

Have the Good Times for Transport History Ended?

A Scientometrical Study of Danish Transport History

Jørgen Burchardt

National Museum of Science and Technology, Denmark

The main question for this article is: How has research in Danish transport history developed over time? How strong has research activity been, and what topics, theories, and methods have been used?¹ A scientometrical method is used as the basis for this investigation. This is useful in understanding the development of trends within specific areas of study and tracking the dynamics of ongoing research. The article will use as its source material the published books on the topic of transport written about Denmark.

Denmark has kept remarkable records of the nation's book publishing. If used with caution, these statistics can trace many of the trends taking place across any number of fields.² The research into transport history is based on an analysis of more than two thousand books published in Denmark since 1783, written by more than one thousand six hundred authors. Library catalogs and publisher descriptions helped compile the works devoted to distinct topics. The author's professional or amateur status and affiliation were also recorded. These fields were used to establish the statistical analyses found herein.

Amidst the daily overwhelming flow of new research, it is sometimes difficult to recognize a trend as it develops. Scientometric reflections help isolate these

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1. I thank the anonymous referees for the fruitful comments to my first version of this article.
 2. The book databases Bibliotek.dk and WorldCat catalogs were searched for a long row of keywords within transport. Those searches were supplemented with searches in Bibliotek.dk through the systematic system DK5 on the thematic topics around transportation. The statistics of published books are from Danmarks Statistik, *Danmarks Statistik 10-års oversigter* (Copenhagen: Danmarks Statistik, 1977, 1987, 1997, 2007), together with a search in the digital Statistikbanken. A report on the methodology is available on www.burchardt.name/Methodology.pdf.



trends over time. In this case the method gives a clear picture of the development of publishing and of the different actors involved in Denmark—especially professional historians at universities and museums and amateur nonhistorians. In Denmark amateurs have far outpaced the production of professional historians, and this analysis shows how active each group has been over time and which topics they covered.

In general, an enormous rise in research activities devoted to Danish transport has occurred in the last decades, but there has been a drastic fall in published books in the last few years. Has Danish transport history reached its peak? How can these latest shifts be explained?

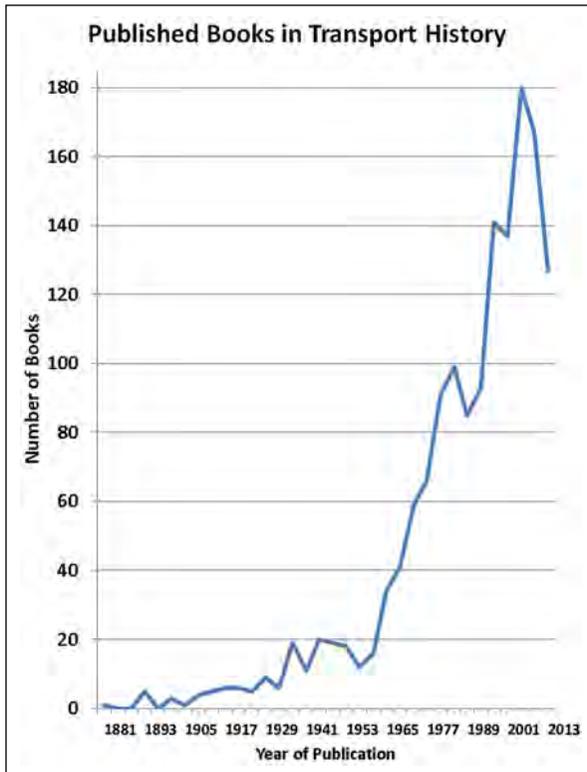


Figure 1

The Enormous Rise in Research

Development in the field can be divided into three different time periods: occasional books until 1906, steady growth from 1907 to 1965, and the research explosion since 1965.

In the first period a small number of books were published, mostly about single maritime journeys. The first genuine historical work was published in 1832,

with an economic description of shipping and related trades. In the 1890s the first of many anniversary books commemorating the longevity of the steamship company DFDS was published. Most books published in this period lacked substantive research.

The second period was one of steady growth from 1907 to 1965, with books also becoming gradually more comprehensive. The tone of most books was one of optimism, with the historical evidence used to celebrate both a fine present and promising future. Anniversary books dominated this period as many institutions and companies celebrated their success. Finally, a new kind of book began to slowly emerge: the comprehensive examination of a sector.

