

論文の内容の要旨

論文題目 Transit-Oriented Development History of Tokyo and Seoul
 - How has TOD been promoted and frustrated?

(東京とソウルの公共交通指向型都市開発史 - TODの実現と挫折に関する原因分析)

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This thesis was performed to find the transit-oriented development (TOD) examples from the urban development history of Tokyo and Seoul to analyze the success or failure points of TOD under the historical context. The thesis is composed of historical research of urban development from the TOD perspective and comparative analysis of the findings. With more than one hundred year span, since when the first mass transit of tram has been developed in both Tokyo and Seoul, the urban development of the two cities related to transit-oriented development was investigated. To understand the relationship of urban sprawl and transit system, the geographical study range was set as the metropolitan area level.

In processing the study, historical research and comparison were used supported by literature review, interview, site visits, and case studies. As a characteristic of historical study, most of the material depended on literature. More than hundred of books, maps, newspapers, handbooks, pamphlets, pictures, photos and statistics were used, and it was tried to refer the original data as much as possible. When the original data was not available, the second data was used. Interviews with different sectors, such as city office urban planners, scholars, private developers and entrepreneurs and site visits were done. For the close analysis of TOD examples, case studies were performed.

The major findings and inferences of this study can be summarized as follows:

First, the strong control-oriented urban development policy in Seoul limited the TOD potential, even

after TOD became an important development concept in master plan, while the market-oriented development environment during the early twentieth century of Tokyo became the ground to develop Tokyo as an extensive railway-oriented city and station-oriented urban pattern. This contrasts the common acceptance that planning-oriented policy would promote TOD more. Under the economic growth and urbanization, land development with infrastructure was wanted by people and lucrative for developers, so the market-oriented development boosted TOD of Tokyo in the early twentieth century. Because of the rigidity of railways, land uses adapted to the railways more cohesively as time goes by, and it fixed the railway-based urban pattern. On the contrary, the strong urban control system decreased the profit for developers in Seoul. Under the TOD policy, the station area was designated as a strategically developing area, which resulted in fastidious development condition and less attractive than other areas for developers. As a result, it was observed the conversed phenomenon of lateness and low rate of development at the station area in Seoul during the 1980's, when the TOD concept was budding.

Second, the high level of flexibility and adaptability of bus system worked as negative in TOD in Seoul between 1950s and 1970s. Bus has been in the center of urban development and transit history of Seoul. As tram declined, bus took over the baton of major and the only mass transit and aligned itself with urban sprawl, and the spread of bus delayed the appearance of subway in Seoul. The bus supportive policies of the Department of Transport (DOT) and the Seoul Metropolitan Government became an ambivalent attitude for bus operators. As increasing the number of buses, the DOT put continuous efforts to regulate bus operations and reform the routes. Under the uncertainty of a bus route, the idea of bus route oriented development must be killed. The recent bus reform in 2004 was achieved by fixing the main routes as an exclusive way thus, enhanced the possibility of bus oriented development.

Third, greenbelt played a negative role in TOD in a densely populated city of Seoul. By storing the sprawl inertia inside of the city area, it stopped urban sprawl very strongly effectively for twenty years, but the inertia flooded low density area, as a result, the compact development at the station was diluted. The example of Tokyo is exactly opposite to Seoul. By the strong and strategic resistance of farmers in greenbelt, Tokyo's greenbelt, called *suburban belt*, was disappeared in the 1969 Tokyo Metropolitan Master Plan. As a result, Tokyo developed extensive urban sprawl, but it preserved station focused compact development pattern in a micro scale.

Fourth, the timing of transit service affected to the success of transit-oriented new town development in a significant way. Because of the characteristics of new town, which has significant number of commuters and large scale development with a good level of infrastructure including roads, the

lateness of transit service drove the new town car-oriented developed regardless of transit-oriented master plan.

From the results, the following implications can be drawn. First, more flexible land use system and development control can promote TOD from the private sectors. Second, bus system based TOD requires reliable public sector's supports to success. As one way of it, the frequently used solution so far has been developing the bus in a more route-fixed way: making bus more railway-like. Third, greenbelt should be used with more considerate development density setting within the urban area, otherwise, it will cause densely flat development in the urban area. Finally, early stage of decent level of transit service affects the success of TOD, not by the land use plan, but by inducing the market system. The characteristics of a new town – which are high dependency on the mother city, large scale development with a good level of road infrastructure and high proportion of residency – apt to lead the travel pattern of people and development in automobile-dependent ways. To prevent it, early stage good transportation service is essential.

From the one hundred year history review of the two cities, it was often seen that every difficult situation became a chance for innovation and reform, and that satisfactory environments delayed to move forward because of the stableness of the system, then, turn to a chronic problem in the next stage. A mess to cut the cancer once happened to be a lethal weapon to hurt oneself later. Thus, cautious system examination and management should be performed even during the system works fine.

Keyword: transit-oriented development, urban development history, comparative study of Tokyo and Seoul, transit system development, institution, new town development, greenbelt, urban regeneration