



A Spatial Segregation : The Existence of Wara Wiri Suroboyo and Conventional Angkot in Gidden's Structuration Perspective

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Abstract

Surabaya as a big city cannot be separated from the polemic of congestion in every corner of the city. This is caused by the excessive use of private transportation. The congestion led the government to launch wira wiri Suroboyo to increase public interest in riding public transportation. However, the emergence of wira wiri suroboyo has also caused pros and cons in the community, especially in conventional angkot groups. This phenomenon makes researchers interested in conducting research on the process of spatial segregation that occurs with the existence of conventional angkot and wara wiri suroboyo. The method used is qualitative with data collection techniques in the form of observation and interviews. The data was analyzed using miles and hubermans analysis techniques and Anthony Giddens' structuration theory. The results of the study show that there is a structuration process between conventional angkot drivers and the government management of wara wiri Suroboyo. The segregation of work space that occurs is then overcome by the government with various agreements so as not to cause a process of struggle for work space between conventional angkot drivers and wara wiri Suroboyo.

Keywords : spatial segregation; transportation; urban; Surabaya; Global South

INTRODUCTION

Congestion is one of the problems that still occurs in big cities like Surabaya until now. Congestion is a condition where the road flow has decreased its smoothness level so that it can affect travelers such as road users using public transportation and road users with private transportation which can have an impact on discomfort and increase travel time for road user (Margareth, M., Franklin, P., & Warouw, F. 2015). The problem of congestion is one of them caused by transportation problems. Transportation is an important thing for urban communities to facilitate the mobility of urban residents who are very high. Transportation is a process of moving, moving, lifting, or transferring that will not be separated from supporting tools in ensuring the smoothness of the movement process based on a predetermined time (Da Cruz, A. 2018) . Public vehicles and private vehicles are one of the tools that can help in the displacement process. In life in a big city like Surabaya, transportation issues are a matter of concern especially in relation to public transportation to overcome traffic congestion in the city (Tahir, A. 2005).

The high activity in urban areas such as Surabaya has led to an increase in movement, resulting in an increase in the number of private vehicles that make Surabaya City has a high traffic density. It is not surprising that traffic congestion has always been a major problem for metropolitan cities . Many people are encouraged to use private vehicles such as motorcycles and cars because existing public transportation is represented by the public as unsafe, uncomfortable, and untimely. This results in traffic jams that cannot be avoided, especially during peak hours.

Congestion in Surabaya City is caused by the use of private vehicles on the main roads of Surabaya City (Fatmawati, Y. G. 2022) . This congestion tends to occur during urban rush hours because many people mobilize within the city or between cities to go to activity centers in urban areas. Surabaya as the center of government and economic center makes the process of mobilization every day occurs in large numbers. This is due to the phenomenon of urban sprawl as a result of the process of expansion and development of the suburban areas of Surabaya. So that based on the results of the analysis published by the INRIK traffic analysis company, Surabaya City is the city with the highest congestion in Surabaya (INRIX 2021) .

The government is doing various ways to overcome the problem of traffic congestion in the city. As done by the Surabaya government, namely by bringing up public transportation called wara wiri Surabaya. This step taken by the Surabaya government is based on the

considerations and demands of the government contained in the 2006 Surabaya City Regional Regulation regarding the implementation of transportation of people on the road using public vehicles which reads "that one of the manifestations and creation of people's welfare is the implementation of public safety in the field of transportation through the mode of transportation on the road with public vehicles". Feeder wara wiri Surabaya was launched by the Surabaya city transportation office to support a safe and comfortable mode of transportation and can reduce congestion (Tvonenews 2023). Wara wiri Surabaya is designed more modern than the previous angkot. Various facilities such as Ac, CCTV, and special seats for women, men, as well as disabilities and the elderly. The existence of this new, more modern transportation certainly makes young people and the public more interested in riding it. So it does not rule out the possibility, the existence of wara wiri Suroboyo ono can shift public interest in conventional angkot. This raises a sociological question how the process of spatial segregation that occurs with the existence of wara wiri Surabaya with conventional transportation?

