



Free Mobility and the European Dream

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1.	Introduction: The Material Dimension of Europe	2
	Reflections on Roads.....	3
2.	Historiographical Context.....	4
3.	“Free Mobility and the European Dream”	6
	Research Questions	6
	Demarcation	8
	Methodological Issues.....	9
	Sources	10
4.	Dissertation Structure.....	11
	A. First Period: 1890s-1918	12
	B. Second Period: 1918-1945	12
	C. Third Period: 1945-1985	13
	D. Fourth Period: 1985-Present Day	15
5.	Time Plan	16
	Priorities and Decision Points	17
6.	Sources	17
7.	Bibliography	19
	Primary Sources	19
	Secondary Sources	19

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1. Introduction: The Material Dimension of Europe

“In contributing to the implementation and development of the **Internal Market**, as well as re-enforcing **economic and social cohesion**, the construction of the trans-European transport network is a major element in economic **competitiveness** and a **balanced and sustainable development** of the European Union.

This development requires the **interconnection and interoperability** of national networks as well as the access to them. (...)”²

So begins an information section on Trans-European Transport Networks (TEN-T) on the European Commission’s section of the ‘Gateway to the European Union’. This quote shows that the Commission expects transport infrastructure development to cause an increase in economic and social cohesion and to stimulate the development of the internal market. The central aim of my Ph.D. project is to trace the historical roots of such infrastructural projects that aim to tie the continent together in a material, a socio-economic, and a political sense. Transport infrastructures even form a necessary condition for many of the elements that are nowadays considered central parts of the project of European polity building. One example of this is the free flow of people and goods that is necessary for the proper functioning of the single market and constrain the course of social reality.

The importance the European Commission is giving to transport infrastructures is not reflected in the burgeoning literature on ‘Europe’, which neglects the material infrastructures that actually tie Europe together (Vleuten & Kaijser 2004). This is a flaw that needs to be mended because the material base of Europe structures Europe’s geography (Carreras e.a. 1994: 9). The construction of material infrastructures shows perhaps most vividly that “spaces are not simply given, they are produced!” (Schultz & Natter 2003: 291). The actors who were involved in building transnational infrastructures were at the same time involved in constructing the infrastructural constraints of the Europe they envisioned. Their projects can be understood as co-constructions of infrastructure networks and visions on Europe. Their projects might be labelled ‘technopolitics’, defined as “the strategic practice of designing or using technology to constitute, embody, or enact political goals” (Hecht 1998: 15).³ The trans-European transport networks cited above are an example of a technological project that has clear socio-political goals.

In my dissertation, I will focus on the European road network, and more specifically on transnational road connections that connect one or more states. The transnational perspective has generally been neglected in historical studies of transport and communication networks (Carreras e.a. 1994). One of the central aims of my project is to integrate transnational road infrastructures into the ‘mainstream’ history of Europe. This fits well with one of the central tasks that historians of technology have set themselves: to bridge the gap between the history of technology and history in general.⁴ Technology has an impact on society and is therefore relevant

² http://europa.eu.int/comm/ten/transport/index_en.htm (emphasis in the original).

³ Hecht uses this term as an analytical tool for studying the link between French national identity and nuclear technology.

⁴ Houten (1986: 41), see also Braun (1999); Staudenmaier (2002). A milestone in this respect was the publication of Merritt Roe Smith’s *Harpers Ferry Armory* in 1977, at least for the American history of technology. This ‘contextualist’ book, embedding a thorough technological analysis in its social *context*, was awarded the Frederick Jackson Turner Award from the Organisation of American Historians, signifying the final recognition of the history of technology by mainstream historians, Houten (1986), p. 29. According to Staudenmaier (1985), p. 165, it was precisely because of its

for any historian. The impact of infrastructures is all the more important because they are long-lasting artefacts, consisting of both a ‘hard’ physical legacy, and of a ‘soft’ institutional legacy (Kaijser 1999).

My project will also try to integrate ‘Europe’ into the history of (transport) infrastructures. Transport historians have more often than not restricted themselves to a national focus. As a result, the history of European transport remains to be written (see Chapter 2 ‘Historiographical Context’, p. 4). Writing such a socio-political history of infrastructures is in keeping with current the trend of writing social histories of technology.⁵ In short, a central aim of my dissertation is to achieve a multidisciplinary cross-fertilization of the history of European integration on the one hand and the history of transport and technology on the other.

Reflections on Roads

As roads will be the protagonists of my dissertation, we need to have an idea of what they are. Roads can be considered manufactured paths that are actively constructed (Lay 1992: 7). It should be noted, however, that there is more to roads than pavement only: there are many heterogeneous elements connected to roads and their networks. First of all, there is a series of technological elements that accompany road networks, like drainage devices, traffic lights, signs, viaducts, and tunnels. Second, there are the vehicles and users that use the road network for the transport of goods and people.⁶ Finally, there is a set of institutions and organisations that supervise the design, construction, and use of road infrastructures: behavioural rules, civil engineering schools, road-building and maintenance agencies, ministries of public works, and schools that teach traffic rules. Together, these elements enable people and goods to move, but at the same time they restrict movement in the sense that they define where it is possible to go (Edwards 2003: 191).⁷

Three important observations need to be made. The first observation is that road networks have different layers. The backbones of the system, the primary roads, form just one part of the entire road network. On a lower level there are lesser types of road that form important secondary networks (Fleischer 2002). On a higher level, there are the E-routes, introduced in the Declaration on the Construction of Main International Traffic Arteries (16 September 1950) to create a European network of trunk roads. These were originally classified in two categories: Category A consisting of the main arteries, Category B consisting of branch roads (Hondermarcq 1972). With such classification schemes, we need to be aware that the categorization of roads used in official governmental publications is not always entirely clear and varies among different countries or state agencies. Some categories of roads may not even be included in official statistics.⁸

The second observation concerns the characterization of roads as ‘infrastructures’, “the connective tissues and the circulatory systems of modernity” (Edwards 2003:

contextualist approach that *Harpers Ferry Armory* could attract such attention. However, a gap still remains between the history of technology and history in general.

⁵ Two very well written examples of this trend in the history of technology are Nye’s *Electrifying America* (1990), and Fischer’s *America Calling* (1992).

⁶ It should be noted that vehicles and users do not occupy a central position in my dissertation.

⁷ This should not be understood in absolute terms: flows of goods and people are not entirely dependent on the presence of a (good) road, or other, transport network.

⁸ Mom (forthcoming) shows that dramatic increases in road network length in the Netherlands was not always the result of actual new roads being built, but rather of existing lesser roads being ‘rediscovered’. This concerned non-paved or quaternary roads.

185).⁹ There is, however, a difference between the term ‘infrastructure’ and the term ‘large technical system’ (LTS), as introduced by Thomas Hughes in *Networks of Power* (1983).¹⁰ Hughes uses the LTS concept in a comparative study of electricity networks in England, Germany and the United States. Large technical systems are networks of coupled technological artefacts and social components consisting of actors and organisations. Taken together, these networks have a common goal and direction, implying the existence of a central point of control (see Hughes 1987). The problem of describing the road network in LTS terms is that there is *no* central control over crucial elements in the system, most importantly users (Vleuten 2000: 354-355).¹¹ It is therefore no coincidence that in the overview works appearing on LTS, the road network is hard to find.¹²

The third and last observation is that roads do not stand on their own, but form part of a larger transport system. To properly understand the function of the road network, I will need to develop at least a rudimentary sense of the relationships among the different modes of transport. A firm grip on multimodality is important because it serves to get a sense of the competitive position of road transport. In the history of transport, there have been many interesting instances of cooperation, but also of competition between different modes of transport, which in turn can shed light on important potential opposing forces that tried to block or slow down developments in the road sector.

2. Historiographical Context

Before continuing, I will provide a brief sketch of some relevant research that has been done until now. I will focus on the field of transport history, to which my dissertation wants to contribute.¹³ Although transport plays an eminent role in the modern world, the historical study of this phenomenon remains somewhat underdeveloped (Kreis 1998).¹⁴ Furthermore, ‘classical’ transport history has suffered from several biases. First of all, accounts of transport history have generally been economic in character, neglecting both technological and socio-cultural aspects of transport history. Second, the history of transport has dealt primarily with British transport. Works dedicated to other geographic areas are usually concerned with single nation-states. This is remarkable, given that transport is an outstanding example of a transnational phenomenon. Third, there has been a bias toward writing railway history, to the detriment of studying other modes of transport (Mom 2003). Nevertheless, the field has been broadened through the inclusion of new perspectives over the last fifteen years. These include attention for gender issues (Scharff 1991; Walsh 2002), cultural aspects of mobility (O’Connell 1998) and failed technologies (Mom 2004).

