CONTESTATION, CONFLICT, AND CRISIS IN TRANSITION

THE EMBEDDING OF RIDESHARING IN INDONESIA

SUCI LESTARI YUANA

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Contestation, Conflict, and Crisis in Transition:
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Betwisting, conflict en crisis in transitie:
De inbedding van autodelen in Indonesië

(met een samenvatting in het Nederlands)

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Suci Lestari Yuana
geboren op 13 december 1986 te Bajera, Indonesië

To all PhD mom.

you are strong,
you are resilience,
you will get there,
at the right time.

CONTENTS

CHAPTER 1

INTRODUCTION

"Experience shows that digitilization makes businesses more efficient and helps them to cope with the growing problem of labour shortages in many countries. It also opens up new markets. One of the many inspiring examples I saw, was in Indonesia. It is called Gojek. Gojek is a ride-hailing app which uses its digital ecosystem to help small businesses digitize their inventory management, marketing, payments, credit, and sales. Now, suddenly, these SMEs are connected to the larger world. Many of them make a leap forward and expand their business beyond their brick-and-mortar presence"
Queen Maxima remarks at G20 side events, 30 October 2021

In 2015, the entry of Uber and Gojek, and the emergence of ridesharing platforms in Indonesia, disrupted the conventional taxi industry and sparked resistance from many taxi drivers. There were many positive responses to the innovation of the ridesharing platform, one example being illustrated by the remarks of the Queen of the Netherlands which reflect the undeniable socio-economic impact of digital transformation in urban mobility and urban livelihood in the developing countries. Nevertheless, the emergence and evolution of digital platform-based ridesharing has been a tumultuous one, marked by contestation, conflicts, and crises. This thesis explores these dynamics in Indonesia. The conventional taxi drivers, who were accustomed to a protected market, saw the new entrants as a threat to their livelihoods and staged protests against them.

In this thesis, I explore the social dynamic of ridesharing and how the associated contestation, conflicts, and crises shape a transition of urban mobility. Here I use the definition of ridesharing by Shaheen as "on-demand ride services connecting pooled passengers with transportation services employing a smartphone application" (Shaheen et al., 2016). The term ridesharing has evolved to include ride-hailing and online taxi services. Apart from technological novelties associated with ridesharing, the investigation of ridesharing involves an examination of how the concept has been socially constructed and redefined over time. It encompasses an analysis of the various involved actors and how they have influenced the shaping of the ridesharing industry. As these stakeholders have different interests and responsibilities, this thesis aims to identify the factors that have contributed to the contestation and conflicts surrounding the ridesharing industry, including issues related to regulation, labor practices, and safety concerns.

Ridesharing has been tauted to have the potential to significantly change the mobility regime in cities, and contribute to making urban traffic more efficient, accessible and sustainable (Chan and Shaheen, 2012; Furuhata et al., 2013; Schor, 2016). Urban mobility transition refers to purposeful, long-term changes in practices, infrastructure, and governance at the city-level aimed at achieving sustainability goals, encompassing innovations in street design, transportation, and neighborhood interactions for enhanced urban efficiency and well-being (Loorbach et al, 2016). The focus of this research is to examine the urban mobility transition process within the context of crisis, conflict and contestation.

In transition studies, conflict is typically framed as a contest between an incumbent regime and emerging niches in the context of the Multi-level Perspective (Geels, 2002; Geels and Schot, 2007). This regime-niches dichotomy could lead to a binary perspective which might promote the belief that niche actors consistently possess the remedy for challenges (Cuppen, 2019), or niche actors always agree with each other without conflict (Smith et al., 2014), while incumbents are automatically deemed responsible for obstructing advancement.

Indonesia's ridesharing industry provides a captivating case study characterized by numerous layers of conflict and contestation involving diverse actors. The innovative nature of digital solutions

challenges existing institutions and interests, with the informal sector playing a significant role in the country's mobility landscape. The inclusion of both motorbike taxis and four-wheels taxis in ridesharing platforms presents a distinctive opportunity to examine the intersection of digital solutions with informal practices in the Indonesian context. While the focus on motorbike taxis may seem specific, it serves as a strategic lens to understand the broader dynamics of mobility innovations in the Global South. Motorbike taxis and four-wheels taxis are pervasive in cities across the Global South, meeting the transportation needs of millions reliant on informal mobility in congested urban areas. Therefore, the emphasis on both motorbike and four-wheels taxis is a deliberate choice to delve into critical aspects of Indonesia's ridesharing dynamics, contributing insights that transcend its borders and enriching the understanding of mobility innovations in diverse global contexts.

In this thesis, the focus is on the conflict and contestation surrounding ridesharing that occurred between 2016 and 2020, which illustrate multi-dimensional dynamics of contestation and conflict beyond a binary regime-niche perspective. This period saw a significant increase in the use of ridesharing services in many countries, including Indonesia. The conflict and contestation surrounding ridesharing during this period were often related to its disruptive impact on existing transportation systems and its regulatory status. In 2016, the Indonesian government introduced regulations for ridesharing services, which included a requirement for all drivers to have a local driving license and vehicle registration. This led to protests from some drivers who argued that the regulations would make it more difficult for them to earn a living.

In 2017, the conflict between conventional taxi drivers and ridesharing platforms escalated when a group of taxi drivers attacked an Uber driver and his passengers in Jakarta. The incident highlighted the tension between conventional taxis and digital ridesharing. Contestation continued in 2019 when the Indonesian government introduced new regulations for ridesharing services, which included a minimum fare, commission caps, and a requirement for drivers to have social security. While the regulations were intended to protect drivers, some argued that they would make it more difficult for them to earn a living and lead to higher prices for consumers.

Furthermore, the socio-technical shaping of ridesharing and its attempt to change or become part of the urban mobility regime have not only been influenced by conflicts and contestation, but also by the crisis brought about by the COVID-19 pandemic. Starting in 2020, the COVID-19 pandemic had a significant impact on the ridesharing industry in Indonesia. With lockdowns and social distancing measures in place, demand for ridesharing services declined significantly, leading to a drop in earnings for drivers and a loss of jobs. This crisis has had a significant impact on the mobility landscape, including the ridesharing sector, and has forced companies, governments, and workers to rethink and adapt their practices. This provides an opportunity to study how actors respond to a crisis in an ongoing transition - a topic that remains underexplored in the transition studies literature (Geels, 2013; Loorbach et al., 2016)

1.1 Research question and objectives

The primary aim of this thesis is to delve into the emergence of online ridesharing and how this influences the ongoing urban mobility transition within developing countries. Central to this exploration are the contestation, conflicts, and crises that invariably emerge during this transformative process. To illuminate this intricate interplay, the overarching research question that guides this study is:

"How do contestations, conflicts, and crises shape the future of online ridesharing in urban mobility transitions in the Global South?"

This central query serves as a guiding thread, leading to a deeper understanding of the multifaceted dynamics at play. To address this question comprehensively, the study is structured to examine the topic from four distinct, yet interconnected methodologies: frame analysis, conflict in transition, futures storylines, and institutional work. Each of these perspectives aligns with the four specific objectives, as presented in Figure 1, which define the scope of this thesis. Throughout the chapters, the thesis unfolds a narrative that uncovers the nuances of each perspective, offering insights into their influence on the complex landscape of urban mobility transitions. The intricate interconnections between these facets are visually represented in Figure 1, offering a roadmap to the overarching questions that guide this thesis.

RQ: How do controversies, conflict, and crises shape the future of online ridesharing in urban mobility transitions in the Global South?	Objective 1: Mapping the controversies and the discursive debate of ridesharing	Chapter 1: Framing the sharing economy: A media analysis of ridesharing platforms in Indonesia and the Philippines	(1) What frames can be identified based on news articles on ridesharing in Indonesia and the Philippines? (2) How do these frame reflect the policy responses to ridesharing in developing- economy context?
	Objective 2: Mapping the conflict and the battleground of ridesharing	Chapter 2: A dramaturgy of critical moment in transition: Understanding the dynamic of conflict in socio-political change	(1) When was the critical moment of conflict and controversies of the transition of ridesharing? (2) How these critical moment produce (new) social realities of ridesharing discourse?
	Objective 3: Mapping the conflict and the desirable futures of ridesharing	Chapter 3: Pluralizing Urban Future: A Multi-criteria Mapping Analysis of Online Taxis in Indonesia	What insights can be derived from diversifying future storyline in the online taxi [ridesharing] industry in Indonesia?
	Objective 4: Mapping the institutional work of ridesharing actors in times of crisis	Chapter 4: Informality and Institutional Work during the Covid-19 Crisis: The Case of Motorbike Online Taxi (Ojol) in Indonesia	(1) How do platform economy actors (company, driver, users) in the informal mobility sector respond to a major extenal crisis like the Covid-19 pandemic? (2) What does this tell us about systemic change in the informal economy stimulated by exogeneous shock?

Figure 1: Research questions and objectives

1.2 Situating the thesis in the literature using four perspectives

In focusing on contestation, conflict and crisis, this thesis approaches the study of urban mobility transitions through a discursive perspective. A discursive perspective involves analyzing the language-in-use and examining the politics surrounding language. Transition

studies have increasingly adopted a discursive approach, integrating theories like discourse coalition, framing, and discourse-transition complementarities (Hess, 2018; Rosenbloom et al., 2016; Smith & Kern, 2011). This approach highlights the importance of language, communication, and cultural legitimacy in shaping sustainability transitions. For instance, research on community choice aggregation (CCA) in California illustrates how discourse coalitions evolve over time, impacting framing strategies and policy conflicts (Hess, 2018). Smith and Raven (2012) elaborate on the concept of protective spaces, emphasizing how discursive strategies are used to shield, nurture, and empower innovative initiatives. Spath and Rohracher (2010) exemplify how discursive practices play a pivotal role in constructing and promoting guiding visions for sustainable socio-technical futures, thereby influencing both niche- and regime-level developments. Similarly, Smith and Kern (2011) analyze the transitions storyline within Dutch environmental policy, demonstrating how interpretative flexibility, discourse, and framing shape the trajectory of sustainability transitions while being mindful of potential constraints during subsequent institutionalization. The discursive approach emphasizes the interplay between challenger-incumbent dynamics, coalition composition, and the strategic use of metaphors and frames to influence transition trajectories.

In line with the importance given to the dynamics of conflict in transition studies, this thesis acknowledges the importance of paying attention to various terms used for ridesharing, such as ridehailing and online taxi services, and recognizes their discursive dynamics. In order to delve deeper into the discursive dynamics of ridesharing, this study examines how ridesharing is framed in the media, identifies the conflicts and contestation underlying regulatory debates on ridesharing, explores the future articulation of ridesharing, and examines how crises affect the discursive development of ridesharing. This section will utilize four perspectives to further unpack the dynamic of ridesharing and its connection to urban mobility transition. The four perspectives are: frame analysis, conflict and contestation in transitions, future storylines, and crisis in transition.

1.2.1 Frame analysis

Existing literature on frame analysis in the sharing economy has largely focused on the experiences of developed countries, with a

limited exploration of the discourse in the Global South which is characterized by ill-functioning institutions and exclusive provision systems (Mejia et al., 2018). This gap in the literature highlights the need to enrich the discussion of frame analysis in the sharing economy in the Global South contexts. I mobilize the definition of frames by Reese as "organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (Reese and et al., 2001, p.11). In addition, Reese argues that frames should be utilized as a macro-level analysis to give meaning to the policy legislation process. The frame as constructed and communicated can then be perceived as constructivist and critical. Critical "in the sense that frames are expressions and outcomes of power that are unequally distributed and constructivist in the sense that frames are interpretive packages that are used by actors in understanding the social world" (ibid).

Chapter 2 provides insights into how to understand the nuances of framing contestation of the sharing economy, especially in the Global South context. A rising number of publications in the Global North analyze the sharing economy using framing theory. Martin elaborates six frames of sharing economy that relate to pathways of sustainability based on Anglo-American experiences (Martin, 2016). Gruszka identified four frames based on the city of Vienna's experiences and argues for more local studies rather than a global framework for understanding the sharing economy (Gruszka, 2017). Palgan uses frame analysis to identify the environmental, economic, and social implications of the sharing economy (Palgan, 2017). Humphery analyzes the framing of the ethical enterprise of alternative consumption in Australia (Humphery, 2017). Sharp argues that narrative framing of the sharing economy for community empower-ment and grassroots mobilization has been used by Shareable to drive a "sharing transformation" and by Airbnb through "regulatory hacking" to influence urban policy (Sharp, 2018). The developed country focus of these papers signals the urgent need to enrich the discussion of frame analysis in the sharing economy in developing-economy contexts. The case of ridesharing in Indonesia illustrates the differences in the level of institutionalization of ridesharing in the Global South. Moreover, the Indonesian context highlights the importance of informal transport in the transportation landscape, which is a crucial factor in shaping the discourse on ridesharing.

1.2.2 Conflict and contestation in transitions

In this study, I differentiate the definition of contestation and conflict. I follow the definition of contestation from Tilly (2004), which is characterized as "how, when, where, and why ordinary people make collective claims on public authorities, other holders of power, competitors, enemies, and objects of popular disapproval." Additionally, I adopt the definition of (social) conflict from Cuppen (2018) as self-organized participation in transition involving the mobilization of collective action and advocacy, encompassing the contestation of existing power relations. The significance of conflicts and contestation in the process of socio-technical change has been extensively discussed in Science, Technology, and Innovation Studies. This field has a longstanding tradition of highlighting the importance of contestation and conflict tied up with the process of socio-technical change (Callon, 1981; Rip, 1986; Giere, 1987; Latour, 2004; Leach and Scoones, 2007). Conflict has been regarded as a crucial factor in governing innovation, evaluating new technologies, and encouraging participation because it serves as a catalyst for learning and progress in stakeholder dialogues focused on complex sustainability challenges (Cuppen, 2012). Furthermore, conflicts and contestation are seen as revealing changes within social groups (Belmin et al, 2018). Numerous studies have concentrated on the challenges faced by innovative niche technologies in gaining social acceptance and legitimacy (Raven, 2007; Lawhon and Murphy, 2012). The nuanced differentiation between contestation and conflict emphasizes their interconnected, yet distinct roles in the dynamics of socio-technical change and innovation governance.

In Sustainability Transitions Studies, conflicts are viewed as part of a growing research focus on power and politics in transitions (Hendriks and Grin, 2010; Meadowcroft, 2009; Avelino and Rotmans, 2009; Scrase and Smith, 2009; Kohler et al., 2019). Transitions are considered political processes in which actors with varying levels of power compete over the direction of socio-technical change, leading to structural changes. Meadowcroft (2009) emphasizes the inherently political character of governance for sustainable development and highlights the messy, conflictual, and disjointed nature of the transformation of energy systems. He recognizes that these conflicts contribute to shaping the course of sustainability transitions. Conflict is typically framed as a contest between an incumbent regime and

emerging niches in the context of the Multi-level Perspective (Geels, 2002; Geels and Schot, 2007). Furthermore, Avelino and Rotmans (2009) provide a comprehensive framework for understanding power in the context of long-term structural change. They argue that the absence of an explicit conceptualization of power in transition studies hinders a comprehensive understanding of how power relations influence the process of transformation. By acknowledging the diverse ways in which power is exercised, including transformative power, they emphasize that power dynamics are integral to the intricacies of sustainability transitions, potentially leading to conflicts and contestations between different actors and agendas.

I argue that by solely focusing on the power struggle between incumbents and newcomers in socio-technical transitions, there is a tendency to oversimplify the complex nature of conflicts. This binary view may lead to the perception that new actors always hold the solution to a problem, while incumbents are seen as the cause of lack of progress. Instead, I suggest rethinking social conflict as a unit of analysis in conceptualizing transitions, as proposed by Cuppen (2019).

My understanding of conflict aligns with earlier research that views conflict as a form of 'informal technology assessment' (Rip, 1986), and emphasizes the importance of conflict and contestation in transformative experimentation for change (Bulkeley et al., 2015; Murphy, 2015). In a similar vein, Torrens et al. (2019) propose three different lenses for exploring the contextual dynamics of experimentation and transition: seedbeds, harbors, and battlegrounds. While the first two lenses focus on experimental approaches, the "battlegrounds lens" emphasizes the generative potential of conflicts in socio-technical change. In this approach, experimentation is viewed as an arena where political contestation takes place, and coalition building, alliances, and mediation are crucial (Torrens et al., 2019, pp. 219).

The aim of Chapter 3 is to further analyze the "battlegrounds" lens by focusing on specific events through which conflicts create opportunities for change (Torrens et al., 2019). However, despite recognition of its importance, a comprehensive examination of how conflicts intricately shape transformative processes and create opportunities for change remains relatively unexplored. This thesis

aims to bridge this gap by delving into the specific events and mechanisms through which conflicts unfold within the "battlegrounds," shedding light on the nuanced interactions that lead to coalition formation, alliances, and mediation. By dissecting the micro-level dynamics of conflict-driven processes and their outcomes, this research seeks to unveil the intricate pathways through which conflicts stimulate transformative experimentation and drive sustainable change in socio-technical systems.

1.2.3 Pluralizing desirable future storylines of ridesharing

Investigating conflicts related to the introduction of ridesharing as part of an urban mobility transition, could go beyond following past and present activities. I explore how future storylines are mobilized as discursive instruments, encompassing not only cooperative aspirations but also potential sources of conflict. The power of future storylines lies in their ability to shape society's socio-technical fabric and trigger actions that bring about transformative change, even in the present (van Lente, 2012; Beckert 2016). Visions of possible futures can influence sustainable transitions through the concept of "expectations," which guide innovation actors by shaping a collective future orientation and creating protective spaces for certain technologies (Schot and Geels, 2008; van Lente, 2012; Sovacool et al., 2019a). Future storylines can coordinate actions across socio-technical stakeholders, promote certain development pathways, and justify the inclusion or exclusion of actors in decision-making processes (Delina, 2018). When future storylines become part of a collective repertoire shared by diverse stakeholder groups, they cannot be ignored, even by those who do not necessarily share them, because they have become part of social reality (van Rijnsoever et al., 2014). By engaging with these storylines, we can uncover both cooperative synergies and potential conflicts that drive the evolution of urban mobility transitions.

However, future storylines are not neutral constructs, but are framed in a particular way that includes and privileges certain aspects, actors, and perspectives while excluding others. As I will demonstrate in Chapter 4, two observations are particularly relevant to pluralizing future storylines. First, the perception of time horizons differs between futurists actors (Marien, 2002; Brier, 2005). In the future storylines, time horizons are often categorized from short term (present to 5

years), medium term (5-10 years) to long term (from 20-50 years). Second, the social contexts in which future storylines are articulated shape which storyline becomes dominant, and social interaction influences potential contestation of future storylines. Articulating future visions comes with manifestations of social position and power, which can de-emphasize and erase alternative futures. This study aims to unpack how time horizons relate to socio-institutional processes (Masini, 1993, p.32; Marien, 2002; Brier, 2005; Sovacool and Geels, 2016).

1.2.4   Institutional work in times of crisis

The first three chapters show that the introduction of ridesharing is subject to conflicts and contestation. Yet, I foreground that crises can have a profound impact on transitions as well, as the COVID-19 pandemic in 2020 showed. The pandemic resulted in a significant decline in demand, financial hardships for drivers, and necessitated a re-evaluation of practices within Indonesia's ridesharing industry.

A characteristic of the mobility sector of Indonesia, as well as of other developing economies, is the significant share of informal work and related institutions. When studying the interplay between conflict and crisis in relation to urban mobility transitions, it is important to take the informal nature of part of the sector into account. Informal institutions are defined as "shared rules, usually unwritten, that are created, communicated, and enforced outside officially sanctioned channels" (Helmke and Levitsky, 2006, p. 5). These institutions are usually maintained through interpersonal trust and play a vital role in collaboration and networking in the sector (Pedersen 2001). Formal institutions and informal institutions define what is legal and legitimate, and their acceptance is widely referred to as "legitimacy" in the literature (Bergek et al., 2015; Binz et al., 2016).

This study aims to examine the relationship between informal institutions and digital platforms while also exploring the impact of crises on informal institutions. Previous research has demonstrated that crises, such as COVID-19, can destabilize digital platforms and force them to become more embedded in the local institutions where they operate (Katta et al., 2020). Digital platforms have been found to recruit workers who typically operate in the informal economy, according to recent studies (Fudge and Hobden, 2018; Randolph et al.,

2019). The COVID-19 crisis has also negatively affected informal enterprises and workers, who are often excluded from financial assistance programs (ILO, 2020). Policymakers respond by formalizing employment and promoting fairness for informal employees (Webb and McQuaid, 2020). Overall, studies indicate that informal institutions become more vulnerable and destabilized in times of crisis.

Chapter 5 explores the connections between crises, digital platforms, and informal institutions, with a focus on how stakeholders take on institutional work within informal sectors in times of crisis. Institutional work has been defined as purposeful actions taken by individuals and organizations to establish, sustain, or alter institutions (Lawrence and Suddaby, 2006). To analyze institutional work in the empirical study, I adopt Pacheco et al.'s (2010) categorization of five institutional change techniques: framing, theorization, promoting collaboration, lobbying, and negotiation. This framework will guide the examination of strategies employed by stakeholders in navigating and shaping informal institutions within the dynamic context of crisis and digital platforms, providing a comprehensive understanding of the multifaceted nature of institutional work.

1.3 Empirical Background

1.3.1 Navigating urban mobility and the evolution of ridesharing in Indonesia

The case of Indonesia serves as an illustrative example of the challenges faced by Global South countries in terms of transportation infrastructure. The transport services in Jakarta – capital city of Indonesia with 10 million population – do not conform to the "modern infrastructure ideal" (Furlong, 2014). Jakarta has experienced rapid growth over the last few decades, leading to the prioritization of cars over other mobility modes. This has resulted in the generally insufficient provision of public transport, a condition that can be found in most mega cities in the Global South. Thus, traffic problems are a significant issue in developing economies, including Indonesia, with severe gridlock and other traffic calamities known as "Carmageddon" (Ford and Honan, 2017). For example, public transport accounts for only 13% of all trips in Jakarta, with many

residents preferring to use motorcycles. However, with the city having approximately 17.5 million motor vehicles on the road in 2014 this worsens traffic congestion. In this context, informal transportation such as motorbike taxi's or 'ojeks' has offered a viable alternative to the negative implications of growth on urban transportation systems dominated by cars and inefficient public transport in Jakarta.

The current policy making elite in Indonesia is favoring formal public transport over informal, "splintered" modes of transport (van Welie, 2018). Informal transport is not represented in policy discussions, e.g. on a ministerial level. This leads to further inequalities of support for and protection of informal transport workers and limits radical changes in the transport system. Claims about the likelihood or indeed the inevitability of a particular mobility future are articulated to anticipate events and to make taking action incontrovertible.

The emergence of digital applications for 'ojeks' and car taxi services has led to a critical convergence of formal and informal transport. Digital ridesharing platforms enable drivers to provide taxi services with their own cars or motorbikes and without an official taxi license, as such building on and reinforcing informal mobility. These services are able to offer lower prices, which threaten incumbent taxi players. Protests and incidents on the streets against on-demand taxis attracted attention from the popular media.

In March 2018, Uber left Southeast Asia, which intensified competition between Gojek (a homegrown online taxi company) and Grab (a regional company in South East Asia). The two companies were locked in a price war to obtain market domination, which had detrimental effects on the drivers' prosperity. The price war between Gojek and Grab has led to both companies offering very low fares to passengers, in order to attract more customers and gain market share. This has created a situation where drivers are earning less money per trip, as they are being paid a lower fare by the companies. As a result, many drivers have had to work longer hours in order to earn the same amount of money that they used to earn. The situation has been exacerbated by the fact that there is a large number of drivers working for these digital platform taxi services. This has led to an oversupply of drivers, which has resulted in increased competition for passengers and lower fares.

The ensuing contestation and conflicts in Indonesia, confronted the Indonesian government with the problematic side of online taxis. Governmental organizations find it difficult to respond to and accommodate online taxis. The legal complexity involved in regulating 'ojeks' is the main reason authorities avoid including 'ojeks' in Indonesia's traffic control system. The government had to enact a regulation that could tame the disruptive effect of online taxis.

The situation has also created contestation and conflicts between the companies and the government. The government has been under pressure to regulate the digital platform taxi services in order to ensure that they operate fairly and do not put traditional taxi services out of business. The situation has been further complicated by the fact that the companies themselves created smokescreens to avoid being labeled (and regulated) as traditional taxi services. They have presented themselves as technology providers, rather than taxi companies, which has made it difficult for the government to regulate them effectively. The legal definition of online taxis was a significant challenge in many countries, including Indonesia. Companies presented themselves as technology providers, but their direct impact on the private transport market raised criticism about representing unfair business practices. As a result, the government was expected to act to prevent chaos. However, the government seemed to be ill-equipped to navigate a smooth transition, as existing transportation law did not foresee online taxis. Therefore, the government needed to come up with a new strategy first and develop regulations.

Even though this study focuses on the Indonesian case, as a comparative background the first part of this research conducts a comparative analysis between Indonesia and the Philippines. While both countries represent characteristics of the Global South, the institutionalization of ridesharing in the Philippines and Indonesia shows significant differences. The Philippines was among the first countries in Southeast Asia that legalized ridesharing in 2015 through the issuance of a Department Order, which recognized Transportation Network Companies (TNCs) as a new category of public transportation. In contrast, the emergence of ridesharing in Indonesia sparked contestation and conflict among various stakeholders, including traditional taxi drivers, local government officials, and the general public. Indonesia took longer to issue a regulatory framework to legalize ridesharing as 'angkutan sewa khusus' or special rental

transportation in 2018. In this sense, the case of Indonesia offers a more complex discursive debate and conflict which brought a bigger opportunity to explore the interrelation of contestation, conflict and crisis with the emergence of ridesharing in shaping the transition of urban mobility.

