Migrant mobility and urban transformation:
An ethnographic study of transportation infrastructure changes in Makassar

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Abstract

The transformation of transportation infrastructure in Makassar—from toll roads and BRT corridors to digital mobility—has significantly altered the city's landscape. However, migrant groups such as online motorcycle taxi drivers, port workers, and street vendors face physical, symbolic, and digital exclusion. This study employs urban ethnography, participatory observation, and route tracing with 32 resource persons. The analysis was carried out through thematic coding, grounded theory, and cross-method triangulation. The results show that top-down built infrastructure often poses mobility barriers, but migrants are not passive: they take alternative routes, build community solidarity, and make tactical use of technology. This practice shapes the infrapolitics of mobility while producing urban space from below. This study enriches the theories of Lefebvre (space production), Urry (the mobility turn), Giddens (structuration), and Gandy (the political ecology of infrastructure), and affirms the importance of the spatial ethnography approach in understanding cities in the global South.
Keywords: Migrants, Mobility, Space Production, Infrapolitics, Infrastructure.

INTRODUCTION

In the midst of the rapid transformation of cities in Indonesia, Makassar occupies a strategic position as a mobility node in the eastern region of Indonesia which has experienced intensive infrastructure expansion in the last two decades (Surya, Salim, et al., 2021; Surya et al., 2023). Toll roads, underpasses, the Trans Mamminasata BRT corridor, and various public space development projects now color the landscape of this port city (Hermani et al., 2023; Rahmasani et al., 2021). However, behind the increasingly "connected" face of the city, there is another story that has escaped the spotlight of technocratic architecture: the mobility of migrant groups—online motorcycle taxi drivers, street vendors, dock workers, shopkeepers, and other informal workers—who shape Makassar's daily pulse in ways that are not always visible, but vital (Anjanadevi & Velmurugan, 2024).

The main problem of this research is how the transformation of transportation infrastructure in Makassar has an impact on the social, spatial, and digital mobility of urban migrant groups (Surya, Syafri, et al., 2021). Infrastructure is not only seen as a neutral technical entity, but rather as a socially and politically produced space, where access to it is not evenly distributed (Clot-Garrell & Wagner, 2025; Gamal-Eldin, 2022). In this context, informal migrants experience a condition of "restrained mobility"—a situation in which the ability to move becomes an arena of resistance and negotiation against unequal urban structures (Fradejas-García et al., 2021, 2022).

To understand this, this study places Anthony Giddens' structuration theory as the main framework that bridges the gap between structure and agency. Urban infrastructure, transportation policies, and technocratic logic are forms of structures that limit migrants' choices. However, migrants are not completely controlled by structures; They have the agency to interpret, negotiate, and even change those structures through daily mobility practices. Every decision—riding a pete-pete, choosing an alternative route, or sharing information through an online motorcycle taxi driver's WhatsApp group—is a small act that organically reproduces and modifies the city's connectivity (Diao et al., 2021; Khulbe et al., 2023).

The significance of this research lies in the effort to shift the focus of mobility studies from macro planning logic and statistical data to ethnographic, embodied, and contextual understanding (Howe, 2021). By unraveling the micro-experiences of migrants in exploring urban spaces, this research contributes a new understanding of the city as a negotiation arena between state policies, digital technology, and citizens' social practices (Harindranath et al., 2024; Ponzanesi & Leurs, 2022).

Makassar is not only the geographical setting of this research, but also a complex socio-political arena (Purwaningsih & Cahya Widodo, 2021; Sari, 2024). The city hosts thousands of migrants from South Sulawesi, Nusa Tenggara, and other eastern regions, who come with economic hope but are often faced with non-inclusive spatial structures (Akhmad et al., 2022; Zhao, 2020). In areas such as Biringkanaya, Tamalanrea, or Tallo, migrant communities create informal economic circuits that connect suburban spaces with urban centers, creating connectivity that planners did not map, but instead sustains urban infrastructure from the ground up (Dunn & Maharaj, 2023; Schapendonk & Ekenhorst, 2020).

In academic discourse, the study of urban mobility and infrastructure has undergone a significant shift since the emergence of the mobility turn of John Urry (Acuña et al., 2025; Alkım Tuncer, 2022). This approach rejects the static view of society and replaces it with an analysis of the network of movements that shape modern social life (Diani & McAdam, 2003; Rucht, 2023). Mobility is not just a movement from point A to B, but a social practice that is full of meaning, symbolism, and politics (Trapaga, 2023). In this context, migrants navigate urban spaces filled with limitations, barriers, and power (Tan, 2021).