⁹ See Laak (1999a) for an account of the etymological development of this term. He claims that ‘infrastructure’ has known “one of the most successful terminological careers of the last decades”, Laak (1999a: 299).

¹⁰ “(His) ideas have played a major – and perhaps dominant – role in shaping the history of technology” (Hounshell 1995: 205).

¹¹ Radkau (1994: 91) invokes the notion of the road network as a ‘System of systemlessness’ (*System der Systemlosigkeit*).

¹² Examples are Mayntz & Hughes (1988); La Porte (1991); Braun & Joerges (1994); Summerton (1994); Coutard (1999). Vleuten (2000) offers an excellent overview of LTS literature.

¹³ See Mom (2003) for a recent overview of the field as a whole. An earlier overview dedicated to the history of road transport is Barker (1993).

¹⁴ On the importance of inland transport improvements for economic development, for example, see Braudel (1979: 365, 376); Girard (1965: 220).

Although road transport has received increasing attention over the last decade, the roads themselves have been studied less than have the vehicles using them (Buiter 1997; Lay 1992). Historical accounts of road infrastructures have suffered from a national bias; works on road building written from an international perspective are virtually non-existent, with Lay's *Ways of the World* (1992) being a rare exception to this rule.

Due to these biases in traditional transport history, there are few studies linking Europe to transport infrastructures in general and to the road network in particular. One of the few books that alleges to dedicate itself to transport history at a European level, Simon Ville's *Transport and the Development of the European Economy, 1750-1918* (1990), is actually an enumeration of national perspectives.¹⁵ The same is true for other works, like Girard (1965).

The study of the relationship between infrastructures and society has also remained somewhat underdeveloped, although there are some exceptions. Knippenberg and Pater's (1990) *De Eenwording van Nederland* (The Unification of the Netherlands) identifies four distinct dimensions of the process of unification, the first of which is infrastructural in character. This dimension is mingled with three others (economic, political and socio-cultural), but it can be separated analytically from them. The authors state that "one of the necessary conditions for spatial integration is the existence of reasonably connected transport- and communication lines" (Knippenberg & Pater 1990: 43). Taken together, these four parts of the integration process led to the 'unification' of the Netherlands.

Weber's (1976) *Peasants into Frenchmen* highlights the importance of infrastructures in the unification process in France. The second part of his book is dedicated to 'The Agencies of Change' and starts with a chapter that is tellingly titled 'Roads, Roads and Still More Roads'. Weber focuses especially on the importance of vicinal roads, instead of the main arteries of the road system. France had a comparatively good radial road network of main roads, but "the highway system was only a skeleton" (Weber 1976: 196), until lesser roads were improved as well.

These two works deal with the link between infrastructures and *national* societies. Infrastructures like the road network were instrumental for achieving territorial consolidation of the nation-state and for the emergence of the nation itself, defined by Benedict Anderson (1991: 6) as "an imagined political community – and imagined as both inherently limited and sovereign". Some of the plans that were developed for a European road network hoped to build a European society along the way. National identities do not preclude connections to a community like Europe. This connection is not only actively sought by politicians and other elites who consider the construction of a European identity in their interest, but is also invoked in many aspects of everyday life, paralleling Billig's notion of banal nationalism. Billig has pointed out the so-called 'flagging' of nations, the constant references to the nation-state as natural and normal that we unconsciously consume almost every day when we read the paper, watch the weather forecast or walk down the street. The result of this flagging, according to Billig, is that when the circumstances arise we are ultimately still willing to die for our nation. Despite the many differences between the nation-states and Europe, the latter is increasingly being 'flagged' in similar ways, thus becoming an 'obvious' element of our daily lives.

¹⁵ Ville does however deal with more than one mode, thus overcoming the railway bias. Similar works of intermodal synthesis had already appeared earlier, especially on the United Kingdom. Bagwell's (1974) *The Transport Revolution since 1770* is a good example of this kind.

3. “Free Mobility and the European Dream”

The title of this paragraph is the working title of my Ph.D. project. It is a reflection of how some of the actors responsible for road building in Europe thought about the road network they were (re)designing from the beginning of the 20th century onward. They wanted their creation truly to tie Europeans together, harmonizing international relations among them as a by-product. For example, at the second International Congress on Highways (Milan, April 18-20 1932) Albert Thomas, president of the International Labour Organisation (ILO) and founder of the *Office International des Autoroutes* stated: “A century ago, the genius Saint-Simon developed the idea of a European federation and proposed an immense program of public works; didn’t he say that the importance of such works was to tie nations together? (...) A grand design of road traffic would be of that nature.”¹⁶

This quote is interesting for two reasons. First, this is a statement by the president of an organisation that does not directly represent road interests: the ILO. It might very well be that Thomas’ ideas on roads somehow trickled down in ILO and spread to other organisations. Second, Thomas was a representative of an international organisation with universal rather than exclusively European membership. The statement shows that researchers should not limit the roots of Europe’s road network to only transport organisations or organisations that limit their membership to European countries. The design, planning and construction of the European road network was not restricted to road-builders and road interest groups; actors in other fields had opinions on road infrastructure policy as well and these mattered for actual road-building. Likewise, universal international organisations mattered for European road building, as they developed a ‘European’ discourse and opinion as well.

Research Questions

The central question in my research is where and how European road networks were designed, how they were actually constructed, and why they were designed and constructed in this way. ‘Europe’ will be conceived as a category used by actors involved in road building activities. This means that its borders will ultimately depend on actors’ perceptions and ideas. Such a definition will enable me to overcome the thorny issue of defining Europe in geographic or cultural terms.¹⁷ The definitions used by these actors is crucial, because the transport infrastructures upon which they decided were a necessary condition for the emergence of any cultural, economic, or social integration of ‘Europe’. The geographic boundaries of the ‘Europe’ these actors imposed on the road networks they built should be described and explained.

My dissertation project will include three main elements: plan, construction and use. Emphasis will be put on the first two, as can be seen in the central research question stated above, but use will be partly dealt with as well. The three elements can be considered three stages in the existence of roads. For each stage, a clear picture of the actor network related to it needs to be built. What were the issues they tried to get on the agendas? What strategies did they use to achieve their aims? Besides knowing the actors, the relationships among actors need to be clarified. Did they cooperate or did they have conflicting interests? Through a thorough study of relevant actors, I will construct an overview of the different plans for European road networks, the first stage. I will further sketch which plans reached the international political transport

¹⁶ Original in French, cited in Bortolotti (1994: 50), my italics- FS.

¹⁷ On the difficulty of defining Europe in geographic terms, see Pocock (2002). On the even greater difficulty of defining Europe in cultural terms, linking it to such notions as ‘liberty’, ‘Christianity’ and ‘civilization’, see Boer (1989).

agenda and what the aims behind them were. For the second stage, I will evaluate which of the projected roads were actually constructed and why. The tenacity of road locations tends to be high, so the continuity and changes in road network should be brought to the foreground. Although the third stage will not be studied in-depth, a general picture of use after construction can be fruitful to assess whether actual use reached expected levels or not.

The design, construction and use of European road networks will be studied through limited group of key institutional actors that played a crucial role in decision-making on the their location and shape, technical standards and non-technical features. The actors I will focus on were involved in each of the phases described above. The actors are both public and private organisations that represented governments, builders and users of the road network. They met at international congresses (most of the organisations involved organized congresses themselves) and at the meetings of intergovernmental organisations.¹⁸ Due to a lack of secondary sources, both for the history of roads and for the organisations involved in designing, planning and building them, my dissertation will have an exploratory character based on primary materials to be found in the archives of these organisations.

Getting a clear picture of the relationship between the relevant actors in creating a European road network, their cooperation and conflicts, will be an important goal for my dissertation. It is important to include counter forces, because the design, construction and use of the road network aroused considerable protest from competing transport sectors, groups concerned with safety issues and environmentalists. Furthermore, ideas about the road network among the promoters themselves differed as well. Following military interests results in a road network that is different from one shaped by tourist interests. There is a difference between publicly financed road networks and ones that have a toll system to pay for their expenses. The different national interests represented at intergovernmental organisations mattered as well and conflicted regularly. It is clear that there was considerable potential for tension at multiple levels.

