

Conflict in Cooperation – Some Introductory Words

Johan Schot and Philip Scranton, the editors, oppose technological co-operation and circulation, on the one hand, and war, on the other, as two different ways to narrate the history of contemporary Europe in their introduction to the six-volume series *Making Europe. Technologies and Transformation, 1850-2000*.

We offer a European history viewed through the lens of technology rather than war. We believe that a European history with technology at its core can help to understand the continuities that have endured despite the rupture of wars.¹

While we agree generally that less visible cross-border connections have long been overlooked in historiography, we think it is timely to go even a step further and write a history of Europe where technological co-operation and conflict are thought of together, not in opposition.

From the Crimean war to the Cold War, technologies that so many engineers, industrialists and commentators presented as new ways to bind peoples together across borders proved to be decisive tools in military confrontations. The subtitle of the volume devoted to infrastructures in the *Making Europe* series rightly thematizes ‘war’ in between ‘economy’ and ‘nature’.² Railways transported soldiers, guns, animals and food for the regiments, communication lines forwarded commands and intelligence, and energy networks fed war factories. It seems common sense to conclude that wars resulted in destruction and disintegration.³ Yet, the capacity to connect and co-ordinate these means became key among allied countries. Co-operative and integrative dynamics appeared to serve the needs of the “logistics of war.”⁴ The experience was to be formative for the peacetime reordering of

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- 1 Schot, Johan / Scranton, Philip: “Making Europe: An Introduction to the Series”, in: Oldenziel, Ruth / Hard, Mikael (eds.): *Consumers, Tinkerers, Rebels. The People who Shaped Europe*, Basingstoke 2013, p. ix – xv, here p. ix.
 - 2 Högselius, Per / Kaijser, Arne / van der Vleuten, Erik: *Europe’s Infrastructure Transition. Economy, War, Nature*, Basingstoke 2016.
 - 3 Kleinschmidt, Christian: “Review: Infrastructure, Networks, (Large) Technical Systems: The ‘Hidden Integration’ of Europe”, in: *Contemporary European History* 19 (2010), pp. 275 – 284.
 - 4 Högselius / Kaijser / van der Vleuten: *Europe’s Infrastructure Transition*, p. 183 – 228.

transnational relations. It is well-known that people in charge of co-ordinating French, British, Italian and American maritime transport capacities during the First World War become subsequently deeply involved in the League of Nations and also in the first European communities after the Second World War – Jean Monnet embodied such a trajectory.⁵ That said, we know far less about the situation from the side of those who eventually lost the wars, the Second World War in particular. What happened to infrastructural co-ordination in continental Europe under German domination? Which lines of continuity can be drawn and which marks of rupture can be underlined during the war, from 1939 to 1945, and the pre- and post-war periods?

A Historiographical Blind Spot

Transnational co-operation in the area of infrastructures during the Second World War can, at the moment, be described as a research desideratum. It appears counter-intuitive to suggest that the time of the Second World War would be one of continuity and perhaps even a deepening and widening of European co-operation within any area. Thus, the inter-war and the after-war time have been researched, while the war time is generally viewed as a caesura. This applies to the different strands of research that this publication touches upon, such as infrastructure history, the history of European integration and Franco-German relations.

The impact of technical co-operation on European integration since the 19th century had long been overlooked but has been the focus of several publications in recent years. Thus, what Misa and Schot in 2005 called the “hidden integration of Europe”⁶ is today no longer hidden – with the exception of the Second World War, which might well be characterised as the era of the most hidden integration. Co-operation was characterised by the strong role of the experts in different fields of infrastructure, such as postal services, telecommunications, rail and navigation. These experts (often engineers or lawyers) came in large numbers from the respectively responsible national administrations, built cross-border epistemic communities and de-

5 Kaiser, Wolfram / Schot, Johan: *Writing the Rules for Europe: Experts, Cartels, and International Organisations*, London 2016, pp. 63 – 66.