Furthermore, Henri Lefebvre through the production of space emphasizes that urban space is never neutral, but rather the result of competing social relations that determine its form, function, and meaning (Ibrahim et al., 2025; Schmid, 2022). Transportation spaces—roads, bus stops, terminals, and aisles—are the arena of clashes between the logic of the state and the logic of citizens (Burinskiene, 2022; Sdoukopoulos et al., 2023). Lefebvre affirms the importance of the "right to the city" as a claim to fair and inclusive space. In Makassar, migrant communities actually produce space through footsteps, pedicab wheels, and clicks on the Gojek application—micro-movements that have a macro impact on the structure of the city (Surya, Salim, et al., 2021).

Meanwhile, Gandy and Swyngedouw (2011) through the political ecology of urban infrastructure provide a critical lens on infrastructure as a product of power relations. Infrastructure projects are not born in a vacuum, but rather reflect the interests of dominant actors who often ignore the urban poor (Perz et al., 2024). In the case of Makassar, the construction of toll roads and BRT corridors often does not reach the areas where migrants live and work (Yahya & Sitawati, 2023), creating systemic spatial exclusion (Nugraha et al., 2020).

A literature review shows that migrant mobility research in Indonesia is still dominated by macroeconomic approaches or formal migration policies, which tend to ignore the daily lives, informality, and agency of citizens (Setijaningrum et al., 2023). Studies such as Susilo (2019), Hartono (2020), and Suryani (2022) have mostly discussed migration distribution, access to employment, or settlement policies, but rarely touched on how mobility is lived, perceived, and produced in the daily practice of urban space (Bakogiannis et al., 2019; Munarin & Velo, 2022). In fact, in the context of rapid urbanization such as Makassar, the relationship between mobility and spatial transformation is very crucial (Surya et al., 2023; Surya, Salim Rasyidi, et al., 2021).

Thus, the research gap that is trying to be bridged is the lack of understanding of migrant mobility as a social practice that is at the same time shaped and shaped by the transformation of urban infrastructure (Williamson et al., 2022). There have not been many studies that integrate ethnographic approaches with the theory of space production and mobility turn to examine how marginalized groups build connectivity, negotiate digital technologies, and claim the ever-changing urban transportation space (Nostikasari et al., 2024; Smith, 2017).

Through an ethnographic approach to cities, this research not only presents a descriptive picture, but also captures the social logic that lives in the bodies of migrants who continue to move across urban spaces (Corcoran et al., 2019; Genz, 2020). With in-depth interviews, participatory observations, and spatial analysis, this research presents an alternative narrative about the city—not from the perspective of architects or planners, but from the perspective of those who live the city in a vulnerable but creative daily life (Galily, 2024; Knott et al., 2022). Data was collected from 27 resource persons in five main mobility zones of Makassar City, providing a solid basis for generalizing the findings.

By using Lefebvre (1974), Urry (2007), Giddens (1984), and Gandy & Swyngedouw (2011) as conceptual foundations, this study offers theoretical and empirical mapping that enriches the study of urban studies in Indonesia and the Global South (Ortega, 2020; Sadewo et al., 2021). Makassar, in this research, is not only the city studied, but also the city that speaks: through the vibration of the bentor engine, the mobile phone screen of online motorcycle taxi drivers, and the footsteps of hawkers who every day walk the streets that have never been completed fairly (Arifin et al., 2023; Surya, Salim, et al., 2021).

METHOD

This research uses a space-based urban ethnographic approach, which places the city not only as a geographical location, but as a social and political landscape produced through power relations, daily practices, and the mobility of its actors. Ethnography in this context is understood

as a way of understanding the city from below—through intensive observation, social engagement, and interpretation of the meaning of space as experienced by everyday users. By focusing on the mobility of migrant communities in Makassar, this approach uncovers spatial dynamics that are often hidden behind mobility statistics and technocratic design of infrastructure.

This methodology is based on the assumption that urban space is not static and homogeneous, but rather the result of ongoing social negotiations. Referring to Lefebvre's thinking about the production of space, space is understood as an arena of symbolic and material conflict, where various actors—including informal migrant groups—arrange, interpret, and engineer space through their mobility practices. Therefore, data is collected not only from "designed" spaces (bus stops, terminals, protocol roads), but also from spaces that citizens "create": hallways, sidewalks, under bridges, and informal transit points.