In a research, of course, there are previous research studies that are used by the author as a review. Many previous researchers have conducted research on the problem of urban congestion and public transportation. Research from (Hendrialdi, H., Sueni, N. W. P., Soimun, A., & Rupaka, A. P. 2021) which seeks to find out how the effectiveness of public transportation as a solution in overcoming congestion problems in Sarbagita Metropolitan. In addition, research from (Ariesandi, J. A., Resita, R., & Salsbabila, Z. 2020) actually states that public transportation in Malang City actually makes traffic conditions congested because many angkot make random passenger stops, making road conditions even more congested. Furthermore, research from (Sahara, I. A. P., Hidayat, A., & Abdillah, W. S. 2022) states that the trans patriot bus as public transportation in Bekasi City has not been effective in dealing with congestion problems in Bekasi city due to intersections with angkot. Then research from (Primasworo, R. A., & Sadillah, M. 2021) seeks to find out how the identification and characteristics of the urban transportation needs of Krakasan in the Probolinggo Regency area. Furthermore, research from (Rusyadi, M. K., & Fajarwati, A. 2020) which tries to find out how the impact of online transportation as public transportation in the city of Bandung on the sustainability of city transportation (angkot).

This research with previous research studies have in common that both discuss public transportation in big cities. However, this research with previous research has differences that will produce a novelty. The difference between this research and previous research is that from

previous research there has been no research that discusses the segregation of space with the existence of modern transportation on conventional transportation. Previous research has also not analyzed in terms of anthony giddens' structuration theory of the problem of public transportation as a solution to the problem of congestion in the city. So, to complement the shortcomings of previous research, researchers aim to conduct research with the title Space Segregation: Looking at the Existence of Wira Wiri Suroboyo and Conventional Angkot (Perspective of Anthony Giddens' Structuration theory). The purpose of this research is to find out how the impact of the existence of wara wiri suroboyo on conventional angkot, how the process of structuration that occurs in urban transportation changes in the city of Surabaya, and how the process of space segregation that occurs in wara wiri suroboyo and conventional angkot. This research will use Anthony Giddens' structuration theory as an analytical tool.

RESEARCH METHODS

This research uses a qualitative method. Qualitative research was chosen because to explore deeper data from informants. This is based on what is symptomatic as a phenomenon is not necessarily the same as what is in the mind of the individual (Harahap, N 2020) . Data collection was carried out by means of observation and in-depth interviews. Observations were made at Joyoboyo terminal as a stop for conventional angkot and also wara wiri suroboyo angkot. In-depth interviews were conducted by means of open interviews so that researchers could explore the data completely and in depth so as to make the researcher's understanding of the phenomenon under study in accordance with the understanding of the actors themselves and there was even the use of recording aids (Djaelani, A. R 2013). In addition, researchers also use secondary data as supporting data. Secondary data is generated from journal articles, books, websites and other literature that matches the research title.

The subjects in this study were conventional angkot drivers and wara wiri Surabaya angkot drivers. The research subjects were selected using purposive sampling technique. Purposive sampling is a data source sampling technique by making certain considerations (Sugiyono 2017) in (Deriyanto, D., & Qorib, F. 2019). The data were then analyzed using the analysis technique from Miles and Huberman which includes three stages, namely the data reduction stage, the data presentation stage, and the conclusion drawing stage. Then the data was also analyzed using Anthony Giddens' Structuration theory. Giddens' structuration theory states that in a change there are agents and structures that influence each other. This theory was chosen by the researcher because it fits the purpose of the study which is to find out whether

there are agents and structures in the process of spatial segregation with the existence of Surabaya wira wiri and conventional angkot.

RESULTS AND DISCUSSION

Urban Transportation : From Conventional Angkot to Wara wiri Suroboyo

Conventional public transportation is part of the transportation system that is a necessity for the community to support daily activities. In general, the existence of public transportation cannot be separated from the development process. The existence of public transportation is useful for supporting the community mobility process and reducing traffic congestion because it has a large carrying capacity. In addition, the existence of public transportation is also useful in reducing the use of private vehicles.

Cities are areas that often have congestion problems in every corner. This is due to the density of the population in the city who all mobilize using private vehicles. This congestion will have a far-reaching impact on the community's economy. So that the mode of transportation is an important solution in overcoming this problem (Sukarmi, S., & Suwondo, D. 2019). Public transportation can provide people with a high degree of flexibility and can even replace the effectiveness of private cars or more commonly referred to as personal mobility (Lyon, et al. 2001) .

The city's public interest in public transportation is still relatively low. This can be seen from the various traffic jams that still adorn the city which is none other than the large number of private vehicles that still dominate. The existence of public facilities in the city of Surabaya which still has various problems is a separate reason for public interest. Public transport problems such as inadequate fleet, insufficient facilities and infrastructure, low interest of public transport users and not optimal role of regulators and operators make operational conditions on public transport look less good. So it is necessary to change the mind set of the community in order to switch from the habit of using private vehicles to the use of public vehicles gradually (Sukarmi, S., & Suwondo, D. 2019) . This must be preceded by the availability of adequate facilities and infrastructure and more deeply there must be a real example from stakeholders, namely the mental revolution of the community. This is what the Surabaya City government then did by completing the existing public transportation facilities and infrastructure in order to make people reduce the use of private vehicles so as to reduce congestion.

