COST 340/17-B
Transport history in Belgium:
An annotated bibliographical overview on literature
by Michael-W. Serruys

This bibliographical overview shows the results of the Belgian transport history, which is nowadays experiencing, without any doubt, a ‘hausse’. Especially the history of the railroads and the history of transportation on water (maritime and inland shipping) are well described, qualitatively, but also quantitatively, from the 18th century onwards. The history of aviation has recently known a peak due to the bankruptcy of the Belgian national air carrier SABENA, but it has been qualitative until now. Nevertheless a few gaps remain in the historical transportation research in Belgium, and particularly with respect of the modern road transports. Very little has indeed been written on this subject after World War II, in comparison with the 18th century. For this period a lot of quantification has been done. It is also very interesting to note the abundance of books and articles about the infrastructures (canals, locks, harbours, railways, bridges, airports, etc.) in Belgian transport history.

The bibliography below is certainly not exhaustive, it only gives the newest books and articles, or the most interesting regarding transport history in Belgium. There is indeed quite a large number of unpublished or more difficult to find historical studies regarding certain aspects of the transport in Belgium in the academic and larger libraries. It’s here as well that one can find a large amount of regional studies. In this bibliography we have tried to give the most important, and also very important for an European public, the most easy to find but. We have also tried to mention, as many as possible, books or articles in English. If a book/article was obtainable in several languages, we have always tried to give priority to the more known languages, that’s in the first place English, followed by French and finally in Dutch. In such case the lesser known language or languages are mentioned between brackets.

Books, articles, bibliographies broadly conceptualised and of general interest

General
Bart Van der Herten and Erwin Horlings depart from the thesis that transportation was an important impetus for the Industrial revolution. In their article they first pay attention to the evolution of the different transportation networks (railroads, vicinal or local railroads, roads, inland and maritime shipping and aviation), after which they focus on the volume and the amount of production in that specific area of transportation. By analysing these data the authors want to deliver a first insight into the evolution of transport in the economical evolution of Belgium.

Davies writes a very extensive history of the Belgian vicinal, a secondary rail network that covered at its peak over 5000 kilometres of track throughout the country. The vicinal railways were created in 1885 to provide a cheap local transportation network. In his book Davies describes with attention for detail all of the 198 vicinal railroad lines and he also gives a lot of technical details on the rolling stock (steam- and electric engines, maintenance-, freight- and passenger vehicles). Statistics with data concerning transportation numbers of freight volume are not available in this study.


L’Histoire des chemins de fer belges used to be the major book on railways in Belgium, but it has been superseded by book edited by Bart Van der Herten. Still Delmelle gives a good idea of what it is all about, albeit his work is vulgarized.

Van der Herten, B., Van Meerten, M., Verbeurgt, G. et al. Le temps du train. 175 ans de chemins de fer. 75e anniversaire de la SNCB. Louvain, 2001, 476 [also in Dutch].

Without doubt the most recent, complete and documented book about railways in Belgium, conceived with a huge amount of photographs, drawings and maps. It covers the time from the first railroad in England and the global evolution of railroads in Europe. But of course the main interest is that of the Belgian railways, which were the first on the continent (1835). The authors cover the evolution of the Belgian railroad network, the history of the diverse private-owned railroad companies, the creation of the new SNCB, the economical, social and cultural aspects in this company and of course the rolling stock and the stations throughout the years. In the last chapter the future policy of the 21st century of the SNCB or STAR21, which encompasses high-speed trains, improved cargo connection between Antwerp and Germany and a rapid urban transit system, is worked out.

Water


The maritime history of the Low countries in four volumes has been written by a group of Dutch and Belgian historians. All the aspects of the maritime history of the Netherlands and Belgium are discussed, like shipbuilding, fisheries, navy, but also trade, trading routes, harbours, etc. Well documented and fully illustrated it gives the best survey from prehistorical navigation to the shipping
in the seventies. Due to the more important role of maritime activities in the Netherlands, it tends to give more attention to that country.


The history of Antwerp in relation to the Scheldt River was written by a group of historians from the University of Antwerp, each writing a different chapter. Albeit the first chapter treats the Roman port, the centre of gravity of their studies can be situated on the great infrastructure works and projects of the 19th and 20th century. Special attention is given to the hard diplomatic negotiations between Belgium and the Netherlands for the construction of the very important Rhine-Scheldt Canal linking Antwerp to Rotterdam and the Rhine River. This collective book also pays a lot of attention to positioning the harbour of Antwerp at the end of the 20th century.


The authors are all reknown historians from the city of Ghent. This city is situated on the junction of the river Scheldt and the river Lys and has always been, especially in the medieval period, an important harbour, both for inland and maritime shipping. Since the digging of the Ghent-Terneuzen canal in 1827, Ghent has always been one of Belgiums major seaports. It is the history of the harbour of Ghent, from its Roman and Medieval past to the international and global economy of the late 20th century, that the authors tell. In the appendix a lot of data is included.


A book of general interest about the history of navigation in Belgium. It delivers a good overview of all the aspects of navigation since the Romans till 1980. As such it is an interesting book when a special subject is not covered, like for instance the Ostend-Dover line in the second halve of the 20th century. Delmelle also pays a lot of attention on the canals, the downward slope of Ronquières, the river- and seaports. This can be useful as the smaller harbours, like Nieuwpoort or Blankenberge are also included and described.


The centennial anniversary of the Compagnie Maritime Belge was celebrated with the publication of a well-documented book written by the maritime historians Greta Devos and Guy Elewaut. The authors explain how Belgium had to connect itself at the end of the 19th century with the Congo. First the CMB was a anglo-german consortium, but steadily it grew more and more
Belgian and it really became the Belgian shipping company by excellence. Although the CMB had lines with most continents, it was especially the monopolistic shipping lines with the Congo, which were profitable. Nevertheless the history of the CMB was also stigmatized with different setbacks, like the crisis in the thirties, the Second World War, the collapse of the Congo trade after its independance and the shipping crisis in the second half of the 20th century. The answer to the last setback was modernization of the fleet and the finding of new markets (bulk cargo, ro/ro and containers), shiphandling in Antwerp and of course reorganization. Today the CMB is the most important Belgian maritime company and an important global player, albeit its ships are now navigating under the Luxembourg flag.