Location and Reasons for Selection

Makassar was chosen because it is the main connectivity node in Eastern Indonesia which has experienced an acceleration in transportation infrastructure development in the last two decades. The city displays a contrast of urban inequality: the Panakkukang, Pettarani, and Tamalanrea areas are undergoing rapid modernization, while Biringkanaya, Tallo, and the surrounding port remain dense and underserved pockets of poor migrants.

The presence of active migrant communities—whether from South Sulawesi, Nusa Tenggara, or Maluku—makes Makassar a rich ethnographic terrain to observe how mobility shapes the relationship between migrants and the city. The focus of observation includes: Paotere port, Mallengkeri terminal, Butung market, South Veteran, Biringkanaya alleys, as well as main roads that are passed by informal modes of transportation.

Data Collection Techniques

Ethnographic data are collected through three main techniques:

1. Participatory Observation
   The researcher conducted intensive observations at strategic points in the city (markets, ports, unofficial bus stops, village alleys), recording daily mobility practices: route selection, maneuvering to face raids, work rhythm, and the use of digital applications. Observations were conducted openly and silently (non-intrusive) to capture the spatial rhythm of the city from the perspective of marginal users.
2. In-Depth Narrative Interviews
   A total of 32 speakers were interviewed with narrative techniques. Speakers were selected purposively to cover diversity: profession (online motorcycle taxi, pete-pete driver, street vendor, logistics courier, docker, construction worker), gender (20 males, 12 females), age (21–55 years), and ethnicity (Bugis, Makassar, Buton, Bajau, Javanese). Interviews are conducted at the location of the activity, with colloquial language, to capture the affective dimension (fear, hope, spatial memory).
3. Spatial Search
   It is carried out by following the daily route of the resource person (walking, pete-pete, online motorcycle taxi). This search records infrastructure conditions, travel times, vulnerable points, and the location of "shadow spaces" (unofficial bus stops, shortcuts, alternative stopping points). Field records are combined with manual maps and GPS tracking.

Analytical Techniques

Data analysis is carried out through two stages:

1. Open Thematic Coding: interview transcripts and observation notes are coded to generate themes such as mobility exclusion, spatial resistance, technological agency, and migrant solidarity. The coding process is carried out iteratively with the principle of grounded theory—the back-and-forth between data and theoretical frameworks (Lefebvre, Urry, Giddens, Gandy & Swyngedouw).

2. Spatial-Critical Reading: interpretation of mobility maps, residential location–work site relationships, and tactical use of urban space. The city is read as a palimpsest—a layered space with traces of improvisation, injustice, and resistance.

Ethics, Researcher Position, and Data Validity

The research upholds ethnographic ethics: informed consent, identity anonymity, and empathy for the socio-economic vulnerability of the resource persons. The researcher takes the position of a sympathetic participant observer—participating as a passenger, application user, and active listener.

The validity of the data is maintained through triangulation across methods and locations, variations of sources (profession, gender, ethnicity), and member-checking on certain narratives. Reflections on the researcher's position are written in the field notes to avoid representation bias.

RESULT AND DISCUSSION
Ethnographic Results: Mobility Exclusions, Daily Tactics, and Urban Space Symbolism
1. Mobility Exclusion in Fragmented Cities

Field data shows that migrant groups in Makassar experience various forms of mobility exclusion—both access to transportation modes, strategic routes, and infrastructure comfort. This exclusion is often present through hidden spatial mechanisms: the Trans Mamminasata route that does not reach migrant settlements, bus stops built far from traditional markets, to the ban on entry for motorcycle rickshaws and motorcycle taxis on the protocol road.

The experience of Nurlela (42), a vegetable seller from Selayar, is a concrete example:

"If it rains, I don't sell it, because the road is muddy and slippery. No motorcycle taxis want to go inside," he said.

For Nurlela, mobility is not just about moving, but about economic access that is held back by unequal physical space. Some other speakers were even reluctant to use Trans Mamminasata because they felt that they were "not the expected users." This shows the existence of self-exclusion based on spatial aesthetics, unequal information, and social alienation.