1.3.2 The effect of Covid-19 crisis to ridesharing transition

The COVID-19 outbreak in early 2020 constituted a critical moment in this process of regulation during which Gojek and Grab used the crisis to redefine the legal and social function of 'ojek' in Indonesian society. There have been multiple discursive battles about online taxis in Indonesia. The COVID-19 outbreak, followed by the implementation of social distancing guidelines (PSBB), provided a crucial battle arena to negotiate the normalization of motorbikes as passenger transport. During the pandemic it became clear that 'ojek' provided crucial services in Indonesia, especially in situations where other forms of transportation are limited.

The PSBB guidelines in Indonesia mainly followed international norms in social distancing, aiming to restrict physical interaction in society to minimize the risk of transmitting the COVID-19 virus. However, the implementation of PSBB faced strong resistance, particularly from informal business sectors that rely on economic activities involving physical interaction. The 'ojek' riders were among the most severely impacted groups since they had close physical contact with their pillion passengers. Despite the initial ban on 'ojek' services at the beginning of PSBB, the government lifted the prohibition due to multiple dynamics between the digital application company, the drivers, the government, and other stakeholders of 'ojek'.

This thesis focuses on the first period of PSBB because it highlights an institutional void in transportation services that shaped the government's policy relating to ojek services for subsequent social distancing regulations. This period was also critical in defining the role of digital application companies in 'ojek' services and their ability to negotiate with the government to create policies that are favorable to their interests, while ensuring the safety of passengers and riders during the COVID-19 pandemic.

1.4 Four methodological approaches

The primary aim of this thesis is to explore the emergence of online ridesharing and its influence on the ongoing urban mobility transition within developing countries, with a focus on contestation, conflicts, and crises. The central research question guiding this study is: "How do contestation, conflicts, and crises shape the future of online ridesharing in urban mobility transitions in the Global South?" To comprehensively address this question, the study is structured to examine the topic from four distinct yet interconnected perspectives: frame analysis, conflict in transitions, future storylines, and institutional work. In this section, I detail the methods guiding my examination of Indonesia's ridesharing evolution.

These methods have been chosen to provide a comprehensive understanding of the subject. I chose frame analysis, argumentative discourse analysis, multi-criteria mapping analysis, and the analysis of institutional work to offer different perspectives on the complexities of ridesharing. Frame analysis helps uncover the narratives shaping public discourse on ridesharing, while argumentative discourse analysis allows to reveal how governance can be performed via discourse and dramaturgy. Multi-criteria mapping assesses future scenarios, highlighting uncertainties. Institutional work analysis dissects strategies during the unfolding of the introduction and take up of ridesharing in the Jakarta mobility system. Engaging with these methods provides varied insights into Indonesia's ridesharing landscape. Each method offers a unique view, contributing to a holistic understanding of the forces at play.

1.4.1 Frame analysis

The first part of this study (Chapter 2) uses frame analysis to map the contestation and debate of ridesharing in the media. Research on frames in news content is a complex and varied field that encompasses many topic areas, including political campaigns, policy formation, legislation, litigation, court decisions, and international affairs. Scholars have used different terms to refer to framing research, calling it an approach, theory, class of media effects, perspective, analytical technique, paradigm, and multi-paradigmatic research program (Pan and Kosicki, 1993; McLeod and Detenber, 1999; Scheufele, 1999; Price, et al., 1997; Kuypers and Cooper, 2005; Endres, 2004; Entman,

1993; D'angelo, 2002). The frame constructed and communicated can then be perceived as constructivist and critical, expressing power dynamics and interpreting the social world.

Framing theory suggests that linguistic constructions that frame issues in particular ways influence individuals' experiences and attitudes toward socio-political issues. Snow and Benford (1988) identified three sub-frames employed within the system framing process: (1) the diagnostic sub-frame, which identifies problems, (2) the prognostic sub-frame, which offers solutions to these problems, and (3) the motivational sub-frame, which establishes the rationale for taking action to address the problem. Through the lens of framing theory, the analysis in this study will utilize these sub-frames as linguistic constructs to unpack and understand the nuanced ways stakeholders articulate, perceive, and respond to urban mobility challenges within the broader context of crisis and digital platforms.

The sharing economy has become a popular topic in framing research, with scholars exploring different frames related to sustainability, local experiences, environmental, economic, and social implications, ethical enterprise, and community empowerment. However, most of these studies focus on the experiences of Anglo-American or other developed countries (Martin, 2016; Gruszka, 2017; Palgan, 2017; Humphrey, 2017), highlighting the need to enrich the discussion of frame analysis in the sharing economy in the Global South contexts. In addressing this gap, we employ frame analysis as a method to dissect the cognitive frameworks shaping public discourse on ridesharing in Indonesia, thus contributing a more comprehensive perspective to the discourse (Reese et al., 2001).

1.4.2 Analysis of discourse and dramaturgy

The second part of the study (Chapter 3) utilizes the ten-step Argumentative Discourse Analysis (Hajer, 2005) approach to explore the governance-as-performance dimensions of discourse dynamics and dramaturgy around the emergence of digital platforms for ridesharing in Indonesia. Hajer's "governance as performance" framework embeds critical moment analysis, focusing on the enactment of the discursive order through two dimensions: discourse and dramaturgy (Hajer, 2009).

The discourse analysis approach taken delves into the "language-in-use", offering deeper insights into how novel concepts and storylines influence the allocation of meaning. It aims to unveil discourse dynamics over time, with a focus on both dominant and marginal storylines. Metaphors and storylines condensing complex narratives play essential roles in discourse analysis (Verloo, 2015). This approach has been frequently applied in transition studies, examining how conflicts and contestation unfold in media discourse (Gamson and Modigliani, 1989; Sengers et al., 2010; Geels and Verhees, 2011)).

In Chapter 3, I aim to enhance discourse analysis by introducing Hajer's second dimension: dramaturgical analysis. Dramaturgy views politics as a series of staged performances, distinguishing actors and publics. Publics are seen as emerging from specific struggles and issues of concern. Dramaturgical analysis connects not only "what people say" but also "how they say it, where they say it, and (especially) to whom" (Hajer, 2009, p.65). Three elements are central: scripting, staging, and setting of performances. Scripting involves defining actors and their appropriate behavior, while staging organizes interactions between active players and passive audiences. Setting encompasses the physical and organizational context of the interaction.

By adding the dimension of dramaturgy, the analysis sheds light on how scenes and acts interact to create distinct public involvements in conflict contexts. This methodology also allows for discerning conditions under which actors and stories emerge in political discussions and influence decision-making. By uncovering critical moments and dramaturgy, this chapter underscores that conflict in transition goes beyond argument persuasion; it becomes a performative act, shaping its own public sphere. The study employed various textual data sources and analyzed interactions during discursive conflicts to identify critical moments. The data was collected over three phases of data collection and analysis.The data collected and analysed is specifically geared to identify critical moments and to zoom in on the two governance-as-performance dimensions of discourse dynamics and dramaturgy around the emergence of digital platforms for ride- sharing in Indonesia. This governance-as-performance analysis relies on various sources of textual data and on the study of interactions in particular moments of discursive conflict.

1.4.3 Multi-criteria mapping

The third part of this study (Chapter 4) aims to construct future storylines from multiple perspectives by using the multi-criteria mapping (MCM), which is a type of multi-criteria analysis tool that appraises multiple options simultaneously and offers a clear understanding of uncertainties associated with each option (Stirling and Mayer, 2001). The MCM method consists of five stages: (1) constructing an open-ended set of options, (2) identifying criteria, (3) scoring options, (4) weighting criteria, and (5) allowing for overall reflection and adjustments. To build inclusive future storylines, the MCM method was combined with mapping multiple future storylines of ridesharing in Indonesia. The results of the appraisal of the core options were presented in a stakeholder workshop to initiate dialog between diverse stakeholders and for validating and negotiating the different future.

The research study was divided into three main phases: constructing future storylines, appraising future storylines through one-on-one MCM interviews, and a future storylines dialog. The first step was to build initial storylines for later use as core options in the MCM interviews. The second step was the one-on-one MCM interview in which interviewees reflected upon and appraised the core options. Interviewees were also invited to revise or suggest additional options if they deemed them suitable. The third and final step was a stakeholder workshop where the results of the appraisal of the core options were presented to initiate dialog between diverse stakeholders and for validating and negotiating the different future.

1.4.4 Institutional work analysis

The aim of the fourth part of the study (Chapter 5) is to analyze the effect of the crisis on the landscape of urban mobility transition, specifically focusing on the impact of the COVID-19 pandemic on the platform economy and informal transport. I adopt the institutional work framework which defines institutional work as "the purposive action of individuals and organization aimed at creating, maintaining and disrupting institutions" (Lawrence and Suddaby, 2006, p.214). The choice of institutional work analysis is well-suited for this aim because it allows for an in-depth exploration of the strategies employed by various actors in response to the crisis caused by the

COVID-19 pandemic. By conducting a systematic scan of public discussions, interviews with key stakeholders, and analysis of official documents and scholarly publications, this study aims to uncover the nuanced strategies and dynamics of institutional work during this critical period. This approach enables us to understand not only the explicit actions taken but also the underlying motivations, conflicts, and negotiations that shape institutional responses in times of crisis.

I used a qualitative methodology that involves three analytical steps. The first step involved a systematic scan of public discussions covered in the news and on social media from March 1 to August 31, 2020, to trace the dynamics and strategies employed during the first PSBB and

Table 1.1 : Summary of all methodological approaches and data collection

Methodological approaches	Articles	Interviews	Direct Observation	Focus Group Discussion
Frame analysis	536 news articles range from 2015-2017			
Discourse and Dramaturgy Analysis	12 meeting notes ranging between 2015-2018	5 helicopter interview 23 semi-structured interviews	January-April 2019 observation in the sites of argumentation at the Ministry of Transportation 84 trips using conventional car taxis, online car taxis, conventional motorbike taxis, and online motorbike taxis	1 hour discussion, presenting the temporary findings in front of stakeholders
Multi-Criteria Mapping Methods	256 news articles range from 2015-2019	9 multi-criteria mapping interviews within a duration of 3-4 hours/each		3 hours online discussion to present the interview results and invite comments from stakeholders
Institutional Work Analysis	214 news articles and social media post range from January-August 2020 23 official reports	8 semi-structured interviews		

before the second PSBB. The second step concerned conducting eight interviews with persons from the ojek riders' organization, the Ministry of Transportation, and two experts to obtain additional points of view and discuss the list of institutional work strategies. The third step involved collecting data from official documents and scholarly publications discussing the impact of COVID-19 on the platform economy, especially on ojek online.

All the data collected were analyzed and categorized by taking into account the five institutional works, which were used to code and categorize the data in NVivo 11. The data were run iteratively, and several keywords were used to initially measure the institutional works contained in the articles or posts before they were assigned a code referring to specific institutional work. During the interviews, the interviewees' opinions of the pre-existing list of institutional work were also elicited, and these discussions helped to better categorize the table with practical inputs from the practitioners and experts. The data from the interviews also helped to identify the dynamics of institutional strategies in the field and to grasp the nuances, tensions, or interconnectivity of each strategy.

1.5   Thesis outline

Chapter 2 focuses on the debates on the use of ridesharing platforms in developing countries. This chapter utilizes a frame analysis to examine news content related to ridesharing in Indonesia and the Philippines. The analysis reveals five distinct frames through which ridesharing is viewed, including as a solution for commuters, an unregulated form of public transportation, a cooperative business venture, a non-conformist alternative, and a means of informal livelihood. These frames are shaped by the specific context of developing economies, which is characterized by traffic congestion in heavily populated cities, a reliance on "informal transport" to fill gaps in formal transportation options, and an emphasis on collectivism. Moreover, the chapter argues that these frames have led to different policy responses to ridesharing in Indonesia and the Philippines, with a focus on addressing the lack of legal status and easing traffic congestion. The chapter also concludes that these policy responses are primarily driven by commercial and legal concerns rather than sustainability considerations.
Chapter 3 focuses on the process of transitioning which involves

significant changes that often give rise to conflict. This chapter gives more in-depth exploration to the complex and multi-dimensional nature of conflict and its relationship to transformative change. The chapter focuses on the case of ridesharing in Indonesia and explores the dynamics of conflict that accompany the emergence of digital innovations in mobility services. To gain a more comprehensive understanding of this phenomenon, this chapter utilizes the concept of 'critical moments' to analyze specific short time frames during which conflicts become particularly visible. To delve deeper into these critical moments, a dramaturgical analysis was used to examine the discursive enactment of the conflicts. The main arguments are three-fold: firstly, incorporating multi-dimensional conflict analysis can be advantageous for studies on transitioning; secondly, critical moments are a promising analytical tool for examining conflictual dynamics in transitioning; and finally, examining the dramaturgy of politics can provide a useful framework for shedding new light on where and how conflicts arise in transitioning, as well as how they unfold.

Chapter 4 focuses on exploring future urban scenarios of transformative change of ridesharing in Indonesia. It is important to recognize that such envisioning is not solely objective, but is influenced by socio-political processes. Therefore, approaches to urban imagination and planning must consider multiple perspectives from a range of actors and stakeholders, beyond the traditional group of experts and professionals. This chapter uses the emergence of online taxis in Indonesia as a case study to demonstrate the value of a more inclusive approach to assessing future urban mobility. We combine multi-criteria mapping (MCM) with an open dialogue on future storylines to derive insights on diversifying future scenarios in the online taxi industry. By employing a participatory approach in constructing future imaginaries, we identify four key insights: 1) criteria for evaluating the future are not solely technological; 2) there are differences in actors' perceptions of time horizons when imagining the future; 3) perceptions of time horizons are influenced by actors' backgrounds and their social interactions; and 4) the MCM method helps individuals to focus and explore their future storylines.

Chapter 5 focuses on the interplay between ridesharing platforms, informal transportation and Covid-19 crisis. In Indonesian cities, online motorbike taxi services ('ojol') play a critical role in transportation, despite their informal status. The COVID-19

pandemic exposed the 'institutional void' as the Ministry of Health issued regulations to ban these services, while the Ministry of Transportation permitted them to operate under certain health safety measures. This chapter explores how platform economy actors (companies, drivers, and users) in informal mobility respond to significant external crises, in this case the COVID-19 pandemic, and what this reveals about the role of exogenous shocks in ongoing transitions in informal economies more broadly. This chapter examines the institutional work strategies employed by two 'ojol' companies (Gojek and Grab), their drivers, and their customers. This chapter identified five institutional strategies – framing, collaboration, lobbying, negotiation, and social media use – that these actors used to keep motorbike taxi services operating during the pandemic. Additionally, this chapter found that social media played a critical role in institutional work during periods of physical distancing. These strategies aimed to portray motorbike taxis as essential, safe, and as

Table 1.2 : Overview of the chapters with publications

Ch	Title	Publication Status
2	Framing the sharing economy: A media analysis of ridesharing platforms in Indonesia and the Philippines	Published Yuana, S. L., Sengers, F., Boon, W., & Raven, R. (2019). Framing the sharing economy: A media analysis of ride-sharing platforms in Indonesia and the Philippines. *Journal of Cleaner Production*, *212*, 1154-1165.
3	A dramaturgy of critical moments in transition: Understanding the dynamics of conflict in socio-political change	Published Yuana, S. L., Sengers, F., Boon, W., Hajer, M. A., & Raven, R. (2020). A dramaturgy of critical moments in transition: Understanding the dynamics of conflict in socio-political change. *Environmental Innovation and Societal Transitions*, *37*, 156-170.
4	Pluralizing urban futures: A multicriteria mapping analysis of online taxis in Indonesia	Published Yuana, S. L., Boon, W., Raven, R., Hajer, M. A., Sengers, F., & Ghosh, B. (2023). Pluralizing urban futures: A multi-criteria mapping analysis of online taxis in Indonesia. Futures, 154, 103260.
5	Informality and Institutional work during the Covid-19 Crisis: The case of motorcycle online taxis (ojol) in Indonesia	Submitted to the Journal of Cleaner Production

"the heroes of the pandemic", changing the perception of the informal economy: motorbike taxis are now seen as "elite informality" in the urban mobility sector.

Chapter 6 discusses the culmination of research findings and brings forth a comprehensive understanding of the urban mobility transition in Indonesia. Throughout the study, the analysis of discourse contestation, examination of conflict dynamics, envisioning of future scenarios, and exploration of crisis responses in ridesharing have coalesced to provide a holistic perspective the embeddedness of ridesharing in urban mobility transition.

Table 1.3 : Overview of authors contributions

	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6
Conceptualisation	Yuana	Yuana Sengers Boon Raven	Yuana Sengers Boon Hajer Raven	Yuana Sengers Boon Raven Hajer Ghosh	Yuana Boon Raven Hajer Sengers	Yuana Boon Raven Hajer Sengers
Data Collection	Yuana	Yuana	Yuana	Yuana	Yuana	Yuana
Analysis	Yuana	Yuana Sengers Boon Raven	Yuana Sengers Boon Hajer Raven	Yuana Sengers Boon Raven Hajer Ghosh	Yuana Boon Raven Hajer Sengers	Yuana Boon Raven Hajer Sengers
Feedback on writing	Boon Raven Hajer Sengers	Sengers Boon Raven	Sengers Boon Hajer Raven	Sengers Boon Raven Hajer Ghosh	Boon Raven Hajer Sengers	Boon Raven Hajer Sengers

CHAPTER 2

FRAMING
THE SHARING ECONOMY:
A MEDIA ANALYSIS OF RIDESHARING PLATFORMS
IN INDONESIA AND THE PHILIPPINES

Abstract

Few studies on ridesharing have so far been conducted in developing countries. To explore this, the present paper presents a frame analysis of news content on ridesharing platforms in Indonesia and the Philippines. We identify five distinct frames, perceiving ridesharing as a (1) commuter solution, (2) unregulated public transport service, (3) cooperative business, (4) non-conformity solution, and (5) informal livelihoods. We show how these frames emerge from a particular developing-economy context characterized by gridlock problems in densely populated cities, the utilization of "informal transport" as a gap-filler, and an emphasis on collectiveness. This study furthermore argues that the identified frames shape different policy responses to ridesharing in Indonesia and the Philippines, which 1) address the absence of legal status; 2) ease traffic congestion. This study concludes that these responses are driven primarily by commercial and legal concerns rather than sustainability concerns.

2.1   Introduction

The rise of the sharing economy is often portrayed as disruptive to traditional economic practices, particularly when combined with digital platforms. This emerging, digitally enabled, sharing economy is of great interest because it sits at the intersection between two major technological revolutions: digitalization and organized sharing. The combination allows for new forms of business activity, politics, and social interaction, often organized in rapid-growing digital platforms. Such economic activity based on sharing underutilized assets enabled by digital platforms is called the sharing economy.[1] It taps into the unique characteristics of digital platforms, mobilizing sophisticated algorithms and cloud computing to convert raw material data into new economic tools. As such, algorithms are crucial components, a fabric of software that is interwoven with the economy (Kenney and Zysman, 2016). Furthermore, the sharing economy often comes with a promise of sustainability, as making use of idle capacity might decrease the demand for products and make their use more efficient (Heinrichs, 2013; Cohen and Kietzmann 2014; Daunoriene et al. 2015; Nica and Potcovaru 2015; Hamari et al., 2016, Ma et al. 2018, Piscicelli et al., 2018).

As sharing-economy initiatives become part of societies, emerging practices start to institutionalize into more durable structures such as new transport policies. This process is in some cases contested and confrontational and concerns a deeply political process through which the distribution of benefits and risks stabilize into regulatory, normative, and cognitive institutions (Scott,1995). Framing the sharing economy (and disagreements over those frames) is an inherent part of this process (Phillips et al, 2004). As such, frames have been a key concern and topic of analysis in the sharing economy literature. In San Fransisco, for instance, ridesharing platforms have been interpreted as a progressive step to make the city "the innovation

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[1] Defining sharing economy has been a struggle due to its relative novelty and hybrid nature. Botsman & Rogers, for instance, define the sharing economy as "an economic model based on sharing underutilized assets from space to skills to stuff for monetary or non-monetary benefits" (Bostman and Rogers, 2010, p.11). They further highlight three features of the sharing economy; (1) product service systems (PSS), (2) redistribution markets, (3) collaborative lifestyles. Stephany (2015) adds the element of online accessibility and the enabling power of the internet as critcial dimensions of the sharing economy. Yet there are other definitions too (e.g. Belk, 2010; Lessig, 2008; Sacks, 2011)

capital of the world" (Flores and Rayle, 2017). In China, ridesharing is framed as a service that will lead to substantial energy savings and emission reductions by weakening willingness to purchase new cars (Biying et al, 2017). In Singapore and Australia, ridesharing is framed as an important factor in building "smart tourism ecosystems" (Tham, 2016). On the other hand, ridesharing companies such as Uber are also framed as practicing the "neoliberal playbook" by misclassifying their workers, exploiting economically vulnerable workers (Zwick, 2017), and burdening drivers with superficial consumer ratings (Rosenblat et al., 2017). Such companies have also been framed as potential monopolies and as practicing unfair competition and therefore in need of smart regulation (Frenken and et al., 2015).

In terms of the geographical focus of sharing-economy research, current studies are dominated by developed economy experiences and perspectives (Schor, 2017; Münzel et al., 2017; Fabo et al., 2017; Chan and Shaheen, 2012; Ma et al., 2017; Furuhata et al., 2013, Martin, 2016; Gruszka, 2017; Humphery, 2017, Voytenko, 2017). While publications on sharing-economy experiences in developing economies are emerging (Roxas, 2016; Widdows et al. 2017; Surie and Koduganti, 2016; Wahyuningtyas, 2016; Schechtner and Hanson, 2017), few so far explicitly undertake a framing analysis. We argue that such developing-economy contexts are different in many ways and that there is a need to identify whether frames in these contexts are different and, if so, how they differ.

To give a more balanced perspective on different framings of the sharing economy, the research described in the present paper therefore focuses specifically on distilling frames from news content on ridesharing platforms in Indonesia and the Philippines. In this study, frames are defined as "organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (Reese, 2001, p. 11). Given the long tradition of ridesharing in Indonesia and the Philippines, it is expected that such an analysis will provide a meaningful contribution to the existing literature.

The cases in Indonesia and the Philippines are important not only because the digital market in South-East Asia encompasses around 190 million Internet users (ASEANUP 2017), but also because of motorbike ridesharing (e.g UberMotor, GrabBikes, Go-Jek, GoMoto,

GoBounce) (Low, 2017), which is typical for developing economies and has been popular for decades. There are also notable differences between the two countries, as the Philippines had already established regulations on ridesharing in 2015 (TechInAsia, 2015), while Indonesia is still undergoing a long process of formulating and revising regulations.

This study addresses the following two research questions: (1) what frames can be identified based on news articles on ridesharing in Indonesia and the Philippines? And (2) how do these frames reflect the policy responses to ridesharing in a developing- economy context? To address these questions, this study presents an analysis of online ridesharing platform news articles, identifies framings that both support and reject ridesharing, and discusses regulatory decisions based on these frames.

This study is structured as follows: Section 2 provides a discussion of existing literature on framing analysis and on the sharing economy, especially on the role of digital platforms in reconfiguring ridesharing. Section 3 presents the methodology and elaborates on the context in Indonesia and the Philippines. Section 4 shows the identified frames. Section 5 discusses the policy responses to ridesharing in a developing-economy context. The conclusions are presented in Section 6.

2.2   The influence of platforms in the ridesharing economy

2.2.1   Frame analysis

Research on frames in news content is situated within the subfields of political communication and mass communication. This work encompasses a variety of topic areas, including political campaigns, policy formation, legislation, litigation and court decisions, and international affairs. Hence, there is no consensual treatment of frame research. Framing has been called an approach (Pan and Kosicki, 1993; McLeod and Detenber, 1999), a theory (Scheufele, 1999), a class of media effects (Price and Tewksbury, 1997), a perspective (Kuypers, 2005), an analytical technique (Endres, 2004), a paradigm (Entman, 1993), and a multi-paradigmatic research program (D'Angelo, 2002). Some researchers have used more than one term; for example, Reese called framing an approach and a paradigm. Reese defined frames as

"organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (Reese and et.al., 2001, p.11). In addition, Reese argues that frames should be utilized as a macro-level analysis to give meaning to the policy legislation process. The frame constructed and communicated can then be perceived as constructionist and critical. "Critical in the sense that frames are expressions and outcomes of power that are unequally distributed and constructionist in the sense that frames are interpretive packages that are used by actors in understanding the social world" (ibid).

Framing theory generally indicates that the experiences and attitude of individuals toward socio-political issues are influenced by a linguistic construction that frames issues in particular ways (Lakoff, 2010). In analyzing frames, Snow and Benford identify three sub-frames employed within the system framing process through which such influence is constructed: (1) the diagnostic sub-frame, which identifies problems (problem), (2) the prognostic sub-frame, which offers solutions to these problems (solution), (3) the motivational sub-frame, which establishes the rationale for taking action to address the problem (rationale) (Snow and Benford, 1988).

A rising number of publications analyze the sharing economy with framing theory. Martin elaborates six frames of sharing economy that relate to pathways of sustainability based on Anglo-American experiences (Martin, 2016), Gruszka identified four frames based on the city of Vienna's experiences and argues for more local studies rather than a global framework for understanding the sharing economy (Gruszka, 2017). Palgan uses framing analysis to identify the environmental, economic, and social implications of the sharing economy (Palgan et al., 2017). Humphery analyzes the framing of the ethical enterprise of alternative consumption in Australia (Humphery, 2017). Sharp argues that narrative framing of the sharing economy for community empowerment and grassroots mobilization has been used by Shareable to drive a "sharing transformation" and by Airbnb through "regulatory hacking" to influence urban policy (Sharp, 2018). The developed country focus of these papers signals the urgent need to enrich the discussion of framing analysis in sharing economy in developing-economy contexts.