This book, written by several academical authors, gives an extensive survey from the first settlement on the banks of the river Scheldt to the world port of today. Well documented it is probably the most complete general history of the port of Antwerp. It is equally well provided with photographs, drawings, charts and maps.

Altough it is not up to date anymore, it is the only bibliography, which gives a survey on all litterature concerning Belgian maritime and inland shipping, including transportation aspects.

Not only Antwerp and Ghent are important seaports, also the old city of Bruges has an intense relation with the sea. In this book the authors revive the old medieval days when Bruges was one of the most important harbours in Europe. After this glorious period Bruges was forgotten for a few centuries, till the end of the 19th century when a new harbour, Zeebrugge, was built on the edge of the sea. Today Zeebrugge is the second largest harbour of Belgium. Well documentes the authors give a very interesting survey of the history of the maritime transport infrastructure in Bruges.

Aviation
This book celebrates 100 years of aviation. It consists merely of photographs of nearly all the airplanes/helicopters, which have flown in Belgium. As such this book gives a good view of the Belgian ‘flying stock’.

In this book, highly documented with photographs, the author shows the history of the three consecutive Brussels airports: Haren (1915-1945), Melsbroek (1945-1958), the present one Zaventem (since 1958) with its new terminals and also the future expansions. Van Humbeek also includes the former military base, the present day cargo airport of Brucargo in his study. Although the book was written for a general public, interested in aviation, it gives altogether an excellent overview of the history of the largest and the most important airport of Belgium.

Guy Vantemsche is professor in contemporary history at the University of Brussels. After the bankruptcy of national air carrier SABENA he wanted to give a complete account of its history and not only of her last days. Vantemsche explains how SABENA was born and how she soon became involved with the Belgian state and politics. One of the main purposes of this involvement was the important ‘imperial’ connection between the motherland with the African colony. In the aftermath SABENA became a government undertaking which constantly needed financing, because of her mediocre performances. Hampered by the independance of the Congo, the oil crises, unlucky alliances SABENA survived till the 21st century thanks to help from the government, but new regulations finally confronted her with the reality and hardship of modern economical competition, which this time led to her bankruptcy. In his book Vantemsche shows some statistics, but these rarely involve passenger or freight numbers. The main focus of this study is the writing of a political history of the former airline carrier SABENA.

Transport history before the Belgian revolution of 1830

Road
A small article, which encompasses the toll system on the roads before the Belgian revolution of 1830. It examines this system throughout the different
political regimes, which have governed Belgium in its history. The centre of gravity can be situated in the 18th century and the first part of the 19th century during the Austrian, French and Dutch regime.


In his dissertation Bruno Blondé delivers a survey of the urban network of the old Duchy of Brabant (the nowadays provinces of Antwerp, Flemish-Brabant, Walloon Brabant and Brussels) in the second half of the 18th century. To ascertain the importance of the different Brabantine cities Blondé analysed the incomes of the toll barriers on the different canals and turnpikes leading to and from those cities. The result of his research is a magnificent survey of the Brabantine transportation network and of the Brabantine urban economy.

Blondé, B. and Deceulaer, H. *The Antwerp port and its hinterland. Port traffic, urban economies and government policies (17th–18th centuries).* To be published.

Although this book has not been published yet, it looks very promising when we see the names of the authors. It is probably going to be very helpful for all transport historians interested in 18th century hinterland traffic.


Before World War II the famous Belgian professor Léopold Génicot was asked by the Bulletin de l’Institut de Recherches économiques to write about the origins and the evolution of the Belgian road network. His article, which was published in three parts, just before and just after the Second World War, is still very important for the Belgian transport history. The article starts with the infrastructure situation in the 16th century, after which Génicot continues about the technical, economical, political and financial aspects of road building during the Austrian, French and Dutch periods of the Belgian history. The evolution and the road building can be followed by a set of very precise maps. A few years after Génicots article the Bulletin de l’Institut de Recherches économiques asked Georges Placq to continue his work for the period from the Belgian revolution till the Second World War.
Barges used to be an important mode of transportation in flat countries like the Netherlands and parts of Belgium. One of the most important ‘barge line’ in the Southern Netherlands and early Belgium was the one on the Ghent-Bruges canal. In their book the authors describe the digging of the canal and the coming of the barge line, but also the emergence of a ‘barge economy’ around the canal. This barge economy consisted of taverns, which in turn often became stops for coaches. The Ghent-Bruges barge disappeared with the coming of the railroad connecting these two cities.


Between 1815 and 1830 nowadays Belgium was part of the Netherlands. William I, the Dutch king, wanted to connect the mercantile North with the industrial South. To solve the transportation problem between the different parts of his country he engaged in an extensive canal building policy. Although most of the canals are now situated in the Netherlands, some of the canals built in the South by William I belong to the most important in Belgium. In his dissertation the Dutch historian Filarski emphasizes on the importance on the problems freight transportation imposes on the engineering, the financing and the construction of the canals.


This article fits in the policy of the Bulletin de l’Institut de Recherches économique to publish the evolution of different transportation networks. Although quite old, Urbains article is still very relevant when it comes to the making of the Belgian canal network. The author examines the different canal projects, the realized projects, the evolution of the main canals and the philosophy behind the canal-building policy, as well as the importance of waterways for agriculture and industry in the Southern Netherlands for the period between 1550 and the French revolution.
Transport history between the Belgian revolution and World War I (1830-1914/1918)

Road


The article of Georges Placq continues where the one of Léopold Génicot stopped, that is during the Belgian revolution of 1830. Like Génicot, Placq provides detailed attention on the further expansion of the Belgian road system, but also on factors like policy, financing, the competition with the railways and of course the appearance of the automobile. Detailed maps and appendix include good information on the expansion and the financing of the Belgian road system.


In a second article Georges Placq uses the information on the development of the Belgian road network to deal with the amount of traffic on these roads between 1830 and 1940. The data used is taken from the entries of the toll barriers (till 1866), and after that his information comes from a series of censuses, which were regularly held. These results can be found in a number of tables and maps, which are showing the traffic fluxes. Placq also examines his results with the evolution of the rail traffic.


