addresses the theme of the "hidden integration of Europe." These working papers can become one of the building blocks of a new technologically informed history of Europe. The papers are accessible via the Tensions of Europe website:
http://www.tensionsofeurope.eu/Dissemina tion.asp?wh=Working%20Papers

The series was kicked off in October with the publication of revised versions of the research proposals of six of the eight "fundable" Inventing Europe projects. More papers are in the offing, ranging from conference reports to dissertation proposals and proto-articles which may ultimately be published in journals. We are also exporing the possibility of reviews of relevant articles and books.

Publication in the series is open to anyone with a story to tell about the themes underlying Tensions of Europe and Inventing Europe. In practice we expect most contributors to come from IE/TOE ranks. This also underscores one of the main functions of the working papers series as envisioned by the IE/TOE executive councils: to perform as a digital message board within IE/TOE and thereby to foster coherence and synergy among the different CRPs and other projects. Despite the diversity of topics being entertained, there are important latent conceptual and methodological

commonalities that can become manifest realities and resources thanks to a platform like the Working Papers Series. Of course we also envision the WPS as a "real time" way to get the message of the "hidden integration of Europe" out into the world and hopefully to engage with scholars and policy makers in other fields of endeavor who may find the Working Papers a congenial site for critical engagement.

We aim to keep the publication threshhold of the Working Papers low. It is not intended as a site for polished journal articles, though it could certainly be a place in which to "try out" elements or a first version of your next publication. If necessary we can protect texts with a password, so as to avoid possible squabbles with journals about "pre-publication." We are also not planning to be very restrictive about the genre of contributions. To be sure, we kicked off the series with the rather formal "promissory notes" of research proposals. But we also hope to be welcoming imaginative efforts to capture aspects of the "hidden integration of Europe" from unexpected angles and surprising approaches. Consider, for example the luxurious graphics possibilities offered by a digital site like the Working Papers. Full-color high-resolution maps and illustrations are no problem, and even Powerpoint presentations and YouTube-like videos are within our scope. So think about sharing your exciting research plans, your findings, your insights and not least your flights of fancy with the rest of us. And please don't be embarrassed about your English; we are willing to do considerable repair work and there is also a possiblity for dual-language publication. Get in touch with one of the undersigned, editors of the WPS, for more info. Yes we can.

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## Inventing Europe Virtual Exhibit "Europe, Interrupted"

In addition to the planned book series (about which see the special report below) a further overarching initiative of the Inventing Europe project has now begun: an online virtual exhibit that combines the current research of the Inventing Europe projects with the collections of several major science and technology museums.

A feasibility study into the Virtual Exhibit was completed in May of this year, and based on this, the European Science Foundation has supported the initiative. This is an ambitious undertaking, involving international co-operation on a hitherto unheard of scale. The hope is that this first small exhibition will lay the groundwork, and establish a platform for future collaboration.

Eight museums intially agreed to participate in the project:

- Science Museum, London
- Musee des Arts et Métiers, Paris
- Deutsches Museum, Munich
- Norwegian Museum of Science and Technology, Oslo
- National Museum of Science and Technology, Stockholm
- Techisches Museum, Vienna
- Hungarian Museum for Science and Technology, Budapest
- Museum Centre Vapriikki, Tampere

More have expressed interest since. In July, the exhibit team conisisting of Brian Fuchs (Imperial College, London) as software designer, Alec Badenoch (SHT) as content editor and Mike Flynn as author and content advisor were assembled to create the exhibit. A demonstration version of the exhibit is expected by the end of the year, and the first version of the full site is planned for January 2009.

The exhibit will consist of two elements: the first will be a series of short illustrated essays laid out in five themed sections, based on research of the Inventing Europe projects and illustrated with the help of the collections of the science museums. A dynamic element will then search the online collections of the various museums involved for related images and artefacts

to allow users to explore the various themes of the exhibit more thoroughly. Further interactive elements are also under consideration.

The static content will be in the form of short illustrated essays, grouped in five themed sections. The exhibit takes the notion of 'interruptions' as its point of departure. These are moments where the messiness and contingent nature of both European integration and technological change (as well as the links between these processes) become apparent. Such a focus in interruptions will allow the exhibit to help draw connections between everyday experience and these broader processes, and place current issues into critical historical perspective.

Each of the exhibit's five sections highlights a different dynamic of technological circulation in Europe.

*Hurry up and Wait* explores the paradoxical dynamics of modernization. While the increased technological connections in Europe promise and increase the speed of life, they also increase the amount of time people spend waiting. Waiting happens at the every day level of waiting for traffic lights, trains, or file downloads, but also for the promised 'worlds of tomorrow' to arrive.