2.2.2   The influence of platforms in a ridesharing economy

The current debate on the sharing economy has increasingly been associated with the term "platform economy" (Slee, 2015), where a company utilizes the platform to create a two-sided market between suppliers (owners of idle capacity) and consumers (Dreyer et al., 2017) and gains profit from facilitating the interaction between these two sides (Murillo et al., 2017). Such platforms are driven by big data and use algorithms as pricing models, which also disrupts the existing relationship between the regulator and regulated (Srnicek, 2017).

Initially, the conceptualization of the sharing economy was shaped by a non- market frame, emphasizing altruistic motivations to exchange goods and services and at the same time contributing to sustainable consumption (Prothero et al., 2011). Current discussions of the sharing economy mainly take place in a market frame, highlighting economic and regulatory issues. Some see the sharing economy as a form of profit-driven collective consumption (Hamari et al., 2015), or as peer-to-peer markets (Kohda and Masuda, 2013), or shifting asset markets (Sundararajan, 2014). Regarding regulatory issues, Sundararajan recommends government intervention to avoid market failure (Sundararajan, 2014). Some are concerned with the protection of users (Ranchordas, 2015), some look for a balance between regulating the sharing economy without stifling innovation, by introducing experimental regulations (Hannah, 2015). Some critics have perceived the sharing economy as growing a precariat working class, who join the sharing economy out of desperation (Roose, 2014), and as a practice of "sharewashing" that shifts risks onto drivers (Kalamar, 2013). In general, the concept of sharing, and ridesharing in particular, seems to be contested between market and non-market narratives. We will use the definition of ridesharing by Amirkiaee and Evangelopoulus: "any use of an automobile that includes, in addition to the driver, non-dependent passengers, without a fully commercial/formal relationship, with an agreement to share the ride, and with or without sharing the travel costs" (Amirkiaee and Evangelopoulus, 2018, p.10). This definition outlines the intersections between the sharing economy and informal or semi-informal transport.

Frenken articulates three future scenarios for governing the sharing economy: (1) platform capitalism, which is characterized by the

integration of various sharing-economy initiatives into a super-platform that follows neoliberal development, (2) platform redistribution, which is state-based distribution for public interest and uses principles of social justice and (3) platform cooperativism as a grassroots movement that uses collective ownership and management principles. (Frenken, 2017). These three scenarios leave room for exploring different angles to understand the sharing economy, as we will attempt in our cases in Indonesia and the Philippines.

2.3   Methods and Contexts

This research utilized an online ethnography (Boellstorff et al., 2012) to gather and analyze online news data containing various frames of ridesharing in Indonesia and the Philippines. News data are a common data source in framing analysis. We adopted an exploratory and iterative research approach consisting of three interlinked elements of data gathering and data analysis focusing on frames of ridesharing: problems, solutions, and rationales. This research is "exploratory" because very few studies on ridesharing have so far been conducted in developing countries, where the topic is new and the issues are in a preliminary state (Babbie, 2007). We cannot take for granted that findings from earlier work in developed countries apply to this very different context. Our samples of online news are mainly in English, but we complemented them with examples in Bahasa Indonesia.

2.3.1   Data gathering

This research utilizes data from three online news media sources that cover stories from Indonesia and the Philippines: Kompas (an Indonesian national newspaper), the Inquirer (a Philippine national newspaper) and Rappler (a news website that covers stories from both Indonesia and the Philippines). We used Rappler as it is the first news website in the Philippines to have adopted the extensive use of online multimedia and to use social media sites for news distribution. Moreover, because it has a bureau in Jakarta, Indonesia, Rappler covers news from both Indonesia and the Philippines (Rappler, 2012). Rappler and Inquirer report the news mostly in English. There are some Tagalog quotes, but English translations are also provided. Our analysis of the Philippines news relied on the direct translation from the news publisher. Kompas reports the news in Bahasa Indonesia,

which is the mother tongue of the first author. The first author translated news in Bahasa Indonesia into English and the translation has been reflected on and verified by a native English speaker, in collaboration with the first author and the author team.

The authorship of news articles varies. We used news articles from Kompas and Inquirer to clarify frames of ridesharing that we identified from Rappler and to add more details on sub-frames. Kompas is one of the most prominent printed and online news sources in Indonesia; in 2017 Kompas was awarded the Best Website Award in the News Category by Indonesia Bubu Awards. According to a survey conducted by AGB Nielsen Media Market Research Philippines in 2015, The Philippine Daily Inquirer was the top choice of news readers in the major urban area.

To gather our main data, first, we typed "ridesharing" into the search engine of the Rappler webpage. We found 194 articles related to ridesharing and captured them using NVivo. Second, we selected the search results that fell within the period June 2015–November 2017 timeframe, because 2015 was the year in which Philippine authorities introduced the category of Transport Network Company (TNC). Third, we selected the articles that only discuss ridesharing in the Philippines and/or Indonesia. Fourth, we read each article thoroughly and categorized it within three sub-frame codes: "problem", "solution" and "rational". Fifth, during the content reading process, we also identified different keywords that were used interchangeably with ridesharing. These are "ride-hailing", "sharing economy", colorum (a Tagalog word for unregistered passenger transport), "online taxi", and "transportasi online" (i.e., online transportation). We used these new keywords in the Rappler search engine to identify additional articles. Following similar protocols, we also included articles from Kompas and the Inquirer to ensure corroboration and consistency of the sub-frames. The final dataset consisted of 213 articles from Rappler, 112 articles from Kompas, and 111 articles from the Inquirer.

2.3.2   Data analysis

We analyzed our data by capturing and categorizing the date into three sub-frames (problem, solution, rational). In analyzing the content of each articles and building our frames and sub-frames, we undertook an inductive procedure to avoid the risk of taking too much of a pre-

defined developed world perspective, as most existing studies are based on cases in the developed world (Martin, 2016; Gruszka, 2017; Humphery, 2017, Voytenko, 2017).

First, we looked at the articles and identified sub-frames by searching for problems, solutions, and rationales of ridesharing discussed in the articles. Not all of these three sub-frames necessarily occurred in one article. For example, an article about the regulation of ridesharing only reported the problem (i.e. unregulated passenger transport service) and discussed a solution (i.e. regulating ridesharing). Initially, we found 7 problem sub-frames, 8 solution sub-frames, and 7 rationale sub-frames. The problem sub-frames are: traffic congestion, unregulated status, unfair competition, exploitative relations, colorum/illegal conduct, expired permit, and economic opportunity. The solution sub-frames are: ridesharing as digital solution, regulating the price, regulation operational area, vehicle permit, cooperative-based, new categories, fine as punishment, and operation without permit. The rational sub-frames are: public demand, technology as enabler, resistance from conventional taxis, inevitable consequence of technological innovation, Uber is not a transportation company, Uber is violating the law, and colorum is inevitable result.

Second, we combined the sub-frames and elaborated them into full frames. From the set of sub-frames, we gathered the sub-frames that tended to co-occur in one article. For example; ridesharing as a digital solution mostly co-occurred with the problem of traffic congestion. In this way, the two sub-frames were gathered, and an iterative process was conducted by re-collecting similar articles about traffic congestion and re-coding until we found full frames containing three sub-frames. To verify these full frames, we re- analyzed random articles in our dataset (approximately 20% of the original data set from Rappler) to see whether the full frames identified are employed fully or partly in the articles. This step confirmed that the process of frame identification was consistent with the empirical data.

Third, we structured all identified frames in two tables: one for Indonesia and one for the Philippines. We analyzed the similarities in and differences between the frames for the two countries. Fourth, we explored the policy documents on ridesharing that have been formulated in Indonesia and the Philippines. The policy documents were used to examine the extent to which the regulations reflect the variety of frames that we identified in each country.

2.3.3 Indonesia and the Philippines: contexts

To give a more detailed overview of our case studies, in this part we will discuss the development of the digital market and ridesharing in Indonesia and the Philippines, followed by a discussion of the traffic problems in the context of developing economies. The first point to note about the context in Indonesia and the Philippines is the size of the digital market in both countries. The number of Indonesians using the Internet has followed the upward global trend, increasing from 2 million in 2000 to 132 million in 2017 and for the Philippines from 2 million in 2000 to 57 million in 2017 (Internet World Stats, 2017).

Interestingly, the sharing economy in Indonesia and the Philippines has potential. According to the Nielsen Global Share Community Report, in 2014 87% of Indonesians were willing to share with others; in the Philippines, the figure was similar: 85%. (Nielsen 2014). In Indonesia, the ridesharing hype began in 2013 with the launch of Indonesian profit-based ridesharing platforms such as Go-Jek, a startup that provides a platform for motorbike ridesharing in Indonesia. Go-Jek's multinational competitors are Uber, which arrived in Indonesia in August 2014, and Grab (a Singaporean-based company), which entered the Indonesian market in June 2015 (Faisal, 2015; Freischlad, 2015). In mid- 2016 Go-Jek raised USD 550 million in new capital, giving it a value of USD 1.3 billion. This is considered an incredible result, given it had launched its first mobile phone application only a year and a half earlier (Pratama, 2016). Uber followed the motorbike ridesharing success by opening UberMotor. Grab introduced GrabBike. Go-Jek also started Go-Car to compete with Uber and Grab in car ridesharing. More dynamically, there were also smaller local players who tried to bridge contextual and cultural gaps, such as Ojek Syar'I, which provides an online booking service for Muslim female motorbike riders in Indonesia (Ojesy, 2015).

In the Philippines, even though in the city of Manila there is long experience of shared transport such as Jeepney, the online platform-based ridesharing was started by a foreign company, GrabTaxi (from Singapore), in 2013. One year later, Uber came to Manila and became the biggest competitor for the Grab platform. In 2015, GrabTaxi changed its name to Grab and started a new Uber-like service called GrabCar and the motorbike taxi service called GrabBike.

Another large influence on the success of these services is that road traffic in Indonesia and the Philippines faces severe threats from gridlock, road rage, and other traffic calamities which together are popularly known as "Carmageddon." In Numbeo's traffic ranking, Indonesia ranks no. 11, with an "average one-way time needed to transport" of 41.73 minutes; the Philippines ranks no. 9 with an "average one-way time" of 43 minutes (Numbeo, 2017). Indonesia's capital, Jakarta's metropolitan area, is home to about 24 million people, but only 13% of all trips are on public transport (Ford and Honan, 2017). Many Jakarta residents prefer to use a motorcycle as a commuting vehicle because it needs less space on the road. However, motorcycles are worsening traffic congestion. According to data from the Jakarta Police, in 2014 the city had roughly 17.5 million motor vehicles on the road, a significant increase from 16 million the previous year. Meanwhile, the road growth in Jakarta is increasing by only 0.01 percent each year (Jakarta Post, 2015). Traffic problems are also imminent in the Philippine's capital city, Manila. Japan International Cooperation Agency (JICA) reported that traffic congestion in the Philippines costs the economy PHP 2.4 billion (around 47 million USD) daily. A study conducted by JICA in 2014 warned that by 2030 the Philippines would be losing PHP 6 billion (around 118 million USD) daily due to traffic congestion (Japan International Cooperation Agency, 2014).

Lastly, the ridesharing services are commonly used in urban communities. In 2015, Indonesian urban commuters started using the ridesharing services of Uber, Grab, and Go-Jek. These companies could benefit from the commuters' frustration with traffic congestion, inadequate public transport, and the growing use of smartphones. The consumption of ridesharing services in Indonesia is rising, even though some technical barriers remain, such as the credit payment system, fare regulation, driving licenses, and passenger safety. The technical barrier in the Philippines was somewhat similar, as only around 31% of Filipinos have bank accounts, with an estimated 4% having access to credit cards. Furthermore, the smartphone penetration in the Philippines was around 21% in 2017. The current market for ridesharing services is therefore limited to a small segment of the urban population, compared to the overall shared transport market. (Schechtner and Hanson, 2017).

2.4 Identified frames of ridesharing

We have divided our analysis into three parts. First, we have identified and compared frames that illustrated the discussion of ridesharing in Indonesia and the Philippines, by showing their similarities and differences. Second, we have related these frames with the policy response to ridesharing in both countries. Last, we discuss some insights from these frames in a discussion of ridesharing in the developing-economy context.

2.4.1 Identified frames of ridesharing in Indonesia and Philippines

Table 2.1 presents the frames created for news articles about ridesharing: three for Indonesia and four for the Philippines. The frames identified from the Indonesian data are the commuter solution; unregulated passenger transport services; and cooperative business. For the Philippines the four frames are: commuter solution;

Table 2.1. Identified frames of ridesharing in Indonesia and the Philippines.

FRAMES	INDONESIA			THE PHILIPPINES			
	Commuter solution	Unregulated passenger transport service	Cooperative business	Commuter solution	Unregulated passenger transport service	Non-conformity	Informal livelihoods
PROBLEM	Traffic congestion	Unregulated status, Unfair competition	Exploitative relations between company and drivers	Traffic congestion	Unregulated status, *colorum*	Uber and Grab recruit drivers without permit or with expired permit LTFRB	Opportunity for unemployed or retired people
SOLUTION	Ridesharing	Regulating pricing mechanism, operational area, vehicle permit, role of each actors	Encourage formulation of cooperative-based ridesharing	Ridesharing	New categories TNC and TNVC introduced by LTFRB in May 2015	Ordered Grab and Uber to pay a fine of PHP 5 million each	Colorum practice (operation without permit), petition
RATIONALE	Public demand, Technology as enabler of more efficient process	Operating without regulation, resistance from conventional	Inevitable consequence of technology innovation. It should not be banned but regulated smartly	Public demand	Uber and Grab are not transportation companies	Uber and Grab are irresponsible by violating the law	The colorum status is inevitable result of legal situation

unregulated passenger transport service; non-conformity; and informal livelihoods. From these frames, it is clear that both countries share similar frames (commuter solution and unregulated passenger transport service). This is indisputably the effect of the severe traffic congestion problem in the two capital cities, Jakarta and Manila. However, interestingly, both countries showed differences regarding law-making and law enforcement related to ridesharing. In Indonesia, the cooperative business frame illustrates the government's strategy to address the absence of legality of the ridesharing, while in the Philippines, the frames of non-conformity and informal livelihoods illustrate the different implications of enforcing the new legislation. Each frame is presented below, paying attention to three elements or sub-frames: problem, solutions, and rationales.

Frame 1: Commuter solution

The frame starts from the traffic congestion as being the *problem*. Inadequate and ineffective public transport, particularly during rush hours when the buses and trains are overcrowded, with long queues and unpredictable schedules, has made daily commuting a nightmare. On the other hand, sometimes commuters have suffered from a tricky taxi pricing mechanism which can be unpredictable and significantly raises the cost of daily mobility. This description can be illustrated by the first paragraph of the example quoted below:

> *The Philippines - "Not too long ago, commuters had to rely exclusively on taking multiple modes of transportation, or aspiring to buy their vehicles if they wanted full control of their rides. These options can be time-consuming and expensive. On bad days, say, the evening rush hour made even worse by a sudden downpour, one can spend hours on the road just driving or trying to get a ride.*

> *Today's technology has made it possible for reliable transportation options in the city to be more accessible for anybody, anywhere at just a tap of a smartphone. Thus, Filipinos have embraced ridesharing services such as Uber, which offer easy access to rides, with the safety, reliability, and convenience that private cars offer (without actually having to acquire one). It is especially useful for those who live in areas that aren't along routes of major public transport options." (Jules Matabuena, Rappler, 3 June 2017)*

The quote's second paragraph could be analyzed as the *solution* sub-frame because it described the function of ridesharing applications that enable commuters to hail drivers instantly. In this sense, the daily traffic problem faced by commuters is solved by the presence of a ridesharing platform. Not surprisingly, the ridesharing application has become well-known to the urban population, as shown by the quote below:

> Indonesia - *"Booking online* ojek/*motorbike sharing has become a habit for society especially in Jakarta, which has serious traffic congestion. Compared to taking public transportation, booking on-demand transport such as Go-Jek, UberMotor, and GrabBike is faster for commuters in the middle of congestion". (Aditya Hadi Pratama, Rappler, 3 November 2016)*

In this frame, ridesharing is seen as a solution for the daily commuting problem in developing economies. We identified the *rationale* sub-frame as the ability of ridesharing applications to make the transport process more efficient, cutting time spent on the road and bringing predictable and competitive prices.

> The Philippines – *"Filipinos are tired of dealing with rude and crooked taxi drivers who refuse passengers based on their destinations, use rigged meters, charge arbitrary fares, and – for some reason – are always out of change. Uber and Grab allowed us to escape that horrible era. Also based on commuters' recent protests online, they are not having more of it again." (JC Punongbayan and Kevin Mandrilla, Rappler, 18 July 2017)*

We found that this frame is quite a dominant frame from a consumer's point of view. Although there were some concerns about the security issues of ridesharing, overcoming traffic congestion has somehow outweighed consumers' considerations for choosing ridesharing. We interpreted this as being associated with the developing-economy context, in which the alternative (e.g., public transport) is often inadequate.

Frame 2: Unregulated passenger transport service

We identified the *problem* of the illegality of ridesharing and the unfair competition practice. In the Filipino language there is a specific term

for the illegal or unregulated: *colorum*. The existence of Uber and Grab in Indonesia and the Philippines has challenged the conventional and legal definition of a public transportation company, as described in the quote below:

> *Indonesia - Traditional taxi, motorbike taxi, and other public transport drivers are angry that the new services are offering rides at lower prices, claiming they are not paying taxes, and are operating without official permits. "Why should thousands of people who did not pay tax, get a permit, or undergo car checks roam the roads freely while we have had to fulfill those duties?" said Yohannis Rorimpandey, a protester who works for Blue Bird, one of Indonesia's biggest taxi groups." (Agence France-Presse, Rappler, 22 March 2016)*

We see that the quote above not only illustrates the problem of the illegal status of ridesharing, but also highlights the potential loss of income for existing businesses and the conflicts arising due to people trying to protect themselves from this business threat. We acknowledge that new ventures often spur legal action both in developed and developing countries, as existing businesses often drive the government to regulate these new competitors.

Our two case study countries have tackled this problem differently. In May 2015, the Land Transportation Franchising and Regulatory Board (LTFRB) in the Philippines created a new category of passenger transportation: the Transport Network Company (TNC). It is a category for companies that provide app-based transportation hailing services. The government also created TNVC (Transport Network Vehicle Services) as a franchise license for TNC's partners (drivers). To get TNVC accreditation, each driver must register and pay a fee to LTFRB. TNC and TNVC have become *solution* sub-frames for the Philippines and are regarded as the first attempts at regulation of ridesharing in South-East Asia, while the *rationale* sub-frame is solving the traffic congestion as illustrated by the quotes below:

> *The Philippines - In May, the Philippine government introduced new transport categories aimed at easing traffic congestion. One of these is the Transportation Network Vehicle Service (TNVS), which are vehicles of application-based, ridesharing service providers, like Uber, GrabTaxi, Tripda, and EasyTaxi.*

"The main challenge of the different government agencies and offices is to align their rules and regulations, as well as policies, to solve the worsening traffic conditions in Metro Manila," Aquino, chairman of the Senate Committee on Trade, Commerce, and Entrepreneurship, said in a statement.(Rappler, 20 August 2015)

In contrast, Indonesia has more dynamic and varied *solution* sub-frames for the unregulated status of ridesharing, which has slowed down the process of law-making. There has been quite strong resistance from incumbent actors, who have accused ridesharing companies of unfair competition, as illustrated in the quote below:

Indonesia – Thousands of Indonesian taxi drivers staged a violent protest Tuesday, March 22, against Uber and other ride-hailing apps, blocking major roads in the capital, clashing with rivals from app-based services and setting tires alight.

The protesters adorned their vehicles with signs saying "stop unregulated taxis" and rallied in front of parliament and government buildings, in an upsurge of anger at the technology they say is threatening their livelihoods.

Herman, a 49-year-old taxi driver involved in the Jakarta protest, who goes by one name, said his earnings had dwindled from around 250,000 rupiah ($20) a day several months ago, to almost nothing due to the increased competition.

"I have not paid my rent, and I need to feed my three children and my wife," he said. (Agence France-Presse, Rappler, 22 March 2016)

Due to the escalating social conflict that emerged between supporters and opponents of ridesharing, the Indonesian Ministry of Transportation has introduced, withdrawn, and revised regulations several times; the last revision was introduced in October 2017 and was planned to be implemented in January 2018. The government encouraged app- based ridesharing companies to collaborate with local taxi companies or cooperatives (*koperasi*). This regulation also accommodated several problem sub-frames that have been debated since 2015, i.e., a pricing mechanism, an operational area for ridesharing, vehicle evaluation, and the power of an app-based service provider. With the new regulation, the government acknowledged the legal status of Uber and Grab as technology companies but reduced

their role to providers of a hailing service that only connects users with a transport provider. The *rationale* sub-frame of the Indonesian government is that Uber, Grab, and Go-Jek had been operating without legal status and therefore needed to be regulated within the existing law without forcing them to change from being technological companies to passenger transportation companies. The illegal status of ridesharing is illustrated below:

> Indonesia - "*Based on documentation shown to Rappler on Monday, 14 March, in which GRABTAXI and Uber are seen to be violating three regulations: UU No. 2 2009 (about traffic and road transport), UU No. 25 2007 which stipulates that foreign investment must be in the form of a limited company based on Indonesian law); and the regulation by Chief of Investment Bureau (BKPM) No. 22 2001 that states that the UBER office in Indonesia cannot perform commercial activities.*" (Santi Dewi, Rappler, 14 March 2017)

We found that this frame illustrates the disruptive effect of ridesharing to transportation in both countries. The debate on the legal status of ridesharing has become a global debate to which each region has responded differently. In our case, we found that the speed of policy response is determined by the strength of resistance from incumbent actors, with Indonesian incumbent actors offering more resistance than their Filipino counterparts.

Frame 3: Cooperative businesses

Covered more in Indonesian news media, this frame is connected with the unregulated status of ridesharing. The *problem* sub-frames that we identified are the dominant control of the ridesharing companies, i.e., through pricing decisions, and recruiting, and blocking drivers. Moreover, based on Indonesian regulation (UU. Number 22, 2009), an individual may not provide a passenger transport service. In this sense, individuals who offer ridesharing are considered illegal. There are two options to address this illegal status; the first is for the ridesharing company to become the umbrella organization employing individual drivers, transforming from technology company into a transportation company. The ridesharing companies resist this option because they argue transportation is not their core business and by being a transportation company they are required to own vehicles as company assets. The second option is to urge drivers of ridesharing to

form a cooperative legal entity, in which every member are allowed to own assets. The vehicle used in ridesharing will be under the ownership of each driver. Conventional taxis and other passenger transport in Indonesia have operatied under this cooperative model. Therefore, the latter option is more favorable to the government and becomes the *solution* sub-frame as discussed in the quote below:

> *Indonesia – "The government encourages ridesharing companies to form cooperatives (koperasi). As an example, this solution will be implemented by Grab in the GrabCar service. Actually, there are two ridesharing services i.e. Uber and GrabCar. However, the government chooses to work with GrabCar as the role model for similar service." (Yoga Hastyadi Widiartanto, Kompas, 17 March 2016)*

Responding to their illegal status, the ridesharing companies seem to agree with the government's idea. Individual partner drivers are discouraged, but cooperative or company partners are encouraged. An individual driver has the option either to form his or her own cooperative (with a minimum of five members) or to join an existing local passenger transport company or *koperasi* (Permenhub 108, 2017). The Grab ridesharing company has mainly collaborated with local companies and *koperasi*. In this sense, the ridesharing company only acts as an app-based hailing service provider and the power to determine the pricing is shared between the app-based company, passenger transport company, and drivers, and must fall within the pricing limit set by the government.

> *Indonesia - On Thursday, March 24, the government urged ride-hailing apps Uber and Grab to become business entities and to partner with a local transport business by May 31 or face a ban after a protest organized by taxi drivers on Tuesday.*
>
> *"It is in line with a government regulation from 2009 that all public transportation needs to be a legal entity, register and work together with legal taxi businesses," said ministry spokesman J. A. Barata.*
>
> *In response to the government's order, Grab's Indonesian unit said it was already working with a local Indonesian partner. "Grab is now trying to ensure that our partner can and will follow every requirement from the government," said Ridzki Kramadibrata, managing director of Grab Indonesia. (Rappler, 24 March 2016)*

Although it originated from the ridesharing's unregulated status, we argue that the longstanding Indonesian practice urged the formation of the cooperative entity as an easy solution to fill the institutional void. The *rationale* sub-frame is that ridesharing is perceived as an inevitable consequence of technology innovation. Instead of forbidding ridesharing, it needed to be accommodated within the existing regulation of the transportation business, for which the cooperative business served as an easy way out.

Frame 4: Non-conformity

In contrast to the Indonesian ridesharing regulation process, the fourth frame we found illustrates the reaction from a ridesharing company in the Philippines after the enforcement of the regulation that introduced the TNC and the TNVC categories. This regulation requires each driver to have an accredited license that is valid for one year and can be renewed by the LTFRB. We identified the *problem* sub-frame as the recruitment of new drivers by Uber and Grab, who do not have a license or whose license has expired. The companies explained that their drivers experience difficulties in obtaining their license from LTFRB due to lack of information.