The author delivers a study of the coach system in the middle of the 19th century, which was created by the Dutch king William I. The Belgians subsequently continued this coach network and service after their independence. By doing research on the timetables of the coaches, Rombauts manages to research on the complementary role of the coaches with the railways throughout Belgium. The author also gives ample data, like traffic, on the roads in the province of Antwerp in the middle of the 19th century.

Rail


This article is the first in a series of articles about the different transportation networks in Belgium published in the thirties. In spite of its age Aviakan’s article gives an excellent overview of the evolution of the Belgian railroad network.
between 1835, the year of the construction of the railroad between Brussels and Mechelen, and 1935. A lot of attention is given to the growth of the network itself, but also the overall growth in traffic, passengers and freight, is being analysed. The author also emphasizes the competition between the railroads and other means of transportation, like inland shipping and from 1900 the automobile. Aviakian also gives some details of the local secondary railways or the so-called chemins de fer vicinaux.


A unique history about the Belgian industrial entrepreneur Simon Philippart and his Compagnie des Chemins de fer des Bassins houillers du Hainaut. In her dissertation Ginette Kurgan-Van Hentenrijck shows the rise of a private railroad company in 1865, which became the second largest in Belgium around 1870, but also its downfall a few years later. This study also demonstrates the entanglement of the financial, industrial and coal mining sectors of the mid 19th century Belgian economy.


Michel Laffut of the University of Liège is one of the first historians in Belgium who wants to deliver an economical account of the Belgian railways during the Industrial revolution. In his article Laffut deals with the geography of railroad construction, the organization of the different private-owned railway companies, the organization of state-owned railway companies, the feedback of the railways on the industry, the output of ton-kilometres of freight and the passenger kilometres. He compares his results with other means of transportation and tries to explain the fierce competition, which existed between railroads on one side and road- and canal traffic on the other side. The article of Laffut is published by Patrick O’Brien book, which gives an excellent survey of the role of railways in other West-European countries.


Influenced by the statistic and quantitative methods of economical historians like Fogel and Fishlow, Michel Laffut wants to do a similar research on the Belgian railways between 1830 and 1913. His study encompasses two volumes, but the second has not yet been published. The first volume deals with the Belgian situation around 1830 and its prerequisites to start building railroads and import the Industrial revolution from England. It also includes the different
political, economical and financial choices and the decisions, which had to be taken by Belgian railroads. Finally Laffut presents the different economic actors, being the state and the private-owned railroad companies. Having presented all the casual facts Laffut is ready to give a statistic and quantitative description/study of the importance of the Belgian railways for the Belgian economy in the second volume, which as told before has still to be published.

The famous Belgian historian Jean Stengers deals in this article with the crucial communication line between Antwerp and the river Rhine in the aftermath of the Belgian revolution. Stengers describes the early beginnings of the Belgian transport and communication politics, trying to solve the biggest communication problem in Belgium, that is to link the Antwerp harbour with the river Meuse and the river Rhine.

In this article railway specialists Bart Van der Herten and Michelangelo Van Meerten analyse the building, the investments and the exploitation of the first private-owned railroad (passengers/freight) between the port city of Antwerp and the industrial city of Ghent. The authors focus on several occasions on the possibility of connecting the Antwerp-Ghent railway with other modes of transportation, like for instance shipping, state-owned railroads and tramways, this in order to transport their passengers/freight from the station onwards.

Water
A small and easy booklet, not very scientific, but it is the only one that explains the construction and the importance of the four 19th century shiplifting locks on the important coal transportation axis of the Canal du Centre. Today these four ‘lifts’ have been given UNESCO protection and have been replaced by the much larger Strépy-Thieu lift. The authors also emphasize on the difficult living conditions the bargemen on the Canal du Centre lived in.

After a conference of transport history at the Europäisches Hochschulinstitut in Mainz in 1995 all the lectures have been collected as articles in one book edited by the German professor Andreas Kunz. Railway specialist Bart Van der Herten wrote the Belgian effort, although he deals with inland shipping in this article. His main focus is to calculate the total output in ton-kilometres of the Belgian inland waterways. Albeit Van der Herten encountered troublesome methodological problems, he was able to achieve a good approximation of the reality for the period between the Belgian revolution and the Second World War. Attention is also given to the competition with railroads and with the different economical and political crisis.


In this article, based on his dissertation, Karel Veraghtert deals with the rapid growth of the maritime port traffic in Antwerp during the second part of the 19th century. Veraghtert did a lot of research in different quantitative aspects, like for example arrived tonnage, shipping movements, import- and export rates, destinations of ships, etc. With these data Veraghtert examined the economic reasons behind the evolution that made Antwerp the largest harbour in the world at the end of the 19th century. He finishes his article with a survey of the international commercial relations of Antwerp with the different parts of the world.

Transport history in the interwar period (1914/1918-1940/1945)

Road

This book describes the different Belgian automobile companies. Most of these companies (over 100) were active at the end of the 19th century and during the interwar period. The authors pay more attention to the more important automobile companies, like the FN, the Excelsior, the Imperia and of course the most famous Minerva. Some of these companies even survived World War II, but all had to close or at least had to produce other goods than cars. Nevertheless this explains why the automobile industry (of foreign car brands) is still very important in Belgium. Although a lot of information can be found in this book, it was written for a general public.

Rail
The Brussels Public Transportation System built its first subway in 1976. To commemorate this event it was decided to write a serie of three books about the history of public transportation in Brussels. Although the books were written for a broad and general public, that is they don’t have any bibliography and they have very few footnotes, they are very well documented and contain a lot of information on tariffs, rolling stock (horse drawn, electrical tramways and busses), organisation, the different exploited lines and building projects. Both book, with a lot of photographs, give the best acount of a municipal public transportation company in Belgium. The original project was to write a set of three books, but the last volume (from 1945 onwards) was never published.


In 1926 the Belgian government regrouped all private-owned railways and the state-owned railways in one new company, the SNCB (Société Nationale des Chemins de fer Belges). Professor Georges De Leener examines the results of the changes (legal constitution, personnel, tariffs) that occurred then. Although De Leener’s book is quite old, it gives an interesting view on the events that changed the Belgian railways forever.


