
BOOK REVIEW

Urban Transport Development, Theory and Practice, I.P. Gautam and H.M. Shivanand Swamy (2023), Published by Concept Publishing Company Pvt. Ltd., New Delhi, ISBN: 978-93-5594-640-9, pp. 174, Price Rs. 800/

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Urban Transport Development: Theory and Practice (2023) by I.P. Gautam and H.M. Shivanand Swamy is a comprehensive work that tackles the multifaceted issue of urban transportation in contemporary cities. Published by Concept Publishing Company, New Delhi, this book provides an in-depth exploration of both theoretical concepts and practical applications in the realm of urban transport planning and development. With ISBN 978-93-5594-640-9, the book serves as an essential reference for professionals, policymakers, academics, and students involved in urban planning, civil engineering, and transport management.

Overview and Structure

The book is divided into six chapters, each addressing a different aspect of urban transport development. It begins with foundational theories, setting the stage for understanding urban transport as a complex, dynamic system that intersects with economic, environmental, social, and technological factors. The authors adopt a balanced approach by not only presenting theoretical frameworks but also providing case studies, real-world examples, and practical solutions to urban transport challenges.

Chapter 1 comprises an understanding of the development of large infrastructure projects. The authors introduce the importance of urban transport systems in the context of rapidly urbanizing societies. The chapter sets the stage for the deeper discussions to follow,

emphasizing that transport is integral not only to urban development but also to the quality of life in cities. The chapter is divided into five sections: The first section provides a historical overview of urban transport development and underscores the growing challenges of congestion, pollution, and sustainability in metropolitan areas. The second section offers a glimpse into urban transport in India, sharing data from various public domains like Census 2011, MoRTH 2019, JNNURM.nic 2015, etc. The third section describes alternative approaches to understanding the project development process, including traditional approaches and alternative perspectives drawn from Actor-Network Theory (ANT). The fourth section narrates the chapter scheme.

Chapter 2 provides an overview of Actor-Network Theory. The theory concerns the formation of actor-networks, in which both human and non-human elements partake. It describes the three critical concepts of ANT—translation, inscription, and delegation—and discusses the distribution of agency. This chapter reveals research that adopted these as analytical tools to understand the development of BRT projects in Ahmedabad.

Chapter 3 outlines the process of project development, emphasizing that stabilization is not a static state. During the life cycle of a project, stabilization and destabilization occur constantly, and the focal actors must continually attempt to mobilize and remobilize associations to keep the project in a stable state. Although project formulation needs to be done in great detail, if flexibility is not built into it, the success of the project could be at stake. Hence, the development of large projects in the public arena entails continuously evolving innovations.

Chapter 4 attempts to describe the design of major artifacts that BRTS Ahmedabad planners designed and developed. While analyzing the design of artifacts, ANT concepts—namely delegation, scripts, inscription, programme of action, irreversibility, and black-boxing—have been adopted. The chapter further explores the design, development, and operation of key artifacts of the Ahmedabad BRTS. While there is a long list of artifacts designed as part of the BRTS, this work focuses on three key artifacts: the street network, the stations, and the bus. Other related artifacts, such as the fare collection system, passenger information system, operating plan and procedures, governance mechanisms, etc., are critical and discussed wherever relevant.

Chapter 5 is divided into four sections. A review of state-of-the-art technology is conducted through market scanning, literature review, and consultation with technical experts and manufacturers. This section also presents the conclusions of a technical workshop held to discuss bus design. It describes how bus specifications were finalized and how the buses were procured. During this process, at an early stage of project development, it was decided to use the private sector for bus operations. Finally, the chapter discusses the above-mentioned aspects and concludes.

Chapter 6 is the epilogue that begins with an understanding of the process of large-scale transport project development, using Ahmedabad BRTS as a case study from conceptualization to commissioning and beyond. It uses the three key concepts of ANT: translation—to explain the project development process; artifacts and their inscriptions—designing artifacts to influence user behavior, and to make the network durable; and delegation and distribution of agency—to illustrate how decisions emerge from actor-network interaction rather than from a single actor. The findings highlight several important facets of urban planning, especially those related to transport and the use of the ANT framework in large-scale transport project development.

Overall Assessment

Strengths

- **Comprehensive Coverage:** The book's strength lies in its holistic approach, blending theory with practice. It addresses a wide array of topics relevant to urban transport, from policy to technology and sustainability.
- **Case Studies and Practical Insights:** The inclusion of global case studies adds depth and context to the theoretical discussions. These real-world examples make the concepts more tangible and provide valuable insights into practical applications.
- **Clarity and Accessibility:** Despite the technical nature of the subject matter, the book is written in a clear, accessible style. Complex concepts are explained in a way that is understandable to both experts and non-experts, making it suitable for a broad audience.

Weaknesses

- **Limited Focus on Non-Motorized Transport:** While the book does touch upon non-motorized forms of transport like walking and cycling, it could benefit from a more detailed exploration of these alternatives, especially in the context of rapidly growing urban areas.
- **Overemphasis on Technological Solutions:** While technology is undoubtedly an important aspect of urban transport, some readers may feel that the book places a disproportionate emphasis on high-tech solutions, sometimes at the expense of simpler, more cost-effective approaches.

Conclusion

Urban Transport Development: Theory and Practice is an invaluable resource for anyone involved in the field of urban transport planning and development. I.P. Gautam and H.M. Shivanand Swamy have successfully blended theory with practical solutions, providing a nuanced understanding of the challenges and opportunities in urban transport systems. The book is well-suited for professionals, policymakers, and academics, offering both a solid theoretical foundation and actionable insights. Despite a few areas where it could have delved deeper, particularly with regard to non-motorized transport, it remains a highly recommended read for those interested in shaping the future of urban mobility.