*How Iron was the Curtain?* draws on the technological stories of the Inventing Europe projects to help reconsider the Cold War division of Europe. On the one hand, knowledge, technologies and artifacts circulated well beyond the Cold War boundaries. At the same time, a number of key technologies and technological efforts went into enforcing the Cold War divide.

*Breaking Points* points to the risks involved in increased integration of technologies. Here the focus is on the way in which increased network connections both allow localized conflicts (such as strikes) to take on international importance, but also for larger geopolitical issues to inject themselves into local struggles.

*Traffic Jam* is devoted to the pardoxes of auto-mobility in Europe. The automobile is perhaps the most quintessential artefact of the 20th century. Cars are both potent national symbols and also have come to

signify specific ideals of individual freedom, both of which make them an interesting focal point for exploring the problematic interplay between techno-logical circulation and European integration in the 20th century.

*Lost in Translation?* explores the dynamics of standardization, from railway track gauges to communication protocolls, in trying to create European unity. It will higlight standards and/or often messy conversion as key to connection between systems. On the flip side, it will show how standards form sites of contested global expansion and boundary marking.

**We are currently still seeking content for the exhibit.** If you have a topic that would fit within these categores, please contact Alec (a.w.badenoch@tue.nl) for more information.


## New books

In the Foundation for the History of Technology & Aksant Academic Publishers *Technology and European History Series* recently two new books appeared. The books of Frank Schipper and Vincent Lagendijk are dissertations of the Transnational Infrastructures in Europe (TIE) project. Further volumes are planned for early 2009. For more information see www.tensionsofeurope.eu.


**Frank Schipper, *Driving Europe. Building Europe on roads in the twentieth century.***
This book discusses the intersection of Europe and roads. Today we can hardly imagine life without roads and the automobiles that use them to move around. The vast majority of movements in Europe takes place on the road. Travelers use the car to explore parts of the continent on their holidays and goods travel large distances to reach consumers. Indeed, the twentieth century has deservedly been characterized as the century of the car. The situation looked very different around 1900. People crossing national borders by car encountered multiple hurdles on their way. Technically they imported their vehicle into a neighboring country and had to pay astronomic import duties. Often they needed to pass a driving test in each

country they visited. Early on, automobile and touring clubs sought to make life easier for traveling motorists. What followed was a century full of international negotiations to tackle the problems arising from differing regulations, with Europe as the main stage. A peregrination along the archives of international organizations has provided the base material for the quest for continental road networks and sets of rules steering their use. The resulting thesis encompasses anything from standardized traffic signs saving human lives on the road to the Europabus taking tourists from Stockholm to Rome in the 1950s. Driving Europe thus offers a highly original portrait of a Europe built on roads in the course of the twentieth century.


**Vincent Lagendijk, *Electrifying Europe. The power of Europe in the construction of electricity networks***
Nowadays most consumers are aware of the European dimensions of their electricity supply. But what ideas lie behind this European network? In constructing electricity networks, "Europe" performed a Janus-faced function. On the one hand, a European network would bolster economic growth and peace. On the other, economic growth through electrification would increase military potential. By combining a wide array of rarely used sources, this book unravels how engineers, industrialists, and policymakers used ideas of Europe to gain support for building a European system. By focusing on transnational and European actors, this book is a valuable addition to existing national histories of electrification. It is an original contribution to the history of technology, while also making the role of technology visible in more mainstream European history. The empirical chapters show how ideas of European cooperation in general became intertwined with network planning during the Interwar period, although the Depression and WWII prevented a European electricity network from being constructed. The subsequent chapters describe the influence of the Marshall Plan on European network-building, focusing on both its economic and military aspects. The last chapter portrays how the Iron Curtain was contested. The troubled expansion of networks and capacity in Western Europe provided an underpinning for political rapprochement with the East in

the 1970s and 1980s. Political and economic turmoil after 1989 accelerated this process, leading to an interconnected European system by 1995.

**Adri Albert de la Bruhéze and Ruth Oldenziel (eds),** *Manufacturing Technology, Manufacturing Consumers. The making of Dutch Consumer Society* **(available from December 2008)**
In the twentieth century production and consumption rapidly grew, accompanied by businesses' frantic search for new markets. To be successful, new products and new technologies had to become socially embedded. In that process, a lot of (new) institutions, corporations, interest communities, research organizations, trades, shops, and laboratories were involved. Twentieth century European mass consumption thus never was self evident, but needed projection, representation, construction, and production. In other words, mass consumption involved a lot of sustained work both of producers and consumers.
By applying the concepts of *mediation* and *mediation junction* this book shows how consumption and production in 20th century Netherlands developed in tandem with social and institutional arrangements, while the relationship between the state, the market, and civil society configured the room for negotiation at mediation junctions. The book hypothesizes that the activities of mediators and processes of mediation junction building within specific state-market-society relations were of decisive importance for the shaping of twentieth century consumer society linking production and consumption in a historically specific fashion. Drawing from recent studies on the mediated manufacturing of houses, kitchens, cars, radio and TV sets, snacks, their consumption and their consumers in the Netherlands, the book helps to disclose the Dutch consumption trajectory that helped building the European version of consumer society.
With contributions by: Adri Albert de la Bruhéze, Marja Berendsen, Liesbeth Bervoets, Gijs Mom, Ruth Oldenziel, Anneke van Otterloo, Johan Schot, Peter Staal and Onno de Wit