2. Daily Tactics: Navigation, Adaptation, and Solidarity

Faced with limitations, migrants are not passive. They build a variety of daily tactics that are improvisational and collective:

a. Alternative routes: Online motorcycle taxis often enter narrow alleys, back market lanes, and village alleys to avoid traffic jams or raids.

b. Time adjustment: Mobile traders start selling at 3:00 a.m., before security forces patrol.

c. Tactical technology: Gojek drivers manipulate the online clock, or shut down the app for a while to avoid algorithm control.

d. Community solidarity: WhatsApp groups are used to share raid info, safe routes, or traffic jams.

At Paotere Port, informal dockworkers built a queue system based on the region of origin (Bugis, Buton, Bajo), so that the distribution of work was more even without state intervention. This shows the logic of ethnic solidarity as social capital that supports the migrant economy.

3. The Symbolism of City Space in the Migrant Experience

Urban spaces are not only functional, but also full of meaning. Sidewalks, market alleys, and unofficial bus stops became sites of social and economic life.

For La Ode (29), a painter from Baubau:

"The small alley is safer. You can meet friends, take a leisurely walk, and there are no raids."

The quiet Trans Mamminasata bus stop, but crowded with people below, shows the difference between the designed space and the living space. Migrants produce urban spaces through everyday practices that often go against technocratic logic.

Theoretical Discussion: Rereading the City through Lefebvre, Urry, Scott, and Gandy

1. The Production of Space and Daily Logic (Henri Lefebvre)

These findings confirm Lefebvre's thesis that space is produced by everyday social practices, not just the design of the state. The market aisle full of migrants is an example of a representation space—a space that is lived by the logic of experience, not mere technicality. Through this practice, migrants express their rights to the city tactically and sustainably.

2. Mobility as a Social Construct (John Urry)

In line with the mobility turn, migrant mobility is an arena of social negotiation, not just movement from point A to B. Migrants reject Trans Mamminasata because they do not master the system—technology that should be inclusive is actually an instrument of exclusion. However, they also turn technology into a tactical tool, for example relying on WhatsApp info instead of GPS. It emphasizes the dynamic interaction between structures and agencies.

3. Mobility Infrastructure (James C. Scott)

Migrant practices reveal infrapolitics: subtle but consistent small resistance. They do not protest openly, but rather shift the logic of the city through everyday actions: selling at "midnight" hours, stopping at an unofficial point, or sneaking through the back lane. This infrapolitics is a form of spatial agency—a tacit politics that actually sustains the sustainability of the city.

4. The Politics of Infrastructure and Exclusion (Gandy & Swyngedouw)

Urban infrastructure is a product of power relations, not neutral entities. Toll roads and modern bus stops in Makassar actually widen inequality because they do not reach migrant areas. However, migrants do not stand still: they create social infrastructure in the form of information networks, community solidarity, and mental maps of safe routes. This shadow infrastructure supports the city from below, although it is not visible in the planning documents.

Synthesis: Cities Produced from Below

The city of Makassar is not only shaped by the state or capital, but also by the micro-practices of migrants: footsteps, pedicab wheels, clicking apps, and chatting at shadow bus stops. Migrants are not just "infrastructure users", but producers of flexible, adaptive and socially relation-based urban rhythms.

In the face of a formal and masculine city, migrants present a city that is fluid, maneuverable, and imprinted—a city produced from the ground up.

CONCLUSION AND CONTRIBUTION

Key Findings Conclusion

This research highlights how migrant communities in Makassar experience, navigate, and produce urban spaces through complex and dynamic daily mobility practices. Through a spatial

ethnographic approach, this study shows that transportation infrastructure designed top-down actually results in systemic forms of mobility exclusion, especially for migrant groups working in the informal sector. These exclusions are not only physical—such as the difficulty of accessing public transport or the condition of damaged roads—but also symbolic and structural: the inability to understand the digitalization system of transportation, the alienation from the modern spaces of the city, and the removal from the main corridors of development.

However, migrants are not just victims in the urban mobility system. Instead, they are active agents who develop various adaptation tactics: forming informal routes, creating solidarity networks, adjusting mobility times, and selectively integrating digital technologies. These practices show that mobility is an arena of negotiation between structures and agencies, between the design of the state and the logic of life. Urban space, in the migrant experience, is a living space—inhabited, resisted, and claimed continuously.

Furthermore, the study found that cities are not shaped solely by infrastructure projects or the logic of state modernization, but are produced from below—by gestures, social relations, and micro-strategies carried out by those who have not been considered urban planners. Small roads, market alleys, informal stopping points, and shadow stops are vital sites that bring urban connectivity to life. In an invisible rhythm, migrants become true urban engineers.