In-depth study of *all* relevant actors would not be possible in a project of this scope. Instead, I have decided to focus on the intergovernmental organisations that provided a forum for international debate on the European road system. They form an apt unit of analysis, because they attracted a wide variety of actors who wanted to influence their policies.

Three final remarks need to be made about these organisations. First of all, they were not monoliths, but very heterogeneous and multi-layered, consisting of different departments, study groups, committees and subcommittees that all dragged their own interests with them. Of the particularly big organisations like the League of Nations or UNECE (itself part of the United Nations system), I will in fact only study small parts. However, the relationship with the whole should not be lost from sight. Second, the organisations and their interrelationships change over time. Their membership,

¹⁸ Perhaps what happened at these organisations can be seen as a kind of ‘europeanisation’ *avant la lettre*. This term can be defined as “processes of construction, diffusion and institutionalisation of formal and informal rules, procedures, policy paradigms, styles, ‘ways of doing things’ and shared beliefs and norms which are first defined and consolidated in the making of EU decisions and then incorporated in the logic of domestic discourse, identities, political structures and public policies.” (Radaelli 2000: 4). It is important not to restrict the application of this term only to the EU and its member states or to Western Europe (Olsen 2002: 6). There are many studies that make use of the concept, e.g. Green Cowles e.a. (2001). *Differential Europe: The European Union Impact on National Policymaking* (Héritier e.a. 2001) gives a specific account of the EU influence on transport policies in the member states, although its title implies a broader topic.

financial assets, bargaining power, interests represented, and strategies chosen to further them do not remain the same over extensive periods of time. My dissertation should take these historical developments into account. Third, the issue of membership limits should be addressed. Some organisations restricted their membership to 'European' countries, while others had universal membership. However, this limitation has little bearing on the presence of Europe in their discourse. Therefore, organisations in both categories are relevant for my dissertation.

Demarcation

The geographic scope and the time span of the object of the dissertation, the road networks of Europe, need to be clear. As the concept of Europe has been made dependent on the visions of the actors, an *a priori* geographical restriction of the study object is impossible. Therefore, the geographic boundaries of the European road network fluctuate in my dissertation and exact borders need to be established for different road plans at different moments of their existence. The example of Turkey can clarify this point. Currently there is a strong debate on the question whether Turkey should become a member of the EU, hence whether Turkey should be admitted to the 'European family' in a political and economic sense. However, if we look at road plans and construction, Turkey is indeed 'European' in the sense that it is included (partially or entirely) in many plans for a European road network.

In comparison with setting geographic limits, it is rather easy to locate the study object in time. My period of study will start in the early years of automobilism in the 1890s. An important reason to start here is that the introduction of automobiles gave rise to some problems that were solved on an international level. Although crossing borders through roads was not a new phenomenon, the automobile raised discussions on import levies and traffic rules. Merki (1998: 333) notes that interest associations played an important part from the very first years of automobilism¹⁹ and they united forces by founding international federations before the turn of the century to resolve some of the issues that bothered their members on an international level. It is therefore legitimate to pick the last decade of the 19th century as a starting point.²⁰

I will end my research in present times, because the European development of transport infrastructures in general and road infrastructures in specific is an ongoing process. During the last decade, a very interesting process of relinking Central and Eastern European countries to networks in Western Europe has been taking place.²¹ Furthermore, in these countries we see an important reshuffling of the relative importance of road and rail transport in the transport sector as a whole. In the communist period, rail transport had a high share in transport totals, whereas railway shares in total transport figures in Western European countries had been steadily declining in the post-WW II period.²² As we could consider the fall of communism as

¹⁹ Cyclist associations preceded automobilist associations (Merki 1998: 329). This shows that the bike was an important predecessor of the automobile in different respects: both in a technical sense, and through its institutional legacy (the Good Roads Movement that pleaded for better roads was also started by bikers).

²⁰ Merki (1998) notes that early harmonisation of road signs was successfully achieved, but that this was not the case for traffic rules in general. Other important issues were duty payment at border crossings the (and repayment on returning to country of origin), and the issue of driving right or left, which used to be the case in Portugal, Sweden and Hungary besides the British Isles.

²¹ At least on a discourse level there have been many policy documents claiming that Europe is being reunited, e.g. ECMT (1991).

²² For an account on the transport situation in Eastern European countries after the fall of the Berlin Wall, see Button (1993).

one of the main closing cycles of 20th century European history, it shall be included in my dissertation.

Methodological Issues

Using the time limits of the previous section, the study object of my dissertation can be refined to the European road network in the period 1890-2000. The research as a whole can be characterised as qualitative, as it hopes to offer a new kind of interpretation of European integration through focussing on technological-material aspects. This does not mean that quantitative and comparative elements will be absent, but they will be embedded in the overall qualitative design, that will follow a case study strategy. According to Yin (1989), when the central research question is an explanatory question, and the researcher has no control over events, conducting a case study can be considered the best method of research.²³ The end result will be a multiple case study research design, in which the previously mentioned international and intergovernmental organisations will serve as units of analysis.²⁴

In addition to clarifying the complicated network of actors involved in road plans, construction and policies in Europe, I also intend to study the American influence on European roads. The Marshall Plan that was launched after WW II to rebuild (Western) Europe is an important element in this part of my dissertation. Choosing different perspectives that all focus on the same study object can result in ‘data triangulation’, enabling the researcher to assess the validity and generality of his findings (Ragin 1994: 99-100). In this sense, the ‘American view’ can form an insightful counterweight to the European main storyline of the dissertation.

American ideas on mobility in general and road building in particular have influenced the European road system in various ways. Especially the direct post-WW II years can be characterised as a period that formed a window of opportunity for promoting the American view on the European road network. The Marshall Plan was important in this respect. In my dissertation I will try to assess the extent of this influence and see how it materialized in European road building practice. It will also be important to trace historical roots of this influence in the pre-WW II period.

Mobility culture in the United States differed from its European counterpart. Cars in the United States became a ‘necessity’ earlier than in Europe. The *Middletown*-studies show that by 1929 the automobile had reached the point of “being an accepted essential of normal living” (Lynd & Lynd 1929: 253) and despite harsh economic conditions in the 1930s “people gave up everything in the world but their car.” (Lynd & Lynd 1937: 265). America’s cars and good road system, long appreciated in Europe as icons of the wealth American citizens enjoyed (Coudenhove-Kalergi 1932), inspired key actors involved in designing the European road network, like Puricelli and Kaftan (Bortolotti 1996, Kaftan 1936), and helped to create a desire for automobility long before it actually materialized (Mazower 1998: 307).

I have briefly sketched two perspectives on the European road network. The first was the one from the intergovernmental organisations that dealt with road building and where different actors, including representatives of national governments (who in the end had to pay for the infrastructures) and international interest groups who met to

²³ According to Yin (1989: 17), a third characteristic of the case study is that it should focus on contemporary events. In my research this is only partly the case. Yin’s argument is that case studies should be able draw on the broadest possible range of data, including surveys and interviews. However, in my view there is no fundamental distinction between what Yin calls ‘histories’ and case studies and Yin’s work can in my view be applied to historical case studies as well.

²⁴ In EU research, the case study has been the dominant method of research, Andersen (2003).

decide on Europe's road system and its (non-)technical features. The second was a perspective from outside, consisting of a transatlantic view. These two perspectives will be interwoven in the chronological chapters of my thesis, although the former will get more attention than the latter. Now I will turn to source materials that will enable me to shed light on the European road network.

*Sources*²⁵

The types of source materials that will be used are of various kinds. The international negotiation process is well documented. At the United Nations European headquarters in Geneva, abundant source materials are available on the League of Nations and the Economic Commission for Europe. These can be subdivided in two parts. The first consists of official documentation: treaties, official reports of meetings (sometimes verbatim), circular letters, policy statements and official reports. Some of these materials can be consulted at the Peace Palace in The Hague, but their collection is not fully catalogued and therefore retrieval can be problematic. The second consists of the actual archives themselves and contain correspondence and draft versions of official documents that give insight into the decision making process.