6 Misa, Thomas / Schot, Johan: “Inventing Europe: Technology and the Hidden Integration of Europe”, in: *History and Technology* 21 (2005), S. 1 – 19.

veloped a self-image that Lagendijk and Schot labelled “technocratic internationalism”⁷: At the heart of this concept was the idea that international infrastructure governance was best done by experts who decided rationally upon standards and regulations. Political interference (or what experts considered as political interference) in these negotiations should be avoided as far as possible. Behind this idea of the technocratic governance of international infrastructure issues, stood the more political ideal that peace could only be upheld if peoples from different countries were connected.

In May and June 1914, telephone engineers and railway experts could be optimistic. The former had a convention signed enabling direct telephone conversations between Paris and Vienna through German territory, while the latter met in Bern at a ‘European Timetable Conference’. A few weeks later though, the outbreak of a four-year war proved that international co-ordination on so-called administrative or technical issues had created bonds that were not strong enough to prevent deadly conflicts within Europe. War interrupted connections between fighting blocs. During the war and its immediate aftermath, experts on the French side struggled hard to link up Europe again, this time bypassing or marginalising Germany. German telephone engineers, for instance, were not invited to the preliminary meeting of the “Comité technique préliminaire pour la téléphonie à grande distance en Europe”⁸ in Paris in 1923. The Weimar Republic, on the contrary, fought hard and managed to restore the central place of Germany on the European scene through infrastructure. German engineers were invited to the second founding conference on European telephony in 1924. Remarkably, the organisation bears the official Franco-German denomination ‘Comité consultatif international (for) Fernschreiben’.

All in all, while many observers and politicians argued for more political co-operation to maintain durable peace with the League of Nations, experts and technicians found a new reason to believe in technocratic internationalism in the experience of the conflict and this new international environment. Against the background of high political instability during the inter-war years, technocracy was seen as:

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- 7 Schot, Johan / Lagendijk, Vincent: “Technocratic Internationalism in the Interwar Years. Building Europe on Motorways and Electricity Networks”, in: *Journal of Modern European History* 6 (2008), pp. 196 – 217.
- 8 Henrich-Franke, Christian / Laborie, Léonard: “Technology Taking over Diplomacy? The ‘Comité consultatif international (for) Fernschreiben’ (CCIF) and its Relationship to the ITU in the Early History of Telephone Standardization, 1923–1947”, in: Balbi, Gabriele / Fickers, Andreas (eds.): *History of the International Telecommunication Union*, Berlin 2019, pp. 193 – 216.

The way of business leaders, engineers, politicians, intellectuals and their respective organisations and parties to create a new societal order for nation-states in Europe plagued by huge problems of instability, social conflict, unemployment and economic depression.⁹

While this self-image was not propagated officially, research in the fields of postal services and telecommunications shows that the experts had, in fact, a high level of autonomy from national political and diplomatic actors.¹⁰ Therefore, Ambrosius and Henrich-Franke coined the term “epistemic expert regulation”¹¹ to describe how international standards were set within infrastructures. These standards were necessary to make the transnational circulation of people, goods and services possible.

Given the long-term fragilization of Europe after the First World War, some individuals and communities refocused their internationalism explicitly on Europe, developing what Schipper and Schot called “infrastructural Europeanism.”¹² During the inter-war period, this vision – building Europe on infrastructures – clashed with or at least tried to go beyond all ‘border builders’ that tried, first and foremost, to build nations on infrastructures. “International-system builders” worked for more fluid and denser transnational connections, but with different visions of Europe – while some were pan-European, others focused on central Europe or Latin countries.¹³ Grand plans flourished to fight under-employment and integrate Europe, at the same time, through electric, automobile or airmail networks, but all failed. National and imperial approaches prevailed. How did the Second World War reshuffle the deck in this respect?