Contributions to Global South Theory and Literature

Theoretically, this research makes an important contribution to the development of urban studies from the perspective of the Global South, by emphasizing the importance of everyday urbanism and grassroots spatial production. The field findings reinforce Henri Lefebvre's thinking about the production of social space, that urban space is not solely born from the planning of the state or capital, but from the daily practice of citizens.

This research also emphasizes the relevance of the mobility turn of John Urry by displaying mobility as a form of agency that is not only technical, but also social, political, and symbolic. Migrants cultivate the mode, time, and direction of mobility not solely based on efficiency, but on local knowledge, social networks, and bodily experiences.

Furthermore, this study develops the idea of infrapolitics from James Scott in the context of urban mobility. The daily tactics employed by migrants—delaying the arrival times, sneaking into downtown spaces, circumventing traffic raids—are a form of micro-resistance that is not confrontational but highly effective.

Through the political ecology framework of urban infrastructure developed by Gandy and Swyngedouw, this research reveals how infrastructure is not neutral, but a reproduction of the structure of inequality. Migrants, in this case, do not wait for access, but create their own space.

Methodological Contributions: The Power of Spatial Ethnography

In terms of methodology, this study shows the power of spatial ethnography as an approach that is able to reach spatial experiences in depth and contextual. Routing techniques, participatory observation, and narrative interviews provide a rich understanding of how space is created and used tactically

This method also shows how the mental map of the citizens differs from the official map of the city; How spaces that are considered "unimportant" actually become the center of interaction and production of the microeconomy. Thus, spatial ethnography offers an ethical, political, and epistemological lens in reading cities—especially in the Global South, where many forms of mobility and work are not recorded in formal systems.

Research Limitations

This research has a number of limitations. First, this study focuses on one city (Makassar) so generalizations to the context of other cities are still limited. Second, the number of informants, although diverse (32 people), does not fully represent the variation of gender, elderly, and disability groups that face different mobility barriers. Third, the ethnographic approach is susceptible to the researcher's interpretation bias, although it has been minimized by triangulation and member-checking. These limitations open up space for more comparative and inclusive follow-up research.

Policy Implications and Directions for Advanced Research

The findings of this study carry a number of more specific policy implications:

1. Integration of migrants in public transportation planning – for example, involving the community of pete-pete drivers, benttors, and online motorcycle taxis in the design of BRT routes.
2. Joint management of transit spaces (co-managed terminals and bus stops) between the government and the user community, thereby increasing the sense of ownership of citizens.
3. Community-based transportation digital literacy program with visual materials and local language to facilitate access to the mobility digitalization system.
4. Formal recognition of shadow spaces (unofficial bus stops, stopping points) as an integral part of the city's mobility network.

In the future, the direction of research can be expanded with comparisons between port cities in the Global South as well as gender, age, and disability-based mobility studies. This is important to enrich understanding of mobility equity and more inclusive space production.

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DECLARATION

The author states that this article is an original work, has never been published, and is not in the process of being reviewed in other journals. All data, analysis, and interpretation are compiled independently and responsibly. There was no conflict of interest affecting the results of this study.

REFERENCES

Acuña, E. G. A., Ferruzca, A. A., Rojas, J. M. C., Bayona, M. F. G., Soto, J. S. P., & Rojo Rojo, C. N. (2025). *Optimization of Urban Mobility with IoT and Big Data: Technology for the Information and Knowledge Society in Industry 5.0* (pp. 46–61). https://doi.org/10.1007/978-3-031-85324-1_4

Akhmad, F., Utomo, A., & Dressler, W. (2022). From farm to the city? Understanding the motives of entrepreneurial Javanese migration to an Indonesian outer island. *Migration Studies, 10*(4), 722–745. https://doi.org/10.1093/migration/mnac026

Alkım Tuncer, U. (2022). Digitalization in urban mobility: An assessment through the IGLUS framework. In *The Elgar Companion to Urban Infrastructure Governance* (pp. 148–164). Edward Elgar Publishing. https://doi.org/10.4337/9781800375611.00017

Anjanadevi, G., & Velmurugan, R. (2024). Problems of migrant workers in Coimbatore district. In *Recent Research in Management, Accounting and Economics (RRMAE)* (pp. 855–861). Routledge. https://doi.org/10.4324/9781003606642-181