Based on research that has been conducted, the existence of public interest in riding public transport raises three types of passengers in choosing modes according to Tamin (2002) including: a. Characteristics of the transportation system; namely the length of the trip (walking to the terminal, waiting for the vehicle, and time in the vehicle), the cost of travel (tickets, fuel, and toll rates), the level of service (comfort and satisfaction), the ease of achieving the destination, and the reliability of public transportation (on time, availability of parking spaces, and tariffs). b. Traveler characteristics; i.e. trip purpose (work, school, recreation, and business), time of travel (morning, evening, or holiday), trip length (distance traveled and travel time). c. Traveler characteristics; i.e. income, vehicle ownership, personal vehicle condition, housing density, and family structure and size.

The government continues to develop technological advances in public transportation to increase public interest. One of them is by providing public transportation with modern and comfortable facilities such as wara wiri suroboyo. Initially, public transportation in Surabaya was a type of conventional angkot. The facilities offered in conventional angkot are sober facilities that are inadequate so that public interest is decreasing and switching to using private vehicles so as to increase congestion in every corner of the city. Then comes wara wiri Surabaya as a modern angkot with various facility updates that aim to make the community comfortable so that the attractiveness increases.

Public transportation in Surabaya City is experiencing very rapid development . This can be seen from the development of the concept of public transportation that exists at this time. In addition, there are various launches of new types of public transportation to improvements in the field of facilities and infrastructure in the public transportation. In principle, public transportation in Surabaya City is sustainable transportation (Fatmawati, Y. G. 2022) . The existence of public transportation that can be reached easily and at a cost and environmentally friendly concept that can have an impact on the economic development of the city. In addition, public transportation in Surabaya City is equipped with adequate facilities and infrastructure such as bus stops that are in good condition. The existence of non-cash payments, the provision of transportation that is friendly to people with disabilities and women, safe and comfortable transportation, and in a more modern form. Public transportation in Surabaya City, which was originally in the form of conventional angkot with the existence of makeshift facilities, has now experienced development. Wara wiri Suroboyo is a form of development of modern public transportation modes in Surabaya in the form of angkot. Supported by various

adequate and sophisticated facilities, this modern angkot is expected to attract public interest in switching to using public transportation.

Space Segregation: The existence of conventional angkot after the presence of wira wiri Surabaya

Wara wiri Surabaya was tested on March 3 to March 9, 2023. wara wiri Surabaya is a public transportation feeder such as angkot to support public transportation modes that are safe, comfortable, and can reduce congestion. This public transportation officially operates since March 2023 with various routes in Surabaya that are integrated with Suroboyo Bus and Trans semanggi Suroboyo. This feeder is designed to use a more sophisticated payment method, namely through non-cash payments via electronic cards or Qris. The design of this feeder is more modern than previous transportation. Where in Surabaya wara wiri feeder is equipped with facilities such as air conditioning, CCTV, and seats that are specialized to support the safety and comfort of passengers. The existence of this new transportation is expected by the transportation agency to make people switch from private vehicles to public vehicles in Surabaya City.

Based on the results of interviews conducted with wara wiri Surabaya feeder drivers, it is stated that this feeder is a government effort in making the transition from conventional angkot to become a more modern angkot. What is prioritized to become a wara wiri Surabaya driver for now is a person who owns a conventional angkot or what is often called a len. This is done by the government to help conventional angkot drivers so that they can all be incorporated into wara wiri Surabaya so that they no longer think about deposits. Because the system in wara wiri Surabaya applies a flat salary system. Drivers do not need to chase deposits, do not need to think about gasoline, because it has been fulfilled by the Surabaya wara wiri feeder manager.

The existence of angkot wara wiri Surabaya raises the pros and cons in society. Since this Surabaya wara wiri operates, many people have switched their interest to the Surabaya wara wiri. Various rejections from the head of the len members to reject the existence of wara wiri surabaya. However, these problems create disapproval from various members of the conventional angkot association. This certainly causes segregation of work space between conventional angkot and modern angkot feeder wara wiri surabaya.

Spatial segregation is another issue in urban society. Spatial segregation is the phenomenon of grouping urban spaces based on social and economic boundaries. The existence of these groupings is due to the accumulation of social problems. In the transition of conventional angkot transportation modes to modern angkot wara wiri Suroboyo, there is segregation of the route taken, causing economic segregation. This lane grouping was carried out by the government so as not to cause conflict between wara wiri suroboyo and conventional angkot.

