



Tensions of Europe/Inventing Europe

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<i>Author:</i>	Jiří Janáč
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Abstract:

This article presents a dissertation project, which investigates historical relationship between infrastructural development and the emergence of contemporary Europe. The proposed "Europe seen through a single waterway" approach allows the author to employ the case study of the Danube-Oder-Elbe canal project as a mirror reflecting the negotiations of "meanings" of the infrastructural link between transnational, national, and regional actors, competing modes of transport and various sectoral interests in different periods. The whole twentieth century was marked by initiatives attempting to interconnect the Danube basin and the Black Sea ports to both the Baltic and the North Sea markets by the construction of an artificial canal. Furthermore, such a connection has been seen as a vital constituent of emerging European waterway network designed under different political regimes. Projected in times of Austrian-Hungarian Empire, independent Czechoslovakia, Nazi Germany, Socialist Czechoslovakia and finally Czech Republic, the Danube-Oder-Elbe canal (D-O-E) was planned in order to serve different requirements and different ideas and perceptions of Europe.

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Europe through waterways:

The European Coasts of Bohemia

"Due to our geographical location, we owe the construction of the Danube-Oder-Elbe canal to Europe. The fact that we will build it will only confirm the prestige of our country and will prove our maturity with which we like to boast, but have not proven by any impressive feat so far..."

(Jan Šeba, Czechoslovakian consul general in Hamburg, March 7th 1923 in Brno¹)

After the First World War and the collapse of the Austro-Hungarian Empire, East Central Europe finally entered the historical period of its nation states. Organization of the space that developed during the ancient regime was significantly reoriented from its centre in Vienna to the recently born capitals such as Prague. A brand new political map of the area was established; strictly demarcated boundaries were installed across the formerly blossoming trade routes. National policies sought to gain absolute control over their territories in an almost imperial fashion. Yet at the same time, globalisation continued to challenge this new order. The capacity of the states to organize trade, identity formation and power was under a constant pressure from transnational phenomenon such as nationalism, socialism and Europeanization as a part of globalization.

The opening quotation shows that such seemingly divergent forces were often aligned and national identities were in a way Europeanized – the speaker expressed

¹ Quoted according to the speech proposal approved by Ministry of Foreign Affairs. Archives of the Ministry of Foreign Affairs (AMZV): "Projev generálního konzula Jana Šeby na schůzi Moravského říčního a průplavního spolku" (AMZV, IV. sekce, k. 169, o.2. Doprava vodní. Průplavy domácí).

the will of the nation to be approved by Europe and to be accepted as a standard “European” state. Furthermore, the Czech diplomat held this speech just a few weeks before being appointed ambassador in Belgrade; that sheds a different light on his support for the extension of the Danube waterway route. Another important fact is that the speech was held at the Waterway congress organized by a regional association whose main goal was to improve the position of Moravia in the trade networks. Thus, international politics, regional and national interests come together in the process of Europeanization.

The canal, designed to overcome the main European watershed between three European Seas, is European *per definitionem*, with a slight overstatement. However, what kind of Europe does it represent? The whole twentieth century was marked by initiatives attempting to interconnect the Danube basin and the Black Sea ports by a wet network to both the Baltic and the North Sea markets using a canal connection between the Morava, Oder, and Elbe rivers. Due to its localization in the much contested centre of the continent, the project was discussed from many perspectives and on as many stages. International organizations such as the League of Nations or later the COMECON incorporated the canal into their visions of Europe. So did the transnational bodies, such as PIANC or the Mitteleuropäischer Binnenschiffahrts-Verband, or Pan-European activists. The dynamics between the historical lands of Czechoslovakia – Bohemia, Moravia and Silesia and Slovakia added some potential for conflict, when especially for Moravians the canal represented a “symbolic infrastructure”, in the way it promised to make their land a bridge connecting Eastern and Western Europe. Such an attitude gains its momentum after the Second World War, when the memorial volume on the canal was published under the title *The Danube Oder Elbe canal – our sea*.²

Although the Danube-Oder-Elbe (DOE) has not yet been completed, it would be rather unjust to the past to interpret this as a failure. The so far unsuccessful attempts to build the canal should not be treated as a failure. Every now and then, under favourable conditions of the Great Depression, the Second World War, the Soviet reorganization of Eastern Europe, or finally the political Europeanization of the continent, the canal plans are revived and adjusted, amounting to the current project, visions and desires for European networks – including its current version, the TEN initiative.³ Such plans in certain periods aligned with the typical complex of landlocked states. In the above mentioned memorial, the symbolic qualities of the canal almost made the Czech lands and especially Moravia a coastal country and this European dimension was preserved. As Alec Badenoch puts it, the outcome of

² Alois Čáp, *Průplav Dunaj Odra Labe naše moře : Sborník o chystaném průplavu uspořádal Alois Čáp za spolupráce red. rady časopisu "Plavební Cesty Dunaj-Odra-Labe"* (v Přerově: Nový národ, 1948). Here I would also like to explain the title of this article: it is partly an allusion of a well-known mistake made by William Shakespeare, who in *The Winter's Tale* famously (and inaccurately) refers to Bohemia as having a coastline. Not surprisingly, this error is extremely popular among historians - one of the best works on Czech history available in English, written by Derek Sayer, quotes it directly in the title. So does an article on the Czechoslovak naval fleet in the interwar period. In case of this dissertation project, such allusion seems to be even more appropriate – indeed, the only coastal line of the Czech lands are the coasts of Europe. Derek Sayer, *The Coasts of Bohemia : A Czech History* (Princeton, N.J.: Princeton University Press, 1998). Stefan Albrecht, "Böhmen Liegt Am Meer" *Österreichische Osthefte* 2004, no. 4 (2004).

³ Although the canal is not listed among the 30 priority projects, it has been included in a TEN-T part of the Accession Treaty between EU and the Czech Republic (see chapter on the European canal below)

past projects, visions and fantasies, operating through a number of national and transnational discourses, smoothed the path of the future construction; and the technologies of symbolic construction and international cooperation did leave a lasting mark on European planning for decades to come.⁴

In fact, the canal was made "European" on three distinctive layers – discursively (visions and projects of Europe), technologically (standards and norms), and politically (in a way of formal political integration or EU-ization). From its very beginning, the canal project was strongly influenced by two competing ideas in Central Europe. Those of *Mitteleuropa* – promoted mainly by Germans living in all the Central European countries and articulated in terms of the German union - and the other one, the Central Europe of nations in between Germany and Russia. This struggle might have resulted in a realization of an "imperial"⁵ variation of a "Mitteleuropean" version of the canal during the Second World War, if it had not been for the War. Since then, larger European schemes have come forward. After a short period of a revival of the Central European plan in 1945-1953, the canal project was directed towards a unified European waterway system under the cooperation of UNECE and COMECON. Although some plans to make it purely "socialist" did appear (canal connected not to Hamburg but to the Baltic by the canal from the lower Elbe in the former GDR), after the 1989 it was incorporated into the EU infrastructure-developmental plans.

The canal therefore can be portrayed as a socio-technical laboratory on a small spatial scale, a junction bringing together Europe of nations or nation states, an integrated pan-Europe, the mesoregional Europes of Central Europe and *Mitteleuropa*, a Europe of regions (Moravia) or even a Europe of cities. The changing meanings given to the canal projects in the different contexts and periods reveal much about Europe from the Central European perspective.

Nowadays, we are witnessing another attempt to bring the DOE canal to life. EU authorities promote water transport as an environmental-friendly alternative to railways, and through intermodal networks and containerization also to a certain kind of road haulage system. But even the plans for construction of weirs and improvements of navigability of the Elbe River encounter great public opposition, in a way paradoxically led by the environmentalists – just another transnational force at work. Accordingly, in a much changed Europe, the vision of the Czech Sea has lost much of its appeal. Nonetheless, even after one century the idea of the canal is alive and kicking.

In following historiographical overview my proposed research is placed within four distinctive sets of literature. Quite obviously, the first part focuses on the history

⁴ See Alec Badenoch's account of the pre-war London-Istanbul road and its later realisation as route E-5 Alexander Badenoch, "Touring between War and Peace : Imagining the 'Transcontinental Motorway', 1930-1950," *Journal of Transport History* 28, no. 2 (2007).; In his article, Badenoch, in opposition to the available historiography, explores the road's symbolic dimensions to interpret it as a relative success, in a sense that the discourses set into work on behalf of that project affected the later and completed visions and plans of European infrastructural building.