The author deals in his article with the structural changes that occurred in the Belgian railroad sector during the interwar period. In those years the private-owned railroad companies and the state-owned railroad company were united and formed the Société Nationale des Chemins de fer Belges. This new company started to modernize and rationalize its financial structure, but also its policy. These changes resulted in a scientifically organized labour system, automatization and the modernization and standardization of rolling stock, etc.


Director Léon Jacobs explains in his book the importance of the SNCV, or the Belgian secondary railroad (or rural tramway) system, for the local economy. His essay focuses especially on the public organization, the rolling stock, the electrification of the network of the SNCV, as well as the complementary role of the secondary railroad network with other modes of transportation like automobiles and the main railroad system.
This memorial book of 1946 covers the regular passenger service on the North Sea between Ostend and Dover, since its early beginnings in the 16th century. But it was only in 1846 that a real maritime company was created by the Belgian state to uphold the most important ferry connection between Belgium and England. The authors have described every ship of the Ostend-Dover company during her centennial history, but alas very little information is given in regards to passenger or freight numbers.


In this old book the author examines the Antwerp hinterland and the way traffic to and from Antwerp has been organized just before World War II. Deprez gives a lot of examples with data, which makes it interesting for whom might be interested in traffic in and around Antwerp at the end of the intrawar period.


Another book written to celebrate the 100th anniversary of the CMB, consisting of two parts. The second part is the catalogue of an exhibition about the CMB held in the National Maritime Museum in Antwerp in 1995. It is interesting because of the large number of photographs included which tell the life on board the ships bond to the Congo and also because of the collection of posters of sea-lines. The first part deals with certain aspects of the CMB, like for example the life on board, the Antwerp-South America line during the interwar period, the CMB during World War II and the maritime history of containerization in Belgium.

Ghoos, J.D. *75 jaar luchtvaart Antwerpen.* Antwerpen, 1984, 119.

This book he recalls the early days of aviation in his city, when aviation pioneers started a little airplane factory, a leisure airclub and finally a little airfield before World War I. After the war all this developed into the airport of Antwerp-Deurne, with its modern interwar terminal, which became an important airport for SABENA and other airline companies. The second German occupation was a turning point in the history of this regional airport. Completely destroyed it became relatively less important and it was often threatened with closing by the government. Today the Antwerp-Deurne airport is one of the four regional airports of Belgium. The author is the former
manager of the regional Antwerp-Deurne airport, and while he didn’t write a scientific scope, his book gives a good survey of the history of a regional airport.


In 1920 a small airfield was created next to the seaside resort of Ostend to attract tourists. Although the airport was the smallest in Belgium it was also conceived to play an important role in completing the role of Ostend as a transport hub (end of continental railroad lines and crossover to England). This role was however never fully developed, albeit SABENA and other airline companies sometimes stopped here on their way to London. The small Ostend airport was also used for leisure and military aviation. After the Second World War the much larger Ostend-Middelkerke airport replaced it.

**Transport history from World War II till now (1945-)**

Road


In this book the history of the Belgian motorways are recalled. It all started when the German ‘Autobahn’-idea was imported in Belgium in the thirties. In 1937 the first stretch near Bruges of the new Belgian motorway network was completed, after which the lightened ‘autoroutes’ started their advance and invaded the tranquil countryside. Gregoire explains in his book how the network was conceived and how it changed during the second part of the 20th century. A lot of data is given about the financial and technical aspects of motorway building, as some data is given about the traffic volume on the Belgian road network.

Rail


This book was written by railroad historians for an exhibition in 2002, which celebrated the fiftieth birthday of the North-South rail connection in Brussels. The North-South connection was the result of a long time visionary dream to connect the two Brussels end-of-line stations. The works, which were to link the Brussels South station with the Brussels North station, started in 1936. It took 14 years to complete the bridges, tunnels and new underground stations in the heart of the capital. This undertaking certainly belongs to the most important works of the Belgian railways, as every day 1200 trains, or 80% of all Belgian
intercity trains use the North-South connection. It is along the 6 kilometre of rail of the North-South connection that the three most important Belgian passenger stations are situated (Brussels South, Brussels Central, Brussels North).

Water
The Albert canal, or the Canal Albert as it is called in the French speaking part of the country, connects the port city of Antwerp on the river Scheldt with the industrial city of Liège on the river Meuse. It was built in the thirties and today it is one of the largest, longest and most used canals of Belgium (36% of all the inland shipping) and as such it has attracted a lot of industry along its banks. This book, which is very well documented with photographs, gives a clear and concise history of the canal and considerable information on the canal infrastructure (construction and modernization). The author, Geneviève Costes, directs her attention also on role of the Liège river port, one of the largest of Europe. Some statistical data of this important river port is given, together with technical details. As Geneviève Costes was asked by the Walloon governement to write about the Albert canal, her book treats foremostly of the (short) Walloon section of the canal near Liège.

One of the first long-term comparative studies dealing with micro- and macro economical, institutional, social and political aspects of the fierce competition between the Belgian port of Antwerp and the Dutch port of Rotterdam. The first part of this study is aimed at the evolution between 1870 and 2000 of the throughput (in- and outward bound cargo-flows) of the two harbours, with extensive scope for the relations with the hinterland and the international relations. In the second part attention is given to the different port authorities and the way they organize their harbours, for exemple roads and railways. Finally in the third part the authors examine in which way the labour conditions are organized and how they have evolved over time. The list of authors is quite long as every topic, on the Antwerp and on the Rotterdam side, is discussed by a historian from respectively Belgium and the Netherlands. These authors are themselves being discussed by a group of British, Belgian and French maritime historians. Although this study is not exhaustive it gives an interesting insight on the evolution of certain aspects of the Antwerp maritime transport economy.
Aviation


The Belgian aviation history used to be ‘terra incognita’ for historians for a long time. With the recent bankruptcy (2001) of the Belgian national air carrier SABENA this gap has been filled. Three journalists review the history of the formerly Brussels based airline from its start in 1923 till now, although their main focus are the ten last years of the company. They also explain how parts of SABENA were saved and resurrected as the new Belgian air carrier SN Brussels Airlines in 2001.