# Meetings

**Appropriating America Amsterdam January 15-17, 2009**

The conference is meant to reflect on the ways U.S. social actors and institutions first sought to impose their practices on European partners, but may have become ´Europeanized´ in the process; how European partners have sought to resist, negotiate, appropriate, and rework American models to serve their local needs. As historians of technology we ask how representations of America both in positive and negative senses became part of the cultural scripts embedded in technological design; how users and consumers resist, appropriate, rework American models or collaborate with their American counterparts trying to tweak U.S. corporations, or to what extent European social actors raised the spectre of "America" to serve their own needs?
Through panel discussions will be explored to what extent the Marshall Aid, the Cold War, or U.S. corporate practices under the flag of international governance have shaped technological trajectories in Europe.
The conference brings together a number of case study projects within *Inventing Europe* to address these issues, which will not only raise the level of their treatment within the respective projects, but more significantly also present a major contribution to understanding technology's role in the making of the discursive and material space of Europe. These discussions are also expected to contribute to the study of Americanization in the post-war era. For this purpose a number of specialists Americanists as keynote speakers and commentators are invited.
The workshop is organized by Professor Ruth Oldenziel, project leader EUWOL and Dr. Gerard Alberts, project leader SOFT-EU, in collaboration with the Foundation for the History of Technology (Eindhoven, The Netherlands). For more information see www.tensionsofeurope.eu.

**Tensions of Europe Summer School
August 12-15, 2009**

The place, dates and themes of the next Tensions of Europe Summer school have now been set.

The theme will be "Oral history and technological memory: challenges in studying European pasts", and it will be held at the University of Turku, Turku, Finland, August 12-15, 2009. Organisers: Petri Paju and Hannu Salmi, University of Turku and Gerard Alberts, University of Amsterdam

The official call for submissions will be published in due course on the Tensions website. Please contact Petri Paju (petpaju@utu.fi) with any questions.

And finally, we regret to announce that the

**Tensions of Europe Meeting 2009 in Sofia** has had to be postponed until 2010. We will of course announce more details as they arise.

## Reports

**Scientific report of the workshop:
Transnational Infrastructures:
Coping with Scarcity and Vulnerability
Stockholm and Sigtuna
May 21-24, 2008**

Arne Kaijser and Per Högselius

**Summary**

The purpose of the workshop was to explore how the intertwinement of different infrastructural systems have created interdependencies and new types of vulnerabilities and scarcities. A key concept at the workshop was *'critical events'*. An ambition was to analyze how actors in different countries have acted, both when critical events have happened, and also afterwards so as to prevent similar events from happening again. The ambition was to investigate different parts of Europe, trying to determine the extent to and ways in which the cooperative patterns have looked different, for

example, within the former Eastern bloc, on the Balkans and in Western Europe.

The workshop had three parts. The first afternoon consisted of an open seminar at KTH in Stockholm, with four keynote speeches and a subsequent panel debate. The second day and most of the third day took place in the small town Sigtuna and were devoted to discussions of altogether 18 papers. The third evening and fourth morning consisted of an internal meeting of the EUROCRIT CRP, at which we discussed the lessons from the workshop and planned our future work.

All in all 30 researchers participated in the workshop, 16 of which belong to Eurocrit, 4 from other CRPs, 3 from "shadow-CRPs" and 7 others. Our assessment is that the workshop was very productive for the Eurocrit-project. We also believe that the workshop contributed to a cross CRP learning process. We learned about the work and approaches applied in the other CRPs (and two shadow CRPs) and they learned about our approaches.