⁵ In sense that it was territorially offensive – it sought to install the canal as an inner territorial boundary encapsulating „barbarians“ – see Charles S. Maier, "Transformations of Territoriality, 1600-2000," in *Transnationale Geschichte : Themen, Tendenzen Und Theorien*, ed. Gunilla-Friederike Budde, Sebastian Conrad, and Oliver Janz (Göttingen: Vandenhoeck & Ruprecht, 2006), Andělín Grobelný, "Místo Odersko-Dunajského průplavu v nacistických projektech přestavby vnitrozemské vodní sítě v letech 1939-1941," *Časopis Slezského muzea* 29, no. 1B (1980).

of Europe and European Integration and the second on the role of technology in the history of Europe in the 20th century; in the third part, emerging literature on transnational infrastructures and the shaping of contemporary Europe is discussed. Final part of the overview is then devoted to the state of arts in the history of wet networks.

The second part of the article presents general outline of the research project. First the hypothesis is articulated in relation to the bodies of literature, followed by a working version of periodization and a summary of sources.

Historiographical Overview – Investigating Europe through Waterways

Histories of Europe

In the past century the picture of Europe presented in historical writings has undergone a massive change, following a similar path to the one exercised by the discipline itself and strongly affected by political developments on the continent. The first wave of European histories from the 1930's and 1940's was drawing from the older narratives of intrinsic values of European civilization and progress. After the war, an openly teleological, linear, nation-building-like style of the federalist histories sought to strengthen the commonality of the peoples of Europe by projecting its history and cultural unity back to antiquity.⁶ Cold War histories then limited their "territory" to the western part of the continent,⁷ reproducing the old "backward" image of the East, originally based on a religious schism and reinforced during the Enlightenment.⁸

The current move away from political-institutional and economic history toward social and cultural, accompanied by a retreat from the traditional grand narratives and influenced by the methods of textual analysis, made the definition of the concept of Europe itself problematic. It is not what it seemed to be anymore. It is not a self-evident entity anymore. It is not precisely delimited by geographic, ethnic, political, or even social boundaries, although it has borders on all these levels. From a contemporary historical perspective, it is as much an idea as reality.⁹

Histories of European Integration form a specific branch of European history. The semantic conflation of Europe and European Union, deriving from the self-definition of the latter, gave birth to the term Europeanization, originally used to depict a top-down process of adaptation of EEC or EU organizational dynamics in the nation states, mainly on the institutional and organizational levels. Despite concentrating on the political and institutional character of the process, resulting in a

⁶ By stressing the continuity and underplaying the conflicts, these authors strive to counteract the national histories; they are actively supported in this endeavour by the European Commission. Cris Shore, *Building Europe : The Cultural Politics of European Integration* (London ; New York: Routledge, 2000).

⁷ Stuart Woolf, "Europe and Its Historians," *Contemporary European History* 12, no. 03 (2003).

⁸ Larry Wolff, *Inventing Eastern Europe : The Map of Civilization on the Mind of the Enlightenment* (Stanford, Calif.: Stanford University Press, 1994).

⁹ Gerard Delanty, *Inventing Europe : Idea, Identity, Reality* (New York: St. Martin's Press, 1995), Anthony Pagden, *The Idea of Europe : From Antiquity to the European Union*, Woodrow Wilson Center Series (Washington, DC: Woodrow Wilson Center Press, 2002).

top-down perspective dominant in this field, one of its best known definitions does recognize the importance of change not only in public policy, but also in the underlying (technological) structures and identities. Radaelli, when defining Europeanization, refers to “processes of (a) construction, (b) diffusion and (c) institutionalization 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 discourses, identities, political structures and public policies.”¹⁰ However, “European” transformations are not limited to the EU and its member states. Cross-border relations have been, and are, managed through a variety of transnational regimes and institutions besides the EU. Therefore, an adequate understanding of the ongoing transformations and their history requires an understanding of other and older European transnational institutions, regimes and organizations.

I prefer the definition of the term coming from regional studies, where Europeanization of Europe is understood as a “process of regionalisation in Europe formed by historical (endogenous) and global (exogenous) forces, composed both of a formal, planned political integration of the members of the EU and of a more spontaneous, non-planned regionalisation process covering the area of geographically defined Europe and forming part of the larger process of globalisation”¹¹. In this sense, Europeanization could be understood as a derivation, or a localization of the transnational force of globalization.

The idea of Europeanization is used as an alternative to European integration to indicate a turning away from simplistic notions of societal integration that dominate mainstream European studies. The focus is redirected toward societal transformations rather than policy-building or institutions of governance.¹²

Throughout history, Europe has been constantly reinvented, or rather forged anew, to fit the needs and to serve the visions of the different historical actors. Europe has been constructed in a historical process, in which often contradictory ideas of Europe competed over its future shape. “Europe cannot be reduced to an idea, an identity or reality, since it itself is a structuring force. What is real is the discourse in which ideas and identities are formed and historical realities constituted.”¹³ Following on from this argument, the history of the 20th century Europe is a story of competing visions of Europe created in transnational forces of nationalism, racism, socialism, globalization, environmentalism, regionalization or pacifism.

Such an approach provides the author with the opportunity to avoid the trap of a teleological perspective: the danger of imposing contemporary categories on past developments and thus of implicitly reckoning the current state of affairs – progressing integration – as its inevitable outcome. On the contrary, an open-end history brings the fragmentation, disintegration, exclusion, and conflicts in the process of European Integration to the foreground. Simultaneously, the national perspective and western orientation still dominating the historical writings about

¹⁰ Claudio Radaelli, "Whither Europeanization? Concept Stretching and Substantive Change," *European Integration Online Papers* 4, no. 8 (2000), <http://eiop.or.at/eiop/texte/2000-008a.htm>. p.4

¹¹ Björn Hettne, "The Europeanisation of Europe: Endogenous and Exogenous Dimensions," *Journal of European Integration* 24, no. 4 (2002).

¹² Gerard Delanty and Chris Rumford, *Rethinking Europe : Social Theory and the Implications of Europeanization* (London ; New York: Routledge, 2005).

¹³ Delanty, *Inventing Europe : Idea, Identity, Reality*.p. 3

European Integration¹⁴ might thus be surmounted together with the essentialist question of what, where, and when is Europe.¹⁵ Following on from this argument, I will consider Europe rather as an actor category, in the way it was perceived and articulated in terms of more or less coherent perceptions and visions by historical actors.¹⁶

In much the same fashion I will also consider the European formations on mesoregional scale. Since its introduction, Central Europe has been the contested term, subject to competing efforts to lay claim to the continent's middle - rarely purely descriptive, but usually laden with specific political connotations. The term itself appeared in the context of the East-West European dichotomy; by claiming centrality, Germans seek to get closer to the 'higher' – western – civilization and to distinguish themselves from the back-warded east. In the wake of the growing national awareness during the 19th century, the reunion of the nation was a guiding principle of Mitteleuropeanism, later gaining the expansionist form in which also non-German peoples of Austria-Hungary were included and which was incorporated into the Nazi ideology. For the German minority, in the interwar period constituting one third of Czechoslovakian citizens, such a concept proved to be extremely appealing. On the other hand the Czech concept of Central Europe was defensive and its aim was to establish a closer cooperation of states geographically located in between the two then powers – Germany and Russia – as the main other.¹⁷ The ongoing struggle between the two versions of centrality and the eastern position is the crucial point in the Europeanization of the canal.

¹⁴ Woolf, "Europe and Its Historians." Richard Vinen, "Comment on Woolf," *Contemporary European History* 12, no. 03 (2003).

¹⁵ Leaving aside the fact that even geographers are not completely in accord regarding the delimitation of the continent, outside the field of physical geography the borders of Europe are, euphemistically speaking, somewhat hazy.

¹⁶ More detailed argumentation might be found in: Thomas Misa and Johan Schot, "Inventing Europe: Technology and the Hidden Integration of Europe," *History & Technology* 21, no. 1 (2005).

