



**Infrastructures, Globalisation, and European Integration**  
**A Historiographical and Conceptual Exploration**

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## **Infrastructures, Globalisation, and European Integration A Historiographical and Conceptual Exploration**

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### *Preamble/disclaimer*

*This paper is work in progress. We have not yet read all the necessary literature for developing our argument. This paper presents preliminary thinking. We hope it suffices for engaging in a discussion at the Posthumus conference*

### **1. Introduction**

The question we have put central in our research is: how transnational infrastructures – the material links between nation-states that took form through railroad, highway, energy, and telecommunications networks- have shaped the European integration process?<sup>1</sup> This process has been shaped by internal dynamics, yet it is also deeply influenced by and contributed heavily to the larger integrating process of globalisation. From the start European integration was arguably as much an attempt to secure peace after decades of bloody civil war as a response to the emergence of new superpowers, notably the USA and USSR. This response however, became significant in hastening globalisation's coming. As Manuel Castells put it: "European integration is, at the same time, a reaction to the process of globalization and its most advanced expression" (Castells, 1998, 318). This paper should be read as a historiographical and conceptual exploration into ways of thinking about the relationships between transnational infrastructure development on the one hand, and European integration and globalisation on the other hand.

When looking at the present map of transport, communication and energy infrastructures across the globe, it immediately becomes clear that they are not contained within European Union borders. The Netherlands, for example has national transport, communication and energy networks that are highly integrated into global infrastructural networks. Non-Union members in Europe such as Switzerland, but also the USA, and in fact many countries of the world are as much integrated as any country in the set of global operating transnational networks. One might thus argue that infrastructures signal first and foremost the deep embedding of Europe into the world. There is no closed European infrastructural network. European Union borders seem to be largely irrelevant to infrastructures and the flows of goods, people, information, capital using them. The only borders that seem to count are national borders since national infrastructure systems have been built up and are still very visible. This leads to the question whether it makes sense to focus on Europe integration at all when studying

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<sup>1</sup> This is the NWO supported project 'Transnational Infrastructures and the Rise of Contemporary Europe' awarded under the VICI scheme to Johan Schot in december 2002. For more information and the work of various collaborators see [www.tie-project.nl](http://www.tie-project.nl). First results are published in Johan Schot, Thomas J. Misa, and Ruth Oldenziel, 'Tensions of Europe: The Role of Technology in the Making of Europe', special issue of *History and Technology* 21 (March 2005), see especially introduction - 'Inventing Europe: Technology and the Hidden Integration of Europe' by Thomas J. Misa and Johan Schot and 'Networking Europe' by Erik van der Vleuten and Arne Kaijser

these infrastructures, and if we do so, how to conceptualize the European in relation to the national and global?

Infrastructures have been regarded as vital for integration processes of nation-states, and larger political units and societies since the eighteenth century when French administrators initiated a reorganization of national space through road and water construction, and Saint Simonians emphasized the role of networks in the shaping of universal associations. Michel Chevalier, a French minister argued that 'railways have more relation to the religious spirit than we think. Never has there existed an instrument of such power to link together scattered peoples' (cited in Mattelart, 1996, 103; for an overview see also Van der Vleuten, 2004). These ideas about the importance of infrastructures for creating integration have also been used by proponents of European integration. In the interwar period the League of Nations included the building of infrastructures in its plans for a democratic and peaceful Europe, and just after the Second World War the United Nations Economic Committee for Europe highlighted the importance of creating road, railroad and electricity networks for forging integration. Also the Treaty of Rome (1957) assigned high priority to the issue of transport infrastructure (Stevens, 1993), and during the 1980s the European Community made considerable efforts to construct a 'European audiovisual space' (Morley and Robins, 1995). By the end of the 1980s, the European Commission developed plans bringing a new push to European transport, energy and telecommunication networks through their Trans-European Networks policy, established to encourage the building of the internal market, and a European society. After the fall of the Berlin Wall this included ambitious plan for improving infrastructural connections between Western and Eastern Europe. A € 220 billion wish list of projects has been developed, including new motorways from Gdansk to Vienna, from Budapest to Constanta (at the Black Sea), and from Sofia to Thessaloniki (Economist, 22 november 2003).