> *The Philippines – Discussions of Grab and Uber's suspensions raised numerous complaints from commuters, especially those taking metered taxis. The suspension dilemma is also heavily reflected on 50,000 Grab and Uber drivers operating around the country.*
>
> *"Hindi ko naman po alam na kailangan naming kumuha ng ganoon sa LTFRB kasi hindi malinaw ang instructions nila sa amin, ang hirap po kasi lahat kami mawawalan ng trabaho," said Grab driver Dodie Cabatu.*
> *"(I did not know that we had to get [those forms] from the LTFRB because their instructions were not clear to us. It is hard because a lot of us will lose our jobs [because of this])." (Kimiko Sy, Rappler, 29 July 2017)*

The *solution* sub-frame from the government was to suspend the operation of these companies in August 2017 and to fine them each PHP 5 million. The *rationale* sub-frame behind this decision is that the government acknowledged Uber's and Grab's conduct of accepting

drivers' applications without the formal license as irresponsible and not complying with the law:

> *Uber has said that it did accept new applications for drivers amid strong demand, but did not process them. Monday's suspension order described that as "irresponsible" behavior in "unduly challenging the limit of fair regulation.*

> *LTFRB Chairman Martin Delgra told Brown his organization was not picking a fight with Uber and hoped the problem could be resolved at a meeting set for August 23. "This is not a fight. We are trying to work together here to address public transport issues," he said." (Jovic Yee, Inquirer, 14 August 2017)*

> *The Land Transportation Franchising and Regulatory Board (LTFRB) imposed a fine of PHP 5 million each on Uber and Grab on Tuesday, July 11, for letting some of their drivers operate without permits.*

> *Classified as Transport Network Companies (TNCs), Grab and Uber admitted that they allowed some Transport Network Vehicle Service (TNVS) drivers to operate even if they do not have permits.*

> *"It appears that the TNCs are not without fault for having these TNVS [drivers] operating unregulatedly," LTFRB Chairman Martin Delgra III said. "We need to be mindful of our responsibilities not only as TNVS [drivers] but also as TNCs." (Rambo Talabong, Rappler, 11 July 2017)*

With this frame we found that in the Philippines, even though the government has facilitated ridesharing by introducing the new category, problems remained in terms of compliance with the new law. However, we found that the new policy has become an instrument that enables the government to act firmly by suspending or fining individuals.

Frame 5: Informal livelihoods

The fifth frame represents the demand side of ridesharing in the Philippines. The *problem* sub-frame is the increasing number of new ridesharing drivers that exceeded the quotas imposed by the government. Demand is partially induced by supply, as ridesharing

has become an informal economic opportunity for the unemployed and retired. On the other hand, this frame is also constructed by the consumers who argue that the government regulation was only hampering their need to have access to a safer way of commuting. The online petition #WeWantUberGrab illustrates the demand from the drivers and the commuters.

> The Philippines – "On Twitter, the hashtag #WeWantGrabUber trended as commuters expressed their anger and frustration. Citing bad experiences with taxis, some netizens say Grab and Uber remain the safest way for them to commute." (Katerina Francisco, Rappler, 28 July 2017)

The *solution* sub-frame emerging from ridesharing drivers is to operate without a permit and work informally, meaning that the status of ridesharing drivers is that of informal workers. The *rationale* sub-frame is that circumstances do not allow other options: the informal status of the drivers of ridesharing is unavoidable, or in other words, *colorum* not by choice. The following quotes summarize this:

> The Philippines – "While applicants have been rejected from applying as TNVS drivers, some 7,000 already-accredited drivers did not get their PAs renewed in 2016, with all of them having expired PA permits by December 2016," Busypaps president Jephthe Gamad said.

> "We are not *colorum* by choice, our colleagues were left with no choice," they said in the petition. "Many of us were unemployed, some are retirees. We were given a chance to be productive in becoming partners of TNVS companies." (Rappler, 7 July 2017)

As a response to the fourth frame, we found that the "informal livelihoods" frame illustrates the reaction from ridesharing companies and drivers. We found this frame as emerging in parallel with the non-conformity frames.

2.5   Relations between frames and policy responses

Based on the identified media frames, this section discusses and reflects on the distinct policy responses to ridesharing in the spatial and economic context in cities in the developing world. First, we review the differences between the frames identified in Indonesia and the Philippines and consider the corresponding policy responses (Section 2.5.1) Second, we highlight the characteristics of ridesharing in the developing world and how they differ from the experiences in the developed world (Section 2.5.2).

2.5.1 Relations between frames and policy responses to ridesharing

In this section, we discuss the variety of frames in the two countries and discuss how these frames reflect the similarities and differences between the two countries regarding their policy responses to the introduction of mobile app based ridesharing as a disruptive innovation in urban passenger transport. First, we compare the response from the governments of the Philippines and Indonesia immediately after they faced pressure and disruption from both proponents and opponents of platform-based ridesharing. Second, we reflect on the potential longer-term consequences of these policy responses.

The government of Philippines prides itself on being the first country in South-East Asia to formulate legal regulations for ridesharing firms. In 2015, the government announced the Memorandum Circular No.2015 (11-15) as a legal umbrella for the operation of app-based ridesharing. This regulation categorized an app-based ridesharing firm like Uber or Grab as a Transport Network Company (TNC) rather than a transport provider company. Drivers who were operating through an app-based ridesharing firm are defined as "partners" and they are considered as an integral part of the category Transportation Network Vehicle Service (TNVS). The Land Transportation Franchising and Regulatory Board (LTFRB) is the authority in charge of issuing TNVS partners/drivers with permits that are valid for one year. In the context of the frames "commuter solution" and "unregulated passenger transport service," this new form of regulation is narrated as a way to deal with informal practices as well as a way to ease overall traffic congestion (Rappler, 11 August 2015).

The Indonesian policy response has differed markedly from the

Philippine policy response. The immediate response of the Indonesian government to the emergence of digital ridesharing companies could also be narrated from the two frames of "commuter solution" and "unregulated passenger transport service." However, the Indonesian Ministry of Transportation did not introduce a new category of passenger transport services like in the Philippines, but instead it introduced the Permenhub 32/2016 regulation in 2016. The regulation emphasizes the pricing mechanisms and requirements for collective membership for partners, stipulates that the ridesharing companies must determine the price of their services in agreement with public authorities, and prohibits private individuals from being ridesharing partners/drivers. Instead, what is viewed as a "partner" should consist of a minimum of five individual car owners, who together form a cooperative entity.

The identified frames can also be used to reflect on potential longer-term consequences of different policy responses in Indonesia and the Philippines. The frames of "non-conformity" and "informal livelihoods" identified in the Philippine news articles are instrumental in understanding the situation after the introduction of the TNC and TNVS categories and regulations. Through the lens of these frames, ridesharing companies can then be viewed as actors who violate regulations by allowing drivers to operate without a license and the government as an actor that attempts to control the situation and discipline the ridesharing companies. This line of argument was used in 2016 when the LTFRB decided to limit applications for new TNVS and eventually when they suspended the operation of Uber and Grab and fined them PHP 5 million for permitting their drivers to operate without obtaining TNVS.

In Indonesia two other frames of "unregulated passenger transport service" and "cooperative business" can be mobilized to narrate the effects and consequences of the introduction of the Permenhub 32/2016 regulation. The regulation faced opposition from conventional taxi drivers, who viewed the regulation as legitimizing unfair competition practices, and from app-based ridesharing drivers, who viewed the regulation as hampering their livelihoods.

In August 2017 the Indonesian Supreme Court decided to annul Permenhub 26/2017, especially relating to the pricing mechanism and vehicle standards. As reported in the media sources, one of the

main reasons for this annulment is that app-based ridesharing is viewed a logical consequence of technological innovation geared to enable more efficient and low-cost passenger transport. Regulation would then mean restriction of innovation, an association that the Ministry tried to avoid by withdrawing the regulation by introducing a revised version in April 2017 (Permenhub 26/2017). The new regulation includes more requirements relating to the partners of the ridesharing firm: each vehicle must meet a public transport standard. This regulation reflects the unfair competition sub- frame that illustrates the demand of conventional taxi drivers to treat ridesharing vehicles as similar to other kinds of passenger transport and re-emphasizes the cooperative mechanism in governing ridesharing services. The Ministry still requires ridesharing drivers to either form a cooperative entity or to join an existing local taxi company or cooperative in order to be acknowledged as a ridesharing partner. In contrast with the withdrawn regulation, the pricing mechanism will be collectively decided upon by the ridesharing firm, the local cooperative, the drivers, and the government. The reaffirmation of the cooperative entity reflects the "cooperative business" frame, which can be identified as a governance strategy to accommodate multiple stakeholders in ridesharing and to achieve a balance of power among these stakeholders.

2.5.2   Ridesharing in developing economies

Based on the identified frames, we explore four contextual characteristics of ridesharing, which are not only relevant for the spatial- and economic settings in Indonesia and the Philippines, but may be indicative for the different ways in which ridesharing is unfolding throughout the developing world.

1. *Ridesharing as a reaction to fast urbanization and traffic congestion*

Our case study of Indonesia and the Philippines provides an illustration of how ridesharing companies proliferate in settings throughout the developing world. Two important reasons for the fast growth of ridesharing stand out. First, like many megacities in the developing world, Jakarta and Manila can be characterized as socio-spatial contexts marked by urban sprawl, rapid influx of new urban dwellers and insufficient provision and access to public

transportation. In this sense, Jakarta and Manila have become primary centers and bustling hotspots for experimental urban development. Second, the explosive growth in vehicle ownership and utilization reflects path-dependent development trajectories that force urban commuters toward the use of private vehicles. As a result, commuters are trapped in daily traffic congestion. These two contextual developments in Jakarta and Manila might explain the existence and fast growth of ridesharing as an alternative for urban commuters faced with this challenging situation. As an example, in Indonesia, Go- Jek, a motorbike ridesharing company that officially launched in 2015, recruited almost 900,000 drivers within two years (Kompas, 2017) and Grab hired around 930,000 drivers (Grab, 2017).

To link this to our five identified frames, the commuter solution frame could narrate the rationale of ridesharing as the alternative mode of transportation for commuters in Jakarta and Manila. The primary rationale of this frame is that the algorithm used in ridesharing applications has enabled commuters to access transport services more efficiently and affordably. By comparison with other pre-existing frames in previous studies, Martin's frames of the sharing economy are based on Anglo-American experiences (Martin, 2016). In those settings, the sharing economy is mostly framed within the context of more comprehensive public transport services and therefore ridesharing is not primarily seen as an alternative in the face of traffic congestion.

2. Ridesharing as (un)sustainable alternative

One of the frames present in earlier studies mobilizes the sharing economy and related digital ridesharing practices as a transformative movement toward more sustainable consumption (Heinrichs, 2013; Cohen and Kietzmann 2014; Daunoriene et al. 2015; Nica and Potcovaru 2015; Hamari et al., 2015, Cohen and Munoz, 2016, Ma et al. 2018, Piscicelli et al., 2018). As Martin has argued: "the sharing economy is heralded as a new and sustainable form of consumption based on individuals accessing rather owning resources" (Martin 2016, p.154). In this sense the sharing economy is seen as a way to empower individuals, as a way to create economic, social and environmental value, and as a way to optimize the utilization of resources. Martin explains that niche actors in the sharing-economy sector primarily mobilize this frame.

But there is a difference here between the developed word and the developing world. Whereas some proponents of the sharing economy in the developed world stress these environmental sustainability promises, in the developing world, ridesharing is hardly ever framed as sustainable or as an environmental solution. In our analysis of ridesharing in Indonesia and the Philippines we found that ridesharing companies frame ridesharing primarily as a solution to insufficient public transport. It would seem that the economic motivations and practical concerns outweigh environmental concerns in the minds of ridesharing actors in Indonesia and the Philippines. We believe that this might be the case in other developing world contexts as well, but that is something future research would have to establish. What can be regarded as sustainable is of course context-dependent and reflects local values and priorities (Raven et al., 2017), but our findings illustrate that the values associated with the sustainability of ridesharing in Indonesia and the Philippines are greatly overshadowed by concerns of traffic congestion and economic growth. Our identified frames do not explicitly illustrate how to conceive the environmental contribution of ridesharing, but instead limited elements of sustainably are implicitly evoked when ridesharing is presented as an attempt to solve the inefficiency problem and as offering a more affordable and reliable alternative.

3. Ridesharing on motorcycles

In Indonesia and the Philippines, ridesharing is often characteristically performed on motorcycles. The frequently occurring gridlocks in Jakarta and Manila means that motorcycles are regarded as a coping mechanism for congested cities with spatial constraints. This mechanism has traditionally led to the opportunity for motorcycle ridesharing to become the "paratransit" or "informal transport" mode of choice. Informal transport can be defined as a transport service that operates "informally and illicitly, and somewhat outside officially sanctioned passenger transport" (Cervero, 2000, p.3). Cervero (ibid) also argues that motorcycle ridesharing as a form of informal transport is seen as a "gap-filler" which provides services that are not supplied by sanctioned public transport. Traditionally, the existence of such gap-fillers is somewhat tolerated by the public authorities, on condition that they remain more or less "invisible" to most motorists and are confined to low-income neighborhoods (ibid).

In this study, we found a shift of motorcycle ridesharing from its traditional use in low-income to upper-income neighborhoods. The shift is due to the enormous potential of motorcycles to act as "gap-fillers" and it represents a coping mechanism for congested cities which has attracted the interests of tech-based companies that develop app-based motorcycle ridesharing services. In Indonesia and the Philippines, this is shown by the emergence of services such as UberMotor, GrabBike, Go-Jek, and Angkas. These digital platforms offer more modern and secure ridesharing services for upper-income commuters and they have somehow increased the "visibility" of informal transport services and expanded their territory into middle-income neighborhoods. Furthermore, the organization of app-based motorcycle sharing services has appeared to be more formal, with the surge of companies resulting in rule-making. In many cases, however, the public authorities are still struggling to regulate this app-based motorcycle ridesharing. The interplay of digital platforms and informal transport may be interpreted as the "semi- formalization" of informal transport and has emerged as a new challenge in positioning these hybrid services in public transport categories (Sengers and Raven, 2014).

In this sense the frames of ridesharing in Indonesia and the Philippines could narrate three transformational elements of ridesharing in developing-economy contexts: (1) the utilization of motorcycles as ridesharing vehicles due to their function as "gap-fillers" in highly congested cities in the developing world, (2) the visibility of ridesharing services that shift from low-income to upper-income customers due to the innovative use of digital platforms, and (3) the organization of informal-traditional motorcycle ridesharing, indicating a situation of semi-formalization.

4. Cooperative model of ridesharing

The fourth characteristic is the distinctive transformation of the cooperative model of ridesharing in developing economies. In this research, the frame of cooperative business that mostly appeared in Indonesian news articles narrates a somewhat different kind of cooperative logic than what is found in Western societies. Frenken (2017) argues that "platform cooperativism" is one specific scenario for the future development of the sharing economy at large. He argues that in this scenario the sharing economy emerges as a bottom-up

cooperative movement that utilizes ICTs to scale up its platforms. He also argues that the cooperative form is rather locally embedded and governed (Frenken, 2017).

Platform cooperatives work markedly differently in the developing world, as indicated by the identified frame of cooperative business ridesharing, particularly in Indonesia. In this frame, the cooperative has already become a default form of private passenger service in Indonesia. In the context of the developing economy in Indonesia, the cooperative has been narrated as a form of collective ownership and entrepreneurial organization based on family life, which has been embedded in the economic history of Indonesia since the pre-independence era (Henley, 2007). Therefore, the arrival of mobile app based ridesharing in Jakarta since 2014 needed to fit within the existing mode of cooperative organization of transportation services in Indonesia.

2.6 Conclusion

Indonesia and the Philippines are among the many developing countries into which the sharing economy and its digital platforms are being introduced. Using a media-framing analysis we addressed the disruptive consequences of digital ridesharing in these two countries. We identified five dominant frames to understand ridesharing: (1) commuter solution, (2) unregulated passenger transport service, (3) cooperative business, (4) non-conformity, and (5) informal livelihoods. These frames narrate the particular transformation of ridesharing in the developing world, and they are interpreted as highly embedded within their spatial and economic context. We illustrated how ridesharing is viewed in settings of densely populated cities marked by chronic gridlock problems and the utilization of informal transport as gap-fillers (especially shared motorcycles), and how there is an emphasis on cooperative mechanisms (especially in the Indonesian context) and a lack of emphasis on contributions to sustainability in these debates.

We also argued that the identified frames shape distinct policy responses to ridesharing in Indonesia and the Philippines. Based on our findings, the media frames demonstrate that the policy responses of the two counties are often geared at addressing the absence of legal categories and at easing traffic congestion. Ridesharing is seen as an

alternative transport mode, and legalizing ridesharing will secure its operation and prevent further opposition. In the Philippines, the immediate policy response by the government was to establish a new legal category for ridesharing. However, in the longer term the legal enforcement remains a challenge. The government is attempting to discipline the ridesharing companies and drivers by suspending their operation and by imposing financial sanctions. In Indonesia, on the other hand, the process of formulating a policy response was more protracted but inclusive. The government used the existing legal category and principles of the "cooperative model" as inspiration for their regulations in order to accommodate demands of multiple stakeholders. The cooperative entity was chosen to provide a more balanced position between the ridesharing company, drivers, cooperative administrators, and government agencies.

These differences aside, we can conclude that in both Indonesia and the Philipines the introduction of digital ridesharing has profound and disruptive implications for traditional transport governance. This disruption is mainly driven by commercial and legality considerations rather than sustainability ones. This distinguishes the developing world contexts we studied from the developed world contexts studied by other scholars, who emphasize ridesharing more in terms of environmental sustainability rather than as a more efficient, reliable, and affordable alternative. We therefore suggest that the role of context is crucial when analyzing the sharing economy.

In addition, we revealed that the transformation of ridesharing and the corresponding policy responses in every country are shaped not only by local dynamics. There is an interplay between global debates about the sharing economy, national regulatory processes, and local law enforcement concerns, which is illustrated by our case studies, not least because providers of sharing-economy services and platforms often operate across borders. There is a considerable need to develop further research on this global–national–local interplay in the sharing economy. This raises questions on the extent to which global debates influence the implementation of the sharing economy in the local contexts and vice versa.

All things considered, the sharing economy has become a timely topic in both popular and academic debates. As transformations toward forms of collaborative consumption become more complex and locally

embedded, we suggest two issues for further research. First, we argue that the sharing economy is locally embedded in a particular socio-economic context, which makes sharing-economy practices vary between countries and cities. However, considering the growing number of transnational sharing economy actors, it is important to ask how to govern such platforms across borders and whether this implies a transnational approach to sharing economy governance. Second, it appears that while environmental concerns are often mentioned as reasons to support sharing-economy initiatives, this was certainly less the case in the two countries studied in this study. We believe, therefore, that in the context of the need for sustainable development, it is interesting to raise questions on how and why sharing- economy initiatives relate differently to sustainability values across locations.

CHAPTER 3

A DRAMATURGY
OF CRITICAL MOMENTS
IN TRANSITION:

UNDERSTANDING THE DYNAMICS OF CONFLICT
IN SOCIO-POLITICAL CHANGE

Abstract

Transitions are processes of major change and often come with conflict. There has been limited attention for the complex and multi-dimensional nature of conflict and its relation to trans- formative change. To capture this complexity, we use the case of ridesharing in Indonesia and the dynamics of conflict that accompany the emergence of digital innovations in mobility services. We use the notion of 'critical moments' to be able to deepen the analysis on particularly short timespans during which conflicts are particularly visible. For an in-depth understanding of these critical moments, we look at the discursive enactment and mobilize dramaturgical analysis. We argue that: (1) multi-dimensional conflict analysis could be beneficial for transition studies; (2) critical moments are promising units of analysis in transition studies when analysing conflictual dynamics. (3) examining the dramaturgy of politics provides a useful framework and shed new light on where and how conflict in transition takes place and how it plays out.

3.1   Introduction

Radical innovation and wider processes of socio-technical transition are inevitably accompanied by controversy and conflict. Within the fields of innovation studies and sustainability transitions there has been a long tradition of studying conflict (Rip, 1986; Smith, 2006; Raven, 2007; Meadowcroft, 2009; Smith and Kern, 2009; De Haan and Rotmans, 2011; Lawhon and Murphy, 2012; Pesch, 2015; Belmin et al., 2018; Cuppen et al., 2019). Most of these studies have tended to take a binary and non-dynamic approach to conflicts as existing between incumbent and newcomer actors. This is understandable when starting from a Multi-level Perspective where socio-technical change is described in terms of the interactions between a dominant regime-level structure and a set of niche-level alternatives (Geels, 2002; Geels and Schot, 2007). Conflict is then generally conceived as a struggle between incumbent regimes versus emerging niches (Raven, 2007; Lawhon and Murphy, 2012).

However, in real-life transitions conflicts are seldom binary (Cuppen et al., 2019). Rather, conflicts typically involve a more nuanced and dynamic battleground in which multiple actors with various interests and positions oppose each other ( ). In this study we aim to approach the analysis of conflict in transition processes in a dynamic way. To do so, we develop an approach that is inspired by recent conceptual contributions to the fields of sustainability transitions and discourse analysis. We aim to add contextual elaboration focussing on the influence of settings on how conflicts are played out. We present this empirically with a case study on the introduction of digital ride-sharing platforms in Indonesia. Ride-sharing is considered as part of a broader transition to a more sustainable urban mobility system (Shaheen and Cohen, 2019).

Our case study illustrates the emergence of a mobility alternative and the ensuing struggle of multiple storylines to restructure incumbent regimes. We regard the Indonesian political and legal landscapes as well as the streetscape of Indonesian cities as arenas of conflict during the introduction of digital ridesharing innovations. Controversy, protest and decision-making dilemmas are core el- ements in shaping the trajectory of these innovations and wider transition processes. The Indonesian government has attempted to introduce multiple ad-hoc policies to regulate ridesharing, but this has not resulted in a

permanent settlement satisfactory to all parties involved.

A discursive analysis reveals digital ridesharing as a permanent battleground where actors compete, using storylines that foreground issues like unfair competition, disruptive innovation and labour exploitation. Looking at the conflict in terms of a dynamic discursive contestation is our way to generate a deeper understanding of the role of conflict in transitions. Conceptually, our discursive approach relies on the notion of 'critical moments' as particular events that allow negotiation of meanings, formulation or reformulation of dominant discourses. We will use this approach to explore which (interactions of) critical moments produce (new) social realities through changing orders of discourse and the relationship between multiple actors in transition pathways.

This study is structured as follows: Section 2 provides a discussion of existing literature on conflict in transition studies and the discursive approach to analyse the dynamics of conflict. Section describes the data collection and data analysis. Section presents the results of the critical moment analysis. Section 5 and 6 discuss and present conclusions of the contribution of critical moment analysis of conflict in transitions.

3.1   A discursive approach to conflict in transition

Science, Technology and Innovation Studies have a long tradition discussing the importance of controversies and conflict tied up with process of socio-technical change. Conflict has been understood as an active agent in the governance of innovation (Callon, 1981), as ways of informal assessment of new technologies (Rip, 1986), or as forms of participation (Leach and Scoones, 2007). Conflict and controversies reveal the changes taking place in social groups (Belmin et al., 2018). Conflict has also been perceived as an intertwinement of objective facts and subjective perspectives (Latour, 2004; Martin, 2014; Marres, 2015) and as a source of decision-making dilemmas (Giere, 1987). Many studies have focused on struggles for 'legitimation' and 'social acceptance' that innovative niche technologies have to overcome (Devine-Wright, 2005; Wustenhagen et al., 2007; Bergek et al., 2008).

In the field of Sustainability Transitions Studies, the role of conflict can be seen as part of an emerging research agenda on power and

politics in transitions. Transitions are first and foremost political processes in which actors with varying degrees of access to sources of power vie with one another over the direction that processes of socio-technical change should take, how to steer this and – by implication – who will eventually end up as winners and losers (Hendriks and Grin, 2010; Meadowcroft, 2009; Avelino and Rotmans, ; Scrase and Smith, 2009; for a more recent renewed call on research on this topic see Kohler et al., 2019). Transitions result in structural change, which is regarded as a function of the struggle between incumbent and emerging socio-technical systems. When starting from a Multi-level Perspective, socio-technical change is described in terms of the interactions between a dominant regime-level structure and a set of niche-level alternatives (Geels, 2002; Geels and Schot, 2007). Conflict is then generally conceived of in terms of a battle between an incumbent regime and emerging niches (Raven, 2007; Lawhon and Murphy, 2012).

We argue that the focus on the polarization of and power struggle between incumbents and newcomers, or regime followers and niche deviants, risks missing out on the complex nature of conflicts of transition. Such a binary understanding of conflict may lead to a perception that new niche actors always are the carriers of the solution of a problem, while lack of progress is then inevitably caused by the endurance and inertia of incumbent actors. We concur with Cuppen (2019) who suggested to rethink social conflict as unit of analysis in conceptualizing transitions.

Our perception of conflict is more in line with earlier research that positions conflict as a form of informal technology assessment (Rip, 1986), with the idea that conflict or contestation are core elements *within* transformative experimentation for change (Bulkeley ; Murphy, 2015). This is taken further in a recent publication by Torrens et al. (2019) that proposes to explore contextual dynamics of experimentation and transition through three different 'lenses'. These lenses have been labelled seedbeds, harbours, and battlegrounds. The first two lenses mostly concern an experimental approach, whereas the 'battlegrounds lens' focuses on the interplay between conflict and socio-technical change and highlights the generative potential of conflicts. In this approach conflict becomes an arena where political contestation is staged and in which processes of building coalitions, alliances and mediation are of key importance (Torrens et al., 2019, pp. 219).