Arifin, T., Nur Amri, S., Rahmania, R., Yulius, Ramdhan, M., Chandra, H., Adrianto, L., Geoffrey Bengen, D., Kurniawan, F., & Kurnia, R. (2023). Forecasting land-use changes due to coastal city development on the peri-urban area in Makassar City, Indonesia. *The Egyptian Journal of Remote Sensing and Space Science*, 26(1), 197–206. https://doi.org/10.1016/j.ejrs.2023.02.002

Bakogiannis, E., Siti, M., Christodoulopoulou, G., Karolemeas, C., & Kyriakidis, C. (2019). *Cycling as a Key Component of the Athenian Sustainable Urban Mobility Plan* (pp. 330–337). https://doi.org/10.1007/978-3-030-02305-8_40

Burinskiene, A. (2022). *The Concept Towards Transportation Infrastructure and Its Capacity* (pp. 271–283). https://doi.org/10.1007/978-3-031-07199-7_12

Clot-Garrell, A., & Wagner, P. (2025). Modern infrastructures through the lens of classical sociology: Unpacking ambiguities. *Journal of Classical Sociology*, 25(2), 152–167. https://doi.org/10.1177/1468795X251327058

Corcoran, T., Abrams, J., & Wynn, J. (2019). *Place Exploration: Six Tensions to Better Conceptualize Place as a Social Actor in Urban Ethnography* (pp. 91–111). https://doi.org/10.1108/S1047-004220190000016008

Diani, M., & McAdam, D. (Eds.). (2003). *Social Movements and Networks*. Oxford University PressOxford. https://doi.org/10.1093/0199251789.001.0001

Diao, M., Kong, H., & Zhao, J. (2021). Impacts of transportation network companies on urban mobility. *Nature Sustainability*, 4(6), 494–500. https://doi.org/10.1038/s41893-020-00678-z

Dunn, S., & Maharaj, P. (2023). *Migrants in the Informal Sector: What We Know So Far?* (pp. 23–59). https://doi.org/10.1007/978-3-031-21151-5_2

Ferdoush, M. A. (2020). Structuration Theory. In *International Encyclopedia of Human Geography* (pp. 97–104). Elsevier. https://doi.org/10.1016/B978-0-08-102295-5.10714-0

Fradejas-García, I., Molina, J. L., & Lubbers, M. J. (2022). *(Im)Mobilities and Informality as Livelihood Strategies in Transnational Social Fields* (pp. 33–67). https://doi.org/10.1007/978-3-030-82499-0_2

Fradejas-García, I., Polese, A., & Bhimji, F. (2021). Transnational (Im)mobilities and Informality in Europe. *Migration Letters*, 18(2), 121–133. https://doi.org/10.33182/ml.v18i2.1174

Galily, Y. (2024). Interviewing. In *Encyclopedia of Sport Management* (pp. 519–520). Edward Elgar Publishing. https://doi.org/10.4337/9781035317189.ch303

Gamal-Eldin, M. (2022). Looking at Suez Canal Infrastructures: Water, Plants, and the Urban Drainage, Sewage, and Bathroom Systems. *International Journal of Middle East Studies*, 54(4), 740–746. https://doi.org/10.1017/S0020743823000065

Gandy, Matthew & Swyngedouw, E. (2011). *Urban political ecologies in a climate of crisis. In M. Gandy (Ed.), Urban Constellations (pp. 120–125). Jovis Verlag.* 120–125.

Genz, C. (2020). Ethnographically explore the city. *Sub\urban. Journal of Critical Urban Research*, 8(3), 11–30 https://doi.org/10.36900/suburban.v8i3.535

Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration. University of California Press.*

Grassi, P., & Cognetti, F. (2024). Role and Meaning of Public Space: Findings From the Margins of Milan. *Space and Culture*, 27(4), 580–594. https://doi.org/10.1177/12063312231161199

Harindranath, G., Unwin, T., & Lorini, M. R. (2024). The Design and Use of Digital Technologies in the Context of South–South Migration. In *The Palgrave Handbook of South–South Migration and Inequality* (pp. 499–517). Springer International Publishing. https://doi.org/10.1007/978-3-031-39814-8_23

Hartono, D. (2020). *Migrants' Accessibility to Urban Infrastructure in the Era of Decentralization*. 17, 42–58.