In this publication the authors of the former book want to revive the history of SABENA with photographs. Although this book is a real ‘picture book’ and doesn’t contain lots of text, it remains a precious source of information for all who are interested in the evolution of the life onboard an SABENA airplane. It gives insight in the furnishing in the airplanes, the clothing of pilots and stewardesses, the evolution of catering, posters and so on.


SABCA was born just after World War I when the Belgian government decided to decrease its dependance of foreign constructors in aviation. Till World War II SABCA was active in building military and civilian aircraft of their own, but after the war this policy was changed. From then on SABCA starts to participate in military, as well as in civilian projects, like for instance with the Dutch Fokker, the French Caravelle and the European Airbus. SABCA also provides elements of the European Ariane rocket, and is hereby on of the most important Belgian manufacturer of high-tech transportation means in aviation and aerospace. The authors also give some information on the Charleroi-Gosselies airport where the main plant of SABCA is located.


Another book written by a journalist about the bankruptcy of aircarrier SABENA. Aart De Zitter recalls, after a small historical introduction, the last days of SABENA, where he emphasizes on the financial and the organisational aspects. He also analyses the role and the use of having a national air carrier in Belgium. Included in his book is also a collection of photographs and charts of all the airplanes and helicopters SABENA ever owned during her existence.

After a conference on the growth of air traffic in Belgium, the different lecturers regrouped their essays in one book. Most of the authors are jurists, working either at a university, as lawyers or as legal advisors for airports and airlines. This volume presents a legal and an economic part. The economic part is quite interesting concerning the nowadays problems in aviation in Belgium, as in the rest of the world. For instance problems like the prospects of express flights, the role of small regional airports like the Charleroi-Gosselies, the future of Brussels airport, etc. are being discussed here.


In this small book Guy Warlop, head manager of the the Brussels Airport Terminal Company in the early nineties describes the planning and building of the new airport terminals in Brussels. He also explains the numerous political problems he encountered when he was head of the Brussels Airport Terminal Company. As such this book gives a good insight in airport building and airport politics in Belgium.
COST 340/17-B
Transport history in Belgium:
An annotated bibliographical survey

by Michael-W. Serruys and Erik Buyst

This bibliographical survey provides an overview of the present state of research on Belgian transport history. Railway history and long-term developments in maritime and inland shipping, including ports, are relatively well documented, both in qualitative and quantitative terms, from the 18th century until today. The history of aviation boomed recently due to the failure of SABENA, Belgium's national air carrier. Most research in the field however focused on qualitative (e.g. political) aspects, so that a thorough quantitative analysis still remains to be done. Road history is very unevenly served. The 18th century received a lot of attention, but our knowledge of 19th-century developments is still fairly limited. The worst-off is the post-1945 period, which almost a blind spot.

Our bibliography is certainly not exhaustive. It focuses on recent publications, but also deals with older books and articles as far as they are still relevant or of historiographical value. In addition, these works should provide the reader access to the huge amount of literature on the history of specific infrastructures (e.g. a specific railway line) or regional studies.

Books, articles, bibliographies broadly conceptualised and of general interest

General
Starts from the hypothesis that changes in transport provided an important impetus for the Industrial revolution. They first pay attention to the long-term developments of the various transportation networks (railways, light rails or local railways, roads, inland and maritime shipping, and aviation). Then they focus on the market share of each mode of transportation. By analysing these data the authors want to give a first assessment of the contribution of transport to economic growth in Belgium.

Rail
An elaborate history of Belgium's vicinal or light rails network that covered at its peak over 5000 kilometres of track throughout the country. The vicinal railways were created in 1885 to connect cities and countryside through cheap regional transportation networks. Davies describes in great detail all 198 vicinal railway lines. He devotes much attention to technical details on the
rolling stock (steam and electric engines, maintenance, freight, and passenger vehicles). Statistics on e.g. freight volume however are not available in this study.

The most recent and complete collection of articles on railways in Belgium, enlightened with a large amount of photographs, drawings and maps. One contribution gives a broad overview of the development of railways in Europe, from the time of the first railway in England until the present TGV-era. But of course the main focus of the articles is on the growth and relative decline of Belgian railways. One author tells the story of the construction of the first railway on the European continent (1835). Other articles cover the evolution of the Belgian railway network, the history of the various privately owned railway companies, the creation of the SNCB/NMBS in 1926, the economic, social and cultural aspects of this company. The history of rolling stock and of railway stations is also dealt with. Not all contributions are of the same quality however.

Water
This four volume maritime history of the Low Countries has been written by a team of Dutch and Belgian historians. Almost every aspect of maritime history is discussed, ranging from shipbuilding and fisheries, over naval developments, to trade and trading routes, ports, etc. Well documented and fully illustrated it covers the whole period from prehistorical navigation until shipping in the 1970s. Due to the more important role of maritime activities in the Netherlands, it tends to devote more attention to that country.

A team of historians from the University of Antwerp wrote the history of Antwerp in relation to the River Scheldt. Although the first chapters start with Roman times, most attention goes to the great infrastructure works and projects of the 19th and 20th centuries. A focal element is the hard diplomatic negotiations between Belgium and the Netherlands concerning the construction of the very important Rhine-Scheldt Canal, linking Antwerp to Rotterdam and the Rhine. This collective book also pays a lot of attention of positioning the harbour of Antwerp at the end of the 20th century. (te vaag)
The city of Ghent is situated on the junction of the River Scheldt and the River Leie/Lys. It has always been, especially in the medieval period, an important port, both for inland and maritime shipping. Since the digging of the Ghent-Terneuzen canal in 1827, Ghent has become one of Belgium’s seaports. The authors analyse the history of the port of Ghent, from its Roman and Medieval past to the international and global economy of the late 20th century. The appendix contains valuable quantitative material.

Provides a broad overview of the history of Belgian navigation since the Romans till 1980. Delmelle pays much attention to canals, the downward slope of Ronquières, river ports and smaller seaports, such as Nieuwpoort and Blankenberge. He also deals with less spectacular topics (e.g. the Ostend-Dover line in the second half of the 20th century).