Due to the fact that experts usually enjoyed long-lasting careers within the administrations, the organisations that they built turned out to be crisis-proof: both the Universal Postal Union and the International Telegraph (later on Telecommunication) Union resumed their work rapidly after the First and the Second World War. Co-operating on an international level for

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- 9 Legendijk, Vincent / Schot, Johan: “Technocratic Internationalism in the Interwar Years: Building Europe on Motorways and Electricity Networks”, in: *Journal of Modern European History* 6 (2008), p. 196 –217, here p. 197.
 - 10 Laborie, Léonard: *L’Europe mise en réseaux. La France et la coopération internationale dans les postes et les télécommunications (années 1850-années 1950)*, Bruxelles 2011.
 - 11 Ambrosius, Gerold / Henrich-Franke, Christian: *Integration of Infrastructures in Europe in Historical Comparison*, New York 2016.
 - 12 Schipper, Frank / Schot, Johan: “Infrastructural Europeanism, or the Project of Building Europe on Infrastructures: An Introduction”, in: *History and Technology* 27 (2011), pp. 245 – 264.
 - 13 Högselius / Kaijser/ van der Vleuten: *Europe’s Infrastructure*, p. 40.

decades also led to solidified institutions, such as international congresses and study groups that were held regularly, and forged the personal and professional relationships between the experts.¹⁴ Against this background, it seems reasonable to assume that the way of working together before and after the war did not change fundamentally during the war and the circles of agents remained extant as well.

While we often understand European integration as the process starting with the European Coal and Steel Community in 1952, the research on processes of infrastructure integration shows that these developments have to be put into context with the internationalist practices in the 19th century¹⁵ as well as of the inter-war time.¹⁶ Additionally, studies around the Nazi concepts of a “New Europe” underline that the term was conceptually rather vague,¹⁷ which gave room for individual initiatives. This tendency was enhanced by the support for Italian-German projects at the beginning of Axis co-operation.¹⁸ However, this Italian-German co-operation was often conflictual because both sides saw themselves as superior to the other.¹⁹ The ideas to fill the term ‘New Europe’ were partially based on inter-war ideas of Europe, both on spatial elements (*Lebensraum*²⁰) and organisational ones

14 Laborie: L’Europe mise en réseaux.

15 Henrich-Franke, Christian / Hiepel, Claudia / Türk, Henning / Thiemeyer, Guido (Hg.): *Grenzüberschreitende institutionalisierte Zusammenarbeit von der Antike bis in die Gegenwart. Strukturen und Prozesse*, Baden-Baden 2019; Thiemeyer, Guido: *Europäische Integration*, Köln 2010.

16 Schirman, Sylvain: *Quel ordre européen? De Versailles à la chute du IIIe Reich*, Paris 2006.

17 Mazower, Mark: *Hitler’s Empire. Nazi Rule in Occupied Europe*, London 2008.

18 Fehlhaber, Nils: *Netzwerke der ‚Achse Berlin-Rom‘. Die Zusammenarbeit faschistischer und nationalsozialistischer Führungseliten 1933 – 1943*, Köln 2019.

19 Fioravanzo, Monica: “Italian Fascism from a Transnational Perspective: The Debate on the New European Order (1930 – 1945)”, in: Bauerkämper, Arnd / Rosoliński-Liebe, Grzegorz (eds.): *Fascism without Borders. Transnational Connections and Cooperation between Movements and Regimes in Europe from 1918 to 1945*, New York 2017, pp. 243 – 263.

20 Concept of the ‘living space’ in the East which provided grounds for the war in the East of Europe where this living space was supposed to be established for German settlers.

(*Mitteleuropa*,²¹ International Paneuropean Movement²²),²³ Elevating issues to a European level was seen as a tool to benefit national purposes – not only from the Italian and the German side but also from other Fascists in occupied countries. They supported (partially) the ideas for a united Europe of fascist states under Axis supremacy – similar to a European federal state – because this concept would have protected their nation from communist forces and provide at least some independence from dominating Nazi Germany or fascist Italy.²⁴ Thus, despite, or maybe due to, the fact that the “New Europe” was a mere propaganda term with no actual decided plan for the after-war Europe,²⁵ concrete projects were developed, for example, in the areas of culture,²⁶ social policy,²⁷ infrastructures²⁸ and youth.²⁹ In addition, groups were founded both in Italy and Germany whose aim it was specifically to spread fascist ideas among international organisations as well as make plans regarding which of those organisations should be upheld, replaced or terminated.³⁰

Technocratic internationalism, with its focus on the political independence of experts and the different ideas of a fascist “New Europe”, might seem, at first glance, contradictory, but as different scholars have pointed out, the two internationalisms could also be seen as two sides of the same