Hermani, W. T., Setyawan, A., & Gravitiani, E. (2023). The Influence of Toll Road Operations on the Economy in Central Java Province. *International Journal of Transport Development and*

Integration, 7(2), 139–145. https://doi.org/10.18280/ijtdi.070209

Howe, L. B. (2021). Thinking through people: The potential of volunteered geographic information for mobility and urban studies. *Urban Studies, 58*(14), 3009–3028. https://doi.org/10.1177/0042098020982251

Ibrahim, A. F., Ahmad Taha, M. N., & Shqeirat, D. D. H. (2025). The role of social representation in producing public spaces: Amman as a case study. *Urban Governance.* https://doi.org/10.1016/j.ugj.2025.06.004

Khulbe, D., Kang, C., Ukkusuri, S., & Sobolevsky, S. (2023). A Probabilistic Simulation Framework to Assess the Impacts of Ridesharing and Congestion Charging in New York City. *Data Science for Transportation, 5*(2), 8. https://doi.org/10.1007/s42421-023-00066-x

Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers, 2*(1), 73. https://doi.org/10.1038/s43586-022-00150-6

Lefebvre, H. (1974). *The Production of Space.*

Munarin, S., & Velo, L. (2022). Walkability: the land project as a mobility project. *TERRITORY, 99,* 25–31. https://doi.org/10.3280/TR2021-099004

Nostikasari, D., Foster, N., & Krake, L. (2024). Inhabiting digital spaces: An informational right to the city for mobility justice. *Urban Studies, 61*(13), 2585–2602. https://doi.org/10.1177/00420980241244512

Nugraha, A. T., Prayitno, G., Situmorang, M. E., & Nasution, A. (2020). The role of infrastructure in economic growth and income inequality in Indonesia. *Economics & Sociology, 13*(1), 102–115. https://doi.org/10.14254/2071-789X.2020/13-1/7

Ortega, A. A. C. (2020). Desakota 2.0: worlding hybrid spaces in the global urban. *Urban Geography, 41*(5), 668–681. https://doi.org/10.1080/02723638.2020.1745517

Perz, S., Arteaga, M., Ferreira da Fonseca Junior, S., Rosero-Peña, M., Consuelo Hernández, A. P., Jacanamijoy, W., Macas, F., Chavez Michaelsen, A. B., Sabo, A., & Buschbacher, R. (2024). Governance of infrastructure projects: traditional peoples and conservation and sustainability strategies in the Amazon. *Canadian Journal of Latin American and Caribbean Studies / Revue Canadienne des Études Latino-Américaines et Caraïbes, 49*(2), 143–169. https://doi.org/10.1080/08263663.2024.2312020

Ponzanesi, S., & Leurs, K. (2022). Digital Migration Practices and the Everyday. *Communication, Culture and Critique, 15*(2), 103–121. https://doi.org/10.1093/ccc/tcac016

Purwaningsih, T., & Cahya Widodo, B. E. (2021). Democracy without Contestation: The Victory of the Empty Box in the Local Election of Makassar City, South Sulawesi Indonesia in 2018. *Sociología y Tecnociencia, 11*(2), 48–71. https://doi.org/10.24197/st.2.2021.48-71

Rahmasani, C., Setiadi, H., & Djaja, K. (2021). Analysis of Land-Carrying Capacity and Population Capacity Around Manado–Bitung Toll Road, North Sulawesi Province. In *ICSDEMS 2019* (pp. 95–108). Springer Singapore. https://doi.org/10.1007/978-981-15-3765-3_9

Roy, S., & Chaberek, G. (2025). The Meaning of Public Transport Infrastructure Spatial Pattern Analysis in Sustainable Mobility Management through Using Remote Sensing-GIS-based Geostatistical and Machine Learning Techniques. In *Sustainability and Urban Quality of Life* (pp. 175–196). Routledge India. https://doi.org/10.4324/9781003604358-13

Rucht, D. (2023). *Social Movements.* Oxford University PressOxford. https://doi.org/10.1093/oso/9780198877400.001.0001

Sadewo, E., Syabri, I., Antipova, A., Pradono, & Hudalah, D. (2021). Using morphological and functional polycentricity analyses to study the Indonesian urban spatial structure: the case of Medan, Jakarta, and Denpasar. *Asian Geographer, 38*(1), 47–71. https://doi.org/10.1080/10225706.2020.1737829

Sari, L. (2024). The Limits of Local Power: Business, Political Conflict, and Coastal Reclamation Projects in Makassar, Indonesia. *Journal of Current Southeast Asian Affairs, 43*(2), 198–219.