The private organisations involved in the international negotiation process have their own archives, but my impression so far is that the materials they contain are both recent and relatively limited. Older materials are scattered, but do contain valuable documents. These sources can be completed with correspondence available at intergovernmental organisations, like the League of Nations and UNECE. Preliminary research so far has proved promising. I have not yet consulted all the archives, e.g. that of the AIT.²⁶

Some of the organisations published journals,²⁷ which form a valuable source to picture the 'image' these organisations wanted to spread about roads, road building, and their own role in these activities. Besides these, there are occasional manifestos, brochures and leaflets aimed at influencing transport policies or informing the general public.²⁸ Furthermore, these organisations regularly organised conferences and congresses. Proceedings and reports on these events form another source that can be used for the study of the construction of a European road network. The content of these materials might of course be partly biased because of their 'propaganda' function. The researcher should remain aware of this.

For the post-WW II period, oral history methods can be used, because relevant actors are still alive. It is important to note that some of the best recent scholarly works in both the history of technology and the history of transport have used oral history as a source of evidence (Fischer 1992, Hecht 1998, O'Connell 1998). Oral history sources can be used in two ways. First, interviews form a source of their own. They can add information missing in the paper reality with which historians usually

²⁵ An enumeration of the locations of archival materials can be found in § 6 'Sources', p. 2.

²⁶ Neither have I consulted any of the archives on the Marshall Aid, but as these concern public or semi-public archives, I reckon their collections are both better kept and better accessible than those of private archives.

²⁷ Besides journals and magazines published by the organisations themselves, scholarly or other journals are of interest as well. Together they can give a fair impression of the atmosphere in the transport field as a whole.

²⁸ These materials include memorial booklets, usually issued in jubilee years. The last decade has witnessed the publication of 50th anniversary booklets by virtually all post-WW II organisations. They contain a lot of factual information about activities of the organisation in question (ECMT 2003, IRF 1998; see also PIARC 1970, AIT 1998). Besides these anniversary booklets, these organisations also regularly publish information leaflets on their function and goals for the general public. These form a valuable source for assessing the public image these organisations try to create.

work. Second, the interviewees can act as ‘information portals’, giving access to further sources through suggesting other persons that might be interviewed or through private archives in possession of the interviewees.

The materials listed above will help me establish a clear picture of the actor network that influenced road transport policy. To be able to systematically compare road plans, actual road construction and, to a lesser extent, road use, the qualitative data obtained from the sources listed above have to be supplemented with quantitative data. These data consist of lengths of the different type of road planned and constructed, amounts of money spent on road building, road haulage, numbers of tourists and their origins and destinations, data obtained from traffic counts etc. Obtaining these data for the post-WW II period is relatively simple; IGOs like UNECE have published most of the data needed in annual statistical publications, like the IRF’s *World Road Statistics* and publications from the ECMT and the European Bureau of Statistics. Obtaining data for the pre-WW II period will most likely be more difficult, as data will have to be largely retrieved from national sources. An important further source of data will consist of maps. They can give information on road construction when statistical data are hard to obtain and they form a crucial link to the individual user, as roads that are not (well) indicated on maps will not or hardly be used because they remain hidden for users.²⁹

Eventually, all qualitative and quantitative data will be put into a database for the TIE-project as a whole. Specific parts of the database will be dedicated to maps, system builders, and the cultural appropriation of European infrastructures. The overall database will serve my individual project in the sense that it will enable me to obtain data on alternative transport modes and their infrastructure.³⁰

4. Dissertation Structure

In this part of my research design, I will give an outline of the structure of my dissertation. I will first give a schematic overview of the dissertation as planned now; under each heading, I have enumerated the organisations that I will deal with in each chapter. Next, I will briefly sketch the actual content of parts 3-6.³¹ The dissertation will follow a chronological order that has been divided into four time periods. The outer limits of these periods are based on the overall time demarcation of my project (see p. 8) and from the centrality of international organisations in my dissertation. The world wars have been important turning points for international relations and are therefore also taken as dividing lines in my dissertation. The choice for the year 1985 as a division between the 1945-1985 and 1985-now periods is further explained in § D. Fourth Period: 1985-Present Day, p. 15.

I would like to stress that the outline is *preliminary* and will therefore be subject to change. The eventual contents of the dissertation might read as follows:

1. Introduction
2. The historiography of roads and road building
3. The automobile enters the scene: 1890s-1918
 - a. AIT
 - b. PIARC

²⁹ It is useful to state here that we should be careful not to view maps as objective representations of geographic reality, but rather as political instruments reflecting certain political ideas and visions, Anderson (1991: 170-178); Black (1997).

³⁰ On the TIE-project: see note 1.

³¹ The content of the other chapters is rather straightforward.

- c. International conference in Paris, Brussels, London
- 4. The Interbellum and WW II, 1918-1945
 - a. League of Nations
 - b. International conferences (continued)
- 5. Recovery and Division, 1945-1985
 - a. ECITO
 - b. UNECE
 - c. The Marshall Plan and OEEC
 - d. ECMT
 - e. The NGOs: IRF, PIARC, AIT & others
 - f. ECSC & EEC
- 6. Brussels takes over? 1985-now
 - a. The development of a Common Transport Policy
 - b. The other actors
- 7. Conclusion
- 8. Bibliography

A. First Period: 1890s-1918

As I said above, the emergence of the automobile on European roads raised a new set of questions for European road-builders: Should there be speed limits? Should all vehicles be allowed on the road, even though these were not always able to support the load of vehicles, due to their weight or the type of tyre? If answers to these questions were given on a national level, this caused problems once cars began moving from one national space to another. Part of this new set of questions gave rise therefore to international negotiations on various automobile-related issues (see Merki 1998). An important milestone was the First International Road Congress, which brought hundreds of specialists to Paris in October 1908 to discuss all kinds of road issues. Among the issues discussed was the construction of an automobile-only road system. The idea did not attract enough support, however, with the majority being in favour of reconstruction of existing roads instead. At the Paris conference, it was decided that a new organisation should be founded to organise conferences on technical road aspects in the future. The Permanent International Association of Road Congresses (PIARC) was born.

On a different front, there was also a joining of forces amongst tourist organisations from different countries, in order to facilitate travel for their members to the greatest possible extent. This resulted in the founding of the Ligue Internationale des Associations Touristes (LIAT) in 1898. For the first time period I intend to look at these two organisations and the conferences that were organised since Paris, 1908.

Perhaps the most interesting example of transnational use of existing roads was international racing. In the early days of the car several races were organised. Jarrott (1906) describes several of them. Paris was the starting point from which most races left. Jarrott takes his readers on a ride from Paris to Amsterdam (1898), from Paris to Berlin (1901) and from Paris to Vienna (1902). The most infamous race was the Paris-Madrid race in 1903. Several participants died in fatal accidents along the way and the French government decided to put an end to the 'race to death' before it had reached the French-Spanish border. Racing was subsequently banned to the circuits, but the atmosphere of racing remained truly international.

B. Second Period: 1918-1945

During the Interbellum, several projects for a 'new' Europe were launched. Actually, this process already started during WW I itself, with projects such as

Friedrich Naumann's *Mitteleuropa*, that aimed at creating an association of real solidarity between the Austro-Hungarian Empire and the German Empire, under 'natural' German hegemony, and T.G. Masaryk's *New Europe*, proposing the foundation of a collection of small nation states between Germany and Russia. They were followed by Coudenhove-Kalergi's *Panuropa*, aiming at a political union among European countries (excluding the United Kingdom and Russia) that would secure peace in the continent, and Aristide Briand's proposals for a federal Europe. None of these projects were successful.³² The same is true for a series of ambitious plans for road networks, designed by people like Puricelli, Kaftan, Lainé and Pigelet. Their proposals for extensive road networks spanning the continent, like the political projects for Europe mentioned above, largely remained a paper reality. It is important to find out where and why connections between such plans were made.³³

The Interbellum was also the period of the League of Nations. Established after the atrocities of WW I, it was established to prevent war and organise the world along peaceful lines. The League's scheme of international cooperation and mutual support covered, among other things, the maintenance of freedom of communication and transit. The League's activities in the field of communications and transit were coordinated by an Organisation for Communications and Transit, which enjoyed "a certain degree of autonomy within the far from rigid framework of the League" and had "one of the most impressive records of all the technical organisations".³⁴ The Committee consisted of several sub-committees, one of which was dedicated to road traffic.³⁵

There was both continuity and change among the pre-war organisations. PIARC resumed its activities, but the LIAT was dissolved and founded anew as the Alliance Internationale du Tourisme (1919), which gradually started shifting its attention from tourism in general to tourism by car. Another new player was the International Chamber of Commerce (ICC, 1919), representing the business user of the road. These organisations enjoyed consultative status at intergovernmental organisations like the League of Nations, meaning that according to formal procedures they were enabled to give their opinion on road related issues and be present at many meetings. In this way they were linked to international decision-making on the road system at the highest level. It can be expected that this formal presence also translated into informal personal networks. The extent and importance of such networks will also be evaluated in my dissertation.