Although the official bodies of the EU, its predecessors and also other actors such as the United Nation Economic Commission for Europe have put effort in infrastructural integration of Europe, this topic has not been addressed in the European integration literature. It has mainly focused on political and economic integration and only recently also cultural integration. The situation is very different for globalisation. Here the academic literature emphasises the importance of infrastructural integration. It is often positioned as the most important enabling factor for the emergence of globalisation. A typical way of introducing the issues involved reads as follows:

'type an e-mail message, and you realize that it can be sent to a friend in India as to one across the street. In computer time they are equally and simultaneously our immediate neighbours...Turn on the TV and see coverage of a soccer game being viewed by literally billions of others around the globe' (Mazlish and Iriye, 2005, 2)

In this paper we will use the globalisation literature to enrich views on European integration, and in particular the process of mutual shaping of the construction and use of transnational infrastructures and the making of Europe. Although at the end of the twentieth century for many people Europe represents the space occupied by the EU, we will, among others argue that viewing through the lens of globalisation at the European integration process makes visible that a history of European integration should go beyond the history of building EU institutions and drafting of treaties as well as

leave behind the focus on the relationships between these institutions and identities and the nation-state. Instead, we argue for a *transnational* history of Europe which focusses on the political, cultural and economic transactions, imaginations, and networks crossing borders. Such a history does not put central the 'official' European integration process. We also argue that for such a history a study of the construction and use of transnational infrastructures might be a good starting point since they happened to form arena's for an engagement with Europe of many people

## **2. European integration**

In his seminal work *The European Rescue of the Nation-State*, Alan Milward (1992) argues that the European integration process has to be understood as a desperate attempt of rebuilding Europe's nation-states after decades of civil war. Without it western European nation-states could not have offered their citizens the same sense of security and prosperity. In such a view, the history of European Integration is a history of building new relationships among nation-states, with the aim of making each of them stronger through this process. Hence, for a long time, historians have treated European integration as an episode in international relations. Textbooks on the topic focus primarily on the passage of treaties, and the formation of EU institutions to implement them (see f.e. Fulbrook, 2001). This treatment is based on a view that from the seventeenth century onward the consolidating process of individual nation-states has also been a process of interstate formation (Giddens, 1995; Tilly, 1990). States claimed sovereignty within its own borders, and also accepted the same rights for other states. This led to a European society of states which was articulated by a new conception of international law, often referred to as the 'Westphalian model (after the peace treaties of Westphalia of 1648, signed after the Thirty Years War).

European state building has not only been studied by historians but also by political scientist. In fact, Milward's analysis should be read as a response to these studies. In particular early political scientists' analysis of the integration process interpreted European integration as a process of transfer of political power to a higher level, some kind of a Federal Union of European countries. European integration was defined by one of its first and most influential theorists, Ernst B. Haas as the process 'whereby political actors in several distinct national settings are persuaded to shift their loyalties, expectations, and political activities toward a new centre, whose institutions process or demand jurisdiction over the pre-existing national states' (Haas, reprint 2004 (first published in 1958, 16.)

This idea of the rise of a new kind of state, has been abandoned in later political science studies. It has been argued, in line with Milward, that the history of European integration shows mainly the pursuit of national interests through a process of intergovernmental bargaining among actors keenly sensitive to their national interests (for an overview see Wiener and Diez, 2004). In the last decade, this consensus about the importance of nation-states has been challenged again. It has been pointed out that European Union's institutions and rules, although created by sovereign member states, penetrate deeply into national affairs and have led to a series of changes within the nation-states. They had to adapt and became involved in a coordinating process. This does not necessarily involves the erosion of the powers of the nation-state, however, but rather leads to a process of continuous

interaction and linkages between national and European levels (see Cowles, Caporosa and Risse, 2001). This process points at the emergence of a new distribution of governing power, leading to a system of multi-governance through local, regional, national and international actors, and include state and non-state actors. In this view the EU is but one level of a newly emerging governance system. It is not so much an interstate-bargain or a new nation-state writ large but a network-state network-state (see Castells) in which the EU level allows policy coordination and harmonization among nation-states. The accomplished nature and depth of this coordination differs strongly per sector, which invites comparative analysis, and puts the competition for political power among a range of actors at the centre of the analysis.