As part of our contribution we want to further unpack the 'battlegrounds' lens by focusing on the "particular event(s)" through which conflicts create opportunities for change (Torrens et al., 2019 pp. 219). Relatedly, we also build on the notion of 'field configuring events' from institutional theory in organization studies to analyse major industry or policy events in order to understand how and where sustainable transitions are performed (Jolly and Raven, 2016).

In this study we mobilize the concept of *critical moments* to better understand the conflicts in transition processes. A critical moment refers to a particular time and place where dominant discourses are questioned and consequentially dislocated or 'unhinged', which, potentially, allows for the shift to a new order of discourse (Hajer, 2009). We emphasise 'potentially' because critical moments may also lead to restoration of the established order. Key is to analyse the interplay to try to determine what explains the discursive dy- namics. The literature on critical moments drives us to identify and unpack tangible opportunities for change and sensitises us to three potential discursive shifts: (1) reinterpreting the meaning of past and future events (Green and Wheeler, 2004; Leary, 2004); (2) new meaning of events shape the 'standard' behaviour of action (Cobb, 2006 p. 148); (3) reframing the form of relationship between actors (Verloo, 2018). We take these three sensitising insights into account when demarcating critical moments empirically in the analysis of the interplay between conflicts and social change.

An analysis of critical moments puts the analytical focus on the time- and space-specific interplay of actors. The attempt is made to analyse how a discursive order is challenged and what determines whether this challenge is effective in causing a change. Hajer has embedded the analysis of critical moments in a "governance as performance" framework. It focusses on ways in which the discursive order gets 'enacted' using two dimensions: discourse and dramaturgy (Hajer, 2009). The first dimension – discourse analysis[2]- focusses on the 'language-in-use' and enables a deeper understanding of how new concepts and storylines can shape or reshape the way we allocate

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[2] Discourse is defined as "an ensemble of notions, ideas, concepts, and categorizations through which meaning is ascribed to social and physical phenomena, and that is produced in and reproduces in turn an identifiable set of practices" (Hajer, 2009, p.60). The discourse approach enables analysis of conflict through an analysis of the language-in-use (Wetherell et al., 2001).

meaning (ibid). In this sense, the main objective of discourse analysis is to reveal the dynamics of discourse over time. The two important elements in discourse analysis are storylines and metaphors. Storylines refer to condensed statements summarizing complex narratives and metaphors refer to explanations of one thing in terms of another. Using discourse analysis facilitates the acknowledgement of both dominant and marginal storylines and stresses the importance of critical moments (i.e. moments of conflict) rather than long-term stability (Verloo, 2015). Discourse analysis has been frequently used in transition studies (Bosman et al., 2014; Geels, 2014; Hajer, 1995, 2003; Lee and Hess, 2019; Lovell, 2008; Jensen, 2012; Schor, 2014; Smith and Raven, 2012; Stirling, 2011; Pesch, 2015; Rosenbloom et al., 2016; Hess, 2019). Several authors have used it to analyse how conflict and controversies play out discursively in the media (Gamson and Modigliani, 1989; Sengers et al., 2010; Geels and Verhees, 2011; Yuana et al., 2019).

In this study, we attempt to enrich discourse analysis by emphasising and adding the second dimension of Hajer's governance as performance framework: dramaturgical analysis. Dramaturgical analysis looks at politics in terms of a 'sequences of staged performances' and distinguishes actors and publics. The word 'Publics' refers back to the work of John Dewey, who pointed out that publics do not a priori exist, but should always be conceived of as the result of a particular struggle; as intertwined with a particular new issue of concern (Dewey/Public and its Problems also in Marres, 2005). In that way, it allows investigation of actors' strategy and its implication for the (re)creation of particular publics. A dramaturgical analysis would aim to understand not only "what people say" but connect its influence to "how they say it, where they say it, and (especially) to whom" (Hajer, 2009, p.65). Three elements are central to a dramaturgy analysis: the scripting, staging and setting of the 'performances'. Scripting refers to the effort to determine the participating actors and the appropriate behaviour in the performance. As in social conflict, scripts are often challenged or disrupted by opposing actors by an alternative or contrasting script. We also look out for these so-called 'counter-scripts'. Staging refers to the 'mis-en-sc`ene', the organisation of the interaction between active players and passive audiences. Setting refers to the physical and organisational situation in which the interaction takes place (ibid). Together, these three elements of dramaturgy allow us to analyse the

interaction of the critical moments that produce (new) social realities through changing orders of discourse and the relationship between multiple actors.

By adding the perspective of dramaturgy, we are able to illuminate the way in which scenes and acts interrelate to produce particular staging of public involvement in the context of conflicts. Furthermore, by investigating conflicts as 'sequences of staged performance' it is possible to distinguish under what conditions various actors and stories emerge in the political discussion, and under what conditions such political statements can be made that influence actual decision making. This chapter adopts critical moments and the dramaturgy dimension to show that conflict in transition is not merely about persuasion of the better arguments or better storylines, but it is also a performative act creating a public of its own.

3.3 Data collection and data analysis

Our methodological approach to our case study draws on the ten steps of Argumentative Discourse Analysis (Hajer, 2005, p.306). The data collected and analysed is specifically geared to identify critical moments and to zoom in on the two governance-as-performance dimensions of discourse dynamics and dramaturgy around the emergence of digital platforms for ride- sharing in Indonesia. This governance-as-performance analysis relies on various sources of textual data and on the study of interactions in particular moments of discursive conflict. During the fieldwork in Indonesia the fortunate opportunity presented itself to be allowed internal access to the textual data at the Indonesian Ministry of Transportation (i.e. minutes of meetings, internal reports) and to be permitted to attend and observe several internal meetings in the Ministry where multiple stakeholders 'performed' their storylines. To present this journey, we structure the ten steps of the Argumentative Discourse Analysis (ADA) approach over three phases of data collection and data analysis.

3.3.1 First phase

In accordance with the first two steps of the ADA, we started with desk research and 'helicopter interviews' (Hajer, 2005). The aim was to build an initial timeline of the conflict by investigating important moments and to identify initial storylines in the conflict of ride sharing. We first

collected and analysed stories from publicly available digital media (i.e. news articles, company websites, blog posts) and have continued to do this throughout the process (2015–2019). Particular attention was paid to keywords related to ridesharing, such as "ridesharing", "ride-hailing", *"transportasi online"*, "online taxi" and *"ojek online"* (the motorbike taxi). Desk research was followed by conducting a round of helicopter interviews with several actors who have a more general overview of the topic. This was done in April 2018 with stakeholders across five key organisations in Indonesia: (1) the Ministry of Communication and Information

Technology; (2) the Ministry of Transportation; (3) The House of Representatives; (4) the Institute of Demography at the University of Indonesia; and (5) the Centre for Digital Society at Universitas Gadjah Mada. All data from the media and helicopter interviews were imported to NVivo to construct an overview and timeline to connect the actors and their storylines and moments of perceived conflict.

3.3.2 Second phase

In accordance to steps 3–6 of ADA, intensive fieldwork was conducted in the form of document collection, semi-structured in- terviews with key actors, and ethnographic observations at the sites of argumentation (from January to April 2019). After the initial round of helicopter interviews, the first author maintained and followed up with her contacts with the Ministry of Transportation and the opportunity arose to become embedded there as a visiting researcher. During this time the first author was given permission to access internal textual data and internal meetings related to ridesharing issues. The access to data and close observations from the inside provided a unique opportunity to shed light on certain critical moments and to analyse the dramaturgical performance through a focus on the particular 'enactment' of the situation.

In terms of document analysis, we were able to gather and analyse meeting notes from the Ministry of Transportation from 2015 to 2018. Some of these notes contain general points of discussion and some notes contain detailed statements of each actor. In addition, slides of presentations about ridesharing regulations from the Ministry of Transportation were collected. To put the documents into perspective and gain an additional understanding of the changing context, an

interview was also conducted with the person who delivered the presentations. To complement these textual sources, additional documents, such as research papers and essays, were collected.

During this second phase of fieldwork, 23 semi-structured interviews were conducted. Fifteen of these were in a formal setting and recorded with permission to cite as a reference. Eight other interviews were more informal and not recorded; these anonymised sources cannot be cited as a reference. Interviewees included policy makers, online taxi companies, online taxi drivers, conventional taxi organisations and transport specialists. This covered most of the key actors involved. These interviews provided a valuable context that helped to reveal the discursive dynamics and to identify the set of critical moments. The first part of each semi-structured interview served as an enquiry about what the stakeholder highlights as crucial events, episodes and points in time that were formative in shaping discourses around online taxis. This provided us with a starting point for distilling critical moments based on multi-stakeholder perceptions. The second part of the interview was geared to inquire about the dramaturgy dimension (i.e. where was the events, how was the dynamic in the event) in each of those critical moments and to further unpack the discursive battle as perceived by the interviewees.

To have an even wider and more balanced understanding, ethnographic work and informal interviews were conducted with drivers by taking 84 trips using conventional car taxis, online car taxis, conventional motorbike taxis and online motorbike taxis. During the interviews, the actors were asked about their perception of conflict and critical moments for ridesharing in Indonesia. This was fol- lowed up with questions that explore the perceptions on the chain of events and the meanings of those events to the interviewees.

An important source of data for the dramaturgy analysis was the observations of closed meetings of key actors. These meetings focused on how to provide regulation for motorbike ridesharing. With permission from the Ministry of Transportation, the main author was able to observe, take photos, and audio-record these meetings for research purposes. In the context of observing the internal meetings, she took the opportunity to talk informally with the meeting participants during the break times or after the meetings. These talks aimed to gather the reflections of each actor and to plan for follow-up

interviews with meeting participants. Support documents that reflect each actor's position and activities were also collected, e.g. public opinions, general statements, policy briefs.

3.3.3 Third phase

The last phase of our research was one of synthesis, verification and reflection. The aim was to reconstruct the discursive battles – both discursive positions and the dramaturgical components through time – as a way to synthesise the various insights developed during the first and second data-collecting phases. This is in line with step 7 (identification of key incidents), step 8 (analysis of practice), step 9 (interpretation) and step 10 (second visit to key actors) of ADA. Some key actors were revisited in order to 'verify' our findings[3].

After several iterative analysis steps we identified a set of critical moments, key storylines, and other elements related to discourse dynamics and dramaturgical performance. A good indicator for a critical moment would be when during our semi-structured interviews multiple stakeholders stressed the importance of a similar episode and identified a set of proponents. For example, multiple rounds of street protest by online taxi drivers that critiqued the company exploit their job were identified as crucial by multiple interviewees. In this case we interpret our version of critical moments as moments with a distinct discursive dynamic, i.e. when multiple storylines battle for dominance, or when the dominant storyline is reinforced, redirected, or reproduced.

Two months after the fieldwork the opportunity arose to present our initial work at 6th International Workshop on Sharing Economy in Utrecht, the Netherlands. In an attempt to verify our initial findings, we invited several of our interviewees to attend this workshop. Delegates from the Ministry of Transportation and Gojek Indonesia were able to attend the synthesis presentation by the first author and gave their remarks about our findings. These remarks demonstrated validation from the key actors of our findings. An early draft version of this study was also sent to other key players who did not attend the workshop to see if our narrative made sense to them, and to confirm

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[3] According to Hajer "Discourse are inferred from reality by analyst. Yet, when respondents are confronted with the findings, they should at least recognize some of the hidden structure in language" (, p.307).

our findings. In sum, all key actors recognized the storylines in our findings.

In the results section, we present our results based on the identified critical moments. For each critical moment we elaborate on the general discursive dynamics (i.e. the language, categories and storylines being used) and on the specifics of dramaturgy (i.e. the where and how of language-in-use; the arena in which the discursive dynamics were performed). The discourse dynamics are characterised by the storylines and the utilisation of metaphors while the dramaturgy is elaborated through an analysis of scripting, setting, and staging. We structure our results into five sub-sections on the bases of five identified critical moments. For each critical moment we elaborate how storylines were contested, reformulated, and/or redirected, along with a dramaturgy analysis describing the situational perfor- mances related to that moment. This chapter has a limitation in providing equal details of dramaturgy in each critical moments, which is due to different access of documents as well as opportunity to observe some events. However, we argue that some critical moments with limited information on dramaturgy are still important to articulate to keep the 'sequences of staged performance' consistent.

In this study we use the term, *'online taxi'*, to describe these digital ridesharing or on-demand taxi services as this was the 'language- in-use', i.e. the term used to cover the story of conflict on-demand taxi in Indonesian media and public debate. We also distinguish between online taxi drivers and online taxi companies, since they were acting as different entities is this conflict[4].

3.4   The battleground of digital ridesharing in Indonesia

Motorbike taxi, popularly known as "Ojek", is an informal transport service available at street corners as the only mobility service locally available in the neighbourhood. Commuters in Jakarta perceive Ojek

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[4] The 'language in use' to describe the online taxi company is 'applicator company'. This term represents the company's position to characterise themselves as an entity who 'only' provides a digital application that connects drivers and customers. The company is reluctant to be regarded as an online taxi company, because that would mean it should comply to transportation law. However, to keep a consistent terminology in this study we will refer to the term 'online taxi company'.

as a solution to get through severe gridlock in the city during rush hours. However, the limited availability and non-standard pricing demotivated commuters to use it on a regular basis. Responding to this problem, Nadiem Makariem founded the phone-based motorbike taxi services company Gojek[5] in Indonesia in 2010. Gojek is a phone-based booking system of motorbike taxi services that promises fiXed prices without negotiation hurdles. The service became increasingly popular. In 2015, inspired by the success of Uber, Nadiem extended the Gojek platform to smart phones by launching an online taxi service.

In the same year, Grab[6] and Uber online taxi services arrived in Indonesia and following the success of Gojek motorbike taxi, they launched their motorbike taxi services (GrabBike and UberMotor). Since Uber left Southeast Asia in 2018, Gojek and Grab has started to become strong competitors. Based on Katadata.id in 2019, number of app downloads for Gojek is 155 millions, and the same number to Grab. Based on area of operations, Gojek cover 207 cities five countries (Indonesia, Vietnam, Thailand, Singapore, and the Philippines) while Grab cover 338 cities in eight countries (Singapore, Cambodia, Indonesia, Malaysia, Myanmar, Thailand, Vietnam and the Philippines). As a homegrown company, Gojek claimed contribution of USD 3billion to Indonesian economy as of end 2018. The major investors of Gojek are Astra International, Blibli.com, Facebook, Google, Tencent, Temasek.Paypal, Mitsubish, Visa, and more that lead Gojek to the first decacorn or startup with valuation over USD 10billion in Indonesia. On the other hand, Grab investors include Softbank, Vertex Ventures, Mitsubishi UFJ Financial Group, Booking Holdings which lead them to the first decacorn in Southeast Asia in 2018.

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[5] Gojek, or legally known as PT. Aplikasi Karya Anak Bangsa, is a homegrown on-demand transport services. The existence of Gojek has increased the visibility of motorbike taxi, because Gojek drivers must use green helmets and green jackets. Beside a motorbike taxi service, the Gojek mobile- app offers over 20 on-demand services, from transport to payments, food, logistics, entertainment and lifestyle. Gojek was celebrated as the first unicorn and decacorn originating from Indonesia.

[6] Grab, formerly known as MyTeksi and GrabTaxi, is a Singaporean based on-demand car taxi services founded by Anthony Tan in 2012. Grab car taxi operates in 8 countries in South-East Asia, and entered the Indonesian market in 2014. Looking at the potential of motorbike taxi, Grab introduced GrabBike's motorbike taxi in 2015 in Vietnam and Indonesia. Similar to Gojek, GrabBike drivers must use green helmets and green jackets.

Despite the popularity of digital platform taxi services and their (stated) alleviation of commuter problems, the introduction of these services created controversies and conflicts as the platform enables drivers to provide taxi services with their own car and without an official taxi license. As a result, these digital services can offer a lower market price and threaten the incumbent taxi players. In Indonesia, protests and incidents on the streets against on-demand taxi attracted attention from the popular media. We can discern two rival storylines in public discourse: online taxi as a technological solution to urban mobility on the one hand, and online taxi leading to unfair competition on the other. As a result, the government was pushed to enact a regulation that could tame the disruptive effect of online taxis. The government of Indonesia was confronted with the problematic side of online taxis. Like many other countries (e.g. the Netherlands, France, UK, China, Australia) one of the biggest challenges is the legal definition of online taxis. Is it public transport? The companies present themselves as technology providers, but their direct impact on the private transport market is inevitable and continues to raise criticism about representing unfair business practices. The tension became critical when Uber left Southeast Asia in March 2018 which intensified competition between Gojek and Grab. The two companies were locked in a price war in order to obtain market domination, which had detrimental effects on drivers' prosperity. Therefore, the government was expected to act in order to prevent chaos. At the same time, the government was ill-equipped to navigate a smooth transition: existing trans- portation law did not foresee online taxis so the government needed to 'invent' a new strategy and develop regulation. Moreover, the government was undecided if online taxi was to be understood according to the first story line (technological innovation) or the second (unfair competition).

Upon closer examination we can distinguish several critical moments in this evolving battle of online taxis, which helps understand the discursive dynamics. The critical moments were identified from particular events that we interpreted as moments that create the opportunity to formulate, challenge, or reformulate the dominant storylines. During our semi-structured interview, we started our discussion by asking the respondents what they perceived as critical moments in the online taxi conflict. From these interviews (and complement with media analysis), we were able to identify the shifts in regulation (upper line in Fig. 3.1) and episodes at the street level (lower

line in Fig. 3.1). The orange boxes indicate the four different regulations as introduced by the Ministry of Transportation for online car taxi (PM32/2016, PM26/2017, PM 108/2017, PM 118/2018) and for motorbike taxi (PM 12/2019). The issue of regula- tions was interspersed by two judicial reviews decided by the Supreme Court (red boxes) that annulled the preceding regulation.

The formulation, introduction and reformulation of these regulations ran in parallel with multiple street protests of proponents and opponents of online taxi (lower line). On the lower line in Fig. 3.1, the blue boxes represent protests online taxis. The protests were mainly initiated by conventional taxi drivers, but other public transport providers (i.e. mini bus) also joined. Fig. 1 also presents the protests of online taxi drivers against Ministry regulation (green boxes) and protests of online taxi drivers against online taxi companies (purple boxes). Not all street protest or regulation change bring up new discursive dynamic, therefore we identified five critical moments that signify the different dynamic of discursive battle i.e. emergence of marginal storylines, redirection of dominant storylines, reinforcement of dominant storylines[7].

The remainder of this section is divided into five sub-sections that each discuss a critical moment. Each sub-section elaborates the discourse dynamics and the dramaturgy of a critical moment.

3.4.1   Critical moment 1: the protest against arrest

The first critical moment was the moment when Uber drivers were detained by Jakarta police officers on 19 June 2015, followed by a series of protests and incidents by conventional motorbike taxi services against online taxi services. This moment opens the public debate that employs the storyline of *online taxi is illegal and unfair*. The storyline explains that online taxis are illegal because they lack the operating permits required for conventional transportation. The popularity of online taxis has put pressure on the operations of other conventional taxis. Our interview with the head of Organda (Organization for land transportation; association of public transport

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[7] Until the end of our field research (May 2019) we still observe some public rejections towards the latest regulation. Therefore, we assume that the resolution of the conflict is still a long way off.
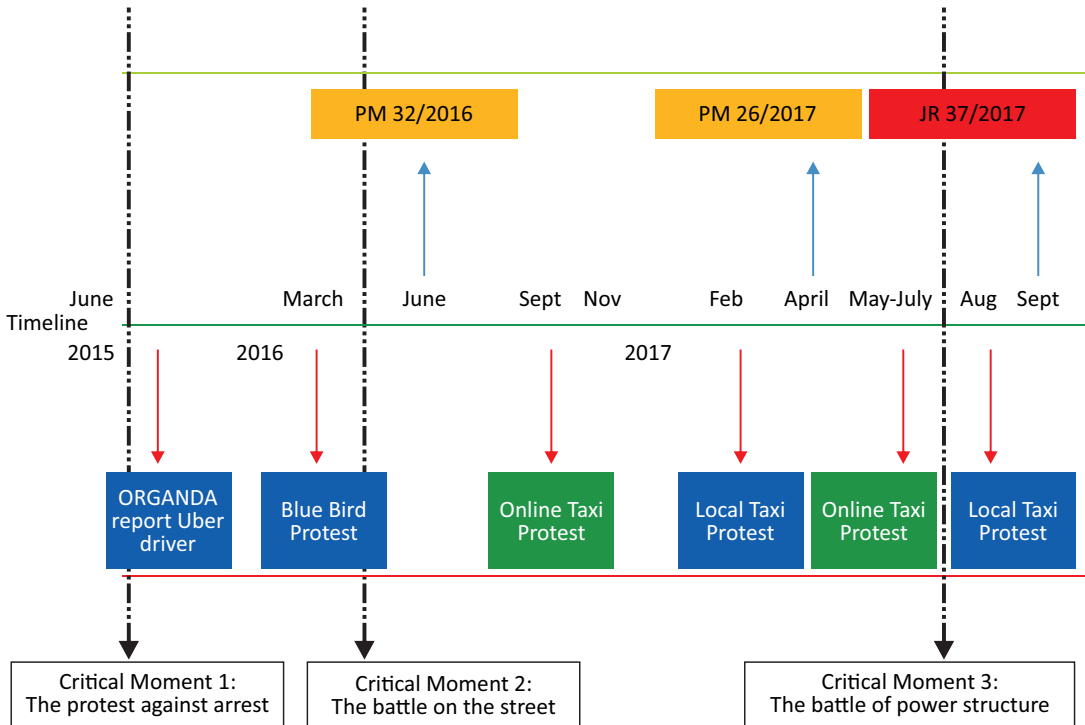
Figure 3.1. Discourse dynamics and critical moments during the ridesharing conflict (2015-2019).

companies), characterising the conflict as an unfair battle using the metaphors of "the bound boXers" versus "the bastard"[8].

> "*They are bastards because they were not originally from our organisation and suddenly they came to our industries and try to change all the rules that we have complied with for years….. Imagine your brother comes to your house and change all of the interior….. Are you offended? Now, imagine a total stranger coming to your house… To me this is a battle in which I am a boxer, I want to fight inside the ring, but my hands and my feet are bound, because I*

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[8] We also found another metaphor which is "banci taxi". Banci is an Indonesian word for sissy, mostly referring to the behavior of a man acting like a woman. In this context, online taxi services present themselves as legitimate, whereas others see them as illegal.

Goverment regulation

| PM 32/2016 | | JR 15/2018 | PM 118/2018 | PM 12/2019 |

Oct   Dec   Jan   Aug   Sept   Dec   Feb   March

2018   2019

Local Taxi Protest

Online Taxi Protest

Online Taxi Protest

Bali Taxi Protest

Online Taxi Protest

Street movement capture in the media

Critical Moment 4: The discourse redirection

Critical Moment 5: The in(ex)clusive battle
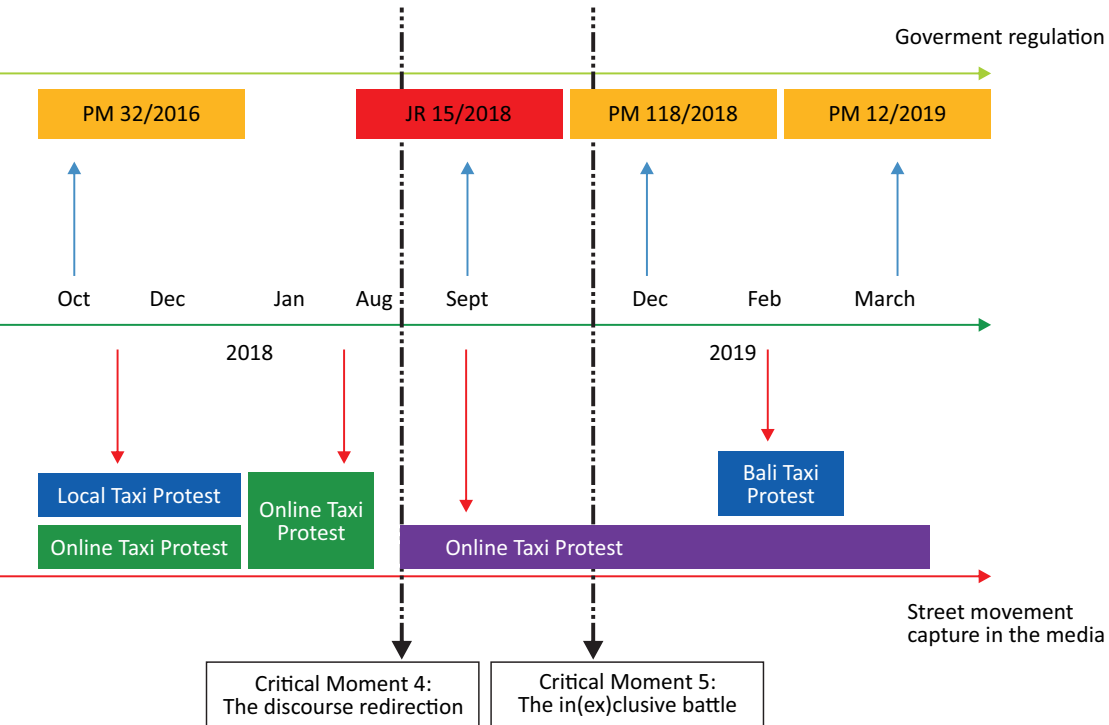
Notes:
PM = Regulation from the Ministry of Transportation
JR = Judicial Review (annulation) from the Supreme Court of Justice
Blue Box = Protest against online taxi
Green Box = Protest by online taxi
Purple Box = Protest by online taxi drivers to applicator company (Grab, Gojek)

follow the rules; my opponent is the online taxi, they are free to do anything they want and they even tried to create the rules of the game too. I end up severely battered." – Shafruhan-Organda, 3 March 2019

The scripting of the detention was orchestrated by Organda, the Polda Metro Jaya police station, and the Jakarta Bureau of Transportation. Running an Uber service was framed as illegal conduct. The Kompas media covered this story using the headline "Uber drivers being framed by Organda". It started by some actors from Organda who 'pretended' to be customers, ordered an Uber service and located the police office of Polda Metro Jaya as their destinations. After arriving at the police station, they were being reported for conducting an illegal act and

being processed to the unit of cyber-crime in the police station[9].These 'sweeping' operations targeted at online taxi drivers, mostly at airports and train stations, continued to become the normal staging of conflict between conventional and online taxi drivers until the end of that year. To prevent customers trapped in this potential violent conflict, the online taxi company directed their customer to hidden or further-afield meeting spots, usually at the airport parking area or outside the train station. As reported in the media, the customers refer to this staging as playing 'cat and mouse'.