C. Third Period: 1945-1985

Renewed efforts to unify Europe popped up after WW II ended. Marshall Aid, channelled through the Organisation for European Economic Cooperation, helped in this respect (Bossuat 1992). The presence of a well-functioning transport

³² These plans are all described in Wilson & Dussen (1993).

³³ One of the offsprings of Briand's efforts was the creation of a European Federal Nationality. Anybody (also non-Europeans) could apply for this nationality by signing a declaration that they in favour of peace in Europe. One of the cards they were given was a so-called blue card that would serve as a passport for car owners (Archive League of Nations, non-catalogued box "Nationalité Européenne"). This is one example of a 'contact point' between the political projects for Europe and the road system.

³⁴ This was the view of the League itself, see the brochure published by the Secretariat of the League of Nations (1935: 140). For a contemporary account of the committee, see Le Marec (1938). For the legal framework that regulated this technical organisation, see League of Nations (1928).

³⁵ The other five permanent sub-committees were dedicated to railroads, inland navigation, maritime navigation, electricity, and legal issues, Société des Nations (1931: 10).

infrastructure was considered a necessary precondition for the Marshall Plan to succeed. American officials remarked “From the standpoint of the overall effective use of Europe’s transport system, highway (...) facilities seem not yet to be fully utilized”.³⁶ It seems that actors like the IRF and ICC also played their part in assuring that Marshall funds would be used to assure that a ‘good’ road system would be the backbone of European transport in the future.³⁷ The Marshall Aid that was invested in road-building activities in Europe reflected an outsider’s point of view of the co-construction of a road network and an integrated Europe.³⁸

The League of Nations was dissolved after the war and replaced by the United Nations. The UN established separate economic commissions for each continent, of which the Economic Commission for Europe (UNECE, 1947) was one. It was housed in the Palais des Nations, the former League of Nations building in Geneva.³⁹ One of the organs of UNECE was the Inland Transport Committee (ITC).⁴⁰ Again, as in the case of the Technical Committee on Communications and Transit of the League of Nations, was one of the most active of the entire ECE.⁴¹ The most important legal instruments on the road infrastructures drafted under auspices of UNECE are the Declaration on the Construction of Main International Traffic Arteries (16 September 1950) and the European Agreement on Main International Traffic Arteries (AGR-agreement, 15 November 1975).

A new international organisation representing governments and especially aimed at Europe’s transport needs was the European Conference of Ministers of Transport (ECMT), founded in 1953. The ECMT dedicated itself to inland transport in the continent and passed several resolutions on road infrastructures.

There was also a reshuffle in the collection of NGOs that dealt with the road system. The existing NGOs, like AIT and PIARC, resumed their pre-war activities. But new players entered the scene as well. An important one was the International Road Federation (IRF), founded in Washington DC in 1948 and representing the interests of the constructors of road networks. The importance of this organisation for building national road networks and institutionalising national road interest settings has recently been claimed for Sweden (Blomkvist forthcoming) and Finland (Antila 2003). The IRF established offices in London and Paris in 1950 and 1951 that were separate organisations, at least on paper. The case of the IRF is interesting for two important reasons. First, it is important to find out to what extent this organisation can be considered an agent for American mobility values in Europe. Second, the IRF is interesting from the perspective of the Cold War. It seems that the IRF road builders crossed the Iron Curtain in several ways. In 1970, the president of the IRF Count Arco went on a trip to Eastern Europe with the explicit aim of establishing contacts. IRF congresses were held in the Eastern bloc. The exchange program of the IRF included

³⁶ “Certain Aspects of the European Recovery Problem”, July, 1947; ERP [folder 2]; Subject File, 1916 1960; Clark Clifford Papers, p. 16.

³⁷ Memorandum no. 38, *Marshall Aid*, IRF (European Eastern Region), October 1950; *Recommendations on the Highway Transport Aspects of the European Recovery Program*, Committee on Highway Transport, United States Associates, International Chamber of Commerce, UNECE G IX 12/1/5/3191, “Correspondence ICC”.

³⁸ On the Marshall Plan in general, see Hogan (1987), which is also a valuable guide to primary sources on the Marshall Plan. The OECD (1996) published a useful bibliography.

³⁹ For an account of the activities of the early years of UNECE, see Wightman (1956).

⁴⁰ The ITC was preceded by the European Central Inland Transport Organisation that was set up by the allied forces during the war in London.

⁴¹ “the Transport Committee sponsors more meetings than any other ECE body” (UN 1957: 25).

Eastern European engineers. However, more in-depth study is needed to be able to find out if and how much the IRF was able to transcend the East-West divide.⁴²

Other actors that were only indirectly related with road building, could also be seen 'playing the European card', or, alternatively, 'flagging Europe' in this period. A clear example of this is that companies began using a 'Europe connected through roads' for advertising purposes. One example of this is a Shell advertisement in *Road International* 47 (1963, p. 18), titled "We roll red carpets out all over Europe", which informs the public about Shell's service stations on the main motorways of Europe, where Shell touring information centres are located. Here we see Shell addressing a *European* clientele. This might seem trivial, but if we consider Shell a rational advertiser, this invocation of Europe would be used because it 'resonates' with the general public. We might be witnessing here the emergence of a 'banal Europeanism' (cf. Billig 1995).

In general the 1950s and 1960s can be characterised as the 'golden days' of automobile-only road building in Western European countries. Networks expanded considerably and so did their transnational use. The role of tourism for the latter development should not be underestimated. As car ownership expanded and welfare in general increased manifold, the masses started to go on holiday. Alternatively, customers could choose to use long distance bus services to reach their destination. Tourist guides like Fodor (1959) reflect the changes in tourism habits of tourists in Europe.

D. Fourth Period: 1985-Present Day

So far the European Union and the preceding European Communities have been absent from the story. This does not mean, however, that they did not (try to) influence Europe's road network. Transport was part of the treaty that founded the European Coal and Steel Community (ECSC) in 1951, but was limited to the products mentioned in the treaty.⁴³ Road haulage played a limited role in the transport of these goods in the 1950s, with only the transport of siderurgical products being of 'considerable importance'.⁴⁴ Judging from annual reports, it does not seem that the ECSC was particularly active in discussions on the shape and standards for the European road network, although I need to explore this more thoroughly.

The Treaty of Rome (1957), establishing the European Economic Community seemed more ambitious, because in it the development of a Common Transport Policy (CTP) had been assigned high priority.⁴⁵ However, CTP was still unsuccessful, even after the European Commission formulated a common policy proposal in 1972,⁴⁶ because the European Council of Ministers was reluctant to move forward, leaving the initiative with the member states. This situation dissatisfied the European Parliament, and in 1985 it asked the European Court of Justice to recognize officially

⁴² In 1974 there was a IRF Regional Meeting in Budapest, in 1982 there was one in Sofia; on the exchange programme, see "Geographical Distribution of the IRF Fellowship Engineers, 1949-1969, in: *World Highways* vol. XX, nr. 10, pp. 10-11; on Count Arco's trip see "Count Arco's Report", 15-7-1970.

⁴³ See chapter IX *Transport* art. 70 ECSC-treaty.

⁴⁴ See "Troisième Exposé sur les Questions de Transport Présenté aux Membres de la Commission des Transports de l'Assemblée Commune", Luxembourg, 5-12-1953, Archives of the European Commission: CEAB 4 525.

⁴⁵ See Kerwer & Teutsch (2001). The judicial base for the CTP can be found in art. 3 sub c Treaty of Rome; Titles I (*Free Movement of Goods*), III (*Free Movement of Persons, Services and Capital*), and IV (*Transport*) all depended on a good transport system, including a good road network.