The definition of Ernst Haas of the European integration makes clear that he assumes that the process would not only lead to the development of a new *superstate*, but also to a new *supernation*, or in other words a new European identity (defined as a sense of belonging to Europe). This was seen as essential because it would lead to a demise of nationalism, the perceived main cause of two civil wars in Europe. Haas projected that at first common European identities would extend only to professional experts who shared technical languages and a commitment to specific functional endeavors such as energy, transport, communication. However with time these new identities would spill over to broader sectors of society and make mobilisation for war based on exclusionary nationalist appeals more difficult. Again this idea has been heavily criticised by historians, in particular within nationalism studies. For example Anthony Smith argued:

' Compared with this vivid and tangible, if fictional, national family, the European 'family of cultures' appears pale and skeletal. Like a shell, in which the nations, regions and *ethnies*, of Europe can take shelter, the European project affords a framework for working out problems and securing benefits for the peoples of Europe, but it appears to constitute no deep bond, no living force, no community of faith' (1995, 140).

We might also refer to results of European Values Study of 2000 which shows that only 5% of EU citizens considers themselves to be first and foremost European (Halman, Lujkx and van Zundert 2005, 14.). Recent studies by psychologist and political scientist challenge this very negative evaluation about the possibilities of the emergence of a European identity of historians of nationalism such as Smith (Herrmann, Risse and Brewer, 2005). The starting point for these studies is the assumption that people can have multiple identities that do not necessarily conflict. Analyses of survey data (conducted in the ninetieth of the twenty century') and social psychological experiments show that many people who strongly identify with their nation state also feel a sense of belonging to Europe. Only within specific social contexts these identities might conflict, for example journalists operating in Brussels might feel they have to take sides. The real cleavage in mass opinion is between those perceiving themselves attached to their nation only and those who identify with their nation and Europe. We might conclude from this that willingness to grant the EU authority and legitimation does not require a prioritisation of Europe over the nation, it suffices if some identification with Europe is present. Historians such as Smith conclude too easily that a European identity has no future because the national identities are so strong. Finally there is also evidence that national identities have been Europeanised, that is various meanings of Europe have been mobilised in the process of building

nation-states. For example, the German identity after the Second World has integrated the idea of Europe to overcome the country's nationalist and militarist past. National and European identities have thus been blended (Malmberg and Stråth, 2002); Marcussen et al., 1999).

Until now, we have discussed two dimensions of integration: political and cultural integration. In these two areas the success of integration is contested and remains to be seen. For many historians the integration process is first and foremost an economic process, and reflects the fact that nation-state in Europe recognize that their national economies need a common market in a globalisation world, defined by the emergence of global trade and flows of capital. They conclude that the European integration process led to the creation of a common market by reducing internal tariffs and creating a common external tariff, and a set of institutions to make this market work (Gillingham, 2003). Here globalisation is mainly perceived as an external threat, and the attempts to create a common market are presented as the logical answer. It makes European nation-states able to compete, and to close the technology gap with the USA, and later on Japan and others, which became visible just after the Second World War (Ross, 1998).

We can summarize the argument until now as follows: European integration is mainly discussed and theorized for three dimensions: economic integration, political integration and cultural integration. It is still contested which dimension is prominent and how to interpret these forms of integration. It is also clear that infrastructural integration is not discussed and perceived as an important dimension of the integration process. The exceptions, not yet discussed, are to be found in the work of the so called 'transactionalists' such as Karl W. Deutsch (1953) who saw integration coming about through increased communication and interaction across borders, and the work of Stone Sweets and Sandholz (1998) who view the development of the EU as a product various forms of transnational activity (trade, investment, networks and associations). These have induced a demand for EU-rules and policies leading to the institutionalisation of supranational governance. Their work is rather marginal in European integration studies, however. This shows in the non-presence of their work in overview studies of European integration studies (see Wiener and Diez, 2004; also George and Bache, 2001). We do not want to discuss their work in any detail because their emphasis on various forms of transnational activity does not lead them to incorporate globalisation –or infrastructures- in their work, as if transnational activities stop at European borders. As globalisation studies show, transnational activities and thus also European integration processes are part of global process (Albrow, 1998; Axtmann, 1998; Rumford, 2002). It is to these global processes we now turn.