The third period took this approach to heart, and a research explosion occurred between 1965 and 2007, with serious academic researchers joining the arena. Prior to 1965, professional historians rarely published research in transport history. However, a new generation of researchers, fascinated by a range of topics, began to regularly publish books that diverged from typical institutional histories. At the same time, historical institutions such as museums, libraries, and archives improved their publications during this period as well. Despite these changes, nonprofessionals continued to outpace the production of trained academics, and anniversary books remained common. The third stage also benefited from a number of cultural and societal changes that created a larger reading audience. Production costs of books fell, the country's population improved its literacy rate, and leisure time increased starting in the 1950s.

Very Few Cross-Sectoral Studies

A better understanding of these trends emerges from a close analysis of the works devoted to particular sectors of transport. The vast majority of books are focused on only one sector. A few consider two sectors—for example, books about bridges often touch on roads and rail. And others focus on institutions of overlapping modes—such as shipping offices. But overall, only a small fraction cover several sectors. In total, only forty-two books—2 percent—have been written about more than one sector. This is problematic given that transport is essentially a chain in which people and goods are moved across several means of transport. To understand one link of the chain one should know it is necessary to see it in connection with other links.

Of the small number that exist, two cross-sector studies that have established excellent rubrics for what comprehensive scholarship might look like are Tom Rallis's *Transport i Danmark 1830–1990* (Transport in Denmark) and *Hundrede års trafik* (Transportation in a hundred years).³ Rallis's work described the total

3. Tom Rallis, *Transport i Danmark 1830–1990: Transport- og kommunikationsteknikkens udvikling i samfundsmæssigt perspektiv* (Copenhagen: Busck, 1992); Hans-Carl Nielsen, Hanne Ras-

transport infrastructure, including the postal service, and also dealt with the distribution of water, oil, sewage, telephone, telegraph, and electricity. *Hundrede års trafik* was written to celebrate the one-hundred-year anniversary of the Ministry of Transportation. The book is a chronological description of the transport politics written for a public audience and is situated within the context of overall transport development. Due to the absence of a more thoroughly researched and objective book about the topic, this book is, in many ways, the best to give an overview.

The Dominant Maritime History

Maritime history is the largest part of Danish transport history. The subject appears in almost half of the books counted. The sector's importance over time makes sense given the centrality of Denmark's international maritime business sector. A closer look at the 971 maritime books shows that a variety of approaches and topics have emerged across the subject. Corporate anniversary books still represent a large part of this number. A similar category to the anniversary books are those focused on maritime institutions. Rather than focusing on a single company, though, these works describe the character of a broader institution, often with a closer look at physical and organizational frames. A smaller contingent focus on the economic and commercial elements of Denmark's maritime history. Many of these works rely on the detailed records assembled by Danish customs officers, who collected taxes in nearly every Danish port; one example is *Fra galeoth til galease: Studier i de kongerigske provinseres søfart i det 18. århundrede* (From Galeoth to Ketch: Studies in the royal provinces shipping in the 18th century).⁴ Others have latched onto specific technological artifacts or processes, such as the history of the diesel engines from B&W. A few books are first-person travel narratives. Some were produced by seamen themselves, and others by observers aboard a wide variety of ships. The harbors have been important parts of the infrastructure, and several books have been published about them. Most harbors have been heavily changed through the last decades, as described in *Industrisamfundets havne 1840–1970* (Harbors in industrialized society 1840–1970).⁵

The largest category of maritime history, though, revolves around specific shipping sectors or set of actors—from ice boat business to the social history of ship pilots. Like other topical areas, this sector approach still has a limited scope. Many of these limits are established by chronology, such as those faced

mussen, and Erik Tøft, *Hundrede års trafik: Trafikministeriet 1900–2000* (Copenhagen: Trafikministeriet, 2000).