**A description of the scientific content and discussion at the workshop**

The purpose of the open seminar, which was attended by just over 50 people, was primarily to invite leading scholars and practitioners to give their views and also discuss the problematique of the workshop. In addition, Arne Kaijser informed the audience of the Inventing Europe programme in general and the EUROCRIT project in particular. Four keynote papers were presented. Two of them were related to critical events that have been very much discussed in Sweden in recent years: The Estonia disaster and the Tsunami in Asia. Kent Härstedt, a member of the Swedish parliament who is one of the survivors of the Estonia disaster and has engaged himself much in questions related to crisis management, talked about his experience of the Estonia disaster and what can be learnt from it. Dr. Per Molander, a policy analyst who was the main secretary of the Swedish Tsunami Commission, described how the Swedish administration has been changed as a response to the Tsunami in order to be better prepared for future critical events. The two other key-note papers were given by academics. Professor David Nye talked

of the social responses to large black-outs in the US that have consisted both of spontaneous cooperation and help in a difficult situation, but also of looting and crime. Professor Sverker Sörlin discussed spatial features of risk and how entire landscapes have been transformed as a consequence of vulnerable infrastructures. In the subsequent panel debate these issues were further explored. The key-note papers played a role also during the following days and were referred to in subsequent discussions.

The main part of the workshop was the discussion of papers. The papers were divided into three themes:

(1) Critical events in transnational infrastructures — and the responses
(2) Perceptions of scarcity and vulnerability
(3) The emergence of critical infrastructures in Europe

In order to facilitate cross-fertilization of contributions and to encourage the search for common points, the papers were further grouped into 'pairs'. A commentator was assigned to each pair of papers and a final commentator to each theme. Each pair of papers was introduced in brief (5-10 minutes) by the commentator, whose task was to summarize the main points in the contributions and suggest issues for discussion and in particular issues that cut across each pair of papers. We also had three summing sessions, one for each theme, at which we tried to identify commonalities and differences among the papers in a theme.



The atmosphere at the workshop was very productive. The participants had prepared themselves well in advance and the discussions during the sessions were lively and constructive. Also the discussions in between the sessions and during the meals were very productive.

It is very difficult to summarize all the discussions but here follows a short account of the discussions, focusing on some conceptual, methodological and empirical issues that were raised in relation to the overall Eurocrit and, more generally, Inventing Europe research agendas.

A focusing device for the workshop, as decided upon beforehand, was the notion of 'critical event', and this was also the overarching theme for one of the three sessions of the workshop. Erik van der Vleuten and Vincent Lagendijk had in their paper on electricity blackouts suggested a double interpretation of the concept: on the one hand, a critical event can be studied as a problematic incident provoking a management response, making it instrumental to further system development. This perspective would aim at various events in the history of an infrastructure. On the other hand, a critical event can be studied as an extraordinary occurrence where things become visible that are usually not. With this perspective it can be fruitful to take an event in the present (rather than in history) as a starting point for analyzing the history of the infrastructure. The workshop participants seemed to agree that the notion of critical event is fruitful both as a theoretical concept in its own right and as a heuristic device for studying critical infrastructures.

It was also noted that critical events may not by definition necessarily be regarded as something negative by involved actors. They may also be positive, for example in the way in which critical events become the starting points for creative renewal. The empirical material from the workshop clearly points in this direction. An interesting development in this respect is also the natural gas relations between East and West, as elaborated by Per Högselius, which started on a very modest scale and without any critical importance, but which have gradually increased enormously in volumes and importance following the perceived reliability of the arrangements. Systems which in this way grow and work seemingly without any

critical events may here create a false perception of safety. In other words, it may be a danger when systems are working without critical events for a long time. David Nye in his keynote address emphasized the seemingly paradoxical experience, in historical perspective, that 'the more efficient a system is working, the more destructive is an accident'.

The concept of *'flow'* figured in many ways in the workshop discussions. David Nye, in his commentary on the first session, noted that critical events can often be interpreted as disturbances in various flows, a theme that was followed up in the ensuing discussion. As a methodological approach, Erik van der Vleuten raised the opportunity of studying plans determining which users of an infrastructure will – and will not – be cut off from the flows in case of acute shortage. Promising empirical fields may here be electricity and natural gas, and material for such a study may be found in national defence plans.

In the Eurocrit application one important research question is what type of *responses* actors have developed over the years to critical events. Eda Kranakis' paper was from this perspective an interesting study of how the emphasis in policy response measures seems to have shifted from a focus on institutional, legal measures to more technology-based approaches. David Nye made an important contribution to another issue of central importance to the Eurocrit research agenda, namely the *social* response to disasters and other critical events. He argued that the social response is not a function of the characteristics of the infrastructure itself, but rather of the cultural factors such as the time spirit.

Linking up with a central political issue in infrastructure policy of our own era, the workshop also discussed *deregulation and liberalization* in infrastructure sectors. Deregulation was discussed particularly in relation to the increasing complexity of infrastructures, not least following the far-reaching cybernetization of systems. This relates directly to both Eurocrit study of 'vertical integration' and the SOFT-EU project on European software: here the workshop produced an interesting discussion about how the need for simple interfaces – which can be regarded as

simulations of simplicity – drive actors to develop more complex systems.