### ***3. Globalisation and European integration***

Many introductions to globalisation start out with pointing at the lack of a precise definition of the globalisation concept. They also come to the conclusion, however, that while there is no easy and uncontested definition of globalisation, it is possible to identify basic features present in almost all discussions. This is the widening, deepening and speeding up of worldwide interconnectedness, leading to a compression of time and space. Many local interactions have become embedded in global

networks, and consequently local activities are shaped by forces occurring at other parts of the world. Some add that not only has the world become a single space, the consciousness of this development has also increased significantly (for overviews see Held et al., 1999; Beck, 2000; Schuurman, 2001). The globalisation literature is growing fast, economic, political as well as cultural issues are explored. For a discussion of European integration, a central topic is whether globalisation will lead to a radical new world order and the disappearance of the nation-state. This topic is often discussed in relation to a periodization of globalisation (for the following see Held et al., 1999, in particular their chapter 1). The argument advanced by hyperglobalists is that nation-states are hollowed out since the identity of people, the power of governing and ruling people and the opportunities for earning profits is more and more derived from participation in global networks. These hyperglobalists typically locate globalisation as a process which started in the 1950s or 1970s, connected with the rise of new information and communication technologies such as television, computer and eventually internet. They see globalisation as a breaking point in modernisation, a process which is so much connected to the rise of the nation-state. Sceptics have argued that contemporary globalisation is exaggerated and underestimates the enduring power of nation-states to design and regulate global activities. In addition, they have pointed out that globalisation, typically they refer to forms of economic globalisation, already emerged in the latter part of the nineteenth century, a period in which the importance of nation-states was on the rise.

In response a third –coined as transformationalist- position has emerged, which, on the one hand also sees globalisation as a long term process which started centuries ago, but in the second part of the nineteenth century but much earlier. Globalisation is not a primarily a phenomenon of the modern age, but a process with a very long history as historical studies of world systems and civilizational interaction have shown. Yet at the same time the unprecedented character of new developments which began in the middle decades of the nineteenth century is stressed. Until that point, interactions occurred between basically autonomous regions, each with its own historical path. Distance remained crucial and were only overcome by specialized mediators. This changed dramatically in the latter part of the nineteenth century enabling by new communication (telegraph and later telephone and radio) and transportation (railroad, steamship) technologies. A new pattern of intensive interaction emerged, within Europa, Asia, Africa and the Americas en between these continents (called aptly 'thick globalisation' by Held et al., 1999), and also a new awareness was born of the rise of a global world. It is for this reason that O'Rourke and Williamson argued that: "by 1914 there was hardly a village or town anywhere on the globe whose prices were not influenced by distant foreign markets, whose infrastructures were not financed by foreign capital, whose engineering, manufacturing, and even business skills were not imported from abroad, of whose labour market were not influenced....". Geyer and Bright (1995) emphasize that this new interaction pattern was not only caused by new imperialist interventions from European nation-states, it was not just an expansion of the existing European system, but a coincidence of various strategies of renewal that became synchronized. Eventually this made it possible for a new European imperialism to exploit the self-improving strategies of many other regions and create a European dominated global world. In this way the European-Atlantic axis became the 'West' and historians and others begun to narrate its status as leader and integrator of the world.

The 'rest' would become more like the 'West'. In this transformationalist position nation-states are not hollowed out due to globalisation. On the contrary, states flourished because they were successfully able to manage the linkages between local activities and an integrating world. They became *the* locality for appropriating the advantages and disadvantages of a globalising world. The rise of the modern state led to the territorialization of politics, identity formation and of social relationships. In premodern Europe, political authority and sovereignty was shared between a wide variety of secular and religious institutions, such as abbots, bishops, kings, landlords, cities and guilds. Due to the rise of the modern nation-state this multi-level system collapsed, and the policing, monitoring and disciplining of the population within strictly demarcated boundaries defined by nation-states became an important feature of modernisation (Anderson, 1996; Wilson and Van der Dussen, 1993). Yet at the same time global processes continued to bypass national politics and challenged the capacity of states to organize trade, identity formation and power. The circulation of capital, goods, people and information had no inherent capacity to respect border and territories organized by the state, and people became integrated in multiple transnational networks and communities such as multinational cooperations, international organizations, transnational social movements, communities of experts, and diaspora communities. Their power to govern, influence trade and identity formation was juxtaposed to the power of nation states. Nations-states tried to control trade and the rise of transnational networks and communities, and with considerable success, but the subverting power must not be underestimated. The power of nations-states to control globalisation has thus been contested from the start, not only by transnational actors, but also by subnational actors, for example cities. In the transformationalist account, there is thus a continuing struggle between nation-states and transnational actors although up to the latter part of the twentieth century, nation-states were successful in controlling the activities of transnational actors and related circulation of capital, goods, people and information. This changed due to the coming available of a new set of information and communication technologies such as internet and mobile phones. This enhanced dramatically the meaning of circulation processes and the power of transnational networks.