⁴⁶ *Bulletin van de Europese Gemeenschappen*, suppl. 16/73, "Gemeenschappelijk Vervoerbeleid: Doelstellingen en Programma".

the lack of a CTP, which resulted in an “inactivity verdict”(Kerwer & Teutsch 2001: 29). Since then, the European Commission has moved forward and initiated the process that eventually led to the TEN project of big infrastructural investment and projects. However, despite the fact that transport has been in a more prominent position on Brussels’ agenda than ever before, as late as 2000 it has been claimed that “across the EU there is still no infrastructure policy” (Banister e.a. 2000: 61).

Due to the increased activity in Brussels, it seems that other actors are increasingly redirecting their strategic efforts towards the European Union. One example of this development is a king-size book called *Auf Allen Straßen nach Europa*, translated on the inside as ‘All Roads Lead to Europe’. This multilingual (10!) book is, according to the title page, ‘A joint activity by Daimler-Benz and Mercedes-Benz concerning the single European market.’ The public’s attention is being focused on the vital importance of roads for Europe. In the opening article, “The New Europe is the Europe of Transport”,⁴⁷ Prof.Dr. Willi Diez makes very clear that road arteries should be the backbone of Europe. The opening chapter is entitled “A Clear Road across Europe”,⁴⁸ and the second, “Linked by Treaties”, opens with the AGR-Agreement (1975) that furthered the E-road network.

Another example can be seen in two policy proposals that the IRF developed with the aim of influencing the European Commission, trying to promote its own vision of a Europe connected through ‘multimodal’ connections; roads remained the linchpin of both proposals.⁴⁹ Furthermore, the IRF has halved the size of its office in Geneva and established an office in Brussels. If the choice of location is an indicator for the presence of decision-making power, one might argue that decision-making power on the European road network is shifting from UNECE, presumably the former prime locus for decision-making on Europe’s road network, to Brussels.⁵⁰

The function of this chapter of my dissertation will be to embed the current changes in transport policy in their historical context and try to assess what function is left to the roads. Is the policy really different from what has been done in the recent and more distant past? Do the images of road development that the European Commission presents to its citizens correspond with historical reality? After linking current (or rather: recent) events to developments in the past century, I will try to draw conclusions in the final chapter of my dissertation.

5. Time Plan⁵¹

Plans are often subject to change. I would therefore like to point out some of the considerations that underlie the current plan. A Ph.D. project as a whole consists of two basic phases, the first concerning the development of a sound research design (1 year) and the second consisting of the actual research itself (3 years). The second phase can be subdivided into a further two parts. The 2nd and 3rd year will be dedicated to archival research, further reading of secondary literature, the presentation

⁴⁷ My translation, “Das Neue Europa ist das Europa des Transports”.

⁴⁸ This is an inadequate translation of the German original, “Freie Fahrt durch Europa”.

⁴⁹ The proposals were named ‘Advanced Integrated Motorway System in Europe’ (AIMSE, 1990) and EUROVIA (1995). Both proposals failed to obtain the results the IRF had hoped for.

⁵⁰ Tracking this process of organisational adaptation to changes in the setting of international decision-making. In the past, the IRF closely cooperated with UNECE and was regularly consulted at both this organisation and the ECMT. See “Main International Traffic Arteries of Europe”, Brochure Europe no. 2, Mai 1955, and “Les Problèmes Économiques de la Circulation Routière des Pays Membres de la Conférence Européenne des Ministres des Transports”, Bureau de Paris, July 1962; both: UNECE G IX 12/1/32, 12168, “Road Transport Relations with IRF Paris”.

⁵¹ A separate ‘study plan’ will be delivered on January 14, 2005.

of preliminary results as articles and/or at conferences, and some non-research activities (teaching, organisational tasks etc.). The 4th year should be largely kept free for writing and finalizing the dissertation. The main lesson to be learned from the experience of our predecessors is that you can never start too early writing your dissertation and that writing a dissertation always takes longer than you hope.

Taking all these considerations into account, the following plan might be a more or less accurate reflection of future reality during my Ph.D. project. For the sake of clarity, the years have been divided into trimesters.

2005	jan-apr	Database research; archival research The Hague (Peace Palace: LoN); workshop Eindhoven (March); teaching.
	may-aug	Teaching; archival research Geneva (AIT, IRF, LoN, UNECE, others) and Paris (ECMT, ICC, PIARC); database research.
	sep-dec	International evaluation workshop Eindhoven (September); participation SHOT 2005 conference; T ² M ⁵² 2005 conference; archival research United States (IRF, Marshall Plan).
2006	jan-apr	Prepare chapter for edited volume.
	may-aug	Further archival research; organizing materials; prepare publication(s) & presentation(s).
	sep-dec	Start (re)writing dissertation; additional archival research.
2007	jan-apr	Continue (re)writing dissertation; International evaluation workshop Eindhoven.
	may-aug	Finalize dissertation; preparing defence and future.

Priorities and Decision Points

Here I will sketch out my research priorities, indicating which parts should be dropped in case of time constraints. As I have explained above, I consider the intergovernmental organisations that dealt with road issues crucial for my research, because almost all of the relevant actors can at least partially be studied through them. They will form the backbone of the dissertation and form the starting point of my research. This is reflected in my preliminary planning in the sense that Geneva will be the first stop for an archival research visit (Spring-Summer 2005). This will enable me to explore the archives of the LoN and the ECE first, two crucial intergovernmental organisations for my research. A further advantage is that they span the entire continent, both East and West.

Another case that has priority over others is the contrasting perspective of the American view. This perspective offers methodological advantages and through my preliminary archive visit to the IRF and ECE I am confident that there is enough material on the IRF to continue with this perspective. A further advantage is that the case of the IRF enables me to link to the Cold War and pursue an interesting story of how this divide might have been overcome.

6. Sources

In this section, I give a schematic overview of locations of the primary source materials I intend to use. For more methodological issues relating to sources, I refer the reader to the § *Sources* of Chapter 3 (p.10). I have listed the archives themselves (in cases where there is no archive or documentary service, these are private

⁵² Transport, Traffic and Mobility.

archives), contact persons, restrictions (if they apply) and relevant parts of the archives to be studied.

Alliance Internationale du Tourisme, Geneva

Contact person: Jean-Michel Henchoz

NB Part of the archive is located in Brussels, the pre WW II seat of the AIT.

Economic Commission for Europe Archives, Library of the UN Office at Geneva

Contact person: Esther Trippel-Ngai

Restrictions: 20 year rule, confidential documents unaccessible.

- Section G IX, Transport and Communications
- Section G X, Economics

European Commission, Secretariat-General, Unit SG/B/2, Brussels

Contact person: Corine Laurent

Restrictions: 30 year rule, confidential documents unaccessible.

European Conference of Ministers of Transport, Documentation Centre, Paris

Contact person: Marian Ashworth

- Annual reports
- Summary reports meetings ministers of transport (twice a year)
- Summary reports meetings of deputies (6-8 times a year)

George C. Marshall Library, Lexington, Virginia, USA

Contact person: Joanne Hartog

- George C. Marshall Papers

Harry S. Truman Library, Independence, Missouri, USA

Contact person: Randy Sowell

- Harry S. Truman Papers

International Chamber of Commerce, Documentation Centre

Contact person: Natacha Pinon

- Private Archive Materials (no catalogue)
- Magazines issued by ICC

International Road Federation, Geneva

Contact Person: Sylvie Gemperlé

- Private Archive Materials (no catalogue)
- Congress Reports
- Magazines: *Road International* and *World Highways*

League of Nations Archives, Library of the United Nations Office at Geneva

Contact person: Bernhardine Pejovic

1919-1927

- Section 14, Communications and Transit
- Sub-Section 14A, International Transit Conference

1928-1932 & 1933-1946

- Section 9, Transport
- Sub-Section 9A, General
- Sub-Section 9F, Road Traffic

National Archives of the United States, Washington DC, USA

- Record group 43, International Conferences, Commissions and Expositions
- Record group 59, Department of State