4. Anders Monrad Møller, *Fra galeoth til galease: Studier i de kongerigske provinseres søfart i det 18. århundrede* (Esbjerg: Fiskeri- og Søfartsmuseet, 1981).
5. Henrik Harnow, René S. Christensen, and Gitte Haastrup, *Industrisamfundets havne 1840–1970: Bygninger, miljøer og bevaringsværdier på danske havne* (Kulturarvsstyrelsen: Odense Bys Museer, 2008).

by the 2,450-page, five-volume serial *Søfolk og skibe 1939–1945* (Seamen and ships 1939–1945).⁶ Others in this category have attempted to craft national stories. In 1919 the two-volume serial *Danmarks Søfart og Søhandel fra de ældste Tider til vore Dage* (Danish shipping and maritime trade from ancient times to our days) was published.⁷ A four-volume serial was published in 1952, *Fra Sejl til Diesel* (From sail to diesel).⁸ In the late 1990s it was again time to collect and exploit the rich history published in the many monographs in the previous decades. This became the seven-volume serial *Dansk søfarts historie* (The history of Danish shipping), published between 1997 and 2001.⁹ With chapters about archaeology, economy, traditional history, social history, and anthropology, the compilation was very comprehensive. Importantly, the Maritime Museum of Denmark was the central institution behind the book series.

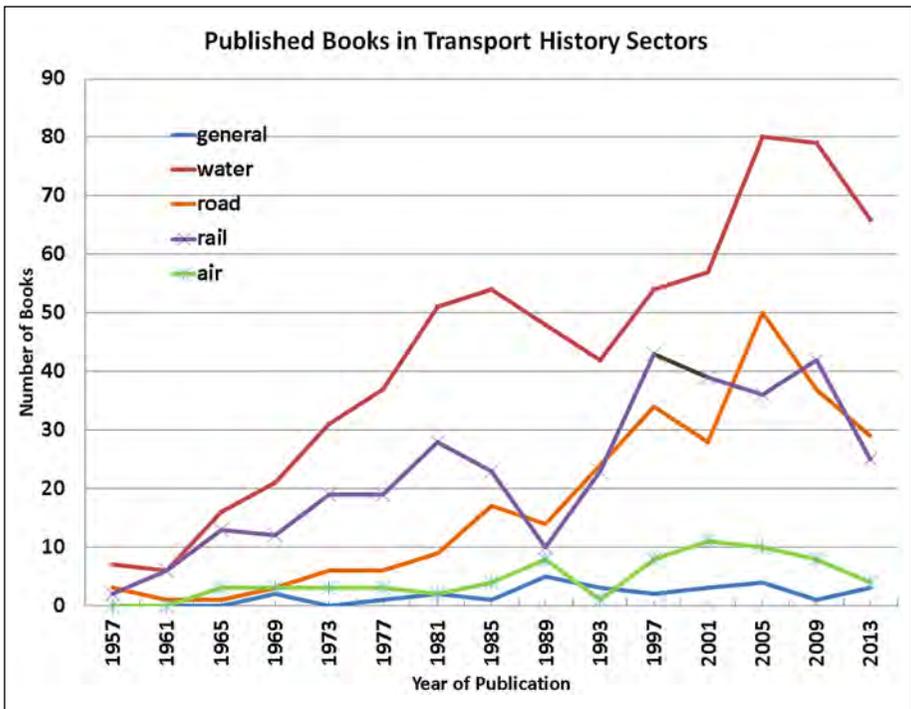


Figure 2

6. Christian Tortzen, *Søfolk og skibe 1939–1945: Den danske handelsflådes historie under anden verdenskrig*, 5 vols. (Copenhagen: Danmarks Rederiforening, 1981–1985).
7. Bering Liisberg, ed., *Danmarks Søfart og Søhandel fra de ældste Tider til vore Dage*, 2 vols. (Copenhagen: Nyt Nordisk Forlag, 1919).
8. Frode Holm-Petersen and A. Rosendahl, eds., *Fra Sejl til Diesel: Dansk Skibsfart, Søhandel og Skibshygning*, 4 vols. (Copenhagen: Skandinavisk Bogforlag, 1951–1953).
9. Ole Feldbæk et al., eds., *Dansk søfarts historie*, 7 vols. (Copenhagen: Gyldendal, 1997–2001).