What can we learn from this account of globalisation for a study of European integration, and in particular from the transformationalist position?

European integration can be seen as a centre (or junction) in the globalisation process where a whole array of transnational activities, such as trade, migration, tourism, standard-setting etc. have become concentrated. Europeanization and globalisation are mixed up, and hard to separate. Transnational activities have gravitated within European networks, but are simultaneously inserted into and traversed by a multiplicity of other regional and global networks. As a consequence European transnational actors and networks are a major contributing factor to further globalisation. Here, we also might point out that the origins of the integration process can best be seen in the light of globalisation, e.g. in particular the attempts by the USA to promote European integration as an element in setting up a globalized trading regime, which also included the Bretton Wood system, the World Bank and the International Monetary Fund.

A consequence of this view on European integration is that the debate should be less focussed on what kind of state the EU represents, and should also focus more on non-state actors. They have also been trying to develop European transnational activities often in cooperation with state-actors. So we argue that European integration consists of a range of multiple, overlapping, intersecting and conflicting networks of interaction. In a way the very notion of integration is misleading because the process of integration consists of not very well aligned and coordinated activities, which makes that Europeanization does not lead to one integrated level, but to the emergence of many different, fragmented and overlapping networks and diffuse power centres. Each of them serve as expressions of the aspiration to carve out a new European space. Here we also want to point out that transnational activities are not so much determined by territorially defined barriers. This is not to argue that territorial boundaries have lost their significance, but they are not so central to the identity of these activities as is the case for the activities of the nation-state.

If European integration is so much part of globalisation, then one might as well argue that it has a longer history. Just like globalisation, European integration process took new forms and became intensified from the middle of the nineteenth century onwards. Economic historians have shown, for example, that by the end of the nineteenth century 'Europe was so integrated in most important aspects of its economic life that it could be referred to as the major part of an international economy dealing in agricultural and manufacturing products, and experience movements of substantial capital and labour across borders.' (Craig and Fisher, 1997, 272; see also Pollard, 1974 for a similar argument).

From this discussion we conclude the following: in our research we will not view the European integration process as a process leading to some kind of new state, however defined. Instead we perceive it as a series of transnational activities which lead to the development of new series of overlapping networks and diffuse power centres. In this development Europe is generated whenever actors define networks and communities as European one. Europe is thus not treated as a fixed geographical but rather as an actor category. In history the notion of Europe is often used in an unflexive way, as if it is clear what Europe is. Handbooks on European history rarely reflect on the assumption implicit in the work 'Europe' (for an exception see Davies, 1996), and often focus on the histories of nation-states, and as a consequence producing a European history which is little more than a sum of national histories. We would like to conceptualize Europe as an actor category. Using the now classical concept introduced by Anderson (1983) we can investigate in our research how Europe has been imagined by actors and thus has become an imagined community. This should include research on the way all kind of actors signify, reproduce, communicate, explore and integrate this imagined community into their daily lives and by doing so maintain Europeanness, and create out of imagined communities living communities (Schot, 2004).

#### **4. Globalisation, European integration and infrastructure**

While infrastructures are hardly mentioned in the European integration literature<sup>2</sup>, they are often put central in the globalisation literature. As observed above, globalisation is often seen as a shrinking world due to communication and transport technologies. However, while the accompanying economic, political and cultural processes are much debated, the presumed condition of space-time compression is rarely contested nor investigated. It is simply presented as a matter of fact. This is so whether it is situated in the 16<sup>th</sup>, 19<sup>th</sup>, or 20<sup>th</sup> century. Wallerstein (1974, 349) noted that 'the size of a world economy is a function of the state of technology, and in particular of the possibilities of transport and communication within its bounds'. Geyer and Bright (1995, 1047) found that the reordering of the world from the mid 19<sup>th</sup> century involved (European) 'new capabilities to synchronize global time and coordinate interactions *within* the world (original emphasis)', a development 'sustained by new technologies, especially the telegraph and, later on, radio and telephones'. For Castells (1996-98), late 20<sup>th</sup> century technologies of real time, planetary communication shape a 'space of flows' and 'timeless time' affecting a variety of economic, social and cultural processes (Castells, 1996). So we want to conclude that it might be a productive move to focus on infrastructures in the study of European integration.