The centennial anniversary of the Compagnie Maritime Belge (CMB) was celebrated with the publication of a well-documented book. The origins of CMB go back to the difficulties that Belgium faced at the end of the 19th century to get a reliable and regular sea connection with Congo. At first CMB was an Anglo-German consortium, but it became steadily more and more Belgian. Although CMB had links with most continents, it was the monopolistic shipping lines with the Congo, which brought in most profits. Nevertheless the history of CMB also faced different setbacks, such as the Great Depression of the 1930s, the Second World War, the collapse of the Congo trade after its independence. In the second half of the 20th century CMB suffered from stagnating cargo prices. The answer was modernisation of the fleet, tapping new markets (bulk cargo, ro/ro and containers), etc. Today CMB is by far the most important Belgian maritime company and a global player.

This book, written by several academics, gives an extensive survey from the first settlement on the banks of the river Scheldt in Ancient Times to the world port of today. Well documented it is probably the most complete general history of the port of Antwerp. It is equally well provided with photographs, drawings, charts and maps.
Verlinden, C., Asaert, G., Baetens, A., De Vos, A. et al. *Bibliography of Belgian maritime history*. Collectanea maritima I, Brussels, 1984, 258 pp [also published in Dutch]. Although it is not up to date anymore, it is the only bibliography, which gives a complete survey of the literature concerning Belgian maritime and inland shipping.

Vermeersch, V., Rijckaert, M., Van Acker, M. et al. *Bruges and the sea: from Bryggia to Zeebrugge*. Antwerp, 1982, 335 pp [also published in Dutch]. Not only Antwerp and Ghent are important seaports, also the medieval city of Bruges had an intense relation with the sea. In this book the authors revive the days when Bruges was one of the most important harbours in Europe. After this glorious period Bruges was forgotten for a few centuries. At the end of the 19th century however a new harbour, Zeebrugge, was built on the edge of the sea. Today Zeebrugge is Belgium's second largest port. The authors provide an interesting and well-documented survey of the history of maritime transport infrastructure in Bruges.

**Aviation**

Brackx, D., Cryns, P., Duwelz, Y., Jacobs, V. et al. *100 ans d’aviation en Belgique*. Tielt, 2002, 206 pp. [also published in Dutch]. This book celebrates 100 years of aviation. It consists merely of photographs of nearly all airplanes and helicopters that have flown in Belgium. As such the book gives a good overview of the Belgian ‘flying stock’.

Van Humbeek, F. *Brussels airport: the history of Haren, Melsbroek and Zaventem*. Nieuwkerken-Waas, 2002, 232 pp. In this book, highly documented with photographs, the author shows the history of the three consecutive Brussels airports: Haren (1915-1945), Melsbroek (1945-1958), the present one Zaventem (since 1958) with its new terminals and also future expansion plans. Van Humbeek also includes the former military base, the present day cargo airport of Brucargo in his study. Although the book was written for a general public, it gives an excellent overview of the history of Belgium’s largest airport.

Vanthemscche, G. *La SABENA: l’aviation commerciale belge 1923-2001. Des origines au crash*. Brussels, 2002, 341 pp. The book explains how SABENA, Belgium's national air carrier, was born and soon became involved in Belgian politics. One of the main purposes of this involvement was the important ‘imperial’ connection between the motherland and the African colony (Congo). SABENA became a public company, which constantly needed financial aid. The independence of Congo, the oil crises of the
1970s, unlucky alliances and a mediocre performance contributed to the structural problems of SABENA. By the late 1990s new regulations restricted government aid and confronted SABENA with the reality and hardship of economic competition. Vanthemsche presents some statistics, but these rarely involve passenger numbers or freight volumes. The main focus of this study is on the political history of SABENA.

Transport history before the Belgian revolution of 1830

Road
Provides an analysis of the urban network of the old Duchy of Brabant (the present provinces of Antwerp, Flemish Brabant, Walloon Brabant and Brussels) in the second half of the 18th century. In order to assess the relative importance of the different Brabantine cities, Blondé analysed the revenues from tolls on different canals and turnpikes leading to and from those cities. The result of his research is a nice overview of the Brabantine transportation network and urban economy.

Assesses in a cliometric way the impact of road construction on market integration. It demonstrates that improvements in infrastructure caused a gradual narrowing of price margins among different market places. Nevertheless, in case that substantial price differentials existed, arbitrage between market places remained slow.

Before World War II the famous Belgian historian Léopold Génicot was asked to write about the origins and evolution of Belgium's road network. His article, published in three parts, is still very important for Belgian transport history. The article focuses on the technical, economic, political and financial aspects of road building during the Austrian, French and Dutch periods of Belgian history. Valuable maps complement his analysis.
This special issue of the journal provides valuable information on the evolution of transportation costs (land and water) and on the organization of transport during the Ancien Régime. It also gives a nice status questionis on transport research in the Southern Low Countries during the pre-industrial era.

Water
Barges used to be an important mode of transportation in flat areas, such as the northern part of Belgium. One of the most important 'barge lines' was the Ghent-Bruges canal. The authors describe the digging of the canal and the emergence of a 'barge economy' around the canal. This barge economy consisted of taverns, which often also became stops for coaches. The Ghent-Bruges barge disappeared with the construction of railways.

Between 1815 and 1830 nowadays Belgium was part of the United Kingdom of the Netherlands. The Dutch king William I wanted to connect the mercantile North of the country with the industrial South. In order to solve the existing transport problems, he pushed through an extensive canal building policy. The Dutch historian Filarski emphasises the problems related to the engineering, financing and actual construction of canals.

Although quite old, Urbain’s article is still relevant when it comes to the making of the Belgian canal network. The author examines the different canal projects and their realisation, the development of the main canals, and the philosophy behind the canal-building policy. He also investigates the importance of waterways for agriculture and industry in the Southern Low Countries between 1550 and the French revolution.