Rail History with Emphasis on the Local

One of the first books about railway history was an anniversary text, and for many of the early years this category occupied more than half of the publications. Local, private railway histories made up the majority of the rest of the works, despite the fact that the state-owned railway company was far larger and understudied. Over time, as local railways disappeared and even the state railway declined, works devoted to these areas increased. Part of the explanation for this might be that the railway administrations created detailed archives that provided scholars with a plethora of sources. In addition to local railways, particular technologies and stations also received a great deal of coverage. In 1947 the Danish State Railway, the largest operating company in Scandinavia, published a nationwide history, *De danske Statsbaner 1847–1947* (The Danish State Railway), and fifty years later *På sporet 1847–1997* (On the track) was published in three volumes on the one hundred and fiftieth anniversary of the company.¹⁰ Local private railways got their history the same year in *Privatbanerne gennem 150 år* (The private railways through 150 years).¹¹

Geografiske studier over jernbanerne i Danmark (Geographic studies of the railways in Denmark), published in 1949, describes the geographic consequences of the establishment of railways and is important for its depiction of the struggle between the railways and automobiles.¹²

The Fragmented History of Road Transport

The history of transport on roads did not emerge as a major field of study until the 1970s. As such, road history is intimately connected with motorized vehicles. A comprehensive Danish history about horse travel is still needed, for example. The actual infrastructure of the nation's large roads has been well documented. This work began with *Forsøg til en historisk beretning om vejvæsenet i Danmark* (Attempts on a historical account of the highway authority in Denmark), which laid out the history of the nation's roads.¹³ *Alvej og kongevej* (The public road and the royal road) was published in 1977, and discussed roads and their use between

10. Generaldirektoratet for Statsbanerne, *De danske Statsbaner 1847–1947* (Copenhagen, 1947); Poul Thestrup, ed., *På sporet 1847–1997: Jernbanerne, DSB og samfundet*, 3 vols. (Odense: Jernbanemuseet, 1997).

11. Lars Vinholt-Nielsen, John Poulsen, and Ole-Chr. Munk Plum, *Privatbanerne gennem 150 år*. (Banebøger, 1997).

12. Aage Aagesen, *Geografiske studier over jernbanerne i Danmark* (Copenhagen: H. Hagerup, 1949).

13. C. L. Paulsen, *Forsøg til en historisk beretning om vejvæsenet i Danmark* (Odense: Syddansk Universitetsforlag, 2009).

1559 and 1648.¹⁴ The nation's major roadways were also analyzed in *Fra chaussé til motorvej* (From chaussé to motorway).¹⁵ In 2006 came *Lige ud ad landevejen* (Straight ahead the road), which similarly focuses on larger roads and the various vehicles that utilized them.¹⁶

While works that focus directly on the physical roads are not huge in number, commercial motorized transport has received a great deal of attention. A few years after the first automobiles drove on Danish roads, in 1936, *Dansk Person- & Rutebiltrafik* (Danish passenger and bus traffic) was published, followed in 1937 by *Dansk Godstrafik med Auto* (Danish freight traffic by automobiles).¹⁷ Both works reflected the confidence of a new social class and included articles about transport and the various companies that operated the systems. They are not traditional historical studies, but with their biographies of most Danish haulers, they are valuable sources. The books were followed by similar publications: *Dansk vognmandsstand* (Danish haulers) in 1956, and *Dansk vognmandserhverv* (Danish business haulers) in 1969.¹⁸

A smaller number of books describe Danish car production and the history of imported vehicles. Shockingly, little research exists on the social history of either personal automobiles or bicycles. *100 år i bilistens tjeneste* (100 years in the service of automobilism), from 2009, is about car owners and is the most comprehensive look at private car ownership.¹⁹ And only a few titles can be found that deal with bicycles, among them *På cykel i 100 år* (On a bike in 100 years).²⁰

In the Air

The history of airplane transportation has received the least amount of attention, which makes sense given its recent introduction. The first book on the subject ap-

14. Alex Wittendorff, *Alvej og kongevej: Studier i samfærdselsforhold og vejenes topografi i det 16. og 17. århundrede* (Copenhagen: Akademisk Forlag, 1973).

15. Steffen Elmer Jørgensen, *Fra chaussé til motorvej: Det overordnede danske vejnets udvikling fra 1761* (Odense: Odense Universitetsforlag, 2001).

16. Jørgen Burchardt and Mette Schönberg, *Lige ud ad landevejen: Med hestevogn og bil på amternes veje* (Odense: Syddansk Universitetsforlag, 2007).

17. Nic. Hurup, ed., *Dansk Person- & Rutebiltrafik samt Falcks Redningskorps* (Copenhagen: Dansk Erhvervsforlag, 1936); Nic. Hurup, ed., *Dansk Godstrafik med Auto* (Copenhagen: Dansk Erhvervsforlag, 1937).