Two additional observations are in place. First, in the globalisation literature new periods often are connected with different set of infrastructures. Globalisation in the 17<sup>th</sup> and 18<sup>th</sup> century has been connected with new shipping and waterway infrastructures. The 19<sup>th</sup> century added telegraphy and railroads, and in the first seven decades of the twentieth century radio, air travel, and the prospect of television occupied center stage. In the words of one author, 'The human voice is now able to encircle the globe in the twinkling of an eye...The evolution of the radio machine .. seems to be one of the very biggest happenings in our civilization...the world is practically becoming a very small place, and this process of virtually reducing the physical dimensions of our planet is being accelerated by the evolution of three machines – the aeroplane, the radio machine and the television machine' (cited in Pemberton, 2002, 328.). In the 1960s television was seen as breaking down space and time barriers and producing a global community, MacLuhan's term for which - the 'global village' – gained wide usage. The fascination of the recent globalisation literature with internet is thus the inheritor of a long tradition of putting infrastructure central in globalisation.

Our second observation concerns *the way* in which infrastructural integration is cast. It is presented as a pivotal background factor in the globalisation process. Sometimes it is cast as a cause of change, but more often as an opportunity, available out of heaven it seems. Where infrastructures come from, and why they were developed at that particular time is rarely analysed. If infrastructural integration is addressed in any depth, it is as an indicator of globalisation: 'mapping the extensity, intensity, velocity and impact propensity of networks of global interconnectedness necessarily involves mapping the infrastructures which facilitate or carry global flows, networks and relations' (Held et al.,

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<sup>2</sup> Only incidentally it is suggested that integration 'is not a set of treaties or organisational frameworks but the degree to which politics, economies and societies of nation states were emeshed, or integrated, at a more fundamental level'such as transport infrastructures (Griffiths 1990: ix)

1999, 19). Such mapping, however, remains rare (for an attempt see Hugill, 1993). So we cannot find a methods for analysing the role of infrastructures in the globalisation literature. For this we need to turn to history of technology.

Our conclusion from these observations is is that since infrastructures seem so central for globalisation, and following our discussion above, thus for European integration, we take this lead, go beyond the assumption of infrastructures as background factors of global and European integration, and investigate the actual construction and use of infrastructures. Our hypothesis is that the development of infrastructures is an important arena where a wide range of actors discussed and negotiated the nature, depth and direction of European integration, and by doing so national and global European integration as well. From a first exploration it is clear that indeed the building of transnational infrastructures was used to realize specific imaginings of Europe (see Van der Vleuten and Kaijser, to be published; see also various working documents at [www.tie-project.nl](http://www.tie-project.nl)). We provide a very brief illustration, at the end of this historiographical and conceptual paper.

After the Second World War, The United Nations established an Economic Committee for Europe (UNECE, 1947) explicitly to forge ties between *all* countries of Europe. In the words of the first UNECE executive secretary, Gunnar Myrdal, the stake was “strengthening the links between countries on both sides of the divide, which must be preserved and strengthened if we want to build a sounder Europe and a peaceful world.” (Myrdal, 1968, 619) Among others the UNECE focussed on promoting transnational motor roads, railway, and electricity systems. The UNECE aim was tying Europe together by material networks. It preferred to work with non-state partners such as the International Telecommunications Union (ITU) and the International Road Federation (IRF). The UNECE vision of Integrating Europe did not work out at that moment in time, since other transnational networks were more successful in realizing in, what Myrdall defined as, subregional visions of European integration (that is the formation of the European Economic Community). This outcome heavily influenced further development of Europe and of infrastructure, since it led to the development of two very different Europes, and a identification of Europe with member states of the EU. To such an extent that at the end of the twentieth century joining the EU was experienced by Central and Eastern European countries as a return to Europe.

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