As a follow-up to this moment, a public debate emerged about the legality of online taxis. The Minister of Transportation (Ignasius Jonan) banned the operation of online taxis on 17 December 2015, which led to major public controversies that could be observed in conventional and social media. In response, customers of online taxis employed a counter-script. They raised their voices to the Minister's decision through social media, which provided the setting of this moment. The hashtag #SaveGojek became trending on Twitter. The hashtag mobilised mostly people articulating the benefits of online taxis. As a response to this stage, in less than 12 h the President (Joko Widodo) responded to the controversy by posting a tweet and called the Minister to cancel his decision. *"I will call Minister of Transportation. Motorbike taxi is needed by the people. Don't let regulation make people suffer. It should be organized-JKW" (Jokowi's tweet, 17 December 2015).* This act symbolised the triumph of the counter-script over the dominant storylines.

3.4.2 Critical moment 2: the battle on the street

The second moment concerns the street protest initiated by thousands of conventional taxi drivers on 22 March 2016. The min- ister's wavering decision of the previous critical moment formed the cause of the protest, which not only increased the visibility of the 'illegal taxi' storyline, but also engaged additional actors in supporting the storyline. These actors included the taxi drivers association Paguyuban Pengemudi Angkutan Darat (PPAD), the Blue Bird Taxi drivers (representing one of the biggest taxi companies), the EX- press

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[9] Sources:Kompas.com https://megapolitan.kompas.com/read/2015/06/19/13080201/ Lima.Taksi.Uber.Dijebak.Organda.dan.Dishub.DKI.ke.Mapolda.Metro accessed in 20 March 2019.

Taxi drivers, and the Ministry of Transportation. Fig. 3.2 illustrates the scripting, the setting and the staging of the critical moment, widely reported as the Blue Bird taxi protest. The scripting emphasised that joining the protest should be done based on a sense of solidarity. Taxi drivers parked their cars and blocked the road (picture on the right) and many Blue Bird taxi drivers performed 'sweeping operations', meaning blocking other Blue Bird drivers who did not join the protest. Furthermore, in this setting we can observe the utilisation of metaphors to convey the main message of the protest. Important in this was the use of posters as timeless and borderless messengers. For example, the left picture in Fig. 3.2 shows a poster on a Blue Bird taxi. The poster says "Rejection to Uber Taxi. Where is the office of Uber Taxi, Gojek? *Siluman coy*". *Siluman* is an Indonesian word for ghost. The term *"siluman coy"* could be interpreted as a metaphor for arguing that the online taxi is a ghost belonging to another, non-human world, and should not belong to the world of legal taxis.

Interestingly, this protest met with a counter-script reaction in the setting and staging of social media mobilisation. On the same day, hashtag Blue Bird became a national trending topic on Twitter and most of the public reacted negatively towards the violent character of the protest. The negative opinion was shown by the use of the metaphors 'angry birds' in Twitter posts to illustrate the violent acts conducted by Blue Bird taxi drivers. We interpret that this counter-script moment provided room for online taxi companies to employ the second storyline: *online taxi is 'karya anak bangsa'. Karya anak bangsa* is Indonesian for 'work of nation's child'[10]. The following quote from the Gojek company blog illustrates the metaphor of online taxis being a "national pride":

> "*As we launched in 50 cities, we have opened opportunities and created impact for individuals, small business, society and government.*
> *We have helped in lifting the welfare of more than 300.000 drivers. One year after becoming a unicorn, our driver's average monthly*

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[10] Karya Anak Bangsa is the legal company name of Gojek. However the media repeatedly associate this term to represent online taxi companies in general. This term signifies multiple meanings: (1) The Indonesian online taxi company, Gojek, is a celebrated homegrown hero as they became the first unicorn and decacorn in the country; (2) as a homegrown company, online taxi services provide a heroic solution to urban commuter problems; (3) online taxi opens up massive employment opportunities and improves driver's standard of living; (4) online taxi also improves the income of small restaurants through their food delivery services.

> *income has increased by* 15 %. *Our customers get a life-changing experience through the service provided by our drivers.*" – Gojek company blog, 31 August 2017

We found that the street protests combined with the social media counteractions form a critical moment, because they had chaotic and violent results and unhinged the dominant storylines. The dominant storyline associated with the street protest backfired in the public media, which allowed the online taxi companies and their customers to employ the second storyline.

Part of the setting in which the unhinging of the dominant storyline happened was the existence of a political void. The President reshuffled his cabinet and Minister of Transportation Ignatius Jonan was replaced by Budi Karya Sumadi. This change in leadership provided the opportunity for the Ministry to reformulate the storylines and their position towards the conflict.

However, the Ministry decided to reinforce the 'illegal taxi' storyline by introducing regulation PM 32/2016 that mostly required online taxi drivers to be part of a company or to form a cooperative of taxi drivers[11]. The problem with the new regulation was that it only regulated the online taxi drivers, while online taxi companies were part of the remit of the Ministry of Information and Communication because they were categorised as Electronic System Providers. As a consequence, the new regulation led to critical reactions and street protests from online taxi drivers.

The protest was organised by online taxi drivers organizations (ALIANDO and ADO) who conveyed a third storyline '*online taxi is our job'*. Posters used in this protest read "SAVE OUR JOB", which signifies the new logic of employment opportunities that are brought by the online taxis. In this storyline the metaphor of *'salam satu aspal'* or 'one asphalt greetings' was used as salutation among pro- testers. Most of Indonesian roads are made from asphalt pavement; one asphalt then means solidarity among online taxi drivers who earn their income from the same asphalt road, no matter what company they belong to (Gojek or Grab). In contrast to the Blue Bird taxi protest, the

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[11] These regulations are mostly for online taxi drivers. To be considered as legal taxi driver, in general they have to (1) obtain a formal public transport license, (2) obtain a vehicle checking license, and (3) form a legal cooperative because traditionally the provision of individual public transport (personal taxi driver) was illegal.

Figure 3.2. The 22 March 2016 street protests (left picture source: Tempo.co; right picture source: Liputan6.com/Johan Tallo).

coordinator of ALIANDO said to the media that their organisation did not allow any 'sweeping operations' to block online taxi drivers who did not join the protest. Such an operation could backfire, shifting public opinion in favour of online taxi.

Once again, through hashtag #savegojek on Twitter, the customers of online taxis pressed the government to disentangle the conflict immediately. The Minister decided to revise the PM 32/2016 regulation into regulation PM 26/2017. The Minister introduced a new category for online taxis called Angkutan Sewa Khusus/Special Rent Transport, to differentiate online from conventional taxi services. However, even though the name of the regulation was changed, the content of the new regulation did not dramatically change the requirements for online taxi drivers and only revised the pricing mechanism to determine the standard price.

In this critical moment we observed the battle of storylines on the street. The dominant storylines, 'illegal taxi' was unhinged and challenged by two storylines: 'karya anak bangsa' employed by online taxi companies and 'online taxi is our job' employed by online taxi drivers. We argue that this moment was an opportunity for the Ministry to make new sense of the conflict and reformulate and take into account the three competing storylines. If the Ministry would have been able to embrace the storylines, the multiple revisions of regulation would have not be necessary. However, in this story, the Ministry chose to reinforce the 'illegal taxi' storylines, prolonging and enlarging the scope of the conflict. Moreover, we observed the paradox of mobilisation of chaos and violence. Violence brings instant news media attention, but also invites negative public reaction.

3.4.3 Critical moment 3: the battle of power structure

In contrast to the street battles, the setting of this moment is in a formal meeting. Feeling unsatisfied with the new PM26/2017 regulation, a few online taxi drivers issued a legal complaint to the Constitutional Court in February 2017[12] and the Supreme Court in July 2017As a response, the Constitutional Court declined the request of online taxi drivers through decision number 78/PUU-XIV/2017 while in contrast, the Supreme Court issued decision JR 37/2017 that annulled several articles of the Ministry regulation PM 26/2017, mostly articles that regulate tariffs and driver requirements.

The Constitutional Court reasoned that online taxi driving must be conducted by legal cooperatives or companies and shall not be operated individually in order to guarantee a formal mechanism. On the other hand, the Supreme Court decision regards online taxis as logical consequences of technological innovation, which should be allowed to change the conventional way of transport services. The Supreme Court also argued that online taxis enable a more competitive transport industry by allowing micro players (online taxi drivers) to enter the business. We interpret this moment to be associated with a fourth storylines in the debate: *online taxi is an inevitable innovation.*

Once again, this moment created an opportunity for the Ministry of Transportation to take a new perspective. The Ministry attempted to take into account the Supreme Court decision and, again, revised the regulation PM 26/2017 into regulation PM 108/2017. The Ministry realised that online taxi is now becoming an 'inevitable innovation', as articulated by the Director of Road Transportation in an interview. As a result, the Ministry eliminated the obligation to form a legal cooperative and allowed individuals as transport services providers. However, the new regulation still requires drivers to have a safety vehicle check, put special stickers on their car, and the online taxi company still needed to provide dedicated pick-up spots.

In this moment, we observed the 'inevitable innovation' storyline to become more dominant than the 'illegal taxi' storyline. The Supreme

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[12] The street protest from proponents and opponents of online taxi is still going on during this period. The protests take place in Jakarta, the capital city, as well as in smaller cities. Local bus and public transport drivers also participated in street protest against online taxis.

Court official document number 15 P/HUM/2018 explicitly mentioned online taxi as a logical consequence of technological innovation in transportation services which is in line with the storyline of 'inevitable innovation'.

Furthermore, online taxi drivers mobilised legal venues and argumentation to stage the battle. They used the power structure of the Constitutional Court and the Supreme Court which has higher institutional power than the Ministry of Transportation. The Constitutional Court only considered transportation law to support their decision, whereas the Supreme Court took multiple laws into consideration, i.e. laws on small- and medium-sized enterprises, on business competition, and on transportation. In this sense, the strength of the 'inevitable innovation' storyline is based on the ability to bring in more dynamic and multiple dimensions to make sense of 'disruptive' online taxis.

3.4.4   Critical moment 4: the discourse redirection

The fourth moment began with online taxi drivers protesting in front of the Presidential palace on 29 January 2018, followed by a second legal complaint to the Supreme Court in August. The online taxi drivers' movement had become larger and more organised. Even though the Ministry took into account the 'inevitable innovation' storyline, the online taxi drivers were still unsatisfied with the details of the new regulations, i.e. safety vehicle checks and stickers.

In addition, this moment also became the starting point for online taxi drivers to speak up, not only against the government regulation but also against the online taxi company (Grab and Gojek)[13]. The *online taxi is our job* storyline was redirected to *online taxi exploits our job*, which highlighted the labour exploitation conducted by the online taxi company. Here, the arguments concerned the asymmetrical relations between the company and the driver. The company used bonus system as a bait to boost driver's productivity, at the same time enforcing rating and suspension systems as a stick to drivers. The price war between Gojek and Grab negatively affected not only accumulative bonuses for drivers but also their basic tariff. Based on

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[13] The decision of Uber to leave Southeast Asia in 2018 has led to a tighter competition between Grab and Gojek, resulting into price war. The companies compete in giving lower prices to customers and higher work pressure to the drivers.

Figure 3.3. Photo taken during the demonstration from motorbike online taxi drivers in front of the Presidential palace in Jakarta, 27 March 2018. The poster "Mitra atau Eksploitasi??" could be translated as "Partner or Exploitation??" (Source: TEMPO/Subekti).

Kompas.com, in 2016 the basic tariff for motorbike taxi could reach IDR 3000, during the price war the basic tariff drop until IDR 1600. We found the use of the metaphor 'drug addiction' as an illustration for this situation.

> "*If I illustrate this online taxi, to me it looks like drugs. If I try to define it, over time it is like drugs addiction. We are the drivers, we got injected with higher basic prices and bonuses, we got higher incomes than our usual job, and then we decided to become full-time online taxi drivers. First, we got comfortable but over time the doses are reduced and we become addicted and dependent. This is our main income now and we don't have many exit options*" – Einstein from Kopdar (organisation of online motorbike taxi drivers), interview on 26 February, 2019

In contrast to the 'save our job' posters used in the street protests of the second moment, now we found a different metaphor was used: '*Mitra atau Eksploitasi??'* (Fig. 3.3). The metaphor could be translated as '*Partner or Exploitation??'*, indicating the asymmetrical relations between the company and the drivers.

Although many street protests were conducted and a second legal complaint was issued and the Supreme Court decided in favour of the drivers, the fourth critical moment focussed more on an advocacy effort. Interestingly, the setting of the battle was not located on the street nor the formal meeting room but rather in the digital space. In July 2018, following a severe price war between the two giants, the online taxi drivers demanded the government to force the companies to set a minimum price. They threatened to mobilise millions of drivers to protest during the opening ceremony of Asian Games 2018[14]. The taxi drivers expressed this 'plan' to protest through social media forums which ran viral and became national news.

The protest threats invited the government to come with a public statement accommodating the demands in exchange to prevent the protest. The scripting in this moment was to prevent any chaotic or violent movement that would jeopardise the image of the country as a host of an international event. Therefore, the protest threat from online taxi drivers became a counter-script that successfully unhinged the dominant script. In the end, Garda Indonesia – one of the organiser of online taxi protest – announced the cancelation of the protest and instead they decided to turn off the online taxi application for one day.

This moment brought two important dynamics to the conflict of ridesharing. First, it reformulated and empowered the third storyline '*online taxi exploits our job'* which was mostly employed by the online taxi drivers. The concern of worker exploitation emerged after the start of the price war between Grab and Gojek. The reformulation of the storyline is a demonstration of the non- binary and dynamic nature of conflict. Non-binary in the sense that the conflict of ridesharing was not only between incumbent taxi actors and online taxi companies, but between the online taxi companies and online taxi drivers. It is a dynamic conflict in the sense that storylines are not static arguments and they could be discursively constructed or redirected. Second, a powerful movement could also grow in a digital space as illustrated by the online threat to protest in Asian Games.

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[14] The 18th Asian Games was a pan-Asian multi-sport event held from 18 August to 2 September 2018 in the Indonesian cities of Jakarta and Palembang. The protest threat from online taxi drivers became crucial because the government feared that a strike would leave a bad impression of Indonesia to global audiences. The Indonesian vice-president, Jusuf Kalla, stated to the media: *"This Asian Games is the dignity of our nation, we need to protect the nation's honour. Don't protest during this crucial situation"* – (Detik, 7 August 2018).

3.4.5   Critical moment 5: the in(ex)clusive battle

The fifth moment happened after the government decided to listen to the online taxi drivers, by inviting driver representatives in a formal meeting to revise the regulations. As an instrument of accommodating the driver's demand the Ministry revised regulation PM 108/2017 as regulation PM 118/2018. The new regulation eliminated the requirement of vehicle tests and special licenses for the drivers as well as allowing individual driver to conduct public transport services. Previous regulation (PM 32/2016 to regulation PM 118/2018) did not regulate online motorbike taxis. Following up on the 'successes' of PM 118/2018, from January to April 2019 the Ministry reused the strategy to invite drivers' representatives to draft regulations for motorbike taxi. In April 2019, the Ministry of Transport introduced the regulation PM 12/2019 regulating motorbike taxis and categorising them as legal 'social transport'[15]. This regulation is claimed as the first national regulation that oversees motorbike taxi.

The Ministry decided to change the scripting and the staging by inviting representatives of online taxi drivers in the drafting process of the regulation. Previously, the online taxi drivers were only involved during the public hearing session which was held after the finalisation of the draft regulation. By having drivers' representatives at the table, the Ministry expected a more satisfied audience and prevention of other protests. There were multiple meetings conducted to draft PM 118/2018 and PM 12/2019.

The principal actor was The Urban Transportation unit, which as part of the Ministry of Transportation, organised the meeting. The unit's members decided who could be invited and what the agenda of the meeting was. Interestingly, this is a new unit that was formed less than one year ago with a minimum degree of background and documentation about the conflict. So they relied on the current debate for their intellectual resources.

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[15] The term 'social transport' was chosen as a category between public and private transport. To acknowledge motorbike as public transport is problematic because it means the government should have changed the laws on transportation. Since the House of Representatives was reluctant to acknowledge motorbike as public transport, the government decided to make it a Ministerial regulation. The Ministry defined social transport as a transport mode that meets a societal need. The Ministry argued that they are only regulating the safety aspect, without explicitly discussing the legal aspect of online taxi as public transport.

Figure 3.4. Internal meeting to discuss the regulation for online motorbike taxis. Three people in the centre are transport experts who were invited by the Ministry (source: first author).

The second important group of actors was the drivers' representatives. In these meetings, there were seven representatives from online car taxi drivers and ten representatives from online motorbike taxi drivers' organisations. These representatives were selected during a one-day meeting covering were different get-togethers for online car taxi and online motorbike taxi representatives.

Other actors present during the meetings were transport experts and delegates of online taxi companies. As independent actors, transport experts were most of the time appointed as moderators of the meeting. The online taxi companies (Gojek and Grab) also attended the meeting. Company delegates who attended the meeting worked at the legal affairs departments, which meant that they could not take immediate decision in sensitive matters during the meeting, such as on suspension and basic tariffs. Mostly, they were outnumbered by the drivers' representatives. The informal motorbike taxis or "ojek" were not present during the meetings.

The draft regulation was prepared by the Ministry of Transportation. During the meeting, this draft was the central point of dis- cussion on which participants could give comments or propose revision of the wording. It was allowed to have different interpretations toward particular words but it was discouraged to speak about other issues that were not related to the topic in the pre-written draft. In terms of

setting, the physical and organisational situation of the meeting indicated hidden meanings of power structures, as shown in Figure 3.4. In the meeting room, the Ministry enforced the fixed agenda in a subtle way by distributing the pre-written draft on each tables and displaying it on the big screen that was central in the room.

Furthermore, we observed a division of power between participants on the first row versus second row. The Ministry of Trans- portation, drivers (who always wanted to sit close to each other and never wanted to be placed at the same side as the companies), companies and experts were mostly seated in the front row and become quite vocal actors. The delegates from other ministries sat in the second row and formed a rather passive audience.

In terms of staging, having the opportunity to attend the meetings gave us a look at details regarding how the actors 'performed' their storylines. During the meeting we observed the online taxi drivers use their daily experiences on the street to articulate the storyline of 'exploits our job'. As an example, there was a debate about non-user passengers who order a taxi service for someone else. Drivers ran into trouble when passengers were not satisfied and complained to the company. The company would then proceed suspending the driver and would provide the opportunity for the driver to clarify, leaving the driver without income during the suspension and clarification process. The storyline is explicated in this conversation:

> *Online Motorbike Taxi Driver: "We always become the victim. The mother orders a taxi service for her child to pick up from school. The child was difficult to talk with. Every risk on the road is under our responsibility. When the customer is not satisfied, the customer will directly punish us with one star[16]. We are doomed. It is unfair because the customer can order for someone else, but we can't use different vehicles or other people cannot use our account as driver"*

> *Company: "I want to clarify, since the last few months our driver partner could rate the customer. Customers could be suspended. Second, the new suspension system has a warning signal. This is*

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[16] Star rating (from 1 to 5) is used as a performance monitoring system by online taxi services. Accumulative performance scores of drivers during one day determine whether they get a bonus that day. In the end, bad scores can also accumulate in getting suspended.

only a warning and does not impact drivers. This suspension policy has been socialised within the 4000-drivers community. I am not defending, only informing. In this regulation, there is a minimum age of 18 years to have application, so we need to see their impact to the business".

From this conversation we argue that there are two storylines that convey different actor perspectives. The online taxi company employs the storyline 'online taxi is karya anak bangsa' to highlight the social contribution of the company by demonstrating how the company constantly was responsive towards their drivers' and customers' demands through adapting their business policy. On the other hand, the drivers' storyline 'online taxi companies exploit our job' highlighted the asymmetrical position between drivers and companies, and drivers and customers.

To convey these storylines, the actors used slightly exaggerated metaphors. For example, the metaphors of 'greening' was used as a threat or reminder from the drivers if the government would ignore their concerns. The term 'greening' originated from the jacket color of Gojek and Grab drivers. It meant that they would mobilise online taxi drivers to participate in street protests, blocking streets and as such colouring roads 'green'. The other example of a metaphor used was 'bonus bait'. It was used as a message to explain the 'trick' of companies to force enhancing drivers' productivity. The drivers pictured the company as a fisherman who used their bonus as a bait to increase drivers' motivations. When the driver was eager to take the bait, the company would gradually pull or lift up the bonus standard so it would be difficult for drivers to get the maximum bonus.

Taking a closer look at these meetings, we observed both an inclusive and an exclusive battle of storylines during this critical moment. It is inclusive because it allowed more storylines to clash in one space in which the actors' positions were governed as being somewhat equal. The pre-written draft from the Ministry explicated the unfinished and even unhinged nature of the issues, inviting the participants of the meetings to attempt to influence and rewrite the dominant storylines. Even though the draft was pre-written by the Ministry, the final draft accommodated priorities of all attending actors. The Ministry prioritised the safety guarantees, the drivers prioritised to have a regulation that safeguarded the basic fare of online taxis, and the

companies wanted to keep their status as applicator (provider of digital application) rather than transport companies.

At the same time, the meeting invited for an exclusive battle because the incumbent taxi actors and the informal motorbike taxi 'ojek' were not included in these meetings. The Ministry acted as a stage director who decided who should be invited and what should be discussed. Furthermore, in terms of deliberative process the meeting was somewhat hurried and under pressure of a political deadline. The political pressure was felt by the President who realised that online taxis form a major potential of voters and supporters, and accommodating their demands of basic fares would win them to his cause. For the drivers, cooperating to draft regulation was a better option than protesting on the street. There were no guarantees that the other, future president candidates would be as accommodating as the current president. For the Ministry, regulating the online motorbike taxi market was best described with a metaphor 'swallow the fireball'. The conflict of online taxi had become a political issue and potential fireball for the opposition party to attack the government's credibility. In this sense, the Ministry took the option to 'swallow' or tame this conflict through accommo- dating regulation. As one of the interviewees from the Ministry told us: *"At least if we swallow [the fireball], it will not burn our house and we can try to reduce the damage"* – (The Ministry of Transportation staff, 15 March 2019).

We summarise the five critical moments with the discursive dynamics and the dramaturgy setting below (Table 3.1).

3.5   Conflict as a focal point in transition studies

The case of digital ridesharing in Indonesia revealed that the transition to new mobility services required a non-binary approach to conflict. By employing critical moments as units of analysis we could reconstruct the shifting storylines around which the controversy was played out. The analysis uncovered a battle of storylines and revealed how the battle connected to particular settings that symbolized the different stages of the conflict. Moreover, those settings influenced the performance of actors acting out their commitments as embedded within the storylines. Five critical moments were discussed empirically and showed to have been situations where the dominant storylines were unhinged and led to shifting power struggles among a

Table 3.1. Summary of Critical Moments

	Critical Moment 1: The protest against arrest	Critical Moment 2: The battle on the street	Critical Moment 3: The battle of power structure	Critical Moment 4: The discourse redirection	Critical Moment 5: The in(ex)clusive battle
Discourse dynamic	Uber drivers are detained by police officers. This moment opens the public debate against online taxi. Conventional taxi drivers argue that online taxi is both illegal and unfair.	Massive street protest and conflict. The story 'online taxi is illegal' gets contested by another storyline around 'online taxi providing jobs (and also the national pride). However, the story 'online taxi is illegal' remains dominant.	Online taxi drivers take legal action to the Supreme Court. The Supreme Court raises the story that online taxi is 'inevitable innovation' supporting the online taxi. This storyline overpowers the story 'online taxi is illegal'.	The conflict shifted towards a conflict between online taxi drivers and online taxi companies. Now, online taxi drivers change their story from 'online taxi is our job' into 'online taxi exploit our jobs'.	For the first time, the government invites online taxi drivers to provide input to the draft regulation for online taxi. This meeting becomes a formal battle between mainly the government, the online taxi companies, and the online taxi drivers.
Drama-turgy	Mobilisation of legal reporting organised by conventional taxi drivers and police officers.	Mobilisation of violence and chaos in massive street protest by conventional taxi drivers.	Mobilisation of regulators by online taxi drivers. The strategy to involve higher power actors in the conflict has proven effective to challenge and change the dominant story.	Mobilisation of opinion and pressure through social media. The online taxi drivers direct the social media, threatening to conduct a street protest on the government's critical moment.	Mobilisation of stories in a formal meeting room. The government plays a substantial role setting the stage and creating a setting that influences the flow of the meeting.

variety of actors rallying around differing storylines. The focus on the dramaturgical elements of setting, staging and scripting in the consecutive critical moments enabled a detailed understanding of where conflicts in transition took place, and how they played out.