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- 21 “Middle Europe”: a concept that foresaw a deeper integration within central Europe with a strong German dominance.
 - 22 Founded in 1923 under the leadership of Richard Nikolaus Coudenhove-Kalergi, the movement envisioned a unified European state.
 - 23 Kletzin, Birgit: *Europa aus Rasse und Raum. Die nationalsozialistische Idee der Neuen Ordnung*, Münster 2000.
 - 24 Grunert, Robert: *Der Europagedanke westeuropäischer faschistischer Bewegungen 1940 – 1945*, Schöningh 2012.
 - 25 Bauer, Raimund: *The Construction of a National Socialist Europe During the Second World War: How the New Order Took Shape*, London 2020; Pohl, Dieter / Dafinger, Johannes (eds.): *A New Nationalist Europe Under Hitler: Concepts of Europe and Transnational Networks in the National Socialist Sphere of Influence, 1933 – 1945*, Routledge 2019.
 - 26 Martin, Benjamin G.: *The Nazi-fascist New Order for European Culture*. Cambridge, Massachusetts 2016.
 - 27 Kott, Sandrine / Patel, Kiran Klaus (eds.): *Nazism across Borders. The Social Policies of the Third Reich and Their Global Appeal*, Oxford 2018.
 - 28 Henrich-Franke, Christian / Laborie, Léonard: “European Union by and for Communication Networks: Continuities and Discontinuities during the Second World War”, in: *Comparativ* 28 (2018), pp. 82 – 100.
 - 29 Fehlhaber, Nils: *Netzwerke der „Achse Berlin-Rom“*, Köln 2019.
 - 30 Heren, Madeleine: “Fascist Internationalism”, in: Sluga, Glenda / Clavin, Patricia (eds.): *Internationalisms. A Twentieth-century History*, Cambridge, United Kingdom, New York 2017, pp. 191 – 212

coin.³¹ Van der Vleuten and Kaijser underline that National Socialists combined the idea of unifying Europe by building transnational infrastructure networks, that was on the rise in the 1930s, with the idea of a “New Europe.”³² Kaiser and Schot emphasise that technocrats supported the authoritarian regimes partially due to ideological overlaps and because they ensured faster processes.³³ All in all, the easy transit between different regimes by the experts “highlighted the ambivalence and pitfalls of the experts’ preference for depoliticising policy-making.”³⁴ The ‘Comité consultatif international (for) Fernschreiben’ was founded in the inter-war, reflected the Franco-German relations at that time, was realigned within the European Postal and Telecommunications Union (EPTU) and adapted to the post-war international relations in 1947. Thus, international co-operation in the area of infrastructures was not generally hindered by fascist regimes, but might even have been intensified. Understanding how actors, institutions, practices and knowledge travelled from the inter-war to the post-war through the war time is generally key for those who want to seize “the concrete nuts and bolts of cooperation and integration in Europe as much neglected carriers of continuity”. In this book, we uncover what was mostly “covered up” at the time – not only continuities between war time and post-war co-operation, but also, already previously, continuities between pre-war and war time co-operation.³⁵ There are, thus, important links between the European integration projects in the Second World War and the post-war period. However, this does not mean, as Kaiser and Patel have rightly emphasised, that European integration was built on the debates and concepts surrounding the “New Europe”. What is decisive is that, in addition to the continuities, the discontinuities in terms of structure, content and personnel are also worked out and analysed.

31 Herf, Jeffrey: *Reactionary Modernism. Technology, Culture, and Politics in Weimar and the Third Reich*, Cambridge, Massachusetts 1984.

32 van der Vleuten, Erik / Kaijser, Arne: *Networking Europe. Transnational Infrastructures and the Shaping of Europe. 1850 – 2000*, Sagamore Beach, Massachusetts 2006.

33 Kaiser, Wolfram / Patel, Kiran: “Continuity and Change in European Cooperation during the Twentieth Century”, in: *Contemporary European History* 27 (2018), p. 165 – 182.