A good urban layout can help prevent the process of urban segregation with a layout that can result in the integration of socio-economic groups . Schools, offices, markets, factories, settlements, or places that allow communication between communities must be well organized so that urban segregation can be overcome so as not to cause gaps and competition for space (Kartono, D. T. 2010). The existence of wara wiri Suroboyo makes the government overcome segregation by grouping the lanes between angkot wara wiri and conventional angkot. This distinction is made by the government to avoid conflict and competition for space. Urban spatial arrangements such as public transportation route lines are arranged in such a way by the government so as not to cause integration between groups. So that with the Surabaya wara wiri becoming urban public transportation in the community, the existence of conventional angkot still exists. This is because there is an agreement made between the conventional angkot and the government regarding the route passed and the regulation that wara wiri cannot be rented out while conventional angkot can still operate freely according to what the owner wants, including in terms of renting angkot. This then does not kill the income of conventional angkot drivers.

Structuration in Urban Transportation process in Surabaya

Giddens argues that in the relationship between agency and structure there is a duality process and a dialectical relationship (Rahmawati, W. D., & Fauzi, A. M. 2021) . Structuration theory emphasizes that in the process of social action always involves structure and vice versa that every structure always involves social action. These two things will be closely intertwined in practices or activities carried out continuously by humans. Agents in this context are individuals who act independently in making their own choices. In this phenomenon, the agency is the driver of the conventional angkot at the Joyoboyo intermodal terminal, Surabaya. In contrast, structure refers more to the structuring process that is carried out in a patterned and repetitive manner that can affect the choice of opportunities for others. This structure is more

directed towards a set of rules made by the government regarding public transportation in Surabaya such as presenting the existence of modern angkot, namely wara wiri Suroboyo. Indirectly, this policy can make conventional angkot space limited if there are no other regulations governing the path of the new transportation mode.

Structuration theory in general emphasizes the dialectical process where practices, structures, and consciousness are produced (Rahmawati, W. D., & Fauzi, A. M. 2021) . Giddens divides the realm of consciousness into two types, namely discursive consciousness and practical consciousness (Rahmawati, W. D., & Fauzi, A. M. 2021). Discursive awareness is defined as awareness that can lead actors to the ability to describe an action through words (language). This discursive awareness can be seen from conventional angkot drivers who make route agreements with the relevant government, namely the transportation agency as the manager of modern angkot wara wiri Suroboyo so as not to take routes passed by conventional angkot in Surabaya. The second is practical awareness. Practical awareness is defined as an action that is taken for granted by the actor without any resistance from the actor. In this type of consciousness, actors are unable to express what they receive through words or language. This type of practical consciousness is then the focus of structuration theory. The focus on this second type of consciousness is then the transition from agent to agency. Agency is defined as events in which individuals become responsible for these events. This practical awareness can then be seen from the various actions taken by conventional angkot drivers in order to continue working, namely by switching to become Suroboyo wara wiri drivers and also some who remain conventional angkot drivers with an agreement with the government so that does not take the route taken by conventional angkot.

The core concepts of Giddens' structuration theory are structure, system, and duality of structure . Structure means something that structures and everything that allows the emergence of a social practice. The existence of structures in society cannot be separated just like that. For the most part, the structures that exist in society have a huge influence on the conditions or activities that exist in society. The modern angkot transportation policy in Surabaya society has become a new policy for conventional angkot drivers. This policy then shapes social practices in society. As well as conventional angkot drivers who switch to become wara wiri Suroboyo drivers, make their families or children to become wara wiri suroboyo drivers, and so on. Based on this phenomenon, it can be said that the structure is formed because of the rules and resources. These two things then mutually realize themselves at the macro level of the social

system and the micro level of human consciousness. Structure does not exist on its own in time and space. However, it is manifested by the social system in the form of reproduced practices.

Government Policy Dynamics and Actor Negotiations in Public Transportation Transformation

The Surabaya City Government, through the Transportation Agency, plays a central role as the main structure in the public transportation transformation process. This role is realized through the formulation and implementation of strategic policies, such as the launch of Wara Wiri Suroboyo, which is formally regulated by Surabaya Mayor Regulation No. 22 of 2023 (Yuliana and Rosyida 2023). The main objective of this policy is to provide feeder transportation that is integrated with other mass transportation modes, such as Suroboyo Bus and Trans Semanggi Suroboyo. The hope is to create a viable, efficient public transportation network that is able to address congestion problems in the city (Yuliana and Rosyida 2023). This is an attempt by the government to deliberately engineer urban social and environmental systems to achieve broader development goals.