Transnational infrastructures, the workshop noted, play an important part in the *geopolitical struggle* – not least in Europe during the Cold War, in which the emergence and governance of critical infrastructures has to a large extent been embedded. But, as in the case of natural gas relations, critical infrastructures may also present a counter-perspective on the usual image of the East-West divide. They may also help to shed light on the difficult relations with the United States. Infrastructural integration between East and West has sometimes functioned as a way to balance the dominance of the United States on the political and economic life in Europe. Some countries offer peculiar perspectives that add to the overall picture, notably Finland, which in the workshop was emphasized as a gateway between East and West, with a considerable dependence on the Soviet Union, but with an ability to successfully find a way to profit from infrastructural integration with its neighbouring superpower. All in all, it seems that technological systems push their way across the East-West division.

However, as emphasized by Thomas Kaiserfeld in his commentary, workshop papers seem to suggest that there are *'borders of technological distrust'*. Moreover, since the collapse of communism, these borders of distrust now seem to be moving eastwards, but not disappear. Kaiserfeld further noted that most workshop papers are characterized by an absence of ideological discussions, which he argued is a weakness. It would add to the research agenda of Eurocrit to put some more emphasis on issues related to ideology, and how infrastructures may change ideology.

The issue of *changing borders* and how this relates to the evolution of critical infrastructures was also discussed. As pointed out by Sverker Sörlin in the panel debate, when infrastructures grow old they tend to 'escape responsibilities from the past. Hence a country which once built an infrastructure may as a consequence of new borders lose both control and responsibility of the infrastructure. There were numerous examples from the workshop including Per Högselius' study of natural gas relations in Eastern Europe, as well as Nil Disco's study of critical events in the Rhine in 1809 – at a time when 'Germany' did not yet exist – and in 1995, when the political map looked completely different. Examples from Greece, in addition, shed light on the problem of missing infrastructure construction in areas of contested borders, such as between Greece and Turkey, and growing vulnerabilities as a result.

### An assessment of the results and impact of the workshop on Inventing Europe

Our assessment is that the workshop was very productive for the Eurocrit-project. We had a large number of papers with interesting empirical cases which gave the discussions more substance. Moreover, the previous workshop was an internal workshop for the Eurocrit project, while this one also included many "outsiders", four from other Inventing Europe projects, three from "shadow projects" and seven total outsiders. The input from these outsiders was very valuable, both through the papers they presented and through their comments and remarks on papers from our CRP. Hopefully our comments on their papers also was helpful for them.

We also believe that the workshop contributed to a cross CRP learning process. We learned about the work and approaches applied in the other CRPs (and two shadow CRPs) and they learned about our approaches. We had invited researchers from other CRPs that we believed would have research topics that relate to our topics, and this turned out to be the case. A workshop of this format also gives the chance to get to form personal relations across different CRPs that can be important for future cooperation.

A Report on the Summer School "Europeanization, Globalization, Americanization, Sovietization" Munich, September 8-13, 2008.

Anna Åberg, Royal Insitute of Technology, Stockholm

The theme for this summer school was "Europeanization, Globalization, Americanization, Sovietization - Conceptual tools of framing the history of Europe". These "-izations" proved to be an inspiring frame for the school, making it possible for the participants to arrive with different perspectives and subjects, and still have common concepts to explore. The lectures on the conceptual tools became the theoretical glue that held the more empiric student presentations together.

Thus, not only were our suitcases unpacked, but also these concepts, as well as others connected to them such as the nation state, transnational history and hidden integration. In asking ourselves where the different "-izations" fit in our stories, we had to look at our research from a different perspective, and thus (hopefully) we gained new perspectives on our work.

The concept of Europeanization was introduced by Professor Johan Schot, who gave us the opportunity to respond to a research proposal aiming to write a shared and global history of Europe from the perspective of history of technology. Such a history of Europe is not an unproblematic undertaking, as we were to find out. A main concern is how to look at the creation of "Europe" without succumbing to Eurocentrism, or even Western Eurocentrism. Among other things we were introduced to the concept of shared history, which could be a means of understanding how certain events and ideas occur simultaneously in different places, despite the seemingly different governance structures, educational systems and cultures.

The theme of Europeanization was present in several of the papers presented. On a supranational level, Katerina Vlantonis' paper on the accident of the "Express Samina" puts the regulations surrounding technological standards on the EU-level in relation to those on a national level. On a more

transnational level, Theodore Lekkas' discusses Greek software development and the efforts of the software developers to participate in the European market.