¹⁷ For the latest discussion on the concept of Central Europe/Mitteleuropa see among others: Peter M. R. Stirk, *Mitteleuropa: History and Prospects*, Studies in European Unity (Edinburgh: Edinburgh University Press, 1994). John W. Boyer, "Some Reflections on the Problem of Austria, Germany, and Mitteleuropa," *Central European History* 22, no. 3/4 (1989), Peter Bugge, "The Use of the Middle: Mitteleuropa Vs. Stredni Evropa," *European Review of History* 6, no. 1 (1999), J. Hagen, "Redrawing the Imagined Map of Europe: The Rise and Fall of the 'Center'," *Political Geography* 22, no. 5 (2003), James Kurth, "Germany and the Reemergence of Mitteleuropa," *Current History* 94, no. 595 (1995), Robin Okey, "Central Europe / Eastern Europe: Behind the Definitions," *Past and Present* 137, no. 1 (1992), Hans-Georg Betz, "Mitteleuropa and Post-Modern European Identity," *New German Critique*, no. 50 (1990), Gerard Delanty, "The Resonance of Mitteleuropa: A Habsburg Myth or Antipolitics?," *Theory Culture Society* 13, no. 4 (1996), Hans-Dietrich Schultz and Wolfgang Natter, "Imagining Mitteleuropa: Conceptualisations of 'Its' Space in and Outside German Geography," *European Review of History* 10, no. 2 (2003), Stefan Troebst, "Introduction: What's in a Historical Region? A Teutonic Perspective," *European Review of History* 10, no. 2 (2003). The most prominent articulations of the two concepts are: Friedrich Naumann, *Mitteleuropa* (Berlin.: G. Reimer, 1915), T. G. Masaryk, *The New Europe (the Slav Standpoint)* (London: Printed by Eyre & Spottiswoode, 1918).

Europe through the Lens of Technology

The bulk of the available literature on European Integration does not absolutely ignore the impact of technology on the constitution of a European space or European identity, rather “a widespread tendency to uncritically invoke networks as exogenous forces of transnationalism and interconnectedness”¹⁸ is omnipresent.

Deriving from the “actor category” definition of Europe, leading scholars involved in the project Tensions of Europe - Inventing Europe¹⁹, Thomas J. Misa and Johan Schot, articulated a powerful historiographical argument in favour of studying technological change as a key variable in the formation of Europe. In order “to situate technology in a broader social and cultural analysis of Europe”²⁰ they propose a concept of ‘hidden (technological) integration/disintegration’ in contrast to political ‘apparent’ integration of European histories. The principal task is to answer the question “how do actors design and use technology to constitute and enact European integration or fragmentation?”²¹ The linking or unlinking (or in the case of the canal the application of certain standards which would enable linking) of infrastructures together with the appropriation of specific technologies (again, their projected application) are the practices in which specific visions and projects of Europe are embedded. The socialist canal project was significantly different from all its predecessors not because of the rapid development of hydraulic engineering, but precisely due to the inspiration coming from a different source than before – from the USSR.

Furthermore, a hidden integration concept, due to its concentration on actor perceptions of Europe, enables researchers to investigate how Europe has become an “imagined community”²² – a term coming from nation studies and suggesting that social groups tend to define themselves by their positive relation to a common set of ideas. The community then can be either regional, national, or European (or Central European) and these identities do not have to be in contrast – as in the case of the German national identity and the European one since the Second World War²³, or as in the case of Mr. Šeba in the opening quotation. The process of forming an identity including the inclusion/exclusion of Europe – and what Europe – is closely related to the symbolic meaning attributed to the canal in its context.²⁴

¹⁸ Erik van der Vleuten and Arne Kaijser, “Networking Europe,” *History & Technology* 21, no. 1 (2005).

¹⁹ My research is placed within this wider project. The project's subtitle is “*Technology and the Making of Europe from 1850 to the Present*.” It's main objective is to show that technological change “was an important arena for constructing Europe on the material, institutional and discursive levels.” Johan Schot and Ruth Oldenziel, “Tensions of Europe, Phase 2: Intellectual Agenda - Inventing Europe: Technology and the Making of Europe from 1850 to the Present,” (2004), http://www.histech.nl/TensPhase2/AboutToe/Intellectual_Agenda.pdf.

²⁰ Misa and Schot, “Inventing Europe: Technology and the Hidden Integration of Europe.” p.3

²¹ Ibid. p. 8

²² Benedict R. O'G Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Rev. ed. (London; New York: Verso, 2006).

²³ Martin Marcussen et al., “Constructing Europe? The Evolution of French, British and German Nation State Identities,” *Journal of European Public Policy* 6, no. 4 (1999).

²⁴ Judith Schueler successfully sums up the discourse surrounding the Gotthard tunnel node and juxtaposed the local, regional, national and international meanings ascribed to this material link. Judith Schueler, “Traveling Towards The “Mountain That Has Borne a State,” in *Networking Europe: Transnational Infrastructures and the Shaping of Europe, 1850-2000*, ed.

Transnational Infrastructures and Building of Contemporary Europe

Among historians, the dominating approach toward a European infrastructural integration is based on its interpretation as an outcome of the interplay of national actors. The history produced is, for obvious reasons, usually reduced to an account of negotiations among the perspectives and interests of great powers, namely Germany, Britain and France, thus totally excluding large – Eastern – parts of Europe from the play.²⁵

To overcome this limit, an Eindhoven-based “Transnational European Infrastructures project research group” has focused on the role of international and above all transnational institutions. Archives of such institutions offer an insight into the arena where different interests – internationalist, nationalist and sectoral – together with diverging perceptions and visions of Europe, were aligned and negotiated. Their recently published results²⁶ offer an alternative history of European infrastructures, based neither on the idea of dominating nation states and their foreign policies, nor on tracing the prehistory of European common transport policy. The transnational history approach²⁷, which I want to follow, allows historians to reflect on, while at the same time going beyond, the confines of the nation; to study the “movements and forces that cut across national boundaries”.²⁸ The main drawback of the results provided by TIE researchers rests in the danger of exaggerating the role of the transnational organizations. Unlike the TIE group, my research concentrates not on international organizations²⁹ *per se*, but rather on the interaction between them and the national authorities in charge of the construction and preparatory works. These organizations will be conceptualized in terms of a transnational Europeanizing force. The emphasis is put on the interplay between

Erik van der Vleuten and Arne Kaijser (Sagamore Beach, MA: Science History Publications/USA, 2006).

²⁵ See for instance the chapter volume by Kaijser and Vleuten, chapters by Léonard Laborie and Pär Blomquist.

²⁶ Among others the special issue of *Journal of Transport History*, 28, no. 2 (2007) and Erik Van Der Vleuten et al., "Europe's System Builders: The Contested Shaping of Transnational Road, Electricity and Rail Networks," *Contemporary European History* 16, no. 03 (2007). Currently first book based on the TIE research project appeared, published in the Foundation for the History of Technology & Aksant Academic Publishers Technology and European History Series: Judith Schueler, *Materializing Identity. The Co-Construction of the Gotthard Railway and Swiss National Identity* (Aksant Academic Publishers, 2008). Till the end of the year, also *Electrifying Europe* by Vincent Lagendijk and Frank Schipper's *Driving Europe* will come out.

²⁷ Unlike the TIE group, which adopted more institutional perspective focused on transnational actors and international governance, I intend to employ broader version of transnational history focused also on various “cross border flows” of knowledge. See: Patricia Clavin, "Defining Transnationalism," *Contemporary European History* 14, no. 04 (2005).

²⁸ Akira Iriye, "Transnational History," *Contemporary European History* 13, no. 02 (2004).p. 213; For a more detailed discussion of transnationalism see :Pierre Yves Saunier, "Learning by Doing: Notes About the Making of the Palgrave Dictionary of Transnational History," *Journal of Modern European History* (2008 - v tisku), Erik van der Vleuten, "Technological History and the Transnational Challenge: Meanings, Promises, Pitfalls," *Technology and Culture*, no. 4 (2008), Gunilla-Friederike Budde, Sebastian Conrad, and Oliver Janz, *Transnationale Geschichte : Themen, Tendenzen Und Theorien* (Göttingen: Vandenhoeck & Ruprecht, 2006).

²⁹ In case of the D-O-E, standards were set mainly by international river commissions for the Rhein and the Danube, transnational organizations such as PIANC or LoN, and also by the authorities of the Third Reich and later by COMECON and UNECE.

these two scales, which might add to the continuing discussion about the role of the nation state in the process of transnational unlinking and integration as a whole.³⁰

Furthermore, the TIE articles illustrate how European “transnationals” formed a European “imagined community” of their own, not only withdrawing from the national interests, but promoting their own visions of Europe.³¹ This could be the case with their Czech counterparts as well. Regarding this point, my research might confirm that the first and foremost affinity of engineers is not connected to the nation, the region or Europe, but simply to the „technological progress“.³² The Czech canal lobby, mostly consisting of Moravian engineers, tried hard to get the canal construction on the agenda under any government.³³ Whether the activities of a national epistemic community could be ascribed to the emergence and the existence of its non-territorial transnational mobile European counterpart, as Schot argues, is one of the questions my research seeks to answer.