Transport history between the Belgian revolution and World War I (1830-1914/1918)
Road
Placq, G. 'Le développement du réseau routier belge de 1830 à 1940', in *Bulletin de l’Institut de Recherches économiques et sociales*, 17 (1951), 425-469.
The article of Georges Placq continues where the one by Léopold Génicot stopped, that is in 1830. Like Génicot, Placq provides detailed information on the expansion of the Belgian road network. He also deals with policy matters, financing, the competition between roads and railways, and of course the appearance of the automobile. Detailed maps and an appendix include valuable information on the expansion and financing of Belgium's road network.

In a second article Georges Placq analyses the intensity of traffic on Belgian roads between 1830 and 1940. The figures are derived from the revenues of toll barriers (till 1866), and after that from census data. The results are presented in a number of tables and maps, which also show the main traffic flows. Finally, Placq confronts his results with the evolution of railway transport flows.

Provides a study of the Belgian coach system in the middle of the 19th century. The Dutch king William I had created the network, but the Belgians continued the network after 1830. By investigating the timetables of coaches in the province of Antwerp, Rombauts assesses the complementary role of coaches vis-à-vis railways. The author provides valuable data, e.g. on traffic.

Rail
In spite of its age, this article gives an excellent overview of the development of Belgium's railway network between 1835, the start of railway construction, and 1935. Much attention is devoted to the growth of the network, but also to the analysis of overall growth in traffic, passengers and freight. In addition, the author investigates the competition between railways and other means of transportation (e.g. inland shipping and from 1900 the automobile). In addition, Aviakan gives some details on the development of light rail connections, the so-called chemins de fer vicinaux.

A unique history about the Belgian industrial entrepreneur Simon Philippart and his 'Compagnie des Chemins de fer des Bassins houillers du Hainaut'. The study analyses the rise of a private railway company in 1865, which became the second largest in Belgium around 1870, and its downfall a few years later. This book also demonstrates the intertwined character of financial, industrial and coal mining interests in the mid-19th century Belgium.


One of the first economic analyses of railway construction and exploitation during the era of the Belgian Industrial revolution. Laffut deals with the geography of railway construction, the organization of private- and state-owned railway companies, the impact of railways on industry, the output in ton-kilometres (freight) and passenger kilometres. He compares his results with other means of transportation and tries to explain the fierce competition between, on the one hand railroads and on the other hand road and canal traffic.


Inspired by the work of quantitative economic historians such as Fogel and Fishlow. Michel Laffut's study encompasses two volumes, but the second has not yet been published. The first volume deals with Belgium's economic situation around 1830 and the prerequisites for a successful start of railway building. It takes into account the many political, economic and financial decisions that had to be taken by the different actors in the process of railway construction and exploitation, being mainly the state and the private-owned railway companies. All these facts give Laffut the necessary ammunition to start a detailed statistical analysis of the importance of Belgian railways for the Belgian economy, which will be the content of the still to be published second volume.


Deals with the diplomatic moves concerning the construction of the important railway line between Antwerp and the river Rhine in the aftermath of the Belgian revolution. Stengers also describes the early beginnings of Belgian transport and communication politics.

A small and easy booklet, not very scientific, but it is the only one that explains the construction and importance of the four 19th century shiplifting locks on the crucial coal transportation axis of the Canal du Centre. Today these four ‘lifis’ are protected by UNESCO and in economic terms have been replaced by the much larger Strépy-Thieu lift. The authors also emphasise the difficult living conditions for the bargemen on the Canal du Centre.


Publication of a lecture given at a conference on transport history at the Europäisches Hochschulinstitut in Mainz in 1995. Focuses on the calculation of total output in ton-kilometres on the Belgian inland waterways. Due to the lack of reliable statistics, the author faced severe methodological difficulties. Nevertheless Van der Herten believes that he was able to achieve a good approximation of the real traffic flows for the period between the Belgian revolution and the Second World War. Attention is also given to the competition with railways and to the effects of several economic and political crises.


Deals with the rapid growth of maritime port traffic in Antwerp during the second part of the 19th century. Veraghtert's focus is on quantitative aspects, such as tonnage, shipping movements, import- and export rates, destinations of ships, etc. With these data Veraghtert examines the economic determinants of the rise of Antwerp to one of the largest ports in the world at the end of the 19th century. He concludes his article with a survey of Antwerp's commercial relations with different parts of the world.

*Transport history in the interwar period (1914/1918-1940/1945)*


This book describes the different Belgian car-producing companies. Most of these firms (over 100) were active at the end of the 19th century and during the
interwar period. The authors pay more attention to the larger automobile companies, like FN, Excelsior, Imperia, and of course Minerva. Some of these firms survived World War II, but in the next decade they were forced to close or to shift to other products. The book was written for a general public, but contains much interesting information.

**Rail**


The Brussels Public Transportation Authority (MIVB/STIB) built its first subway in 1976. To commemorate this event MIVB/STIB decided to write a series of books on the history of public transportation in Brussels. Although the books are intended for a broad audience - they have no bibliography and only very few footnotes - they are very well documented and contain detailed information on tariffs, rolling stock (horse drawn, electrical tramways and busses), organisation, the different exploited lines and building projects. Both books show many photographs and provide the best account of a municipal public transportation company in Belgium. The original project was to write a set of three books, but the last volume (from 1945 onwards) was never published.


In 1926 the Belgian government transformed the state railways in a new public liability company, the NMBS/SNCB (Société Nationale des Chemins de fer Belges). Professor Georges De Leener examines the results of the changes from various angles: legal context, personnel, tariffs, etc. Although De Leener's book is quite old, it gives an interesting contemporary view on the events that changed the Belgian railways forever.


Deals with the structural changes that occurred in the Belgian railway sector during the interwar period. In those years the NMBS/SNCB was formed (see De Leener's book) that acquired several private-owned railway. The NMBS/SNCB started to modernize and rationalize its financial structure, but also its transport policy. These changes resulted in a scientifically organized labour system, modernization and standardization of rolling stock, etc.

Director Léon Jacobs explains in his book the importance of the NMVB/SNCV, or Belgium's light rail system, for the local economy. His essay focuses especially on the public organization, rolling stock, electrification of the network, as well as on the complementary role of the light rail system compared with other modes of transportation, such as automobiles and the railway network.