The Surabaya government showed a deep understanding of the potential conflicts that might arise with conventional angkot drivers as a result of this modernization. Therefore, they took proactive measures to integrate and empower the old angkot drivers. One of the key policies was to prioritize the recruitment of Wara Wiri Suroboyo drivers from among conventional angkot owners, known as "len". The payroll system applied to Wara Wiri Suroboyo was also designed to provide income certainty, with a fixed salary that eliminated the burden of daily deposits and gasoline costs that conventional angkot drivers usually bear themselves. This approach is a form of negotiation and accommodation by the government. The aim is to mitigate possible resistance from conventional angkot driver groups and ensure the smoothness and acceptance of this transportation transformation program in the community.

Surabaya's experience in managing this transition is inseparable from lessons learned from similar cases in other cities in Indonesia that also face challenges in modernizing public transport and integrating conventional transport:

- Makassar (Trans Mamminasata BRT): The operation of Bus Rapid Transit (BRT) in Makassar faced a series of demonstrations from *pete-pete* (conventional minibus) drivers due to the significant negative impact on their

income (Saifullah and Isabella 2023). In response, the proposed solution involved a comprehensive negotiation process with the pete-pete association (SIGANDA). Options offered included integration schemes for operators (vehicle owners), such as payment based on kilometers traveled, scrapping (replacing) old vehicles with new units, or integration into larger schemes such as Jaklingko. For drivers, training and a guaranteed decent salary are offered (Saifullah and Isabella 2023). The negotiation process involves structured stages, from determining priority routes, direct negotiations with operators, comparative studies to show a picture of the future of transportation, to procurement of operators and program implementation (Saifullah and Isabella 2023).

- Jakarta (JakLingko): The JakLingko program in Jakarta is an ambitious effort to integrate all modes of public transport with a unified payment system and revitalize angkot into more modern Mikrotrans. Although the program had a negative impact on the income of conventional angkot drivers and some drivers were reluctant to join due to strict regulations and the new monthly salary system, JakLingko remains a comprehensive integration model and a reference for other cities (Wijayanti 2024; Itdp- indonesia.org 2019).
- Semarang (Trans Semarang): Trans Semarang adopted an integration approach by requiring existing angkot operators to cancel route licenses that overlapped with BRT routes. In return, their old fleet was replaced with more modern BRT buses (Itdp- indonesia.org 2019).

These cases clearly demonstrate the power dynamics between the government (as the policymaker and provider of the new structures) and conventional transport operators/drivers (as the agents directly affected by the changes). Governments have the power to make rules and provide resources, but successful policy implementation depends largely on their ability to negotiate, accommodate, and mitigate the socioeconomic impacts on existing agents (Itdp- indonesia.org 2019). Successful public transport reforms require careful business planning, strong communication and consensus building between all parties, training programs, fair negotiation processes, and careful implementation (Itdp-indonesia.org 2019).

The government's approach as a "mediating structure" in socioeconomic transitions is an important aspect in understanding these dynamics. The Surabaya government, with its

policy of recruiting old angkot drivers as Wara Wiri drivers and segregating routes, not only introduced a new system, but also actively managed the social and economic impacts of the changes on vulnerable groups. This is in contrast to an approach that may directly displace older transporters, which has been shown to trigger protests and demonstrations, as happened in Makassar (Saifullah and Isabella 2023). The government realizes that failure to accommodate the agency of conventional angkot drivers may hinder the overall success of the program. By offering a "way out" (becoming a Wara Wiri driver) or a "defensive space" (separate routes), the government tried to steer the agency of the drivers into a more controlled and cooperative path. This approach suggests that effective public policy in the context of rapid social change must be adaptive and inclusive, recognizing and responding to the dynamics of agency on the ground. It also highlights the complexity of "power" in sociology, where state power is not only coercive, but also persuasive and accommodating, in order to achieve social stability and development goals.

Socio-economic Impact and Adaptation of Conventional Angkot Drivers

The modernization of public transportation, especially with the arrival of Wara Wiri Suroboyo and the proliferation of online application-based transportation, has had a significant impact on the lives of conventional angkot drivers. One of the most striking impacts is the drastic drop in their income. For example, in Jember, the income of conventional angkot drivers has reportedly dropped by 50%, from Rp 100,000 to only Rp 50,000 per day, often leading to deposit arrears (Zainuddin 2023). A similar situation occurred in Jakarta, where conventional angkot drivers reported a 60% drop in income after the introduction of the Jak Lingko microtrans (Wijayanti 2024). This decline in income directly threatens the economic well-being of drivers and their families, raising serious concerns for the sustainability of their livelihoods (Zainuddin 2023; Wijayanti 2024). In Surabaya alone, the number of conventional angkots continues to decline, with some drivers choosing to switch professions or join Wara Wiri Suroboyo (Selalu.id 2023).

