The Transportation experience. Second edition

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This book is not a standard transportation handbook, but a walk through history from a transportation point of view. It provides an overview of developments in the world of transportation from the end of the eighteenth century until now. The authors have subdivided the book into five big parts; titled “Wave 1: 1790-1851”, “Wave 2: 1844-1896”, “Wave 3: 1890-1950”, “Wave 4: 1939-1991” and finally “Wave 5: Modern Times”.

Wave 1 gives background information on new ideas and technologies – at the end of the eighteenth century and beginning of the nineteenth century – making new ways of transportation possible. The idea of applying steam to solve transportation problems resulted in the use of steam boats and in a later stage, more advanced steam engines resulted in locomotives and the rise of rail road use. Although not to the same extent as we know it today, at that time a rise in the road network was visible and new technologies to construct them, such as the Macadam-type roads, were developed.
In wave 2 – ranging from 1844 to 1896 – various transportation methods develop further. Ships become larger and start crossing the ocean. Networks of railroad and canals become more widespread, while cars come into play. In this period, we also see a shift in public transit, from horsecars to streetcars and subways. Interesting case studies of the expansion of public transit networks in London and New York are presented here. In this second part of the book we also find a section on the telegraph and on the increasing speed of transport modes.

In the third big wave – going from 1890 to 1950 – a further development in (American) shipping takes place. Ships are being used for colonial and military interests. In this period transportation through the air makes its entry, in a first stage for mail traffic, in a later stage for passengers. Starting in the nineteen twenties, airline companies started to develop. In this wave the authors also deal with railroad deployment at national/continental scale. In the public transport sector a shift occurs from rail transit to the cheaper and more flexible bus. Some mass rail transit systems in major cities, however, are still present and successful (e.g., BART in the San Francisco Bay Area). Finally, we see an increase in private car use. Although cars were developed at the end of the nineteenth century, the car only becomes a dominant travel mode in the nineteen forties, following Fordist mass production and increasing incomes.

The fourth wave – ranging from 1939 to 1991 – is characterised by revolutions in the shipping of freight and a new age in flying. Roll on/roll off (ro/ro), but especially the introduction of containers by McLean in 1956 changed the world of freight transport. Unloading and loading became about 40 times faster while space is being used in a
more efficient way. In air transport, the jet engine made supersonic flights possible. Although commercial supersonic aircrafts were used since the end of the nineteen sixties, the last one (i.e., the Concorde) flew in 2003 since the cost of operating the aircraft could not be recovered by fares. Finally, in this wave we also see a decline in railroad (use) and a rise of interstates and freeways, and in a later stage the introduction of HOV (High-Ocupancy Vehicle) and HOT (High-Ocupancy/Toll) lanes on these freeways.

Finally, the fifth wave deals with present-day transportation issues. Increasing car use is resulting in natural resource exhaustion, damage to the environment (e.g., due to greenhouse gas emission), and growing traffic congestion. However, there are signs that we recently reached a peak in car use. In this part of the book, the authors provide some potential solutions for car-related problems, such as very small (electric) cars and automated highways. In this final part, the authors also go into detail on high speed rail networks.

This book gives very thorough information on transportation history. In this book, readers find a bundle of detailed stories on the development of transportation systems in various (mostly US) cities and more general transport evolutions, such as the decline in train ridership due to increasing car use in the middle of the twentieth century to peak car use in the present decade. As a way to show how extended this book is, it also has chapters on the rise and decline of telegraph and telephone use.

This book will probably not provide you with state of the art theories in transportation, but will arouse the attention of people with an interest in various aspects of
transportation. What makes this book also fun to read is that it provides numerous facts; for instance that the word bus originates from the Latin word omnibus, meaning 'for all', and that the first successful US transcontinental car trip (from San Francisco to New York) in 1903 took 63 days.

A downside of this book is that it is highly focussed on the United States (and to lesser extent the United Kingdom), leaving transportation developments from other countries and continents out of account. Of course, providing a detailed overview for the whole world would probably result in 5,000 pages instead of 500 or it would result in a loss of detailed information. Furthermore, some chapters are – in my opinion – a bit far-fetched (e.g., the chapters on telegraph (wave two), telephone (wave three) and the internet (Wave five)). In the end, this is an easy-to-read book with a lot of interesting transportation stories brought together in five chronological parts.

This book is reviewed by Dr. Jonas De Vos, Geography Department, Ghent University, Belgium