Similar study as that of Cosaert and Delmelle, but then on the history of public transportation in Antwerp.

Covers the regular passenger service between Ostend and Dover, since its early beginnings in the 16th century. But it was only in 1846 that the Belgian State created a real maritime company to service the important ferry connection between Belgium and England. The authors describe every ship used by the Ostend-Dover Company during its centennial history, but offer very little information on passenger or freight numbers.

Examines the Antwerp hinterland and the way transport flows to and from Antwerp has been organized just before World War II. Deprez gives much valuable quantitative information, which makes it still interesting for those who investigate transport flows in and around Antwerp at the end of the interwar period.

Another book written to celebrate the 100th anniversary of CMB. The first part deals with certain aspects of the CMB, e.g. life on board the Antwerp-South America line during the interwar period, the CMB during World War II and the maritime history of containerization in Belgium. The second part is the catalogue of an exhibition about CMB held in the National Maritime Museum in Antwerp in 1995. It is interesting because of the large number of photographs, which show life on board the Antwerp-Congo line, and also because of the collection of posters of sea-lines.
Aviation

Recalls the early days of aviation in Antwerp, when aviation pioneers started a little airplane factory, a leisure air club, and finally a little airfield. After World War I these facilities developed into the airport of Antwerp-Deurne. In the interwar period it became an important airport for SABENA and other airline companies. But the second German occupation proved to be a turning point. Completely destroyed during the war, it never regained its prominent position of the 1930s. Frequent threats by the government to close it down further weakened its attractiveness. Today the Antwerp-Deurne airport is one of the four regional airports of Belgium. Although the author did not intend to write a scientific work, his book provides a good survey of the history of a regional airport.

In 1920 a small airfield was created next to the seaside resort of Ostend to attract tourists. Although the airport was the smallest in Belgium, it was intended to play an important role in complementing the role of Ostend as a transport hub (end of continental railway lines and crossover to England). The airport failed to develop this role, although SABENA and other airliners sometimes stopped in Ostend on their way to London. The airport was also used for leisure and military aviation. After the Second World War the much larger Ostend-Middelkerke airport replaced it.

Transport history from World War II till now (1945-)

Road
Explores the history of Belgian motorways. It all started with the import of Germany’s ‘Autobahn’-idea in the 1930s. In 1937 the first stretch near Bruges, but the construction of motorways really took off in the mid-1950s. Gregoire explains in his book how the network was conceived and how it changed during the second part of the 20th century. A valuable dataset is given on the financial and technical aspects of motorway building. Some figures also deal with transport flows on Belgian roads.
Rail
This book was written for an exhibition in 2002 celebrating the fiftieth anniversary of the North-South rail connection in Brussels. The North-South connection was the result of a long time visionary dream to link the two Brussels end-of-line stations. The works connecting Brussels South station with the Brussels North station started in 1936. It took 14 years to complete the bridges, tunnels and new underground stations in the heart of the capital. The undertaking undoubtedly belonged to the most important works of the Belgian railways ever. Every day 1200 trains, or 80% of all Belgian intercity trains, use the North-South connection. It is along these 6 kilometre of rail that the three most important Belgian passenger stations are situated (Brussels South, Brussels Central, Brussels North).

Water
The Albert canal connects the port of Antwerp on the river Scheldt with the industrial city of Liège on the river Meuse. It was built in the 1930s and today it is one of the largest, longest and most used canals of Belgium (36% of all inland shipping). As such it attracted a lot of industry along its banks. This book, including many photographs, gives a clear and concise history of the canal and its infrastructure (construction and subsequent modernizations). The author focuses also on role of the Liège, one of the largest river ports in Europe. Some statistical data of this important river port is given, together with technical details. As the Walloon government asked the author to write about the Albert canal, the book treats mainly the (short) Walloon section of the canal near Liège.

One of the first long-term comparative studies dealing with micro- and macro economic, institutional, social and political aspects of the fierce competition between the ports of Antwerp and Rotterdam. The first part of this study deals with the development of throughput (in- and outward bound cargo-flows) in the two ports between 1870 and 2000. Extensive attention is devoted to international relations in general and hinterland connections in particular. In the second part attention is given to the functioning of the port authorities in Antwerp and Rotterdam. In the third part the authors examine in what way labour relations were organized and how they have evolved over time. The book
also includes the comments from a group of British, Belgian and French maritime historians on the papers presented. Although this study is not exhaustive it gives interesting insights in the evolution of certain aspects of the Antwerp and Rotterdam maritime transport economies.

Contains a cluster of articles focusing on a comparison between the ports of Antwerp and Rotterdam. They deal with the regulation of throughput, wage bargaining, the functioning of local governments, and hinterland connections.

Aviation
For a long time aviation history used to be ‘terra incognita’ for Belgian historians. The recent bankruptcy (2001) of Belgium’s national air carrier SABENA, however, has provoked a research wave. In this book three journalists review the history of the formerly Brussels based airline from its start in 1923. But the focus of the study is on the ten last years of the company. They also explain how parts of SABENA were saved and resurrected as the new Belgian air carrier SN Brussels Airlines in 2001.

In this publication the authors of the book mentioned above revive the history of SABENA with photographs. The picture book is a precious source of information for all those interested in the evolution of life onboard a SABENA airplane. It gives insight in the clothing of pilots and stewardesses, the evolution of catering, posters and so on.

SABCA was created just after World War I because the Belgian government wanted to become less dependent on foreign suppliers of aircrafts. Until World War II SABCA built its own military and civilian airplanes, but after the war this policy was changed. From then on SABCA has participated in international projects, military as well as in civilian, with partners such as Dutch Fokker, French Caravelle and European Airbus. SABCA also provides components of the European Ariane missile. In the course of the years SABCA has become Belgium’s most important manufacturere of high-tech products in aviation and aerospace. The authors also give some information on the Charleroi-Gosselies airport where the main plant of SABCA is located.

Another book written by a journalist about the failure of air carrier SABENA. It analyses, after a short historical introduction, the last days of SABENA from a financial and organisational viewpoint. The author also investigates the benefits of having a national air carrier in Belgium. The book also includes a collection of photographs and charts of all airplanes and helicopters SABENA ever owned.