An important research object in writing the kind of history proposed by Professor Schot would be the shared flows and movements of people, knowledge and goods, and the (attempts to) control of those flows. This is a theme that was very much present in Emiliya Karaboevas presentation of her dissertation work on Bulgarian truck drivers as actors of European hidden integration. Another main part is looking at the history of the technology that enabled these flows. However there are also instances when this technology fails to be established. This can be seen in the work of Jiri Janac on the Danube-Oder-Elbe Canal, a project that despite great efforts on a transnational and international scale has not been able to be realized.

In discussing Sovietization, Professor Raymond Stokes pointed out that it rarely was a finished product or event, but an ongoing process, including, in turn, many different processes, on both institutional and cultural levels, as well as the interaction of institutions, people, artefacts and norms. In the work of Ivaylo Hristov we can see how Sovietization has worked in the context of the Bulgarian nuclear programme. There we also notice that this process works both on the level of hard power (that is through actual technology) and soft power (through the organisation and overseeing of the work). Another example of Soviet influence on technological structures is the history of architecture in Albania, presented to us by Elidor Mëhili.

Professor Ruth Oldenziel expanded on the similarities between the Soviet Union and the United States, in showing that both were, in a way, anti-imperialist empires, concentrated on industrialization and material progress. Thus Sovietization and Americanization also share certain traits. Except for the fact that they both mainly operated within a cold war context, they for example also both inspire different forms of opposition. However, the meaning of Americanization has changed over time, as well as the attitudes towards it. An important part of this process has been the spreading of consumer technology. In the papers of Michelle Mock and Terje Finstad we can see how knowledge, innovation and structures of consumption, in this case kitchen technologies and freezing technologies, are exchanged between the United States and Europe.

The last "-ization" that we touched upon is the one that seems all-encompassing, but yet very hard to put your finger on: Globalization. With the help of Professor Helmuth Trischler we tried to get a grip on the concept of globalization and its different uses and meanings. Just as the other "-izations", Globalization is an "open process with undefined ends", which during the years has been defined differently, and has been allocated on different time-scales. However, the issue of Globalization is many faceted and leads us to questions of inclusion and exclusion, as well as power relationships. It also forces us to look at the workings of the local and the regional and how they interact with the global. In several of the papers presented, the regional played an important role, as for example in the case of the Swedish-Danish gas deal, presented by Anna Åberg, where transnational connections between regional actors and engineers proved important.

However, as we were reminded by Professor Karin Zachmann, the focus on the processes of different -izations and on a transnational history does not mean that the nation state stops being important. As a parallel to the process of Globalization and the development of a European level of governance it seems as though the nation state is transforming rather than disappearing. This transformation needs to be considered and investigated. Even though the state can not be considered the only actor of importance, it still provides a framework that is hard to ignore when talking about economic and juridical structures, as well as regarding the production and negotiation of identities. The nation state can thus be both eroded and strengthened by the processes of Europeanization, Globalization, Sovietization and Americanization.

In the case of Bulgarian yogurt, presented to us by Elitsa Stoilova, the national stereotype is used to sell a consumer product, and in several of the papers concerning Sovietisation and Americanization some kind of nationally coloured resistance is often present. The discourse of national self-sufficiency is also an important part when looking at energy systems, as in the case of the

Greek electricity grid, investigated by Yiannis Garyfallos. On many occasions, the different –izations overlap each other, as in Helena Durnovas paper on the development of Czech computing, where both Americanization, Sovietization and Europeanization can be said to have played an important role.

One of our tasks during the summer school was to write a book review, which was then to be presented in front of the rest of the group. To get us started with our task, we were introduced to the art of reviewing by Martina Blum, the managing editorial secretary of the German journal Technikgeschichte. It proved to be an interesting exercise, particularly as we were to write the reviews in groups, which is not the usual approach to review-writing. However, it proved to be quite successful, as the four different groups presented animated discussions around the books.

On the concluding Saturday morning, we informed each other about the professional situations in our respective countries, as well as did an evaluation of the summer school. The question had been raised whether these summer schools were to continue or not. In response to this the participants all agreed that summer schools are a fruitful way for young researchers and Phd-students from different countries to get together and discuss their work in smaller groups and an open environment. They become an arena for personal development and international networking which is hard to find in other places. This kind of networking and discussions around ongoing research also benefits Tensions of Europe as a whole, and provides a way into the organisation for young scholars. Among the things discussed around the organisation of the Summer School was how to better integrate the reader that we had been given with the week's sessions and different ways of organizing sessions and paper-presentations.