18. Adam Nygaard, ed., *Dansk vognmandsstand: Faglig biografisk håndbog for den organiserede danske vognmandsstand* (Copenhagen: Forlaget Liber, 1956); Jørn Gundelach, ed., *Dansk vognmandserhverv: Faglig biografisk håndbog for den organiserede godstransport* (Copenhagen: Forlaget Liber, 1969).

19. Frank C. Motzkus, *100 år i bilistens tjeneste: Historien om FDM* (Copenhagen: FDM, 2009).

20. Walther Bach Knudsen, *På cykel i 100 år: Dansk Cyklist Forbund 1905–2005* (Copenhagen: Dansk Cyklist Forbund, 2005).

peared in 1917. As with the automobile sector, air travel received its first comprehensive history relatively quickly. In 1936, *Dansk Flyvnings Historie* (Danish flight history) was published.²¹ In 1943 an anniversary tome was published for the national and dominant airline, Danish Air Lines, *Dansk Trafikflyvning gennem 25 Aar* (Danish air traffic through 25 years), and three years later came the two-volume serial *Flyvebogen* (Aviation).²² Danish Air Lines merged after the war to create the Nordic Scandinavian Airline System (SAS), and in 1968 a fiftieth-anniversary book, *Det Danske Luftfartselskab 1918–68* (The Danish airline), was published.²³ The most comprehensive book about Danish aviation history is the popular *Da danskerne fik vinger* (When the Danes got wings), written in 2002.²⁴ Another book written by a nonhistorian is *Til vejrs: Københavns Lufthavn i 75 år* (Into the sky: Copenhagen Airport in 75 years), which tells about the development of important airport infrastructure.

Amateurs and Professionals

Most books—more than four-fifths—about transport history have been written by amateurs. In contrast to professionals, who hold positions where research is expected, amateurs are routinely people who come to transport history as a hobby. Drawing from decades of experience and research, though, many of the amateur authors are gifted professionals in their field and have produced valuable works. Professional transport historians, often employed by universities, archives, or museums, have been slow to come to the history of transport. The lack of production from academics, combined with the desire for such works from many amateurs and transport enthusiasts, perhaps explains why amateurs have produced so much more research than professionals have to this point.

One of the first and most prolific amateurs of Danish transport history was Frode Holm-Pedersen. After starting as a seaman, he eventually came to own a shipping company. Aware that the culture of Danish sailing life was eroding, he dedicated his life to preserving its legacy by collecting its artifacts. His collection eventually became part of a public museum in Svendborg. In the 1950s he wrote many books about sailing ships and the transition process in the sailing trade. In 1952 he edited the previously mentioned serial *Fra sejl til diesel*.

21. Det kgl. Danske aeronautiske Selskab, *Dansk Flyvnings Historie* (Copenhagen: Det kgl. Danske aeronautiske Selskab, 1936).

22. Knud Lybye, *Dansk Trafikflyvning gennem 25 Aar* (Copenhagen: Gyldendal, 1943); John Foltmann, ed., *Flyvebogen* (Copenhagen: Westermann, 1946).

23. Povl Westphall, *Det Danske Luftfartselskab 1918–68: Verdens ældste luftfartselskab og dets historie* (Copenhagen: Scandinavian Airlines System, 1968).