34 Kaiser / Schot: *Writing the Rules*, p. 74.

35 “When analysing such continuities at the level of knowledge, it is productive to distinguish between ‘celebrated’ and ‘covered up’ continuities. In some cases, actors and organisations invoked connections to legitimise their ends. In other cases continuities existed that actors were loath to discuss in public. This holds particularly true for continuities from wartime cooperation into the post-war era.” Kaiser / Patel: *Continuity and Change*.

Regarding the history of Franco-German relations, the research interest has delved into questions of co-operation, collaboration, “accommodation” (accommodation) and resistance during the occupation of France by Nazi Germany³⁶. When discussing the co-operation between the German and the French postal and telecommunications administration during World War II on the issue of the EPTU, Laborie focuses on the question whether the decisions taken could be a form of (passive) resistance or reluctance to collaborate by some high civil servants.³⁷ While the narrative of German-French relations during the Second World War is generally often one underlining the caesura the war meant in the relations – two hereditary enemies who started a reconciliation process after the war necessary for European integration and the European Union we know today – studies have also shown the impact that personal contacts during the war had on German-French reconciliation, for example, when it comes to the establishment of twin cities.³⁸

Aim and Guiding Questions

This book, which is one result of the research project EUROPTT between the CNRS (French National Centre for Scientific Research) and the universities of Sorbonne, Düsseldorf and Siegen, has the aim of tackling the historiographical blind spot and filling part of the research desideratum regarding transnational co-operation in infrastructures during the Second World War.³⁹ By analysing the EPTU, founded in Vienna in 1942, and placing it in the broader framework of co-operation and conflict in infrastructure sectors in general, it sheds light on the years often simply seen as a break between the inter-war and post-war time. It examines how an international organisation led by the Axis powers functioned during a total war and looks at how inter-war processes shaped the war time co-operation. The end of the Second World War did not mean a complete change in international

36 Martens, Stefan / Vaisse, Maurice (Hg.): *Frankreich und Deutschland im Krieg (November 1942 – Herbst 1944): Okkupation, Kollaboration, Résistance*, Paris 2000; Aglan, Ayla: *La France à l'envers: La guerre de Vichy (1940-1945)*, Paris 2020.

37 Laborie: *L'Europe mise en réseaux*.

38 Defrance, Corine u.a. (Hg.): *Wege der Verständigung zwischen Deutschen und Franzosen nach 1945*, Tübingen 2010.

39 Europtt (ANR- 16-FRAL-0013-01) was an ANR/DFG funded research project on ‘Infrastructures, infrastructural cooperation and the continuity of European Integration: The European Postal and Telecommunication Union (1942 – 1944)’.

technocratic co-operation either, which is why the research project also attempts to discuss continuities and discontinuities in the postal services and telecommunications sector up until the 1960s. The EPTU was, on the one hand, part of the long-term development paths of technical co-operation and, on the other hand, a component of the political concepts of Europe. It reflects the long-term transformation of intergovernmental relations in Europe.

Against this background, this volume aims to supplement the common perspective on confrontation and collaboration during the Second World War with the dimensions of co-operation and integration in infrastructure sectors. In addition to the field of postal services and telecommunications, it also examines the extent to which these new dimensions can be found in other infrastructure sectors. It does not primarily address the Nazis' diverse infrastructural plans for the future of Europe. It focuses instead on the actual practices for maintaining and developing cross-border connections in continental Europe among Axis powers, occupied territories and neutral countries. Remarkably, since The Hague convention of 1907, neutral countries also defined themselves in terms of their ability to keep their telecommunication infrastructure connected with those of the belligerents.⁴⁰ By analysing co-operation in the field of infrastructures, this volume aims to provide a new element for a more precise understanding of infrastructure and European integration history as a whole.

Questions that all contributions raise both directly and indirectly are: What role did political, social, technical, economic, societal and similar reasons play in co-operation, non-co-operation and integration? What contents were discussed? Was there a German or Italian dominance? Did the Axis powers, Germany and Italy, co-operate? What role did war and foreign policy considerations play? Was it possible to separate technical co-operation from political goals?