Europe through Wet Infrastructures

The power relations are of the highest importance in the process of building and using infrastructures. The links are being built, maintained and abolished as a consequence of political and economical conflicts.³⁴ According to van Laak, only the

³⁰ One stance is that of Alan Millward, who argues that nation states have been all the time in control of the integration process (in case of EU), while other authors, for instance Ulrich Beck, articulate „obituaries of the nation state“, stressing the idea that globalization leads to the corrosion of the sovereign nationalized territory. Alan S. Millward, George Brennan, and Federico Romero, *The European Rescue of the Nation-State* (Berkeley: University of California Press, 1993), Ulrich Beck, *What Is Globalization?* (Cambridge: Polity Press, 2000).

³¹ Johan Schot, in a synthesizing introduction to the above-mentioned special issue of *JTH* (see footnote 27), concludes that the development of the Common Transport Policy of the ECE was delayed for almost thirty years due to the diverging interests and activities of transnational system builders. Johan Schot, "Introduction: Building Europe on Transnational Infrastructures," *Journal of Transport History* 28, no. 2 (2007).

³² In case of transnational infrastructural development in interwar Europe this led to creation of „technocratic internationalism“ – a specific background ideology behind grand European schemes. Johan Schot and Vincent Lagendijk, "Technocratic Internationalism in the Interwar Years: Building Europe on Motorway and Electricity Networks," *Journal of Modern European History* 6, no. 2 (2008).

³³ Antonín Smrček, the leading figure in water construction and professor of hydraulic engineering at the Technological University at the Moravian city Brno, tirelessly worked on the canals under the Austrian government, in Czechoslovakia and also during the Protectorate. Similarly, Ing. Bartovský, a high ministerial official in the interwar period, was interested more in the idea of the canal than in the idea of the Czechoslovak state, and did not hesitate to cooperate on the Nazi canal. Finally, Ing. Kubec was extremely active in stressing the importance of the canal for COMECON integration; currently he is the leading figure of the final Europeanization of the project. Sticking to the famous Czech tradition, these people followed their professional ambitions with no respect to temporary changes of political regimes. Their driving force was probably just to become The Engineer, “who did it”! The technological aspects, in their view, put all other variables aside. They still sense the „call of duty“, the mission to civilize the land (whoever might be in charge and profit from such “modernization”). On the other hand, some of them showed a strong regional identity: above all Antonín Smrček proved to be a Moravian engineer, always having the progress of Moravia in mind.

³⁴ Armand Mattelart, *Networking the World, 1794-2000* (Minneapolis, Mn.: University of Minnesota Press, 2000). See also: Stephen Graham and Simon Marvin, *Splintering Urbanism:*

powerful shape the infrastructure; the commoners are merely shaped or, more precisely, spatially organized. Infrastructures thus acquire a certain flavour of the imperial - besides connecting they “also exclude and segregate and establish a new hierarchy.”³⁵ At the turn of the 19th century, two main completely disconnected waterway networks existed on the continent – one in the Danube river basin, the other along the Rhine as its main artery. The Danube – Oder – Elbe project was designed to connect the two, and thus its designers had to choose which standards to follow. If it had been solely a matter of “internal system logic”³⁶, the much larger and more intensively utilized Rhine network would have been the obvious choice. It was not.³⁷

The possible social implications of infrastructures consist in the ability of the developer to 'inscribe' values in the material lay-out during the sociotechnical construction process³⁸. While this can be done for the centrally controlled railways, in case of wet infrastructures the situation is much more complicated.

Although transportation links such as roads are not considered typical examples of Large Technical Systems (LTS) due to the lack of central authority in these networks, boisterous development of sociotechnical system studies³⁹ brought about research devices adapting LTS methodology to the so-called “loosely coupled systems” or networks.⁴⁰ For my purposes, the systems approach helps to decipher the complex of actors and interests involved in a waterway construction and to identify important actors in the process of Europeanization. A focus on system

Networked Infrastructures, Technological Mobilities and the Urban Condition (London ; New York: Routledge, 2001).

³⁵ Dirk van Laak, "Technological Infrastructure: Concepts and Consequences," *ICON. Journal of the International Committee for the History of Technology* 2004, no. 10 (2004).p. 55

³⁶ The scope of analysis plays a crucial role in the agency evaluation of technologies. Similarly to geography, the greater the scale, the more independently the system seems to behave. In other words, with the growing complexity of the system and the growing number of its components and subsystems, the internal logic of the system becomes more and more apparent. Paul Edwards, "Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnical Systems," in *Modernity and Technology*, ed. Thomas J. Misa, Philip Brey, and Andrew Feenberg (Cambridge, Mass.: MIT Press, 2003).

³⁷ Antonín Smrček, *Průplav Pardubicko-Přerovský a souvislost jeho s ostatními průplavy rakouskými* (Pardubice: Společná knihtiskárna, 1904).

³⁸ Secondly, intrinsic properties of network technologies can cast a certain effect on society, external to the sociotechnical construction. Thirdly, the construction of 'second order networks' – an independent activity of users of infrastructures mediating their implications on society. Finally, the fourth moment is even more indirect and arises from the second order network, which can influence consumers' choice (processes facilitated by the processes enabled by the existence of the infrastructure). Erik van der Vleuten, "Infrastructures and Societal Change. A View from the Large Technical Systems Field," *Technology Analysis & Strategic Management* 16, no. 3 (2004).p 395-6

³⁹ Erik van der Vleuten, "Understanding Networked Societies: Two Decades of Large Technical Systems Studies," in *Networking Europe : Transnational Infrastructures and the Shaping of Europe, 1850-2000*, ed. Erik van der Vleuten and Arne Kaijser, *History & Technology* (Sagamore Beach, MA: Science History Publications/USA, 2006).

⁴⁰ As opposed to “tightly coupled” systems, based on a specific grid (railways, pipelines, etc.). See: Arne Kaijser, "The Helping Hand: In Search of a Swedish Institutional Regime for Infrastructural Systems," in *Institutions in the Transport and Communications Industries : State and Private Actors in the Making of Institutional Patterns, 1850-1990*, ed. Lena Andersson-Skog and Olle Krantz (Canton, Mass.: Science History Publications, 1999).

building as a multi - actor process shows how different interests were balanced and eventually accommodated in the actual design.

The LTS concept is based on the idea that technological systems are complex entities consisting of technical artefacts, institutional and legislative frameworks, and other components.⁴¹ This concept was originally coined by Thomas Hughes and later adapted to encompass the key collective actors engaged with the system in its sociotechnical complexity. Thus it does not distinguish between traditional analytical categories of *a priori* technical, social and political aspects of the system. System builders cross interdisciplinary boundaries in order to ensure the development of the system⁴². In its derivation, system building in a multi-actor game focuses instead of the key actor on the process of alignment of competing functions.

A unique type of “coupling” (interface) of the water-based systems illustrates the specific character of wet infrastructures. While standard types are junctures (roads, railways and airways at the airport) and gateways (such as containers connecting different transport systems), the wet systems also share the material link in itself, like a stretch of a canalised river used for navigation, drainage or water-supply.⁴³ There are several examples available to conceptualize nationally framed water-management systems in terms of LTS. Van der Vleuten and Disco⁴⁴ proved that such an approach is not only feasible, but could be extremely valuable.

An analysis of the shaping of certain elements of the DOE canal projects can be related to several transnational (European) infrastructure systems. The wet network in Europe was established by nature, but its Europeanization is still in its infancy. The case of the Danube-Oder-Elbe canal could contribute to the history of its development. By concentrating on the very specific case of the Danube-Oder-Elbe canal, this project contributes to the area widely ignored by historians, but not by engineers, industrialist and politicians.

Europe through Waterways

Waterways have been in a way out of fashion since the First World War not only in public discourse, but also in historiography. Some attention has been paid to the canals and navigable rivers in the context of the industrial revolution, mainly by transport historians. Recently environmental historians became interested in water history en-grosse and touch on the issues of canalisation and riverine transport from a different perspective. A case study published in the “local” language is still the predominating outcome of historical inquiries in this area, for instance for the Czech-speaking audience, quite a few works on the topic are available, including some technologically informed, albeit limited in scope and time period covered.