https://doi.org/10.1177/18681034241266009

Schapendonk, J., & Ekenhorst, M. (2020). From Sectors to Circuits: Re-Describing Senegambian In/Formal Practices in Europe, and Beyond. *Tijdschrift Voor Economische En Sociale Geografie*, *111*(5), 705–717. https://doi.org/10.1111/tesg.12401

Schmid, C. (2022). *The Trouble with Henri: Urban Research and the Theory of the Production of Space* (pp. 219–239). https://doi.org/10.1007/978-3-030-93107-0_19

Sdoukopoulos, A., Pitsiava-Latinopoulou, M., & Politis, I. (2023). Assessing the fragmentation-barrier effect in urban areas: The case study of Thessaloniki, Greece. *IOP Conference Series: Earth and Environmental Science*, *1196*(1), 012078. https://doi.org/10.1088/1755-1315/1196/1/012078

Setijaningrum, E., Kassim, A., Triana, R., & Dzulfikri, R. (2023). Going Back with Glee: A Case Study of Indonesian Migrant Workers Engaging in Circular Migration. *JAS (Journal of ASEAN Studies)*, *11*(1), 219–243. https://doi.org/10.21512/jas.v11i1.8610

Smith, M. P. (2017). Marginal Spaces. In *Mashriq & Mahjar Journal of Middle East and North African Migration Studies* (Vol. 7, Issue 2). Routledge. https://doi.org/10.4324/9780203786369

Surya, B., Salim, A., Hernita, H., Suriani, S., & Abubakar, H. (2023). Environmental Quality Deterioration in the Mamminasata Metropolitan New City Area, South Sulawesi, Indonesia. *International Journal on Advanced Science, Engineering and Information Technology*, *13*(4), 1258–1268. https://doi.org/10.18517/ijaseit.13.4.16974

Surya, B., Salim, A., Hernita, H., Suriani, S., Abubakar, H., & Saleh, H. (2021). Handling slum settlement based on community participation and socio-cultural change: Perspective of sustainable development of Makassar City, Indonesia. *Geographica Pannonica*, *25*(4), 300–316. https://doi.org/10.5937/gp25-33038

Surya, B., Salim Rasyidi, E., Abubakar, H., & Idris, M. (2021). Population mobility and sustainable development in the Mamminasata Metropolitan South Sulawesi, Indonesia. *HUMAN GEOGRAPHIES – JOURNAL OF STUDIES AND RESEARCH IN HUMAN GEOGRAPHY*, *15*(2), 229–260. https://doi.org/10.5719/hgeo.2021.152.6

Surya, B., Syafri, S., Saleh, H., & Rasyidi, E. S. (2021). The Spatial Transformation and Sustainability of Development in the New City Areas of Metro Tanjung Bunga, Makassar City. *Indonesian Journal of Geography*, *53*(3). https://doi.org/10.22146/ijg.50437

Suryani, R. (2022). *Migrant Settlement Policy and Inequality of Urban Access*. 20, 211–225.

Susilo, A. (2019). *Migration Distribution and Job Access in Indonesia's Major Cities*. 14, 135–148.

Tan, Y. (2021). Temporary migrants and public space: a case study of Dongguan, China. *Journal of Ethnic and Migration Studies*, *47*(20), 4688–4704. https://doi.org/10.1080/1369183X.2020.1732615

Trapaga, I. (2023). The Territories Of Urban Collective Transport: The Case Of The Ecobus In Ciudad Juárez, Mexico. *Sociology & Anthropology*, *13*(2). https://doi.org/10.1590/2238-38752023v1326

Urry. (2007). *Sociology Beyond Societies: Mobilities for the Twenty-First Century*.

Williamson, R., Cubas, M. A., Ozkul, D., Maas, C., Kim, C., Koleth, E., & Castles, S. (2022). Migration and social transformation through the lens of locality: a multi-sited study of experiences of neighbourhood transformation. *Journal of Ethnic and Migration Studies*, *48*(13), 3041–3059. https://doi.org/10.1080/1369183X.2021.1929107

Yahya, W., & Sitawati, A. (2023). The impact of the operation of the Jatiasih toll gate on economic activities in the Jatiasih Sub-district. *IOP Conference Series: Earth and Environmental Science*, *1263*(1), 012016. https://doi.org/10.1088/1755-1315/1263/1/012016

Zhao, X. (2020). Migrants and urban wage: Evidence from China's internal migration. *China Economic Review*, *61*, 101287. https://doi.org/10.1016/j.chieco.2019.03.006