Reflecting on the case of digital ridesharing in Indonesia and its critical moments we want to highlight a few broader conceptual points to contribute to the discussion about the role of conflict in transitions research:

First, critical moments as unit of analysis to study conflict in transition. Critical moments are tangible and observable events in practice as situations where the dominant order becomes unhinged or discursive regularities are broken up and become prime moment of power struggles. Using the critical moment concept enables a contextualized analysis, converging on a specific time and space to show how a complex conflict unfolds. We argue that the five critical moments in our findings are the prime moments during which things became unsettled and ready to shift. These five critical moments show the reconfiguration of discursive regularities because of power struggle that has played in a particular staging. For example, we could observe online taxi was perceived as illegitimate services in the first critical moment, but it became legitimate services in the fifth critical moment. Also, from the first until the fifth critical moment we could understand the discursive change of online taxi from illegal to legal taxi services, as well from economic growth contributor to labor exploitation.

As part of our intention to pursue a non-binary approach to understand conflict, we argue that critical moment analysis helps to unpack the complex nature of conflict in transition and bring a more inclusive approach to the analysis. For example, from each critical moment we could learn that online taxi conflict is not a simple conflict between the incumbent taxi and the digital taxi company. The critical moments highlight that the conflicts are multi-layered and play out between conventional taxi drivers and the online taxi company, between policy makers who support and those against the online taxi company, between online taxi company and online taxi drivers. Critical moments as an analytical tool have helped us to move away from simplistic assumptions about the nature of conflict. A lesson that we derive from the conflict around online taxi in Indonesia is that conflicts may provide a venue to integrate contrasting storylines and allows for the involvement of actors on more equal terms. For instance, the creation of PM 118/2019 and PM 12/2019 regulations as an output of the fifth critical moment included three out of four existing storylines employed by online taxi company, online taxi drivers and the government. This is the first moment when those three actors act and negotiate with each other around the same table.

Second, the focus on dramaturgy that accompanies a critical moments analysis is promising for future transitions research. Discursive

approaches are quite often used in transition studies, but these accounts seldom stress how these discourses are 'performed' in particular contexts, and how those particular contexts matter. Our critical moment analysis clearly situates where the conflict in transition took place and how it is played out. For online taxi in Indonesia we demonstrate that a focus on the exact how and where of this performance – the 'dramaturgy' in other words – reveals why in some context discursive storylines could become dominant and in others not. As an example, the different dramaturgy setting in the second critical moment and the fourth critical moment could explain why the protest by conventional taxi (Blue Bird Taxi) could not dominate the discursive debate, while the protest by online taxi could. The protest by conventional taxi in the second critical moment only happened in a street setting, which allowed counter-storylines to emerge in the social-media setting and delegitimate the storylines employed on the street. On the other hand, the protest of online taxi in the fourth critical moment were both played out on the street as well as on social media. This performance became effective to employ the 'online taxi exploits our job' as dominant discourse because not only it took the battle into both offline and online arena, but also it was mobilized during a crucial political moment (the opening of Asian Games that will become a bad precedent if it is interrupted by political protest) that enforce the government to facilitate the actors.

The other dramaturgical comparison between these two street protests are the different scripting dimensions. The street protest by conventional taxi allows violent action as a form of solidarity, while the street protest by online taxi discourage use of violence. The two ways of scripting led to different public reactions. The public supported the protest from online taxi drivers while they criticized the protest by conventional taxi.

The case showed how they use material and immaterial strategies to shape the outcome of the discursive battles – e.g. blocking the road with cars, setting the table arrangement in a meeting room to determine who could speak and how the negotiation should be. The dramaturgical analysis articulates that the actors who control the material design of the battleground have an advantage. Therefore, we argue that the dramaturgy dimension brings up the material perspective on how power plays out in conflicts in the context of transitions.

One implication that we highlight is that the nature of this study is mostly retrospective rather than prospective. Yet, an important question remains what the implications are for governing prospective transitions. In this respect, we note that prospective transition governance tools such as Transition Management have strongly been informed by historical analysis of past transitions, such as the natural gas transition in the Netherlands (Rotmans et al., 2001). Hence, analysis of retrospective cases can inform prospective tools to expedite a transition that has not yet occurred. We also note, however, that earlier historical analyses have sometimes overlooked the politics of (Heiskanen et al., 2009; Smith et al., 2005) and places (Raven et al., 2012) where transitions take place. The premise of our retrospective analysis therefore is that by developing new lenses that are sensitive to politics and place, we can 'see' the unfolding of historical transitions in new ways, which in turn can inform the development of new or adapted prospective transition frameworks.

This study arguably does not go into much detail regarding the latter but does provides new views on the politics and place of transition governance. One major implication is that based on our analysis frameworks such as transition management will need to take more account of the places (whether offline or online) where transition arenas and discursive battles are staged, because these spatial characteristics and who controls them, as our analysis demonstrates, will shape the likely outcomes of the arenas. Similarly, for governance tools focusing on strategic niches to shape prospective transitions, it will be useful to consider that (often marginal) niche actors can 'punch above their weight' by staging their experiments and discursive battles with incumbent actors in place they have relatively more control of.

Third, the analysis highlights the multi-faceted character of conflict, generating a more dynamic and inclusive understanding of transition pathways. We argued before that the polarization of actors (i.e. regime vs. niches or incumbent vs. newcomer) could lead to oversight of the complexity of conflict itself. Using a binary approach of understanding conflict may lead to the perception that niche actors always become the solution of the problem caused by incumbent actors (Cuppen et al., 2019), or that niche actors always agree with each other without conflict (Smith et al., 2014). Our case of online taxi demonstrates that problems and solutions are not entirely embedded within one single actor group. Actors who promise one solution cause yet another

problem – e.g. even though online taxi is perceived as a successful new solution for flexible employment, it also brings risks of labor exploitation. Conflicts are part of a dynamic arena where actions are staged, meanings are discursively negotiated, and stories are becoming a part of a strategic repertoire.

In that sense, conflict analysis puts forward a different perspective compared to the 'consensus-seeking' and 'social-learning' approaches in other transition studies accounts. Conflicts do not just repress progress, but they offer a more dynamic and inclusive understanding of alternative ways in which transitions might unfold. Positioning conflict as a generative force to come up with socially robust innovations or as a form of informal technology assessment (Rip, 1986) offers the opportunity to highlight the voices of marginalized actors and storylines. Our case shows how conflicts become inevitable consequences of disruptive innovation. This chapter contributes by introducing critical moments and dramaturgical analysis as an approach to better unpack the complexity of conflict by bringing a more inclusive understanding of dominant and marginal actors, where the arena of conflict is in transition, and of how they played out.

In the final analysis conflict becomes not a battleground between niches and regimes but a complex, multi-faceted and multi- layered relations composed of intersecting storylines spun and latched on to by the various actors involved. All actors are attached to particular storylines and decide their actions based on it. Those who share similar storylines (often from varying backgrounds!) become a political force in the form of discourse coalitions (Hajer, 2005). In places where contrasting storylines are intersected, opportunities for change are created. In relation to transition studies, in particular to sustainability transitions, conflict analysis could indicate to what extent sustainability storylines are transformed or neglected in the web of public discourse. For example, ridesharing is considered a form of the sharing economy that could promote a new pathway of sustainable development (Botsman and Rogers, 2010; Heinrichs, 2013). However, in our empirical case the notion of sustainability has been overlooked in the enactment of conflicts on ridesharing. In our case, ridesharing as sustainable option was only conveyed by the online taxi company during the preliminary introduction of digital app-based ridesharing. Soon after, ridesharing is regarded differently; it became contentious on issues of ille- gality and fairness. Subsequently, the company chose

to employ the story of how ridesharing contributes to economic growth and employment. The evolving stories reveal how the company's strategies to overcome conflict are interconnected with stories that matter and are relevant to the broader public.

3.6   Conclusion

This study provides a more plural and complex analysis of conflict in transition by foregrounding critical moments analysis and adding dramaturgy elements to illuminate the discursive dynamic of conflict. Using the case of ridesharing conflict in Indonesia, we articulate a non-binary approach by employing critical moments as units of analysis to uncover the battle of the storylines and to some extent the performance of actors within the storylines. We have discussed five critical moments in the case of online taxi, in which the dominant storylines were unhinged and led to power struggles for marginal storylines. Adding the dramaturgical analysis underneath the discursive battle in each critical moments enables a detailed and nuanced understanding of hidden power structures as well as political strategy used by actors to mobilize their storylines.

We suggest to use critical moments as unit of analysis because it offers analysis converged on time and space. Also, we suggest to use dramaturgical analysis as a novel practice in transition studies, that helps explain why and how discursive strategy succeeded or failed to become dominant discourse. The dramaturgical analysis includes the role of the situational context in our analysis and helps to understand how conflicts in transition played out. In our case, the dramaturgical analysis illuminates the role of other locations than the formal office meetings, such as the streets or the social media.

We argue putting conflict analysis as focal point in transition studies could embrace multiple stories of sustainability and open up a pathway to sustainability in a more complex set of ways. We argue that our contribution is not to produce a guideline on how to pursue or predict a particular transition agenda. We note that prospective transition governance tools such as Transition Management have quite strongly been informed by historical analysis of past transition. Thus, analysis of retrospective cases can inform prospective tools to expedite a transition that has not yet occurred. We also note, however, that earlier historical analyses have sometimes overlooked the politics

of and places where transition take place. The premise of our retrospective analysis is to develop new lenses that are sensitive to politics and place, so we can 'see' the unfolding of historical transition in new ways, which in turn can inform the development of new or adapted prospective transition framework.

CHAPTER 4

PLURALIZING URBAN FUTURES:
A MULTICRITERIA MAPPING ANALYSIS OF ONLINE TAXIS IN INDONESIA

Abstract

The exploration of urban future storylines of transformative change is subject to socio-political processes rather than a mere, objective envisioning of the desirable city. Approaches in urban imagination and planning processes should thus consider plural perspectives across a range of actors and stakeholders beyond the usual suspects of experts and professionals. This study mobilizes the case of the emergence of online taxis in Indonesia to embrace a more inclusive approach to the assessment of urban mobility future by employing multi-criteria mapping (MCM) analysis and combining it with an open dialog on future storylines. We answer the question of what insights can be derived from diversifying future storylines in the online taxi industry in Indonesia? From applying a more inclusive approach in constructing future imaginaries we derive four insights: 1) criteria to appraise the future are never purely technological; 2) there is a difference in perceptions of time horizons among actors when imagining future; 3) perceptions of time horizons are shaped by actor backgrounds and social interactions; and 4) the MCM method contributed to helping individuals to focus and explore their future storylines.

4.1   Introduction

Urban mobility is central to the social, environmental, and economic development of cities. This is explicitly recognized in target 11.2 of the UN Sustainable Development Goals: "By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons" (UN General Assembly, 2015, p. 26). However, the formulation of the goal raises the question of how to incorporate the various views and interests of all actors, especially of the most vulnerable ones, into envisioning the future of urban mobility systems. Despite long-standing scholarship on 'futuring', existing approaches in urban imagination and planning processes still remain somewhat limited in the ways in which plural perspectives across a range of actors and stakeholders — beyond the usual suspects of experts and professionals — might be better considered. In this study, we extend this scholarship and propose a more inclusive approach of exploring and negotiating the future based on multi-criteria mapping (MCM) and apply this to a case study of urban mobility in Indonesia.

Various approaches and concepts exist that take a performative approach to what we will refer to as 'future storylines', such as 'socio-technical imaginaries', 'articulating expectations', 'techniques of futuring' or 'envisioning'. For instance, Jasanoff (2015) uses the notion of 'socio-technical imaginaries' and focuses on linking the past with the future, enabling or restricting action in spaces, and normalizing ways of thinking about many possible future worlds. Imaginaries are most powerful when they become part of a "collective repertoire" of ideas and statements shared by large stakeholder groups (Konrad and Böhle, 2019). Imaginaries are never neutral constructs but are framed in a particular way. This leads to dynamics of inclusion and exclusion of certain actors and aspects, as they become perceived as more or as less important or meaningful parts of the future.

Particularly, this study builds on the insights gained from the *Futures* special issue on "Socio-technical futures and the governance of innovation processes" (Konrad and Böhle, 2019), which foregrounds a participatory and inclusive approach to 'future storylines' to make innovation processes more transparent, pluralistic, and democratic.

This studys in that issue deal with various participatory practices and procedures, from forecasting, scenario-modeling to foresight and technology assessment (Konrad and Böhle, 2019). Taking such assessment further, this chapter has two objectives. First, to explore the benefits of using multi-criteria mapping as a participatory mechanism for pluralizing future storylines. Second, to present a fieldwork-based attempt to broaden multi-stakeholders' dialogues in the storylines of the future of online taxis in Indonesia.

In doing so, empirically this study explores future storylines of digital technology in urban mobility in Indonesia. This study hones in on digital ridesharing enabled by smartphone apps, which in Indonesia are commonly known as "online taxis". Ever since their aggressive introduction several years ago, digital ridesharing services (e.g., Uber) have grown in popularity, yet have also led to controversy and disruption in many cities around the world (Pelzer et al., 2019). Since then, a diverse set of tensions among various car-based and motorcycle-based transport systems and actors in the mobility systems of Jakarta and other cities has become apparent. Related to the disruption of the urban mobility system is the reshaping of the nature of employment, which may lead to workers or drivers being unfairly treated (Nastiti, 2017). The Indonesian government has attempted to regulate online taxis many times, and online taxi businesses and drivers have both tried to protect their interests through various discursive tactics (Yuana et al., 2020). Recently, policymakers were criticized for not being proactive in dealing with these anxieties, and for preferring short-term solutions rather than systematically anticipating the future position of online taxis in the context of urban mobility (ibid).

The question we ask here is "What insights can be derived from diversifying future storylines in the online taxi industry in Indonesia?" To address this question, we used multi-criteria mapping (MCM) developed by Stirling and colleagues (2019). MCM is a multi-stakeholder engagement tool that helps to broaden and open up societal debates about political choices through: (1) a systematic storyline of all relevant perspectives, for instance on new technologies; (2) illuminating the range of uncertainties within and ambiguities between each of these perspectives; and (3) documenting qualitative arguments and reflections concerning the rationales and underlying beliefs associated with these perspectives and uncertainties. The

advantage of MCM is that it allows quantitative representations of how different actors and stakeholders assess performance ('appraisals'), which is integrated with qualitative information on the reasons for those appraisals. We complemented MCM with action research to foster an open dialog among a diverse group of stakeholders about Indonesian urban mobility and to consider a wider-than-usual range of future storylines in public decision-making.

This study is structured as follows: Section 2 discusses relevant scholarship on future storylines and Section 3 describes the MCM approach in constructing open dialog on imaginaries for future mobility. Section 4 presents the results. Section 5 reflects on and discusses implications of our approach for scholarship on future storylines. Section 6 concludes.

4.2   Pluralizing future storylines

Future storylines can be a powerful trigger for actions that shape the socio-technical fabric of society (van Lente 2012, Beckert 2016). Although visions evoke a particular future, they are important in the present by enabling transformative action through imagination. For instance, the storylines of possible futures have been demonstrated to play an important role in sustainability transitions through the concept of "expectations" (Schot and Geels, 2008; van Lente, 2012; Sovacool et al., 2019a). The storylines of expectations guide actors involved in innovations by shaping a collective future orientation, fostering resources and constructive protective spaces to shield, nurture, and empower certain technologies instead of others (Konrad, 2006; van Lente and Bakker, 2010; Smith & Raven 2012).

In general, future storylines have the potential to guide and coordinate actions across techno-epistemic networks, establish key political decisions, justify new investment in science and technology, promote certain development pathways, and justify the inclusion or exclusion of certain actors in the decision-making process (Delina, 2018). Therefore, future storylines are most powerful when they become part of a collective repertoire of ideas and statements shared by diverse stakeholder groups; in such contexts, future storylines cannot be ignored anymore, even by those that do not necessarily share them, because by then the future storylines have become part of social reality (van Rijnsoever et al., 2014). Thus, future storylines are never neutral

constructs, but are framed in a particular way where some aspects, actors and perspectives are included and privileged, whereas others are excluded.

Here we highlight two observations that are particularly relevant to our aim to pluralize future storylines, and to which we return in the discussion section. First, Masini's argument on the plurality of perceptions of time horizons in future studies (Masini, 1993, p.32). The perception of time horizon generally differs between applied and academic futurists (Marien, 2002; Brier, 2005). In the scholarly work on future storylines, time horizons are often categorized from short term (present to 5 years); to the medium term (5 to 10 years); and the long term (from 20-50 years). Perceptions of time horizons and how they relate to socio-institutional processes have received limited attention (Sovacool and Geels, 2016) and our research aims to unpack this relation.

Second, we are interested in the social interaction in future storylines because they shape the possibility space of pluralizing future storylines. The social contexts in articulating future storylines shape which storyline becomes the dominant articulation of the future. Which means the existence of future storylines are contested based on the social interaction. We follow the notion of "bounded imaginaries" developed by Smith and Tidwell (2016), who argued that articulating future visions comes with manifestations of social position and power and de-emphasizing and erasing alternative futures. Through this we highlight the social and power dynamics of articulating the future which we want to aim for in our research by using the multi-criteria mapping (MCM) method.

4.3　Multi-criteria Mapping Methods

4.3.1　Context of Indonesian Urban Mobility

The development of transport services in Jakarta does not conform to the "modern infrastructure ideal" referring to systems of service provision catered for in an equal and universal way by responsible public authorities (Graham and Marvin 2001; Coutard 2008; Van Welie et al 2018). Jakarta has experienced rapid growth over the last few decades, drawing immigrants from across the region to the city's fast-growing economy and modern life. Like many cities, both in the

Global North and Global South, Jakarta's transport policy prioritized cars over other mobility modes. At the same time, many cities in the Global South struggle with a generally insufficient provision of public transport. More affluent urbanites are laying claims on an increasing part of scarce road space (Sengers 2016), while markets — particularly in the informal sector — are expected to organize the provision of services through what is characterized as "Laissez-Faire Transit" (Cervero 2001). The informal public transportation steps in to offer a viable alternative to the negative stresses of growth on urban transportation systems dominated by cars and inefficient public transport.

One popular mode of transport in Jakarta is offered by motorbike taxi providers or *'ojeks'*. These motorbike taxis offer urban mobility services to the lower-middle class and working-class households. The emergence of digital applications for ojeks and other taxi services has led to a critical convergence of formal and informal transport. These online taxis have improved the accessibility and connectivity of formal and informal worlds. Since 2014, online taxis companies such as Easy Taxi, Uber, Gojek, Grab and other emerging start-up companies (Wahyuningtyas, 2016) had fiercely competed for market share. In the end two giant companies, Gojek and Grab, remained (Nurhasana, et al, 2021). These companies employed multiple strategies to maintain their motorbike taxis services during the Covid-19 pandemic. They responded to multiple restrictions by providing face masks, hand sanitizers and plastic shields to protect drivers and customers (Jakarta Post, 2020). Despite all the changes and flexibility being employed, the future of online taxis existence is still a battleground between policymakers, business player and local communities (Yuana, et al, 2020)

Governmental organizations find it difficult to respond to and accommodate online taxis (Leung, 2016). The current urban mobility system in Indonesia is favoring formal public transport over informal, "splintered" transport. The legal complexity involved in regulating 'ojeks' is the main reason authorities avoid including 'ojeks' in Indonesia's traffic control system. Traffic laws and highway traffic laws restrict public transportation to vehicles with four or more wheels (Medeiros, et al., 2018). Moreover, informal transport is not represented in policy discussions, e.g. on a ministerial level. This leads to further inequalities of support and protection to workers of informal

transport and limits radical changes in the transport system.

While the current situation in Jakarta points to some futures being more likely to materialize than others, our position is that the future is always open and that alternative storylines are always conceivable or may progress in parallel. Claims about the likelihood or indeed the inevitability of a particular mobility future are articulated to anticipate events and to make taking action incontrovertible ("if we do not act, traffic will be gridlocked ten years from now" or "and that is why we now seriously need to consider public transport infrastructure"). In this context, a "bounded imaginary" of the future of urban mobility is imminent and is shaping the everyday practice of urban mobility. However, there should be space for alternative imaginaries; the future of Jakarta mobility is still open, which invites a thorough and inclusive approach to pluralising future storylines.

4.3.2 Multi-criteria Mapping Methods

The key method used in this research to construct imaginaries from multiple perspectives is multi-criteria mapping (MCM). This approach helps to open up the debates about the future of urban mobility inclusively. MCM is a type of multicriteria analysis tool that is distinctive in its aim to appraise multiple options simultaneously and to offer a clear understanding of uncertainties associated with each of the options. In this way, MCM allows a more nuanced understanding of complexity of choices in relation to diverse perspectives and does not force narrowing down to a single, "collectively-agreed-on", best course of action. The approach aims to identify the different underlying reasons, or criteria, that influence people's perceptions of different options (Stirling and Mayer, 2001).

The MCM method consists of five stages: (1) constructing an open-ended set of **options** to appraise; (2) identifying a range of **criteria** to assess these options; (3) **scoring** the performance of each option against these criteria; (4) **weighting** each criterion to determine its relative importance; (5) allowing for overall **reflection** and adjustments to the final visual outcome and overall process. The step-by-step guide to applying the MCM method is explained in more detail in Stirling and Mayer (2001) and in Raven et al. (2017).

To build an inclusive imaginary we combined MCM methods with mapping multiple future storylines. MCM has frequently been used to appraise technological options in the current state. An earlier study by

Royuela et al (2016) modified the MCM approach to develop participative foresight scenario mapping in which they used MCM methods to build future scenarios. Inspired by their research, we created similar future scenarios, using a novel approach. As illustrated in Figure 4.1, our methodology was divided into three main phases: constructing future storylines, appraising future storyline through one-on-one MCM interviews, and a future storylines dialog. Instead of future scenarios, we built future storylines that have more mundane nuances toward future storylines. Our storylines consist of future narratives and imagined positions of actors in those narratives. To share the results of MCM analysis and initiate dialog with the stakeholders, we held a workshop with diverse stakeholders. The workshop allowed a deeper and critical engagement with the uncertainties around the future storylines and the diversity of perspectives. The workshop also complemented the MCM interviews by validating the plausibility and desirability of the future.

All three phases were designed to facilitate an inclusive dialog about future storylines. The first step was to build initial storylines for later use as core options in the MCM interviews. We found this step was necessary to give our interviewees an entry point for engaging with the potential uncertainties and ambiguities of the future of urban mobility. The second step was the one-on-one MCM interview in which
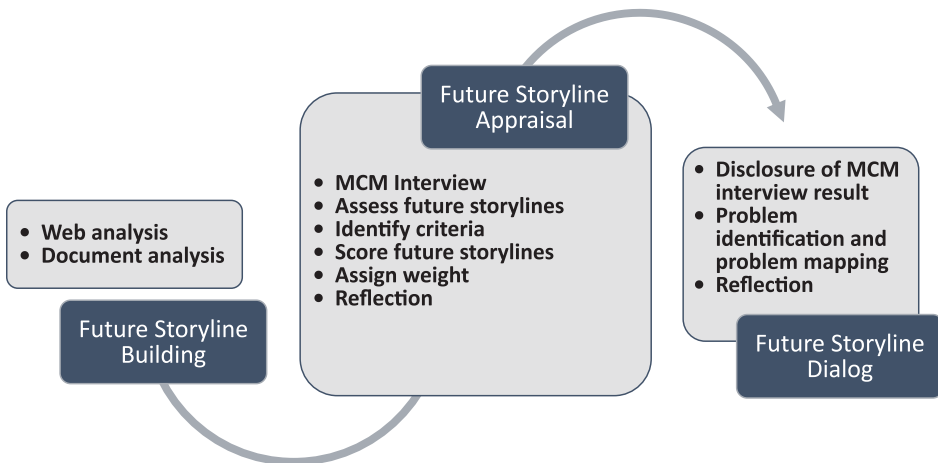

Figure 4.1. Three phases of constructing future imaginaries (inspired by the work of Royuela, et al., 2016).

interviewees reflected upon and appraised the core options. Interviewees were also invited to revise or suggest additional options if they deemed them suitable. This is in the true spirit of MCM: to offer diverse stakeholders the choice and capacity to express perspectives about alternative future storylines beyond the ones suggested by the interviewer. The results of the appraisal of the core options were presented in the stakeholder's workshop in the third and final step of this research, to initiate dialog between diverse stakeholders and for validating and negotiating the different future.

1. *Future storylines building*

To construct an initial, preliminary set of future storylines of online taxis in Indonesia, we analyzed websites. First, we gathered data from the official web pages of online taxi companies and the Ministry of Transportation, and national digital newspapers such as Kompas and Detik.com. We selected data from 2015 to 2019 in order to capture data on online taxis since their inception in 2015. The second step was to identify future storylines from multiple stakeholders in the online taxi industry. To build the storylines, we codified the data into three categories: (a) technological innovation to be expected in the future, e.g. the rising presence of online taxis as part of a super-app company in 2030; (b) government policies to be expected for online taxis, e.g. policy on a tariff mechanism for online taxis; and (c) problems to be expected to emerge in the future, e.g. the exploitation of gig workers. Based on the three categories, the third step concerned formulating three initial future storylines. We are aware this method could not identify which storyline is more marginal, however, we use these storylines only as entry points to open up a dialogue during the MCM interview session.