The impact of modernization is not only limited to economic aspects, but also extends to psychological and social dimensions. Conventional angkot drivers often feel significant pressure and stress due to unequal competition with modern modes of transportation. Social conflict between conventional and modern transportation drivers is a common sight, especially in strategic areas such as terminals or bases, where angkot drivers feel that their operational areas and passengers are being usurped (Zainuddin 2023; Jurnal-ebismen 2023). The feeling

of being "cheated" because online transportation is often perceived as not complying with certain transportation regulations is also a source of tension that muddies the atmosphere (Zainuddin 2023).

Faced with these challenges, conventional angkot drivers did not remain silent. They developed various adaptation strategies to survive, which can be grouped into three main categories based on Suharto's (2009) adaptation theory (Wijayanti 2024):

- 1) **Active Strategy:** This involves proactively utilizing one's abilities and potential to seek additional income. Examples include looking for side jobs, such as becoming an online ojek driver in their spare time or after angkot operating hours, or even opening a small business such as a car repair shop if they have additional skills (Wijayanti 2024; Scribd.com 2018). Drivers also optimize their operational patterns, such as "ngetem" (waiting for passengers) in crowded strategic areas, such as under flyovers or near terminals, where passenger mobility is high (Wijayanti 2024). Some also offer angkot rental services for groups or specific events, utilizing the flexibility of their vehicles (Wijayanti 2024).
- 2) **Passive Strategy:** This strategy focuses on minimizing expenses and saving on living costs. Angkot drivers often complain that the rising cost of living is burdensome, so they prioritize primary needs such as rent and children's school fees (Wijayanti 2024). Other expenses that are considered less essential will be minimized.
- 3) **Network Strategy:** This involves utilizing social relationships or external parties as a source of support. Drivers often borrow money from relatives or neighbors when facing financial difficulties to meet basic needs (Wijayanti 2024). In addition, wives or children of drivers also often contribute to household income by working in other sectors, such as online motorcycle taxi drivers or working in shops (Wijayanti 2024). Social assistance (bansos) or direct cash transfers (BLT) from the government are also a form of networking strategy, although receipt is not always consistent (Wijayanti 2024).

Despite facing great economic pressure, many conventional angkot drivers choose to remain in the old system due to several strong factors (Wijayanti 2024):

- Age factor: The maximum age limit set for drivers of modern transportation, such as Jak Lingko microtrans (maximum 45 or 57 years old), is a barrier for older drivers. Many conventional angkot drivers are above this age limit, making them ineligible to join (Wijayanti 2024).
- Regulatory Barriers: Conventional angkot drivers are reluctant to join the modern system due to strict regulations, such as smoking restrictions, mandatory uniforms, fixed operating hours, and cashless payment systems. They value the freedom to determine their working hours, dress code, and freedom to operate without being bound by fixed rules (Wijayanti 2024).
- Incentives and Salary System: Unfamiliarity with the monthly salary system (equivalent to UMR) and concerns about managing monthly income for daily needs (such as food and snacks for children) make them reluctant to switch. They are more accustomed to daily income that can be used immediately (Wijayanti 2024).
- Community Needs: Conventional angkot drivers feel that they are still needed by certain segments of society, such as mothers or school children, who may not be familiar with cashless payments or find modern transportation stops too far or cumbersome (Wijayanti 2024). They see themselves as a relevant alternative.
- Distrust of Operators: Some drivers have had bad experiences or heard of cases of late payment of incentives from modern transport operators, leading to distrust and reluctance to join (Wijayanti 2024).

These factors suggest that occupational identity and "freedom" are forms of agency resistance to the structures of modernization. For conventional angkot drivers, their work is not just a source of income, but also part of a social identity and lifestyle that provides a high degree of autonomy. The strict regulations and monthly salary system offered by modern transportation (as part of the structure) are perceived as restrictions on this autonomy. This resistance to regulation is a manifestation of agency that seeks to maintain the microstructure of their working lives, even though the macrostructure (government policy and the market) is undergoing major changes. This suggests that their occupational identity is strongly linked to "freedom" and control over the rhythm of their work. This reluctance complicates the government's efforts to fully integrate conventional transport. It also highlights that transport modernization policies need to consider not only economic and technical aspects, but also the socio-cultural dimensions and occupational identities of existing actors.