Canals, as well as navigable rivers, have mainly been conceptualized in terms of an Inland Water Transport (or Inland Waterborne Traffic - IWT). Drawing on my inevitably selective reading, I find that the history of transport generally suffers from

⁴¹ Thomas Parke Hughes, *Networks of Power : Electrification in Western Society, 1880-1930* (Baltimore: Johns Hopkins University Press, 1983).

⁴² As such, they are more problem-solving entities than heroic inventors of an artefact. The standard example is Thomas Edison, who was not primarily concerned with inventing the light bulb, but with designing and selling electricity supply. Ibid.

⁴³ Cornelis Disco and Erik van der Vleuten, "The Politics of Wet System Building: Balancing Interests in Dutch Water Management from the Middle Ages to the Present," *Knowledge, Technology & Policy* 14, no. 4 (2002).p. 39

⁴⁴ Ibid, and also Erik van der Vleuten and Cornelis Disco, "Water Wizards: Reshaping Wet Nature and Society," *History & Technology* 20, no. 3 (2004).

several biases. First and foremost, historians tended to see transport mainly as an economic activity and neither the technological nor the cultural aspect was given their proper place in the narratives. Second, an overwhelming majority of works in this field concentrate on railway history, while other modes of transport and especially inland navigation are marginalized. The importance of inland navigation for the outbreak of the Industrial revolution is recognized, but from the First World War onward, virtually no attention has been given to this topic. Third, a nation remains the main unit for analysis; this is remarkable indeed, given the truly international character of rivers flowing from their spring down to the estuary without any respect for borders. Furthermore, IWT historians proved to be especially prone to getting trapped in the snares of local history⁴⁵. This can be illustrated by looking at the structure of IWT network. Inland water transport even in national frames never became a completely integrated network, as is the case with other forms of transport. It was patchy in its incidence and often had strong regional leanings. The economic impact of canals was mostly regional.⁴⁶ On the other hand, in the regional context, inland navigation was often very important and was sometimes linked to coastal shipping to form an integrated service for bulky low value products which could traverse long distances before they were finally consumed - only as a part of intermodal transport system can IWT constitute an element of a truly international system of transport.⁴⁷

A comparison between Great Britain and France appeared only later in the early 1990s⁴⁸, followed by two papers attempting to cover the whole European territory.⁴⁹ Simon P. Ville focuses on the development of all modern types of transport in a comparative perspective in the context of the industrialization of Europe, which is perceived as one homogenous economy consisting of sovereign states. His method, highlighting selected subjects such as inland navigation in one country after another, inevitably leads to overlooking the transnational developments and intra-national consequences.⁵⁰

In another publication editors Andreas Kunz and John Armstrong take up the ambitious task of covering the entire European territory. Although one of the three topics chosen to be discussed in the chapters was the role of governmental and voluntary associations in the provisions of waterways, only a few authors devote much space to this and when they do, then only in a very schematic way, stressing the derogatory effects of political fragmentation. Furthermore, in the introductory

⁴⁵ Gijs Mom, "What Kind of Transport History Did We Get?," *Journal of Transport History* 24, no. 2 (2003), Simon P. Ville, *Transport and the Development of the European Economy, 1750-1918* (New York: St. Martin's Press, 1990). Beautiful example of the prevalence of such attitude might be found in: Gerald Crompton, ed., *Canals and Inland Navigation*, Studies in Transport History (Aldershot, Hants, England - Brookfield, Vt.: Scolar Press - Ashgate Pub. Co., 1996). The complaints about the "antiquarian tradition of case studies" and their "descriptive nature", which renders the use of the tools of social scientist impossible, might be found also in: Ville, *Transport and the Development of the European Economy, 1750-1918*.

⁴⁶ Gerard Turnbull, "Canals, Coal and Regional Growth During the Industrial Revolution," *The Economic History Review* 40, no. 4 (1987).

⁴⁷ John Armstrong, "Inland Navigation and the Local Economy," in *Inland Navigation and Economic Development in Nineteenth-Century Europe*, ed. Andreas Kunz and John Armstrong (Mainz: Verlag Philipp von Zabern, 1995).

⁴⁸ Rick Szostak, *The Role of Transportation in the Industrial Revolution : A Comparison of England and France* (Montreal ; Buffalo: McGill-Queen's University Press, 1991).

⁴⁹ Armstrong, "Inland Navigation and the Local Economy."

⁵⁰ Ville, *Transport and the Development of the European Economy, 1750-1918*.

chapter to this volume Kunz discusses the role of the developer⁵¹, only on national, regional or local level. On the contrary, in the case of the D-O-E canal, the role of transnational (or international) organizations appears to be crucial. Of course, there was no COMECON in 19th century. But the European aspects of the network were discussed at the PIANC conferences from the very beginning (1885).

The history of IWT in Europe and in the USA from its very beginning up to the present is sketched out in a relatively recent summary article by Gerald Crompton. A well known British economic historian, he presents the periodization, or “economic cycles”, of IWT. According to Crompton, the IWT sector in Europe experienced a significant “renaissance of the canals”⁵² in the late 19th century. The Interwar period then marked a beginning of a stabilization phase followed by a significant drop, which was the most pronounced in the 1990’s (in Western Europe, in the relative market share) and continued until 1990’s. In the last decade of the 20th century, the EU authorities recognized IWT as being “environmental-friendly” and as such deserving to be supported by public policy.

Here we approach another limitation of IWT – its huge dependency on the development of other modes of transport and inter-modal transport networks. To connect virtually any place to a tight network is not possible without some cooperation with the other modes of transport, especially railways. The position of IWT in the intermodal competition is integral to the dominating narratives of an “outdated” mode of transport, which has been made redundant by railways firstly at the beginning of the second half of the 19th century and then once again after the First World War, only to be finally condemned to a permanent struggle for survival on the edge of the market by individualization of transport represented by automobile.

As one of the weaknesses of the IWT Crompton mentions “the unattractive and old-fashioned image of the waterways”⁵³. A similar point was often made by Czech engineers working on the D-O-E project, who complained about widely spread „false notions, according to which any canal must be a gigantic work, which scars mountain ranges with deep cuts. This is not the only myth. A part of the nation connects the idea with some kind of a huge construction made of concrete.”⁵⁴ The image of waterways might be one of central elements in its development. In the article on the Moselle canalization⁵⁵, the geographer Aloys A. Michel brings forward the issue of the relatively small number of people directly involved in IWT business, who were by far outnumbered in this respect by their closest competitor, the railways; this comparative disadvantage dramatically limited the bargaining power of canal promoters in negotiations with state authorities and may be held partly responsible for the relatively – again when compared to railways – low level of political and public support for any new constructions.⁵⁶

⁵¹ It is not clear, whether the notion of developer is rather a „system builder“ or a stakeholder.

⁵² Ville, *Transport and the Development of the European Economy, 1750-1918*.

⁵³ Gerald Crompton, “the Tortoise and the Economy.,” *Journal of Transport History* 25, no. 2 (2004).p.15

⁵⁴ Jaroslav Kubec, Josef Podzimek, and František Nepil, *Křižovatka tří moří : Vodní koridor Dunaj-Odra-Labe = Meeting of Three Seas : Water Corridor Danube-Oder-Elbe*, 1. vyd. ed. (Praha: Your ARTillery, 2007).p. 14

⁵⁵ Aloys A. Michel, “The Canalization of the Moselle and West European Integration,” *Geographical Review* 52, no. 4 (1962).

⁵⁶ For more on the topic of intermodal competition between railways and waterways in interwar Central Europe see: Ivan Jakubec, *Eisenbahn und Elbeschiffahrt in Mitteleuropa 1918-1938 : Die Neuordnung der Verkehrspolitischen Beziehungen zwischen der*

Finally, there has been some research done on the DOE canal by mostly Moravian historians. Usually very limited in scope and also in the time period covered. For no obvious reason, most works emerged in the 1970's and 1980's. The canal was studied as case study of the two NGO's⁵⁷, from the perspective of environmental history⁵⁸ and also as an instance of the Nazi Grossraum policy⁵⁹ or a case of International Relations⁶⁰. Regional historians have paid some attention to the canal as well,⁶¹ but the most common are the histories written by engineers.⁶²

The literature on waterways generally fails to address the emergence of Europe, and if it does so, it 'assumes' Europe instead of inquiring it critically. The construction of European wet network is theme widely ignored in historiography. This project is designed to add to all mentioned kinds of literatures by their synthesis into a „Europe through Waterways“ attitude.

Tschechoslowakei, dem Deutschen Reich und Österreich in der Zwischenkriegszeit, Beiträge zur Unternehmensgeschichte (Stuttgart: Steiner, 2001).