Permanent International Association of Road Congresses, Paris

- *Bulletin de l'AIPCR*
- Proceedings of congresses

7. Bibliography

Primary Sources

- AIT (1998), *100 Years of Mobility, 1898-1998* (1998), Milano.
- Bulletin van de Europese Gemeenschappen*, suppl. 16/73, “Gemeenschappelijk Vervoerbeleid: Doelstellingen en Programma”
- “Certain Aspects of the European Recovery Problem”, July, 1947; ERP [folder 2]; Subject File, 1916 1960; Clark Clifford Papers.
- “Count Arco’s Report on His Trip to Poland, Hungary, Rumania, and Czechoslovakia to Extend Already Existing Contacts, to Exchange Ideas with Leading Personalities in the Field of Highways and Highway Transport, as well as to Discuss the Potential Membership or Engineering and Research Organisations as Affiliate Members of IRF”, 15-7-1970, IRF Archive.
- ECMT (1991), *Prospects for East-West European Transport*, International Seminar, Paris, 6th-7th December 1990, Paris: OECD Publications.
- (2003), *Principal Acts of the ECMT*, Paris: OECD Publications.
- (2003), *Fifty Years of Transport Policy, 1953-2003*, Paris: OECD Publications.
- Hondermarcq, M.H. (1972), “The E-Road Network – Its Evolution, Its Characteristics (1)”, in: *Bulletin de l’AIPCR* vol. 61, nr. 206, 3rd trim., pp. 21-73.
- IRF (1950), *Marshall Aid*, Memorandum no. 38, London, October.
- (1990), *AIMSE: The Motorway Project for the Europe of Tomorrow*, brochure, Geneva.
- (1995), *EUROVIA: The Advanced Integrated Motorway System in Europe*, brochure, Geneva.
- (1997), *Fifty Years of Service, 1948-1997*, Geneva.
- League of Nations (1928), *Collected Texts and Documents Relating to the Constitutional Powers and Procedure of the Organisation for Communications and Transit*, Geneva, January, C.C.T.51-129, 1922-23, v. 539.
- PIARC (1970), *AIPCR-PIARC, 1909-1969* (1970), Paris.
- Reuther, Helmut (1992), *Auf Allen Straßen nach Europa*, Bonn: Transcontact Verlagsgesellschaft.
- Secretariat of the League of Nations (1935), *The Aims, Methods and Activity of the League of Nations*, Geneva.
- Shell (1963), “We Roll Red Carpets Out All Over Europe”, in: *Road International* 47, p. 18.
- Société des Nations (1931), *Communications et Transit*, Genève: Section d’Information.
- UN (1957), *In the Service of Europe: Ten Years of International Cooperation in the United Nations Economic Commission for Europe*, New York.

Secondary Sources

- Andersen, Svein S. (2003), “‘On a Clear Day You Can See the EU’: Case Study Methodology in EU Research”, ARENA working paper 16/03, http://www.arena.uio.no/news/publications/publ_wp.htm.
- Anderson, Benedict (1991), *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, rev. ed., London: Verso.
- Antila, Kimmo (2003), “Actors, Factors and Foreign Influences in the Finnish Highway Building from the 1930s to the 1960s”, paper presented at the ESTER advance seminar *Infrastructure, Environment and Urban Culture: Industrial and Post-Industrial Societies*, 12-15 November, University of Tampere.

- Bagwell, Philip S. (1974), *The Transport Revolution from 1770*, London: B.T. Batsford.
- Banister, David, Dominic Stead, Peter Steen, Jonas Åkerman, Karl Dreborg, Peter Nijkamp & Ruggero Schleicher-Tappeser (2000), *European Transport Policy and Sustainable Mobility*, London: Spon Press
- Barker, T.C. (1993), “Slow Progress: Forty Years of Motoring Research”, in: *Journal of Transport History* 14: 2, pp. 142-165.
- Billig, Michael (1995), *Banal Nationalism*, London: SAGE Publications.
- Black, Jeremy (1997), *Maps and Politics*, Chicago: Chicago University Press.
- Blomkvist, Pär (forthcoming), “Roads for Peace! Lobbying for a European Highway System”
- Boer, Pim den (1989), *Europese Cultuur: Geschiedenis van een Bewustwording*, lecture given at the Universiteit van Amsterdam, June 5, Nijmegen: SUN.
- Bortolotti, Lando (1994), “Les Premières Propositions d’un Système Européen d’Autoroutes, 1926-1937”, in: Albert Carreras, Andrea Giuntini & Michèle Merger (eds.), *European Networks, 19th-20th Centuries: New Approaches to the Formation of a Transnational Transport and Communications System*, B8 Proceedings 11th International Economic Congress, Milan September 1994, Milan: Università Bocconi, pp. 47-59.
- (1996), “I Congressi Autostradali Internazionali del 1931 e 1932 e le Prime Proposte di un Sistema Autostradale Europeo”, in: *Storia Urbana* 75, pp. 5-26.
- Bossuat, Gérard (1992), *L’Heure Occidentale à l’Heure Américaine: Le Plan Marshall et l’Unité Européenne (1945-1952)*, Questions au XXe Siècle, Brussels: Éditions Complexe.
- Braudel, Fernand (1979), *Civilisation Matérielle, Économie et Capitalisme, XVe-XVIIIe Siècle*, vol. 1, *Les Structures du Quotidien: Le Possible e l’Impossible*, Paris: Armand Colin.
- Braun, Hans-Joachim (1999), Current Research in the History of Technology in Europe”, in: *History of Technology* 21, pp. 167-188.
- Braun, Ingo & Bernward Joerges (ed.) (1994), *Technik ohne Grenzen*, Frankfurt am Main: Suhrkamp.
- Buiter, Hans (1997), “'Hoogviadukten in het polderland?' De introductie van de autosnelweg in Nederland”, in: *NEHA-Jaarboek voor Economische, Bedrijfs- en Techniekgeschiedenis* 60, pp. 285-306.
- Button, Kenneth (1993), “East-West European Transport: An Overview”, in: David Banister & Joseph Berechman (eds.), *Transport in a Unified Europe: Policies and Challenges*, Studies in Regional Science and Urban Economics 24, Amsterdam: Elsevier, pp. 291-333.
- Carreras, Albert, Andrea Giuntini & Michèle Merger (eds.) (1994a), *European Networks, 19th-20th Centuries: New Approaches to the Formation of a Transnational Transport and Communications System*, B8 Proceedings 11th International Economic Congress, Milan September 1994, Milan: Università Bocconi.
- (1994b), “Introduction”, in: idem (eds.), *European Networks, 19th-20th Centuries: New Approaches to the Formation of a Transnational Transport and Communications System*, B8 Proceedings 11th International Economic Congress, Milan September 1994, Milan: Università Bocconi, pp. 7-11.
- Coutard, Olivier (ed.) (1999), *Governing Large Technical Systems*, London: Routledge.

- Edwards, Paul (2003), “Infrastructure and Modernity: Force, Time, and Spatial Organisation in the History of Sociotechnical Systems”, in: Thomas J. Misa, Philip Brey & Andrew Feenberg (eds.), *Modernity and Technology*, Cambridge: MIT Press, pp. 185-226.
- Ekenger, Peter (1987), “Large-Scale Infrastructure Projects in Europe”, in: *Technology in Society* 9: 87-95.
- Fischer, Claude (1992), *America Calling: A Social History of the Telephone to 1940*, Berkeley: University of California Press.
- Fleischer, Tamás (2002), “Infrastructure Networks in Central Europe and the EU Enlargement”, paper prepared for the Polish-Hungarian Workshop organised by their joint Academies of Sciences, Warsaw, October 7-8, available on-line at http://www.vki.hu/~tfleisch/PDF/pdf02/INFNET-CE_021008en.pdf.
- Fodor, E. (1959), *Jet Age Guide to Europe: A Comprehensive Handbook of 32 Countries*, New York: McKay.
- Girard, L. (1965), “Transport”, in: H.J. Habakkuk & M. Postan (eds.), *The Cambridge Economic History of Europe*, vol. 6 part 1, *The Industrial Revolutions and After: Incomes, Population and Technical Change*, Cambridge: Cambridge University Press, pp. 212-273.
- Green Cowles, Maria, James Caporaso & Thomas Risse (eds.) (2001), *Transforming Europe: Europeanization and Domestic Change*, Ithaca: Cornell University Press.
- Hecht, Gabrielle (1998), *The Radiance of France: Nuclear Power and National Identity after World War II*, Cambridge: MIT Press.
- Héritier, Adrienne, Dieter Kerwer, Christoph Knill, Dirk Lehmkuhl, Michael Teutsch & Anne-Cécile Douillet (2001), *Differential Europe: The European Union Impact on National Policymaking*, Lanham: Rowman & Littlefield.
- Hogan, Michael J. (1987), *The Marshall Plan: America, Britain, and the Reconstruction of Western Europe, 1947-1952*, Cambridge: Cambridge University Press.
- Hounshell, David (1995), “Hughesian History of Technology and Chandlerian Business History: Parallels, Departures and Critics”, in: *History and Technology* 12, pp. 205-224.
- Houten, B.C. van (1986), “Techniekgeschiedenis: Een Historiografische Beschouwing”, in: *Jaarboek voor de Geschiedenis van Bedrijf en Techniek* 3, pp. 13-42.
- Hughes, Thomas (1983), *Networks of Power: Electrification in Western Society 1880-1930*, Baltimore: Johns Hopkins University Press.
- (1987), “The evolution of large technical systems”, in Wiebe E. Bijker, Thomas P. Hughes & Trevor J. Pinch (eds.), *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Cambridge: MIT Press, pp. 51-82.
- Jarrott, Charles (1906), *Ten Years of Motors and Motor Racing*, London: E. Grant Richards.
- Kaftan, Kurt Gustav (1936), *Europa Braucht Autobahnen! Vorschläge und Entwürfe zur Erbauung Nationaler Autobahnnetze als Ausgangspunkte zur Errichtung eines Europäischen Autobahnnetzes*, Berlin: Reichssportverlag.
- Kaijser, Arne (1999), “The Helping Hand: In Search of a Swedish Institutional Regime for Infrastructural Systems”, in: Lena Andersson-Skog & Olle Kranz (eds.), *Institutions in the Transport and Communications Industries: State and*