Public Perception and Preference for Modern Public Transportation

Surabaya citizens have shown a mixed but positive response to modern public transportation modes such as Wara Wiri Suroboyo and Surabaya Bus. One of the main factors that received high appreciation is the completeness of the facilities provided. Passengers feel comfortable with air-conditioning, CCTV that increases their sense of security, ergonomic seating, and the cleanliness of the vehicles (Harianmerahputih.id 2025; Aksiologi.org 2023). More than just physical facilities, service aspects are also considered good, including reliability (ability to provide services on time), officer responsiveness (readiness to help passengers), security assurance (officer behavior that builds trust), and empathy (attention and concern for passengers) (Aksiologi.org 2023; Researchgate.net 2025).

In addition, affordable fares are a strong attraction for the public. At Rp 5,000 for the general public and Rp 2,500 for students, as well as free services for veterans, the elderly, children under 5 years old, and people with disabilities, Wara Wiri Suroboyo offers an economical transportation option (Liputan6.com 2025; Mpp.surabaya.go.id 2025). The convenience of cashless payments through QRIS or electronic cards is also highly appreciated, eliminating the hassle of cash transactions and the problem of change (Harianmerahputih.id 2025; Mpp.surabaya.go.id 2025). The existence of disability- and elderly-friendly facilities, such as low floors on the Wara Wiri fleet, is also highly appreciated as it shows a commitment to inclusiveness in public services (Harianmerahputih.id 2025; Liputan6.com 2025).

Although there are many positive responses, there are also some criticisms and challenges that need attention in this modern transportation service. One issue that is often highlighted is the uneven development of bus stops. Some bus stops still lack facilities such as roofs and proper seating, which leaves passengers exposed to heat or rain and forced to wait while standing, reducing comfort levels (Aksiologi.org 2023). In addition, sometimes irregular departure schedules and delays due to traffic congestion are also common complaints, causing longer than expected waiting times. Ideally, the waiting time for good public transportation should be between 5-10 minutes, but people often have to wait up to half an hour (Axiology.org 2023).

The choice of transportation mode by the public is influenced by various complex factors, which can be categorized as follows,

- Transportation System Characteristics: These include trip length (including walking time to the terminal, waiting time, and in-vehicle time), trip cost (tickets, fuel, tolls), level of service (comfort, satisfaction), ease of reaching destinations, and reliability of public transit (punctuality, availability, fares).
- Traveler Characteristics: Includes the purpose of the trip (e.g., work, school, recreation), the time of the trip (morning, evening, holiday), and the length of the trip (distance traveled and travel time).
- Socio-Economic Characteristics: Factors such as income, vehicle ownership, housing density, and family structure and size also influence transportation mode choice.

Comparison with other modes of transportation, such as online and conventional ojek, also provides an overview of public preferences. Studies show a clear preference for online ojek due to ease of booking through the application, practicality, time and cost efficiency (often there are discounts), payment flexibility (non-cash), and a higher sense of comfort and safety (Mufida, Wulandari, and Silvia 2023; Jurnal-politikom-indonesiana 2023). Meanwhile, conventional ojek is still chosen by a small portion of the community due to the personal relationship established with the driver, traditional reasons, or unfamiliarity/discomfort with the use of smartphone technology, especially among certain age groups (Mufida, Wulandari, and Silvia 2023; Jurnal-politikom-indonesiana 2023).

Mapping public perceptions of transportation quality in Surabaya shows that Suroboyo Bus receives the highest user satisfaction score (Ktj.pktj.ac.id 2023). City transportation (angkot) and KAI Lokal tend to be similar in terms of speed and affordability, but with lower levels of comfort. Online ojek (motorcycle) is considered superior in speed and price, but less convenient. Online ojek (cars) focus more on convenience, albeit at a slightly higher price. Meanwhile, Suroboyo Bus and TransJatim Bus scored high for both convenience and price, indicating similar service quality that is valued by users (Ktj.pktj.ac.id 2025).

These societal preferences are directly a force for the reproduction and transformation of transportation structures. Within the framework of Giddens' structuration theory, repeated social practices, such as individual choices in using modes of transportation, collectively shape and reproduce existing structures (Scribd.com 2018). When people en masse choose modern transportation such as Wara Wiri Suroboyo and Surabaya Bus because of the facilities, convenience, and efficiency offered, they indirectly reproduce and strengthen the existence and

development of these modern transportation structures. In contrast, the continued decline in interest in conventional angkot is slowly eroding the structure of conventional angkot. This shows that individual choice (as a manifestation of agency) has a significant cumulative impact in shaping and changing the transportation system (structure) at the macro level. The government, as the structure, responds to these preferences by continuing to develop modern modes. This is a clear example of how social practices (people's choices and preferences) dynamically interact with structures (government policies and service provision). Structures provide choices, but it is people's agency that determines which choices will be reproduced and reinforced, which in turn will influence future investments and structural policy directions. Therefore, the long-term success of Wara Wiri Suroboyo will largely depend on its ability to continue to meet and even exceed people's expectations regarding convenience, efficiency and accessibility. If criticisms regarding uneven stops or irregular schedules are not addressed, it could hinder the positive reproduction of this modern transportation structure.