⁵⁷ Both authors are archivists and their articles follow the narrative line included in the archival documents. Andělín Grobelný, "Přípravy projektu Odersko-Dunajského průplavu v letech 1939-1941," *Vlastivědný věstník moravský* 38, no. 2 (1986), Kateřina Smutná, "Podíl Společnosti Dunajsko-Oderského průplavu na přípravě průplavního propojení Labe, Odry a Dunaje," *Dějiny věd a techniky* 1989, no. 4 (1989), Zdeněk Bičík, "Spolek pro stavbu Labsko-Oderského průplavu v Pardubicích," in *Plavba a obchod po Labi : Sborník příspěvků z 1. mezin. symposia o dějinách labské plavby v Děčíně 1969*, ed. Helena Smíšková and Miloslav Košťál, *Rozpravy Nár. Techn. Muzea v Praze* (Praha: Národní technické muzeum, 1971), Andělín Grobelný, "K jednáním o stavbu Odersko-Dunajského průplavu po Mnichovském diktátu," *Slezský sborník - Acta Silesiaca* 77, no. 1 (1979).

⁵⁸ Josef Bartoš, "Historické varianty spojení řek Odry, Labe a Dunaje," in *Vodní Cesta D-O-L: Historie, ekologie, krajina : Historická a současná studie a výběr příspěvků ze semináře Vodní cesta D-O-L: Ekonomie, ekologie, krajina v rámci EDO Olomouc 2003*, ed. Michal Bartoš (Olomouc: Univerzita Palackého v Olomouci, 2004).

⁵⁹ Grobelný, "Místo Odersko-Dunajského průplavu v nacistických projektech přestavby vnitrozemské vodní sítě v letech 1939-1941."

⁶⁰ Andělín Grobelný, "Projekty Odersko-Dunajského průplavu a československo-německá jednání v meziválečném období," *Ostrava : Sborník příspěvků k dějinám a výstavbě města. sv.10*, no. 10 (1979).

⁶¹ Josef Bartoš, "Projekty průplavu Odra-Labe-Dunaj na střední moravě v letech 1938-1945," *Střední Morava : kulturněhistorická revue* 6, no. 11 (2000), ———, "Město Olomouc a projekty kanálu Odra-Labe-Dunaj," *Střední Morava : vlastivědná revue* 7, no. 12 (2001).

⁶² Mostly published in periodicals – most notable exceptions, all written by hydraulic engineers actually working on the DOE canal projects, are among others: Kubec, Podzimek, and Nepil, *Křížovatka tří moří : Vodní koridor Dunaj-Odra-Labe = Meeting of Three Seas : Water Corridor Danube-Oder-Elbe*, Adam Kříž, *Průplav Dunaj-Oderský, jeho dějiny, stavba a význam národohospodářský* (Přerov: Spisovatel, 1901), Josef Bartovský, *Vodní cesty a vodohospodářské plánování v Čechách a na Moravě : Přehled a bilance práce dvou generací : další úkoly : dvouletka a pětiletka* (v Praze: Společnost Dunajsko-Oderského průplavu, 1946), Jaroslav Čábelka, "Velký průplav v srdci Evropy - Vodohospodářsko dopravní soustava Dunaj-Odra-Labe," in *Plavba a obchod po Labi : Sborník příspěvků z 1. mezin. symposia o dějinách labské plavby v Děčíně 1969*, ed. Helena Smíšková and Miloslav Košťál, *Rozpravy Nár. Techn. Muzea v Praze* (Praha: Národní technické muzeum, 1971).

Project Outline

Presented project is generally based on the constructivist perspective, which is elegantly articulated in a premise that „requirements are not given, but antagonistically constructed“.⁶³ This is true for the construction of material links as well as for the emergence of Europe.

The core of my project is the story of the construction of the Danube – Oder – Elbe canal. The entire twentieth century was marked by initiatives attempting to interconnect the Danube basin and the Black Sea to both the Baltic and the North Sea through Moravia by canalization of the Morava River or by a lateral canal following its route.

The main aim of my research is to reveal how the Danube-Oder-Elbe canal was perceived as a part of an emerging wet network in Europe, nationalized, internationalized and subsequently Europeanized. Although for most of the century the entire route of the canal was situated within a single state (Austrian Empire, Czechoslovakia and for a few years the Third Reich), due to the specific international nature of water bodies it was never the sole matter of one national policy and under any national control.

The functional canal link is vitally dependant on the navigational improvements on other, lower parts of the rivers. Furthermore, it requires a sufficient water supply for the upper parts; in the case of the Morava River this demanded the construction of a huge dam on the Danube, which was to raise the water levels far into the Moravian inland. These examples illustrate the necessity of international cooperation, which was multiplied by the high construction costs of the canal.

A crucial point is, then, the interplay of three levels of decision making. In this case, these are the local, the national and the trans-supra-inter national levels. As it seems, these three categories of system builders were by no means hierarchical and the role of each of them in the process of the construction of the canal changed throughout the 20th century, also as a consequence to the “nature” of the transnational organization. The context of international politics had a profound effect. While the researchers working on the TIE project seek to answer the question of the development of a transnational European Infrastructure and its role in the process of European Integration, my own research concentrates more on the question of how the different projects and visions of Europe affected certain material links, how certain visions and projects of Europe were translated into its technological design, how this process actually worked and how all the involved “system builders”, i.e. trans- or international organizations, national political and technological authorities and local actors (municipality of Přerov) interacted. The list of the main research questions follows:

- How competing forces of europeanization, nationalization, socialism etc. were negotiated, and what kind of integration (cooperations)/fragmentations (borders) it produced in thought and/or action ?
- What kinds and visions of Europe were in play in the negotiation of the canal project?
- How did these change in the course of the century?
- How they were aligned, juxtaposed, and negotiated in different periods?

⁶³ Disco and van der Vleuten, "The Politics of Wet System Building: Balancing Interests in Dutch Water Management from the Middle Ages to the Present."p. 33

Hypothesis

The canal project has been Europeanized on three distinctive levels: discursive, technological, and political. Concerning the first point, in the course of the century several canal projects appeared, were affected, influenced and directed by different projects and visions of a Europe they were designed to serve, in accord with national interests. The second point consists of a set of standards included in the projects of the material-aspect of the canal as a complex wet network link (measures of vessels and barges, later also environmental standards, water route standards etc.) Regarding the final point, political negotiations achieved a European level only in the 1990's.

Furthermore, claims for a "European" dimension were coming not only from the transnational structures, but also from the national level. The intentions were the same. While transnational organizations employed the Pan-European rhetoric to mobilise political support⁶⁴, national and local promoters invoked Europeanism because "the most effective rhetorical strategy ... seemed to be to translate (individual projects) into the components of larger and more glamorous projects."⁶⁵ The European promises of the canal have been articulated differently by actors on various levels and specific actors were dominant in the canal negotiations in different periods. Whereas in pre-war Imperial Europe the integrative power of the center dominated, during the interwar period the role of nations was usually highlighted. After the intermezzo of *Grossraum Europe*, the bipolar Cold War context influenced the canal project negotiations. Currently the multi-polar world order of Globalization and political Europeanization has taken over the plans for the canal of the three seas. Furthermore, as the research done so far indicates, the dominating power influenced also the technological layout and "promises" of the canal, thus ascribing to it different meanings.

Trying to investigate Europe through a waterway, the above considerations lead to my main hypothesis: in each period one distinct kind of Europe (and related visions of Europe) as formed by the transnational forces of Europeanization, nationalization, socialism, was dominant (though not exclusively) and thus „gaining reality“ in the negotiations and material lay-out of the given canal project.

This will be investigated by concentrating on the institutions where the negotiations took place – above all the governmental institutions and national authorities in charge of the construction and the main NGO's and IGO's in given period. These constitute the main research units of this dissertation.

One of the well-developed historical methods, which I intend to employ in order to determine the meaning of the canal in the context of fragmentation/integration of Europe, is a discursive analysis of map and plans produced by canal promoters or opponents in the tradition of "persuasive cartography."⁶⁶ Such an approach towards the project should reveal the meanings ascribed to the canal or its desired function.

⁶⁴ Van Der Vleuten et al., "Europe's System Builders: The Contested Shaping of Transnational Road, Electricity and Rail Networks."p.346

⁶⁵ Cornelis Disco, "From Sea to Shining Sea. Making Ends Meet on European Rivers" (paper presented at the TIE book workshop, Eindhoven University of Technology, April 2007).