- Private Actors in the Making of Institutional Patterns, 1850-1990*, Canton: Science History Publications.
- Kerwer, Dieter & Michael Teutsch (2001), "Transport Policy in the European Union", in: Héritier, Adrienne e.a. (2001), *Differential Europe: The European Union Impact on National Policymaking*, Lanham: Rowman & Littlefield, pp. 23-56.
- Knippenberg, Hans & Ben de Pater (1990), *De Eenwording van Nederland: Schaalvergroting en Integratie Sinds 1800*, Nijmegen: SUN, 2nd. rev.ed.
- Kreis, G. (1998) "Introduction", in: *Relations Internationales* 95, pp. 279-281.
- Laak, Dirk van (1999a), "Der Begriff 'Infrastruktur' und Was Er vor Seiner Erfindung Besagte", in: *Archiv für Begriffsgeschichte* 41, pp. 280-299.
- (1999b), *Weißer Elefanten: Anspruch und Scheitern technischer Großprojekten im 20. Jahrhundert*, Stuttgart: Deutsche Verlags-Anstalt.
- La Porte, Todd R. (ed.) (1991), *Social Responses to Large Technical Systems: Control or Anticipation*, Dordrecht: Kluwer.
- Lay, M.G. (1992), *Ways of the World: A History of the World's Roads and of the Vehicles That Used Them*, New Brunswick: Rutgers University Press.
- Le Marec, Pierre (1938), *L'Organisation des Communications et du Transit*, Thèse pour le Doctorat, Université de Rennes – Faculté de Droit, Rennes: Imprimerie Provinciale de l'Ouest.
- Mayntz, Renate & Thomas P. Hughes (1994), *The Development of Large Technical Systems*, Frankfurt: uitgever.
- Mazower, Mark (1998), *Dark Continent: Europe's Twentieth Century*, London: Penguin Books.
- Merki, Christoph Maria (1998), "L'Internationalisation du Traffic Routier avant 1914", in: *Relations Internationales* 95, pp. 329-348.
- Mom, Gijs (2003), "What Kind of Transport History Did We Get? Half a Century of JTH and the Future of the Field", in: *Journal of Transport History* 24: 2, pp. 121-138.
- (2004), *The Electric Vehicle: Technology and Expectations in the Automobile Age*, Baltimore: The Johns Hopkins University Press.
- (forthcoming), [3 preliminary chapters on road building in the Netherlands, dealing respectively with the pre-1920, interbellum and 1945-80 periods]
- Moraglio, Massimo (2003), *Strade e Politica: Storia della viabilità nella Provincia di Torino*, Alessandria: Edizioni dell'Orso.
- Nye, David (1990), *Electrifying America: Social Meanings of a New Technology*, Cambridge: MIT Press.
- O'Connell, Sean (1998), *The Car and British Society: Class, Gender and Motoring, 1896-1939*, Manchester: Manchester University Press.
- OECD (1996), *The European Reconstruction 1948-1961: Bibliography on the Marshall Plan and the Organisation for European Economic Co-operation (OEEC)*, OECD Historical Series, Paris.
- Olsen, Johan P. (2002), "The Many Faces of Europeanization", ARENA working paper 02/2, http://www.arena.uio.no/news/publications/publ_wp.htm.
- Pocock, J.G.A. (2002), "Some Europes in Their History", in: Pagden, Anthony (ed.), *The Idea of Europe: From Antiquity to the European Union*, Cambridge: Cambridge University Press & Woodrow Wilson Center Press, pp. 55-71.
- Radaelli, Claudio M. (2000), "Whither Europeanization? Concept Stretching and Substantive Change", in: *European Integration online Papers (EIoP)* 4: 8, <http://eiop.or.at/eiop/texte/2000-008a.htm>.

- Radkau, Joachim (1994), "Zum ewigen Wachstum verdammt? Jugend und Alter grosstechnischer Systeme", in: Ingo Braun & Bernward Joerges, *Technik ohne Grenzen*, Frankfurt am Main: Surhkamp, pp. 50-106.
- Ragin, Charles C. (1994), *Constructing Social Research: The Unity and Diversity of Method*, Thousand Oaks: Pine Forge Press.
- Scharff, Virginia (1991), *Taking the Wheel: Women and the Coming of the Motor Age*, Albuquerque: University of New Mexico Press.
- Schultz, Hans-Dietrich & Wolfgang Natter (2003), "Imagining Mitteleuropa: Conceptualisations of 'Its' Space In and Outside German Geography", in: *European Review of History* 10: 2, Topical Issue: *Geschichtsregionen: Concept and Critique*.
- Smith, Merritt Roe (1977), *Harpers Ferry Armory and the New Technology: The Challenge of Change*, Ithaca: Cornell University Press.
- Staudenmaier, S.J., John M. (1985), *Technology's Storytellers: Reweaving the Human Fabric*, Cambridge: SHOT & MIT Press.
- (2002), "Rationality, Agency, Contingency: Recent Trends in the History of Technology", in: *Reviews in American History* 30, pp. 168-181.
- Summerton, Jane (ed.) (1994), *Changing Large Technical Systems*, Boulder: Westview.
- Ville, Simon P. (1990), *Transport and the Development of the European Economy, 1750-1918*, New York: St. Martin's Press.
- Vleuten, Erik van der (2000), "Twee decennia van onderzoek naar grote technische systemen: thema's, afbakening en kritiek", *NEHA-Jaarboek voor Economische, Bedrijfs- en Techniekgeschiedenis* 63, pp. 328-364.
- Vleuten, Erik van der & Arne Kaijser (2004), "Networking Europe: Review Essay", working paper presented at the *Tensions of Europe*-conference, Budapest, March 17-22, 2004.
- Walsh, Margaret (ed.) (2002), "Gender and Transport History", special issue, *Journal of Transport History* 23:1.
- Weber, Eugen (1976), *Peasants into Frenchmen: The Modernization of Rural France 1870-1914*, Stanford: Stanford University Press.
- Wightman, David (1956), *Economic Co-operation in Europe: A Study of the United Nations Economic Commission for Europe*, published under the auspices of the Carnegie Endowment for International Peace: European Center, London: Stevens and Sons & William Heinemann.
- Wilson, Kevin & Jan van der Dussen (eds.) (1993), *The History of the Idea of Europe*, Milton Keynes: The Open University.
- Yin, Robert K. (1989), *Case Study Research: Design and Methods*, Newbury Park: Sage Publications.
- Zeller, Thomas (2003), "Alfred C. Mierzejewski, *The Most Valuable Asset of the Reich: A History of the German National Railway, Volume 2, 1933-1945*, 2000, (Book Review)", in: *Journal of Transport History* 24: 2, pp. 279-280.