Between sessions we were guided through Munich in rain and in shine by our organisers, Helmuth Trischler, Karin Zachmann, Philipp Aumann and Alexandra von Daacke. The cultural programme included guided tours of the Deutsches Museum, its branch museum for transport Deutsches Museum Verkehrszentrum, and the Pinakothek der Moderne. It was a full, but gratifying schedule with only a few moments to rest at the Deutsches Museum where we were hosted at the Kerschensteiner Kolleg. Arriving in Munich we had been met by a city buzzing with preparations for this year's "Oktoberfest", with traditional clothes on sale and the gigantic festival area being set up with tents and carousels. Unfortunately we were not able to attend the actual activities, but we were at least treated to the election campaign for the local government, which was exceptionally exciting this year. Thus we saw Munich from its most hospitable side, except for one exceptionably wet evening when we had to search for a restaurant in the shadow of a thunderstorm. But even that ended well, and in the end the city proved a great host for our meeting.

## Tensions/Inventing Europe Meeting, Lisbon 2008 (part 1)

This year's Tensions of Europe gathering took place attached to the Society for the History of Technology (SHOT) meeting at the Hotel Arts in Lisbon. As part of the meeting, the four ESF Eurocores Inventing Europe projects, as well as the two 'shadow' projects, held workshops. All of the groups then came together for a common plenary session where the integration of the projects was discussed, and the overarching Inventing Europe initiatives, the book series, working paper series, and the virtual exhibit, were presented.

Tensions of Europe also hosted the first reception of the Anniversary SHOT meeting, where even more old friends were present. We were very glad of a chance to applaud Maria Paula Diogo's tireless organizational efforts in putting everyting together. Ruth Oldenziel also took that opportunity to pay moving and fitting tribute to one dear friend who could not join us this year, Karen Freeze.

Given the large amount of news already in this issue, we have decided to divide our coverage of the meeting over this issue and the next. In this issue, we present reports from two of the workshops.

**Lisbon, EUWOL, and Transnationalism**

This year's Inventing Europe meeting took place in connection with the Society for the History of Technology (SHOT). The sunny, romantic, and colorful Lisbon hosted the event. It was really difficult to resist the temptation to act as a tourist but there was lots of work to be done. The workshop took place from October 9 until October 11 2008 in the VIP Executive Art's Hotel, located in "Parque das Nações" the former site of Expo' 98 and Lisbon's new modern city part. Instead of paper sessions the meeting's main objective was to bring together the ESF Eurocores Inventing Europe project, to give possibility for inter-project meetings and network interaction.



As part of European 'Ways of Life' in the American Century: Mediating Consumption and Technology in the Twentieth Century (EUWOL) research project, I must admit that the full program of our meeting meant three very busy days. Moreover, EUWOL includes three different pillars: housing, food, and leisure, each of which bring different perspectives to the mediation processes between Europe and America, but that make the coordination of the project real challenge.

One part of the EUWOL meeting program was devoted to discussing the ongoing development of an anthology. The anthology aims not only to bring together the results in this jointly produced work, but also seek research collaborations and theoretical contributions. The participants had delivered an outline of their proposals before the Lisbon meeting, so that they were able to discuss the individual proposals, the structure and the format of the anthology in smaller groups. The anthology editors (Milena Veenis, Thomas Kaiserfeld, and Per Lundin) sketched its main aims, themes, perspectives, and methodology. They strongly encouraged the collaborative contributions and discussion within the pillars.

Another important aim of the meeting was the theoretical discussion of the concept of Transnationalism and how that approach fits in with history of technology research. The organizers of the EUWOL meeting prepared two sessions devoted to the question "How does the transnational approach impact my research": one for senior researchers' presentations, and the other was poster presentations for younger scholars. Reflecting on the question of how the concept fits to their researchers' projects made it possible for the participants to arrive with different perspectives and subjects. In her presentation Emanuella Scarpellini, doing research on the influence of American kitchens and super markets in Italy, questioned the difference between transnational and international as both deal with movements and migrations. She concluded that in international movement links with a new place are created and focus is on the new country. According to Scarpellini, transnational is related with continuous bilateral movements that involve processes of habituation, domestication, and adaptation as people are in many realities at one time. To conclude, she stressed that it is difficult to define the multiple layers that transnational migrations have as result.

In discussing how the study of American influence in Europe may achieve from transnational approach, Ruth Oldenziel pointed out that in different European countries there are similar questions and problems, as women and consumer organization; gasification and electrification. That shows that something is going on that can be contain from the national-state. Dealing with the issue of Europe in the Americanization studies researchers should pay attention to whether something happened *in* Europe, as well as that something happened *of* Europe. According to Oldenziel, transnationalism should be used as a tool for better understanding of Americanization. Adri Albert de la Bruhèze stressed that a transnational approach is a concept as well as a tool, but not a method of analysis. He highlighted the different actors in the transnatioanl proceses as: state, non-state, and international actors: acting as linkers and intermediators

between the policy makers and the civil society. He further argued the researchers should combine both transnational and international approaches, as well as questioning how national actors adapt international regulations and influences.