24. Toni Mygdal-Meyer, *Da danskerne fik vinger* (Copenhagen: Gyldendal, 2002).

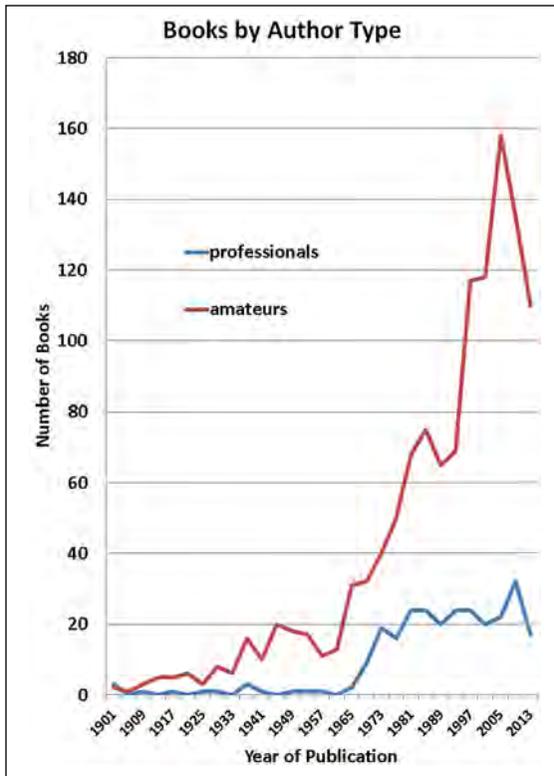


Figure 3

Holm-Pederson and other amateur authors had an advantage that many professionals could never match—knowledge of transport sectors gleaned through firsthand experiences. Academics could not read books to capture this knowledge, but instead had to rely on first-person accounts. The passion and ties that amateurs brought to the subjects they wrote about helps explain why they so often completed entire series of books and not just one single volume.

Without direct connections to transport experiences, professionals were slow to focus on the subject and rarely have worked on more than one transport-related project.²⁵ This lack of cohesion has made it hard to establish a dedicated field of study or any specialized research groups or centers. The few times such a collective focus has formed it has been productive, such as the Center for Nautical Archaeology established in collaboration between the Viking Ship Museum and the University of Copenhagen between 1993 and 2003. A more permanent institution is the Centre for Maritime and Regional History, which is a collabora-

25. For example, since Alexander Wittendorff wrote *Alvej og kongevej*, he has not returned to the subject.

tion between the Fisheries and Maritime Museum and the University of Aarhus. There has been some production by non-Danish researchers as well, but this has been limited to only a few works or mentions in larger projects.²⁶ One of the most productive groups of professional authors has been museum employees, who gain knowledge of their field over decades of collecting and organizing sources. Without teaching and other academic requirements, this group has produced a number of influential works.²⁷

What should be clear is that the quality gap between amateur and professional transport history is not as large as one might expect. A comparison between two books about a similar subject—university-educated historian and researcher Carsten Porskrog Rasmussen's *De danske eksportvognmænds historie* (The Danish export haulers' history) and journalists Lorents B. Rasmussen and John Aagaard's *Transportgiganten—historien om DSV* (The giant of transport—the history of DSV)²⁸—elucidates this point. Both books deal with understanding the drive and psychology behind those involved in the transport business. Rasmussen learned a great deal about the business and the role of individuals within it, but remained unattached to particular actors. The journalists' work, on the other hand, gives fine details and relates the stories of individual, named actors, leading the reader to invest much more in the experience. And as one of the few books focused on DSV, its depiction was invaluable. This example shows that while not all amateur works follow academic rules, they are often some of the only works focused on a variety of subjects and produce quality work.²⁹

26. One of the most productive non-Danish authors are Bruce Peter with, for instance, *Danish Liners around the World* (Frederiksværk: Nautilus, 2014); *Knud E. Hansen A/S: Ship Design through Seven Decades* (Frederiksværk: Nautilus, 2010).

27. To mention a few examples: the Viking Ship Museum has published H. C. Petersen, *Skin Boats of Greenland* (Roskilde: Viking Ship Museum, 1986), the first of seven books in the series *Ships and Boats of the North*. One of Denmark's many small maritime museums has published the three-volume serial by Karsten Hermansen, Erik Kromann, and Holger Munchaus Petersen, eds., *Danske coastere og andre danske skibe på 150–500 brt: Fra 1945 til 2012* [Danish coasters and other Danish ships on 150–500 GRT (Gross Registered Tonnage)] (Marstal: Marstal Museum, 2013). Nonspecialized museums are publishing books as well. The Danish National Museum has published the eight-volume serial by Ole Højrup, *Søens folk: Beretninger fra århundredskiftet, 1985–1988* [The sailors: Stories from the turn of the century] (Copenhagen: Nationalmuseet, 1986). Local museums in harbor towns have published maritime books, such as Ole Mortensøn, *Renæssancens fartøjer: Sejlads og søfart i Danmark 1440–1650* [Renaissance vessels: Sailing and shipping in Denmark] (Rudkøbing: Langelands Museum, 1995).