⁶⁶ Judith Tyner, "Persuasive Cartography," *Journal of Geography* 1982, no. 81 (1982). For recent application of this method in history of technology see: Alexander Badenoch, "Myths of the European Network: Construction of Cohesion in Infrastructure Maps" (paper presented

Periodization and Sources

Generally I plan to divide my research into five periods. The periodisation I employ here is rather a standard one based on International Relations – the central parts of Europe were to a considerable extent shaped by the political factors, in a manner comparable in the European context only to the Balkans. The time demarcation of this research project follows the history of the DOE project, which was for the first time set into construction by the state authorities in 1901. I do not intend to look for the “pre conditions” in the 19th century, because all discussion about the DOE were cut off by the construction of the Vienna - Cracow railway link. The periodisation follows the moving center of the network of which the canal link was designed to form a part – from Vienna during the Empire, Prague in times of the European nations displaced by the Nazi Berlin, Soviet Moscow, and finally Brussels.

The Imperial Canal

Waterway standards in Europe at the turn of the 20th century were nothing but fragmented. The continent was divided into many isolated systems of specific river basins essentially corresponding to the areas of individual states – with important exceptions of the Rhein river and the Danube.

The D-O-E canal project has quite a long history, dating back to the beginnings of the 18th century. However, with the accession of steam engines and the ensuing boom of railways, the idea of the canal was largely abandoned. The development of railways led to a decline of navigation not only in Austria-Hungary. Indeed the importance of the north-south transport connection was confirmed when the first steam railway line of the monarchy (North Railway of Kaiser Ferdinand), built in the 1840s, ran along the River Morava from Vienna to Cracow.

In 1893, the state adopted a new policy toward waterways and, at the Ministry of Trade in Vienna, established a department for research and construction of canals. The department produced a complex plan of the future waterways network in the monarchy, including the DOE. Eight years later, in 1901, renewed Waterway Act was issued by the Austrian parliament. The Prague Chamber of Trade and Commerce demanded from the state the development of waterways (Vltava, Elbe, DOE) in Bohemia in exchange for the Czech share of the railway construction in the Alps. Czech deputies in cooperation with the Silesian ones succeeded and the new law was accepted. It included the outline of a future waterway system in the Monarchy and a plan for its construction. The act mandated the realization of the programme to begin in 1904 and finish 20 years later (the navigability of the Elbe was almost completed by the First World War). Funding was mainly from the Empire, only an eighth of the costs to be paid by the country of the site. The authority of the completed waterways was to be granted to the state. Any variation of the original programme (in technical design etc.) was allowed only in the form of a new act, and only after all committees of the concerned lands had their say. The water management of the proposed canals was secured by the regulation of all non-navigable rivers and water sources connected to the network. The Ministry of Trade was to carry out the Act on the principle of a single work management (each site separately), advised

by the board of professionals (engineers) and interested persons (chambers of commerce etc.)⁶⁷. Thus the Directorship for Construction of Waterways and the Waterway Advisory Board were established at the Ministry of Trade already in 1901 in Vienna. The branches of the directorship were later opened also in Prague (1903), Cracow (1905) and in Přerov (1907). The directorship had a technical and an administrative departments, which together were supposed to prepare and carry out the waterway construction. The Waterway Advisory Board (40 members: 20 appointed by countries, 20 by the empire) was the controlling body and was also allowed to propose independent projects related to construction and operation of the waterways. The specific features of the Imperial canal project were, among others, the national tensions between Germans and Czechs and the unresolved connection to the Baltic due to different standards proposed for Prussian waterways.⁶⁸

The Waterways Act plans fell rather short of the original expectations in the end, probably due to its politicized character – a compromise aimed at the realization of the Alps railways. In this sense, significantly, the Vienna government officially abandoned the waterway development program in 1911 when the railway project was already completed. Construction of waterways could continue only due to the political activity of mainly Czech and Moravian deputies, who managed to stop the governmental proposal from being accepted by the Parliament.⁶⁹

The projects carried out within the Waterways Act (several dams and locks were completed) used modern constructions, allowing operation even in the winter. Thus, the Waterways Act introduced also qualitative changes to the waterway engineering.

The Czechoslovak Canal

The First World War interrupted all the works and the consecutive breakup of the Danube Monarchy set up a completely new scene.

In the new republic, the development of waterways became a competence of the Ministry of Public Works, and the former Prague branch office of the Viennese Directorship for Construction of Waterways became the Directorship for Construction of Waterways. The Waterways Act program from 1901 was supposed to continue. Only in 1931 was Act n. 50/1931 passed, creating the state fund for making rivers navigable, for construction of ports and reservoirs, and for waterpower utilization. The new act also included construction for purposes of water-power utilization in terms of constant electrification of the country. An important change in comparison to the Waterways Act of 1901 was that the act of 1931 only treated “preparation works for artificial waterways”, i.e. preparation works of canals, but not for their realization. Thus, the DOE project was put aside, as its whole route was designed as an artificial canal along the Morava and Oder. These two rivers were commonly perceived as not navigable, due to their shallow water level.

At the end of the interwar period one significant project connected to the DOE was created. The Baťa company put into operation the Baťa Canal from Otrokovice to

⁶⁷ Ivan Jakubec, "Vodocestný Zákon a Jeho Realizace" (paper presented at the Boat-Cruise Conference - Waterwork in the Landscape, Malše river, 2006).

⁶⁸ Antonín Smrček, *Průplav Pardubice-Přerov-Krakov a Souvislost Jeho S Ostatními Průplavy Dunajskými* (Praha: nákl. vlast., 1904).

⁶⁹ Jakubec, "Vodocestný Zákon a Jeho Realizace".

Rohatec (along the Morava River). The 51 km long waterway was built in 1934–1938 as a part of the Ministry of Social Affairs project of “productive care for the unemployed”.⁷⁰ Attempts to include the complete route of the DOE under the new-dealish project, even in the frames of LoN, came in vain.⁷¹

In the Interwar period several organizations and individuals tried to promote closer cooperation among newly born Central European states. In the field of Navigation the activities aimed at economic unity met with an overwhelming response. Even before, societies such as *Mitteuropäischer Binnenschiffahrts-Verband* tried to develop a single central European wet network⁷². At the close of the First World War several books on this subject were published,⁷³ leading to closer cooperation of non-state actors in this area.⁷⁴ These activities were echoed in the Czechoslovak plans for canal constructions⁷⁵ and prevailed until the end of the Second World War.⁷⁶

Czechoslovakia was not a typical nation state, but rather an attempt to forge a Czechoslovak nation, consisting of Slovaks, Germans, Czechs, and several

⁷⁰ Pavel Čmelík and Ivo Ondračka, *Přírodní a technická památka Baťův kanál (Veselí nad Moravou: Agentura pro rozvoj turistiky na Baťově kanálu, 2003).*

⁷¹ The League of Nations did not taken initiative in canal building – the improvements of the Danube waterway were much higher on their agenda. Although the DOE project was included in the propositions prepared by Czechoslovakian authorities for the Mr. Hines' inspection of the Danube waterway, DOE was completely omitted from its final version. "České stanovisko k Dunajské plavbě - Podkladové materiály pro inspektora SN W.Hinese," (AMZV, IV. sekce, k. 1105, Společnost Národů - inspekce W.Hinese), Walker D. Hines, Brehon Burke Somervell, and League of Nations., *Rapport Relatif À La Navigation Sur Le Danube, Présenté À La Commission Consultative Et Technique Des Communications Et Du Transit De La Société Des Nations* (Lausanne: Imp. réunies s.a., 1925).- czech translation available in the same archival group in the AMZV as the propositions.

⁷² They followed the German concept and included Switzerland, Germany and Austro-Hungary and published their own journal. *Mitteuropäischer Binnenschiffahrts-Verband, Verbands-Schriften.* (1897).

⁷³ Georg Thilo, *Die zukünftige Stellung der Binnenschiffahrt in der Weltwirtschaft, Ihre Bedeutung für den Mitteleuropäischen Wirtschaftsbund* (Berlin: Gea-Verl., 1916), V. Scheller, *Der Anteil der österreichischen Schifffahrtskanäle am mitteleuropäischen Wasserstrassennetz : Vortrag geh. bei der Donau-Oder-Elbe-Kanal-Tagung in Breslau Am 22. März 1917* (Wien: s.n., 1917).