Thomas Kaiserfeld argued that the transnational should be seen as independent from the national state. He also laid emphasis on the actors of transnational flows, pointing out that migrations produce different type of communications. According to him, for better understanding of transnationalism one should pay attention on the actors that mediate between national state, non governmental and national organizations.

Looking from Eastern European perspective, Meglena Zlatkova reminded that during communism, because of the communist regime there were many restrictions and limitations. Therefore, technological and knowledge transfers were accomplished both on official and on non-official level.

Per Østby offered a very interesting approach to transnational history. He suggested looking at transnational history from national level. He argued that transnationalization is globalization from below, while internationalization is globalization from above. Tracing the transfer of technologies, as example for transnational circulations, Østby stressed out that technological transfers are not only about domestication of certain technology but as well are about domestication, localization, and integrations of ideas and practices. The researchers should have in mind the social changes going simultaneously with technological transfers, as well to trace how people reject or influence imported technology.

The younger scholars from EUWOL project were provoked by the organizers to deliver their presentation as posters, reflecting on the question how transnational approach impact their researches. That was very interactive and no typical way of communication, stimulating informal discussions between younger scholars and senior researchers.



On a basis of a pre-circulated reader on transnationalism three prominent concept discussions emerged. First Mikael Hård in his reflection on "Circulation and Appropriation—Uniformity and Distinction" traced the development of these concepts. He stressed out that transnationalism is not an universal research tool. Before using it, the researcher should be aware of his research problems. The transnational approach might be useful for explaining similarities between European citizens as well as tracing the actors that contribute to the growing uniformity. Hård saw the appropriation, domestication and circulation of knowledge, materiality, and people as driving forces of Americanization and Modernization. He paid particular attention to the circulation channels and the mechanisms of circulation of knowledge (technological innovation, scientific knowledge, "knowing of").

Jean-Pierre Williot presented his perspective on the subject of "Transnationalism in Food History." According to him transnational approach contributes to food history by following the economic and cultural perspective of food exchanges.

The EUWOL project meeting in Lisbon was a fruitful event that became an arena for development and further elaboration of the theoretical concepts of Transnationalism and Americanization involving senior and younger international researchers into discussions. The ongoing networking and discussions around the individual and corroborative research also benefited the Project.

Elitsa Stoilova, Plovdiv University

**'Software for Europe' in Lisbon**

Like other Inventing Europe teams, Software for Europe project members also met in Lisbon during the two days before 2008 SHOT Annual Meeting. After the introductory meeting in Prague and Hejnice (Czech Republic) in September 2007 and a very successful workshop in Grenoble and St. Pierre de Chartreuse ('ALGOL, IBM and Software Crisis, the state of historiography in transnational interpretations') in January 2008, this was the third meeting of all the project members. Over the last year, the actual project portfolio shrank due to the lack of funding for associate projects, but more notably grew, the outcome of which is our growing awareness of the developments connected with the history of computing in what has recently been called Eastern Europe. Nevertheless, our main discussion subject in Lisbon was Americanization. Although American-ization of the Soviet bloc during Cold War years might seem to be a contradition in terms, it can very well be traced there, albeit on a different level.

By late Thursday afternoon, the group was almost complete: the project leader Gerard Alberts (Amsterdam), Petri Paju (Turku), Ksenia Tatarchenko (Princeton), Sandra Mols (Namur), David Nofre (Amsterdam), Pierre Mounier-Kuhn (Paris), Jeff Yost (Minnesota), Thomas Haigh (Milwaukee, Wisconsin), Gard Paulsen (Oslo), Theodore Lekkas (Athens), and myself. After the extensive discussions of different aspects of Americanization, David Nofre led the way to a dinner in a cosy restaurant downtown Lisbon, escaping for a moment the modern architecture of the Expo area. Drinking *vinho verde*, we continued exchanging views on not only Americanization, but also computerization and related issues. On Friday morning, business was on the meeting agenda, and on Friday afternoon, we joined the common Inventing Europe session.

For those who did not stay for SHOT, the meeting was short and intensive. The fact that the meeting ended just before SHOT, however, presented a possibility to meet some people coming for SHOT even without attending the conference. Nevertheless, most of the Software of Europe group stayed for SHOT and enjoyed (not only) the several history of computing sessions, including in particular "Computing at Transnational Cross-Roads: Technology and Politics in the Cold War", organised by Corinna Schlombs (University of Philadelphia).

Helena Durnova, Brno University of Technology