28. Carsten Porskrog Rasmussen, *De danske eksportvognmænds historie* (Sønderborg: Institut for Grænseregionsforskning, 1988), and Lorents B. Rasmussen and John Aagaard, *Transportgiganten—historien om DSV* (Odense: Rasmussen & Aagaard, 2012).

29. In general most authors make books of acceptable quality—including nonprofessional authors. This judgment follows the results from a study of authors of articles in Danish scientific journals—Jørgen Burchardt, "Researchers Outside APC-Financed Open Access: Implications for Scholars without a Paying Institution," *SAGE Open*, 2014—which found around 25 percent

Another clear connection between both amateurs and the professionals who have come to devote more of their time to transport history is their passion for the subject. While their interest is often tied to a romantic view of the “old days,” this should not be dismissed, as this drive has indirectly led to the creation of not just valuable readings but also transport museums and research positions.

While there do seem to be some undeniable divisions between professional and amateur authors, increasingly these groups of researchers are finding fruitful collaborations through the work of a variety of field-specific societies. Most of the major transport sectors have societies devoted to their study. The most influential groups, such as the Commission for Danish Maritime History and Social Research, draw members from across the country and hold annual or biannual conferences. Museums often play a role, promoting specific societies by publishing journals about the groups’ works and proceedings. A final set of societies that has produced fewer published pieces, but that has nonetheless helped keep transport in the public eye, are enthusiast groups for different transport modes. Whether clubs for vintage car collectors or groups for fans of historic railways, these groups often have their own journals and occasionally publish books in addition to maintaining museums filled with historic makes and models.

Why a Decline in the Number of Books?

While a steady stream of Danish transport histories have been published since the 1960s, based on this scientometrical analysis production seems to be slowing down, especially amongst the very important amateur authors. While production is dependent upon some topics already discussed—the number of researchers, the resources devoted to a subject or field, and the interest among readers—there may be other ways to account for the decline.

I would argue that three other explanations may be contributing to the actual decline in the published number of books. First is the lack of continued support from research sponsors. The economic decline of 2008 left many companies without excess capital to devote to anniversary books or in support of outside research. Likewise, professional researchers saw their budgets shrink, and universities have seen resources dwindle, with a tendency to cut all “unnecessary” activities. The more internationalized business world would not be interested in supporting national Danish transport history. Second, it may be that professionals are choosing to not pursue transport histories at the same level as before. Many universities have been pushing researchers to write more articles rather than books in hopes of gaining more recognition of various citation rankings.

of authors are not employed at a research institution. Thus, the editors of the peer-reviewed academic journals find that nonprofessional authors can act on the same professional level as the people employed to make research.

Further, the retirement of an older generation of transport historians from universities and museums may have led to an influx of new professionals with less interest in the subject. One can hope that as with previous generations of professionals, transport history may once again become a topical focus in the years to come. The third possible reason for decline might stem from a disinterested reading public. Whether the subject is less enthralling to younger audiences or the Internet has become a go-to site for research, changing reading habits may also be contributing to the recent slowdown in the production of transport histories.

If the decline in research is permanent, it could also be a result of changing research realities. As Poul Holm has argued, providing works that benefit both national and international audiences can be a challenge.³⁰ On the one hand, in order to be recognized as an accomplished academic, professional researchers must meet international standards and write in English. While this widens the spread of Danish scholars' work, it also threatens to weaken national and local understandings of our history. One outcome of this might be that a lack of professional encouragement and engagement might lead to a further decline in the previous fruitful amateur work on transport history.³¹

Jørgen Burchardt is a researcher at the National Museum of Science and Technology in Denmark and former director of the Danish Road Museum. His current project is "Freight Transportation and Supply Chains, 1900–2000." He was educated as an engineer and ethnologist at the University of Copenhagen, the Royal Institute of Technology, Sweden, and Deutsches Museum, Germany.

30. Poul Holm, "Danish Maritime History, 1976–1992: A Review," *Research in Maritime History* 8 (1996): 81–112.

31. It could be interesting to see if the development exists in other countries through similar analyses. Unfortunately, few countries possess comprehensive statistics about book publishing. The situation for Africa is presented in Hans M. Zell, "How Many Books Are Published in Africa? The Need for More Reliable Statistics," *The African Book Publishing Record* 39, no. 4 (2014): 397–406. Other parts of the world have a similar lack of information.