This volume places a particular focus on Franco-German relations because of the key role these had for the history of Europe. The interplay of co-operation, collaboration and competition between the two states had proven to be a decisive engine of European integration since the 19th century. Hence the following questions: How did the tension between *de facto* co-operation/collaboration and *de iure* non-co-operation/confrontation develop? What role did the specific Franco-German constellation (Occupying forces, Vichy government) play in co-operation? What was the importance

40 Druelle-Korn, Clotilde: "Miserable Souls Who Lived without Infamy and without Paradise. Les neutres pendant la Grande Guerre", in: *Les Cahiers Sirice* 26 (2021), pp. 73 – 83.

of the French public administration, and what roles did the Vichy government and the German military administration play in France? Where did the boundary between co-operation and collaboration lie? What continuities and discontinuities existed in Franco-German co-operation before and after the war? Did German leaders try to contest the traditional French leadership role on the international stage?

Structure and Contributions to this Volume

This volume is structured along the lines of two main parts: one on ‘postal services and telecommunications’ and the other on ‘inland transport’. Both parts contain a mix of chapters on institutional aspects of ‘co-operation’ within the different infrastructure sectors and shorter contributions which highlight particular aspects of infrastructural ‘co-operation’, such as actors and representation.

a) War Time and Postal Telecommunications

The first part of the volume has two focus areas. The first is on the EPTU itself as a newly found organisation during war time. It consists of two chapters on postal services (Sabrina Proschmann) and telecommunications (Valentine Aldebert). Both pay tribute to the particular wartime role of France and Germany, however, from different angles. Regarding postal services, it is asked whether the EPTU was a creation to promote German hegemony or if the pressure of path dependency and technocratic traditions led to an organisation without (geo-)political influence. Regarding telecommunications, the focus is on the role of the administration in occupied France, which was officially not part of the EPTU but at the insistence of Germany, participated in the organisation’s work from 1943. Both chapters show that unambiguous assignments are not possible. Instead, there were signs of hegemony and path dependency in both cases, however, the EPTU hardly had a lasting effect on working routines. These chapters also show that the EPTU, as an international organisation, was not set once and for all. Though brief in time due to the fate of the war, it evolved along its own dynamics. The focus on organisations is supplemented by a contribution on the Swiss-based International Broadcasting Union (Christian Henrich-Franke), which was founded in the inter-war period to co-ordinate broadcasting and the use

of broadcasting frequencies. The Union tried to continue ‘objective operations’ during war time under the protection of Swiss neutrality. However, it is shown that the Union did not succeed in maintaining a Pan-European approach to broadcasting co-operation due to war tensions, the importance of radio propaganda and the monitoring of radio transmissions. The inability to remain objective and neutral during the war greatly discredited the Union when it tried to restart its activities in June 1945.

The second focus is on key actors which, in one way or another, shaped or were shaped by the EPTU. The actors portrayed show how war time co-operation was embedded into long continuities of individual participation in international organisations and committees, such as the Universal Postal Union or the International Telecommunication Union. The three chapters on Giuseppe Gneme (Valentine Aldebert), Pierre Marzin (Pascal Griset) and Friedrich Risch/Helmut Bornemann (Sabrina Proschmann/Christian Henrich-Franke) discuss the personal motivations and mechanisms behind continuities and discontinuities in European postal and telecommunication co-operation.

The contributions on institutions and actors are supplemented by one on the representation of EPTU by postage stamps (Sabrina Proschmann). The stamps that were emitted by four postal administrations across Europe were quite different in style and motif. Remarkably, the EPTU failed to issue one common stamp for Europe due to financial or technical problems and the potentially lacking will to do so by almost all sides.

b) Comparison with Inland Transport Infrastructures

The second part of the volume offers a view on co-operation and non-co-operation in inland transport infrastructures. It starts with a contribution on the impact of the war on inland navigation on the Rhine (Guido Thiemeyer). The Central Commission for Navigation on the Rhine became inactive after Germany had invaded all riparian states and put the entire Rhine region under German control. German authorities were put into a position to unilaterally set new standards. However, the contribution demonstrates that the rules and standards of the Rhine commission were hardly changed by the Germans. This allowed for a number of continuities in the sector. A similar picture can be drawn for the canalisation of the Moselle as part of an improvement of inland navigation in the Rhine region (Martial Libera). Libera’s contribution uses a diachronic approach to focus on German war time projects in order to explore continuities to earlier projects as well as to