⁷⁴ Elemér Hantos, *Mitteleuropäische Wasserstrassenpolitik; Referate und Beschlüsse der Mitteleuropäischen Wasserstrassenkonferenz, Budapest, 11. Bis 13. Mai 1929* (Wien-Leipzig: W. Braumüller, 1929), *Gegenwartsfragen der Mitteleuropäischen Binnenschiffahrt Verhandlgn D. 1. Mitteleurop. Binnenschiffahrtstages, Stuttgart, 15.-17. Mai 1930*, *Verbandsschriften des Mitteleuropäischen Binnenschiffahrtsverbandes*, Berlin, Bd. 1 (Berlin: Selbstverl., 1930).

⁷⁵ Antonín Smrček, *Vorschläge in Bezug auf eine raschere Durchführung der Mitteleuropäischen Kanalprojekte : (Oder-Donau-Elbe, Rhein-Main-Donau, Donau-Weichsel)* (Berlin: W. Rothschild, 1930), Josef Bartovský, *Der Elbe-Donau-Oder-Kanal Im Wasserstrassennetze Mitteleuropas* (Prag: Společnost Dunajsko-oderského průplavu (Donau-Oderkanalgesellschaft), 1938).

⁷⁶ The titles for the plans for canalisation of the Middle Elbe from this period illustrate it clearly: *Die kanalisiertete Mittelbe im System der Mitteleuropäischen Wasserstrassen.II. Teil, Strecke Pardubitz-Jermer-Königinhof (Einschliesslich des Wassergebietes der Aupa, Mettau, Adler, Lautschna und Chrudimka)*, Buecherei der Zeitschrift *Schiffahrtswege Donau-Oder-Elbe* (Prag: Donau-Oder-Kanal Gesellschaft, 1941), *Die kanalisiertete Mittel-Elbe im System der Mitteleuropäischen Wasserstraßen. I. Teil, Strecke Melnik-Pardubitz (Einschließlich des Wassergebietes der Iser, Zidlina und Doubrava)*, Buecherei der Zeitschrift *Schiffahrtswege Donau-Oder-Elbe* (Prag: Donau-Oder-Kanal Gesellschaft, 1941).

minorities. At the end of the 1930s the DOE became a part of this „nation-building“ process as a symbolic „coast“ of the nation. This attitude was shortly revived after the war, but the communist takeover marked an end to such initiatives.

The Nazi Canal

At the onset of the Second World war the German-Czech-Slovak Protocol (Slovakia formed an autonomous and later independent state after the Munich Agreement) ⁷⁷, signed on November 1938, revived the DOE once again (Elbe branch included). The Committee for Construction and Operation of the Danube–Oder Canal was established and immediately started with preparatory works. According to the new project the construction should have been finished in 6 years. On December 8, 1939 near Kędzierzyn in the contemporary Poland, actual construction started without having the plans finished. Simultaneously, the works commenced even at the other end of the waterway at Vienna. In 1943 all works were suspended for obvious reasons. The project was later finished and expressed the Nazi vision of Europe – the route followed the German settlement in Moravia.⁷⁸

The Communist Canal

After the war, within the new borderlines (Silesia became part of Poland – Oder), the D-O-E canal construction was widely expected to be only a matter of time. The Polish-Czechoslovak committee on transport started with preparatory works. The economic council (GSHR) asked industrial groups and chambers to fill out a questionnaire to find out if the possibility of the canal construction still remained (estimated usage)⁷⁹. But the communist takeover marked an end of these activities. Under the new regime the state institutions for waterways were disassembled, and the private efforts and activities were suppressed. By the government decree no. 206 from 1952, all preparation works on the canal were terminated again⁸⁰. The State Water Management Plan from 1953 became the only document, which actually acknowledged the idea of the D-O-E canal in the 1950s and 1960s. Although it specified principles of the complex utilization of water resources, it remained a mere outline plan with no concrete terms or deadlines.

At the end of 1950s, the Standing commission of transport of the Council for Mutual Economic Assistance (COMECON), launched a project on the complex utilization of the Danube from Devín to its Black Sea estuary with regard to energetic, navigation, and irrigation issues. In terms of the project, Czechoslovakia was assigned to investigate the navigation connectivity of other countries of the COMECON to the Danube. Within this work, in 1959, the national water management authority, Hydroprojekt Brno, produced “A Study on the Navigation Connection of the Danube

⁷⁷ "Německo-česko-slovenský protokol o stavbě Odersko-dunajského průplavu Z 19.11. 1938," (AMZV, IV. sekce, k. 170, o.5. Doprava vodní).

⁷⁸ Grobelný, "K jednáním o stavbu Odersko-dunajského průplavu po Mnichovském diktátu."

⁷⁹ NAČR, Fond 862 Ministerstvo Dopravy I., box 814

⁸⁰ In a secret report on the canal the secretary of the GSHR, Mr. Fuxa labeled the DOE canal project as a „capitalistic“ enterprise. Contrary to the view of its promoters, Dr.J.Fuxa saw the canal as merely a connection between two waterway networks, not two seas. J. Fuxa, "Zpráva o kanálu Dunaj Odra," (NAČR, Fond 862 Ministerstvo Dopravy I., box 814, 1949).

with the Oder, Vistula and the Canals of GDR". When completed, the study was again set aside.⁸¹

Seven years later, again inspired by COMECON, Hydroprojekt Praha developed a study "The Danube–Oder–Elbe Canal Interconnection – the General Solution 1968" [Průplavní spojení Dunaj–Odra–Labe – generální řešení 1968]. "The General Solution" was supposed to re-evaluate the project of the Danube, Oder and Elbe interconnection, including the problems of the border rivers between Czechoslovakia and Poland. The General Solution treated the canal interconnection as a complex navigation and water management project, which aimed at the realization of an efficient waterway as much as at a solution of water management problems. In the same atmosphere the government passed the decree no. 169/1971, which assigned the competent authorities to protect the territory of the future canal as defined in the General Solution.⁸² After the 1971, the DOE project was once again put aside.

Such an attitude stood in a sharp contrast to the view of the authorities on the other side of the iron curtain. The United Nations Economic Commission for Europe in Geneva in 1959 set up a program of creating a unified waterway network of Europe. To succeed, they were ready to make especially two arrangements: the integration of the hitherto completely separated systems of the West and Southeast European waterways, and the standardization of the basic parameters of the unified network. The international classification of European waterways was to become the instrument of such unification; it was first drawn in 1961, to be amended in 1992. According to UNECE, the final integration of the network was to be achieved through the realization of three navigation connections: the waterway Rhine – Main – Danube, the waterway Danube – Oder – Elbe, and the waterway Oder – Vistula – Dnieper. The UNECE Group of Rapporteurs for the DOE waterway began its work concurrently in 1964. The results were fully completed and submitted only in 1981.⁸³

The European canal

After the collapse of the communist regime the DOE project was included in the *European Agreement on Main Inland Waterways of International Importance* (AGN).⁸⁴ Prepared by an expert working group appointed by UNECE, it was enacted in Geneva on January 19, 1996. The agreement pronounces a coordinated plan of development and construction of the European inland waterway network of international importance, i.e. the network of waterway category E. By the ratification of the AGN agreement the signatory parties (including Czech Republic) confirmed

⁸¹ Jakubec, "Vodcestný zákon a jeho realizace".

⁸² Kubec, Podzimek, and Nepil, *Křižovatka tří moří : Vodní koridor Dunaj-Odra-Labe = Meeting of Three Seas : Water Corridor Danube-Oder-Elbe*.

⁸³ Political controversies included the position of the GDR, which was outside the UN till 1973. Regardless, it had to be involved in the project. United Nations. Economic Commission for Europe. Working Party on Inland Water Transport., *Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels : Resolution No. 61* (New York ; Geneva: United Nations).

⁸⁴ United Nations Economic Commission for Europe Inland Transport Committee, *European Agreement on Main Inland Waterways of International Importance (Agn) Done at Geneva on 19 January 1996 = Accord européen sur les grandes voies navigables d'importance internationale (AGN) en date, à Genève, du 19 janvier 1996 = Evropeiskoe soglasenie o vazhneishikh vnutrennikh vodnykh putiakh mezhdunarodnogo znacheniiia (SMVP) soversheno v Zheneve 19 ianvaria 1996 goda* (Geneva: UN, 1997).

their intention to realize the respective waterways within their programmes. The reservation of the DOE route was also included into the Accession Treaty⁸⁵. In this period, the canal project was in a way fully Europeanized.

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⁸⁵ "Treaty Concerning the Accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic to the European Union", (2003), http://www.europarl.europa.eu/enlargement_new/treaty/default_en.htm.

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