Spatial Segregation in Transportation: Regional Case Studies in South Asia

Various case studies from cities in South Asia offer valuable insights into the challenges and efforts in the transportation sector. These studies simultaneously highlight a pattern of spatial segregation within South Asia that has formed from the dynamics of urban mobility:

India: The COVID-19 pandemic led to a drastic decline in public transportation usage, such as railways (approximately 85% in 2020-2021) and buses (81%), accompanied by a significant surge in reliance on private vehicles (Bhasawati 2024). This behavioral shift triggered the creation of socio-economic spatial segregation within South Asia. This is evident from the mobility and comfort advantages enjoyed by individuals who can afford and operate private vehicles, while communities heavily reliant on public transportation—which might have been perceived as less safe or less available post- pandemic—face limited access and lower quality of travel. This condition ultimately widens the gap in mobility experiences between different socio-economic groups.

Pakistan : Urban mobility in Pakistan is constrained by the pace of urbanization outpacing transportation infrastructure development, leading to severe congestion and the dominance of private or paratransit modes like motorcycles and auto-rickshaws (Haider 2023). Public sector projects often fail due to weaknesses in governance, judicial intervention, and hindering bureaucracy (Haider 2023). This situation results in functional access segregation within South Asia, where the majority of the population depends on informal modes that are

often less safe or efficient, while well- managed and formal mass transit systems remain scarce. Furthermore, the presence of "military cantonments" obstructing integrated planning directly creates physical spatial segregation within South Asia, disrupting seamless connectivity within the urban network and limiting transportation integration across areas.

Sri Lanka : Urbanization in Sri Lanka demands comprehensive infrastructure development, including in the transportation sector. One effort involves exploring e- mobility as an alternative to address the economic crisis and reduce emissions (Alahakoon et al. 2025; Bandaranayake, Balfors, and Mörtberg 2024). However, this transition process is hindered by the dominance of private vehicles and the "lock-in" phenomenon within existing fossil fuel-based infrastructure (Bandaranayake, Balfors, and Mörtberg 2024). This "lock-in" condition can lead to spatial segregation based on technology and infrastructure within South Asia. This occurs because continuous investment in private vehicle-oriented infrastructure reinforces the dominance of these modes and impedes the development of more sustainable alternatives. Consequently, segments of society that cannot access or are not served by the dominant infrastructure will experience limited mobility.

Bangladesh : Dhaka faces severe transportation challenges due to rapid population growth and a lack of coordination in urban planning. The extremely limited road network (only about 7% of the total built-up area) exacerbates this problem (Aktar 2023; Mujtabe et al. 2024). The situation is further worsened by inadequate coordination among various relevant transportation authorities (Aktar 2023). This severe limitation in the road network inherently creates physical spatial segregation within South Asia, leading to significant variations in accessibility and connectivity between different urban areas, thereby restricting the effective movement of people and goods. A lack of coordination also triggers planning segregation within South Asia, where transportation policies and projects are not integrated holistically, worsening congestion and inefficiency, which ultimately limits accessibility for a large portion of the population.

The phenomenon of spatial segregation within South Asia in the context of transportation in this region is not merely an urban planning issue. Rather, it reflects inequalities in access, weaknesses in governance, and significant challenges in the transition towards a more inclusive and sustainable mobility system.

CONCLUSION

This Congestion is a never-ending problem in urban areas like Surabaya. This makes the government do various ways to overcome existing congestion. One of them is by innovating public transportation in the city. Wara wiri suroboyo as public transportation comes with a variety of complete and modern facilities. This modern transportation is present in the middle of Surabaya society in order to support the mobility of the Surabaya community. However, the presence of wara wiri Suroboyo has led to a process of structuration in society. Conventional Angkot drivers as agents must then deal with structures related to various rules presented by the government, one of which is the presence of wara wiri suroboyo.

In this structuration process, there is a discursive awareness that arises from conventional angkot drivers who make route agreements with the government, namely the transportation agency as the manager of modern angkot wara wiri Suroboyo so as not to take routes passed by conventional angkot in Surabaya. So that the existence of wara wiri Suroboyo still makes conventional angkot exist in the community. Because there are various issues that are mutually agreed upon between the government and conventional angkot drivers. So that this social segregation does not cause a struggle for work space for conventional angkot drivers and wara wiri suroboyo.

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