the realisation of the Moselle's canalisation in the 1960s. Nazi policy took its place in the *longue durée* of Moselle improvement projects, however, during the war it was a project of domination instead of co-operation among neighbouring countries. Central European rivers were less intensely used and integrated as transnational waterways than the Rhine (Jiří Janáč). Although the issues were the same when it came to the governance and regulations, the transnational cartelization of companies operating transport, and the material standardisation and connection through international canals. The rise of Germany as a leading power in the region already in 1938 signed the end of an international liberal regime born out of the First World War and the League of Nations, and the return to a form of governance closer to the one in place before 1919. The new regulatory framework combined with the strengthening of cartels served the war economy needs of Germany. Traffic on the Danube, the Oder and the Elbe indeed peaked during the war. Unsurprisingly, this revived projects to integrate further Central European rivers through river development and new connecting waterways. Czechoslovak experts were associated and actively supported this agenda. Neither the governance regime favouring riparian states and bilateral agreements, the taming of competition through deep cartelization nor the experts' support of large public works projects disappeared after Germany collapsed and was replaced by USSR as the dominant power in the region.

That the continued application of inter-war agreements by German authorities could even strengthen international co-ordination is discussed concerning the railways (Leonard Laborie). International pre-war railway agreements, such as the International Wagon Regulation about the international use of goods wagons in Europe, which were hardly altered, made cross-border traffic possible throughout the war. Wartime experiences not only kept the International Railway Union, which had formally suspended its activities, untouched but more than that fostered the coming into being of advanced projects, such as the European Freight Wagon Pool. On the other hand, the German-centred, century-old Verein Mitteleuropischer Eisenbahnverwaltungen (Association of Central European Railway Administrations) did not survive the war. From this point of view, the end of the war, not the war itself marked a rupture. Regarding motorways the developments were completely different. There was no active co-operation in the road sector and the inter-war congresses on European highways did not meet again during the war (Mathieu Flonneau). Motorways were a hotly debated topic at a national level even in war time. Motorways spread across Europe between 1935 and 1955 and with them, the European models for road traffic and techniques which were often inspired by German and Italian

models. The war years made a decisive contribution to the development of the technical object that is the ‘motorway’, whose national, social, political and geopolitical impact should, under no circumstances, be obscured.

Advances of existing projects of co-operation and other institutional reforms were often as a consequence of war time experiences of key figures, such as the Dutch banker Karel van der Mandele (Martial Libera). Van der Mandele was the director of the Rotterdam Chamber of Commerce and Industry during the war, which was a challenging position at the interface of the city, the occupiers and the interest groups along the Rhine. Being shaped by the wartime experiences, van der Mandele stood up for functional reforms after the war. He had drawn the lesson that Europe had to be built from the bottom up by responsive economic actors that could produce results quickly. Therefore, he became the driving force behind the founding of the Rhine Union Chamber of Commerce.

Claire Aslangul-Rallo emphasises the key role of infrastructure projects in the sociotechnical imaginary and propaganda of German authorities in order to get support for their view of a “New Europe” (under German leadership). She zooms in on the reports on the actual or desired building of transnational infrastructure networks which were presented as ‘European’ achievements within the bimonthly magazine *Signal*. The magazine, which was launched in French in April 1940 and spread widely across Europe, served to legitimise the war effort and the occupation of Europe by painting the picture of a ‘European Economic Community’ that would drive exchange, prosperity and unity. It willingly placed the developments it portrayed in the continuity of a well-established international co-operation, re-interpreted as the fruit and prodrome of German technical and organisational leadership. By a singular cognitive inversion, some articles in the magazine gave the idea that the war was the world before 1939, and that political unity would allow this technical integration dynamic to finally give its full measure.

In sum, the book shows that the maintenance and development of transnational infrastructures were compatible with different visions and discourses supported by very diverse actors: the economic exploitation of the continent in favour of the Reich; the unity of a reborn Europe enlightened by the German torch; the pursuit of a practice of international co-operation, guided by the utility of standardization, for more efficient networks for the public; and the insertion of dominated countries into a semblance of an egalitarian multilateral structure.