2. *Future storylines appraisal*

Our study attempts to bring more, diverse perspectives in deliberating the future storylines. To do so, we carefully selected our interviewees which we believe could bring more diversity of perspectives and experiences in the context of online taxis. We included 9 respondents covering a variety of perspectives as being shown in Table 4.1. The diversity of perspectives that we brought into the appraisal is reflected in:

1. The policy makers category: next to the Ministry of Transportation within which the online taxi regulation is centralized, we added perspectives from the Ministry of Communication and Information regarding the impact of digital platforms on urban mobility, and from KPPU (the Supervisory Commission of Business Competition) on business ecosystems.

2. The drivers' community: they have hardly been invited in planning or brainstorming meetings on urban mobility policy and are usually only involved in the socialization of the online taxi regulations. We invited two leading drivers' community organizations: ADO that represents local branches and KOPDAR that represents motorbike taxi drivers.

3. The users' community category: deliberation of online taxis regulation has so far never involved user communities. Most data about customers had been delivered by the platform company. We included MTI as a non-profit community that focuses on transport issues and advances users' perspectives, and Queen Rides representing non-profit female drivers and users to add gender perspectives in transportation issues.

4. Professional consultancy on digital innovation: usually in ministerial meetings only experts with a transportation background are invited to give advice. However, in this research, we added an expert on the digital economy to knowledge on the influence of digital innovation on urban mobility.

Table 4.1. The list of interviewees

Category	Function
Policymakers	Head of Urban Transport, Ministry of Transportation Ministry of Communication and Information KPPU, Supervisory Commission of Business Competition
Drivers' Community	ADO, Alliance of Online Car-Taxi Drivers Indonesia KOPDAR, Organization of online motorbike taxis
Users' Community (Online taxi customers)	MTI, Indonesian Transport Society Queenrides, female drivers, and female users' community
Professional Consultant	Transport ExpertDigital Economy Expert

We conducted 3-4 hours MCM interviews with each interviewee from February to June 2020. We followed the five stages of MCM interviews. The first stage was verifying if the interviewee was comfortable with the set of future storylines to appraise, or whether the interviewee wanted to make any changes. This step gives freedom to interviewees to reject our initial future storyline or add their own future storyline in the interview set. At the start of the interview, we offered interviewees our three future storylines for their appraisal. They were invited to suggest additional storylines and/or elaborate the three initial storylines. The second stage was identifying a range of criteria to assess the future storylines. Each interviewee was invited to develop their own set of criteria with which they would like to appraise the options. The third stage entailed the interviewee scoring the future storylines against each of the criteria and providing qualitative reasoning for each score. The fourth stage entailed the interviewee assigning a weight to each criterion. In the final (fifth) stage, we reviewed and reflected on the final outcomes of the appraisal and overall process and made necessary adjustments to scores, weights, or even qualitative explanations. All interviews were recorded with consent.

The data was collected during the Covid-19 pandemic; we therefore conducted our interviews and workshop online. We experienced some problems with poor internet connections during the data collection, which may have adversely impacted the quality of interaction. The online formats were anticipated to somewhat limit optimization of the interviews and workshop, e.g., due to internet connection issues, lack of personal connection, time-zone difference. However, we took measures to reorient the format and styles of engagement to mitigate these limitations. Hence, they are not expected to have influenced the results.

3. Future storylines dialog

This was the final step after conducting the MCM interviews with experts and stakeholders of online taxis in Indonesia. The dialog workshop was held on September 15, 2020, in collaboration with the Ministry of Transportation (MoT). The purpose of organizing this workshop was to facilitate the Ministry to encounter more diverse perspectives than the usual future storylines of online taxis. We compared our list of interviewees with the usual attendants of the Ministry meetings on online taxis. Based on diversity of perspectives

and experiences we decided to invite 5 discussants from the usual invitees of the Ministry meetings and 5 discussants from our interviewee list (all 9 interviewees were invited as discussant in this workshop, 1 was not able to join due to schedule conflicts, 3 were part of usual invitees of the Ministry meetings).

The 10 workshop discussants formed a diverse group. The usual invitees on the Ministry meeting were: (1) the director-general of land transportation, (2) the director of urban transportation, (3) the public policy manager of Gojek (an online taxi company), (4) the transport expert, and (5) ADO, (driver's community representatives). The additional 5 discussants which could bring wider perspective were: (1) the secretary-general of the MTI (Indonesian Transport Society/ user's organization), (2) the special advisor to the Minister of Communication and Information, (3) the representative of the KPPU (the Indonesian Supervisory Commission for Business Competition), (4) the digital economy experts, and (5) the representatives of KOPDAR (a motorbike taxi rider organization).

The Ministry of Transportation acted as a moderator and intermediary between the research team and the stakeholder groups in the online meeting. Besides inviting the workshop discussants, the Ministry proposed to invite 20 of their internal staff as audience of this workshop. They were not invited to give an opinion on our research findings, but they were allowed to raise questions during a Q & A session.

At the beginning of the workshop, the researcher (the lead author) presented the appraisal of all options (future storylines) from the MCM interviews for 20 minutes followed by 10 minutes of comments and reflections from the discussants. After each comment from the discussants, the moderator opened up the Q&A session and directed the discussion to focus on identifying problems in order to achieve the future storylines of the online taxis. Before closing the workshop, the researcher invited participants to reflect on the workshop via a one-on-one talk or by filling out the online survey. 10 audiences filled in the online survey and expressed their reflections and 3 audiences gave their reflections verbally.

4.4 Diversity of Future Storylines of Indonesian Online Taxis

This section presents the diversity of future storylines of online taxis in Indonesia. Based on the three phases of our research framework, we have divided the results into three subsections: (4.1) diversity of future storylines; (4.2) diversity in appraisal of future storylines; and (4.3) actor backgrounds and social relations shaping the articulation of future storylines.

4.4.1 Diversity of future storylines

The three future core storylines of online taxis are "Transformation", "Optimization", and "Decentralization". Table 4.2 illustrates the core storylines covering their general narratives, and related positions of the government and online taxi companies. These storylines describe not only the image of the future of online taxis but also the pathways for achieving each imagined future. Even though the core storylines were prepared by the researcher prior to the MCM interview, all the interviewees accepted these storylines to be appraised and some even added further details to the narrative of the storylines, thereby confirming that the results of our desk research were relevant for the stakeholders' imaginations of online taxis.

Besides the three core storylines, our interviewees came up with four additional storylines. These additional storylines were not systematically appraised by all nine interviewees due to an inability of the MCM software to allow them to appear in other interviews. However, these storylines give some valuable insights into the alternative future of online taxis and we took the opportunity in the workshop to introduce these additional storylines. These storylines represent the diversity of future storylines as played out by multiple stakeholders. We have retained the original titles of storylines proposed by their creator, as they illustrate the interviewees' nuanced perspectives on the future. The four additional storylines are:

1. Storyline "5G Technology Leapfrogging" imagines the emergence of autonomous vehicles in urban mobility which will gradually replace human drivers, meaning there will be fewer online taxi drivers in the future. In this storyline, the government is imagined as the initiator, deciding on when and where autonomous vehicles are to be implemented.

Table 4.2: The three core future storylines of online taxis.

Storyline	*"Transformation"*	*"Optimization"*	*"Decentralization"*
Images of the future	In 2030, online taxis will be embedded very well in people's daily activities. Online taxis are a convenient and easy option for urban families that offer door-to-door mobility services.	In 2030, due to a limitation of services in some remote areas in the city, online taxis function as feeders for the first- and last-mile commutes.	In 2030, the emergence of digital apps that are developed by individual online taxi drivers or local driver communities is growing. These newcomers collaborate with local governments to provide transport services in the neighborhood.
Imagined position of government	The government functions as an enabler of online taxis.	The government acts as a manager of innovation, integrating all modes of transport services and regulating business players.	Local governments play more active roles in supporting the local business players.
Imagined position of the online taxi company	Online taxi companies own a meta-platform or "super-app" that integrates multi-modal transport and multi-sector services such as transportation, logistics, digital finance, digital entertainment.	Online taxi companies collaborate with the government to organize integrated urban mobility.	Online taxi companies will focus on the capital city and other big cities.

Policymakers from the Ministry of Information and Technology proposed the storyline. The participant who created the storyline displayed a high level of confidence by stating: *"I am optimistic that the introduction of autonomous vehicles will happen in less than 5 years in Indonesian urban mobility. For example, it is designed to be implemented in the new capital city of Indonesia in Kalimantan Island which is now under construction and monitored by our Ministry"* – interview March 10, 2020.

2. Storyline "Autonomous Vehicles" resembles the previous storyline and imagines the prominence of driverless cars. This storyline was initiated by the representative of the user community who also owns a digital business. In this storyline, platform companies act as dominant actors in steering the development of autonomous vehicles. The participant showed some pessimism about the role of government in this storyline by saying: *"We are a capitalist country. As long as the government does not stand by the citizens, [companies] will always remain dominant. It is hard to imagine the government will develop tools that benefit the people because they do not have money. Without money and authority, people will lose with capitalists"* – interview April 30, 2020.

3. Storyline "Jakarta Pilot" imagines that future mobility development will start from Jakarta, the capital city, and would then be replicated in other regions. This storyline was proposed by a transportation expert who is frequently asked to attend and advise the Ministry of Transportation as a consultant. This storyline recognizes the current centralized and unequal development between the capital city and other local areas which will continue in the future. The participant expressed this inequality by saying: *"Talking about Indonesia is different compared to developed countries. Our analysis must recognize the inequality between the capital and other cities, which is very high. Therefore, Jakarta must be a separate future storyline and should be imagined differently from other cities"* – interview March 2, 2020.

4. Storyline "Substitusi" ["substitution" in English] imagines that online taxis will completely replace conventional taxis. The storyline was proposed by a policymaker from the Ministry of Transportation. Even though this storyline seemed to him to be possible, he was rather pessimistic about it because he said that conventional taxis have been popular for 20-40 years. He predicted that the market will be shared between online taxis for customers who want cheaper fares, and conventional taxis for customers who prefer quality of service. However, according to him, it was necessary to propose this storyline as an alternative future that speculates on the trends of the conventional taxis.

From these four additional storylines, we observe that the diversity of future storylines could go beyond the technology and deployment of online taxis. The first and second additional storylines discuss artificial intelligence as a point of departure for imagining the development of online taxis. The third storyline starts from spatial inequality, which is one of the main characteristics of the densely populated capital cities of Global South countries. The fourth storyline uses the reaction of online taxis' competitors as a consideration in imagining the future.

4.4.2 Diversity in the assessment of future storylines

After being given the opportunity to identify additional possible future storylines, each interviewee was asked to appraise the three original storylines plus their own additional storyline if they had suggested one. Here, we treat the diversity in the appraisal of future storylines. We discuss two types of diversity: (a) performance diversity, which illustrates the respondent's level of optimism and pessimism towards the core storylines, and (b) appraisal diversity, which unpacks various criteria used to assess the storylines

Performance diversity

Figure 4.2 shows the diversity in terms of performance, measured as the degree of optimism or pessimism interviewees displayed for each core and additional storyline. A high degree of optimism means interviewees perceive that the future storylines are feasible and meet their desired criteria. The four additional storylines were introduced by individual respondents, so the orange bars only represent the mean of the pessimistic and optimistic score assigned by the interviewee who proposed the storyline.

Generally, the overlaps between the ranges for different future storylines show the combined effect of a high degree of uncertainty and variability in their performance. It can be observed that on average, the "Optimization" storyline received higher optimistic scores than the other storylines. Interestingly, although interviewees were most optimistic about the "Optimization" storyline, they were also more uncertain about it. According to the qualitative statements associated with the scores, such a high degree of uncertainty stems from the respondents' difficulty in articulating the future of the mobility system
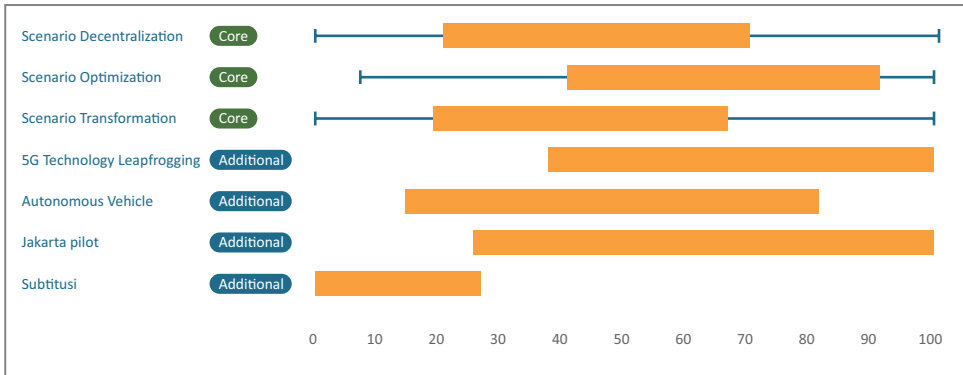
Figure 4.2. Performance diversity for future storylines of online taxis. Thin blue lines represent the range between the lowest (most pessimistic) and highest (most optimistic) rating. Thicker orange bars represent the range between the mean pessimistic and the mean optimistic rating for a storyline. In general, the further the bars and lines extend to the right, the more desirable are the future storylines.

on a national level, because they are far better acquainted with the situation in Jakarta. There are vast differences in transport infrastructure between Jakarta and other locations in Indonesia. *"Talking about Indonesia is different in comparison to developed countries. Jakarta must be distinguished from other cities and regions. One should consider the many varieties of contexts and developments in areas other than Jakarta"* - interview with Transport Expert 5 April 2020. From this statement we could interpret how Jakarta has become the focal point for business and administration of Indonesia, being more developed yet also different from any other city in Indonesia. So, stakeholders found it easier to imagine the future of Jakarta than to imagine national-level urban mobility.

Another issue contributing to the uncertainty around the "Optimization" storyline is the differences in opinion about the desirable criteria. Even though that storyline imagines the government having a strong role in realizing the future, many interviewees are pessimistic about the consequences of such a strong role. In this sense, the pessimistic appraisal of this future storyline reflects the uncertainty about the central role of the government in governing online taxis. One policymaker expressed this pessimism as follows during the interview:

"In this storyline, regulation is stricter, and businesses will be less innovative. Moreover, ideally, tariffs and quotas should be led by supply and demand and not regulated by the government. Tariffs are determined by online apps and the number of players is growing, which will guarantee tariffs are competitive. However, if we look at village areas, numbers of digital app users are still small, so it is questionable if village areas could follow the competition." – interview May 7, 2020.

This quote expresses policymakers' divergent perspective on the role of government in managing online taxis. While most policymakers agree the government role should be central in managing online taxis, this respondent hopes for less control from the government and is more supportive of free-market competition. However, the last sentences also indicate uncertainty about the future of business competition of online taxis in urban and rural areas.

Appraisal diversity

Appraisal diversity is defined as contrasts in perceptions and values between the different stakeholders participating in the appraisal process. These divergent perspectives on desirable futures were reflected in the respondents' selection of criteria. This appraisal diversity can be captured by comparing the responses of the stakeholders either at the level of individuals or at a semi-aggregated level where the variously definable groupings of stakeholder perspectives can be compared with each other. Table 4.3 illustrates 19 criteria proposed during all nine MCM interviews. They have been categorized into four sectors: economy, government regulation, social criteria, and technology. Table 4.3 also presents the number of times the criteria were used in MCM interviews, indicating the importance of indicators for appraising the future of online taxi storylines.

In the "economy" category, the criteria of business competition, added value to consumers, and partnership (between company and drivers) were discussed the most. That business competition was a criterion frequently discussed in the interviews reflects that the current market environment of competition between two giant online taxi companies has influenced stakeholders' imagination about the future of online taxis. In addition, this finding highlights the importance of relationships between stakeholders for imagining the future of online taxis, e.g. in the form of competition between online taxi companies,

Table 4.3. List of criteria for the future of online taxis mentioned in the nine MCM interviews (numbers in parentheses in the first column refer to the frequency the criteria were used by different interviewees).

Economy

Business competition (3)	• standard for business practices that include pricing mechanism, anti-monopoly, non-discrimination
Business ecosystem (1)	• the ecosystem that enables the growth of digital start-ups
Added value to consumers (3)	• the gain for consumers for using online taxi services
Tariff (1)	• the minimum and maximum rates for one trip of an online taxi
Partnership (3)	• the dynamic relationship between company and drivers

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Government Regulation

Consumer protection (4)	• the regulation that protects consumers' safety
Human resources (3)	• the capacity of policymakers to create regulations for online taxis
Regulation for start-up (1)	• the government position toward the emergence of start-ups
Strategic planning (3)	• the trajectory of government policy toward urban mobility
Legal protection (3)	• the law that protects the legality of online taxi services

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Social

Labor exploitation (1)	• the exploitation effect of online taxis on drivers
Health and pension insurance (1)	• the guarantee of health and pension funds for drivers
Driver organization (1)	• the growth and activity of a union for online taxi drivers
Customer organization (1)	• the growth and activity of the customers' community
Gender empowerment (1)	• the effect of online taxis on gender inequality

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Technology

Digital infrastructure (2)	• the supporting facilities that enable the online taxi service
Digital talent (1)	• the number of IT professionals to support the ecosystem
Public transportation (1)	• the quality of mass public transportation
Quotas (1)	• the minimum and maximum numbers of online taxi vehicles in a city

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interactions between company and customers, and 'partnerships' of companies and drivers.

In the "government regulation" category, consumer protection was discussed most during the interviews. The reason could lie in the vulnerable position of consumers and the absence of strong consumer protection. The vulnerability of consumers was expressed by a digital economy expert interviewee: *"Consumer protection must be one crucial criterion because there are still biases, even though the government said they would listen to the public. It is because business players can use think-tank organizations and media to steer public opinion. The media creates public opinion"* - digital economy expert interview 5 March 2020. In this sense, the company has influence over the framing of online taxis in the public media, which means the prevailing public opinion may not truly represent or protect the interests of users or consumers.

Interestingly, none of the five criteria in the "government regulation" category articulate driver protection or drivers' regulation. Some specific criteria proposed discuss the government's position, regulation of start-ups or other business players, and regulation of consumer protection. The reason for the absence of criteria on drivers could be the ambiguous nature of the work of drivers: they are not easily categorized as employees or entrepreneurs. Even the driver representative did not mention or discuss this possible criterion and when asked why, answered: *"Maybe it is because I was having lots of interaction with policymakers and business players. I feel less and less confident in my own imagination of the future and I feel very much influenced by the idea of the future from policymakers"*- interview with the representatives of ADO in 4 April 2020 This answer could indicate the realization of "bounded imaginaries", which means a person's capability to have future imaginations related to others during social interaction. This shows that the multiple stakeholders that were individually interviewed do not possess individual visions after all. Their visions are connected and shaped by one another.

In contrast, the drivers' perspective does feature largely in the "social" category. Here, four of the five criteria are about drivers: labor exploitation, health and pension for drivers, driver organization, and gender empowerment for female drivers. This suggests that drivers' conditions and struggles are merely seen as social consequences of the

disruptive innovation of online taxis, rather than as a crucial development that needs separate legal protection and regulation. Even the drivers preferred to discuss the legal issues of online taxis and the business model of online taxis, but not specifically regulating protection for drivers. Finally, the "technology" category contains criteria that address digital technology (digital infrastructure and digital talent) and transportation (public transportation and transportation quotas). From all interviews, these technical aspects were only discussed by policymakers and experts. This means the actors were divided on which criteria they found important. Technical criteria were more interesting for policymakers and experts, while socio-economic criteria were more important for users' and drivers' communities.

4.4.3 Actor backgrounds and social relations shaping the articulation of future storylines

The interviewee and workshop participants represented a variety of backgrounds. We observed some interesting differences in the way actors perceived futures and articulated future storylines, which was partially influenced by their social relations.

First, the diversity of perspectives could be divided into two categories: market-oriented perspectives and government-led perspectives. Our analysis of categorizing the perspectives is largely based on what the interviewees said during the discussion of regulation criteria in relation to who is the leader or what should be the leading mechanism of the online taxi future. Interviewee answers that proposed a more liberal and market-based mechanism were categorized as being part of the market-oriented perspective, while answers that proposed a more centralized function of the government in regulating innovation were categorized as government-led perspectives.

Second, there was a division of perspectives among policymakers. The representative of KPPU (Supervisory commission of business competition) argued that the future market of online taxis will be competitive and is therefore best governed by a market-based mechanism. On the other hand, the Ministry of Transportation representative argued that tariff regulation led by the government is important to protect drivers from predatory pricing by companies. This argument is also shared by the Ministry of Communication and

Information representative: this ministry favors the government's ability to facilitate marginal actors. The diversity among policymakers implies that their perspectives are not personal but are those of their employer.

Third, even though they shared similar expertise in social criteria, as mentioned in the subsection on appraisal diversity, the drivers' and users' communities have contrasting perspectives related to which mechanism should regulate online taxis. Drivers are more supportive of a government-led perspective, which is in line with the discussion of drivers' bounded imaginaries. Their bounded imaginaries could be the result of the drivers' perspective being formed through frequent interactions with actors who have more authority in imagining the future. As illustrated in the statement during the MCM interview: *"Maybe it is because I was having lots of interaction with policymakers and business players. I feel less and less confident in my own imagination of the future and I feel very much influenced by the idea of the future from policymakers"* - interview April 4, 2020. Similar arguments could explain why the user community is more supportive of a market-based mechanism: *"The news mostly shows the success of business players having minimum correlation with government intervention. Look at the unicorn companies* [Gojek and Grab]*, they grow without government support"* - interview with Queenrides (users community) representatives, May 20, 2020. Users are mostly informed through media and have less direct interaction with the government. As discussed in the subsection on appraisal diversity in the government category, media coverage has generally been sponsored by business players to influence public opinion.

Fourth, we observe the politics of social relations shaping the individual time horizon of future storylines. What we mean by politics of social relations is who talks to whom, when and how? We argue these relations bound the imaginaries of individuals to articulate the future. One example we found was the statement from the driver's community who felt their imagination was limited only to a short time horizon (1 year or less) due to frequent encounters with people from the government. Another example concerns the policy maker from the Ministry of Information and Telecommunication who proposed the "5G Technology Leapfrogging" storyline. His frequent interactions with other coordinating ministers and his active involvement in the national planning of digital infrastructure shaped his optimism and ability to imagine a long-time horizon (20 years and more). *"I have met*

*a lot with influential young people in Indonesian ministries. Young
people tend to work with a long vision orientation and use a concrete
approach in solving problems"* - interview with a policy maker from the
Ministry of Information and Telecommunication, March 10, 2020.
Thus, we analyzed how social interaction forms an important factor in
shaping the length of the individual time horizon.

Fifth, although the MCM interviews and the workshop varied in the
length of the time horizon and problems of online taxis captured, they
might still have longer-term influence by creating a space for future
discussions and collaborations between diverse stakeholders. One of
the respondents from the user organization mentioned: *"I appreciate
the opportunity to be able to listen directly to the drivers' perspectives"*.
Such appreciation suggests that any opportunities for multi-actor
exchange and coordination in shaping mobility are rare. However, the
limitation of this research was the minimum intervention from the
researchers in supporting actors who have a short time horizon to gain
bigger confidence in articulating their future. As one of the drivers'
representatives stated in the workshop *"I feel the research about future
storylines is too far away from my reality, which cannot provide
immediate solutions to my daily problems"*.

4.5   Discussion

Following the presentation of results in the previous section, we now
offer the following four insights. First, future imaginaries are never
purely about a particular technology but more about values and
expectations about the technology to fulfill them. Our case study
shows two storylines which were additionally proposed by actors who
were inspired by emerging technologies (the 5G leapfrogging storyline
and the autonomous vehicle storyline). These additional storylines
illustrate the diversity of future storylines in our case. However, when
we look at the criteria to appraise these storylines, the non-
technological aspects such as regulation, social impact, and economic
issues are more prominent than technical aspects in the articulated
future. This can be seen from the list of criteria for characterizing the
future of online taxis (Table 3). Of the 19 criteria articulated by the nine
participants in the study to appraise online taxis, only four relate to
technological aspects of mobility. Most of the criteria refer to how
online taxis should be positioned in current and future social,
economic, and legal conditions, such as how online taxis should

protect consumers, or how online taxi drivers should obtain fairer working conditions. This echoes a long tradition in the social study of technology in general, and socio-technical future and socio-technical imaginaries research specifically (Konrad and Böhle, 2019), and there is arguably a need to advance approaches to decenter the role of technology in future-oriented technology assessments (Truffer et al., 2017).

Second, we observe a difference in the time horizon of those participating in this research. Some of them think in longer timescales, whereas others mostly have an immediate or medium-term future. Based on the results, actors can be divided by their temporal capacity to imagine the future. For the four policymakers, it was more common to imagine and plan the future of mobility in the next 5-10 or 10-20 years. The three participants from the drivers' community articulated that they found 5-10 years future imagination as too distant and even at times frustrating, because this would not address their immediate daily problems. We note that preferences regarding the time horizon covered by future storylines do not say anything about the cognitive ability to take a short or long-term view. Rather, we argue, it is more important to consider that for some, what happens (and changes) tomorrow is more important than for others. To a driver who is dependent (and worried) about his/her income today or tomorrow, talking about long-term developments may only look like a distraction. Considering the time window of future storylines can help in understanding some of the fundamental challenges of pluralizing future storylines beyond the involvement of experts and professionals. Pluralizing future storylines with involvement beyond the usual suspects not only widens the range of interests to be considered in a future storyline, but also broadens the range of time horizons to be considered. Research on pluralizing the time horizons of future storylines specifically, and the practice of future exploration and anticipation, is still embryonic.

Third, future storylines are shaped in interactions between actors. For example, again on the time horizons our results show how a group with a short-term horizon, such as the drivers' community, becomes more pessimistic when discussing the uncertainty of the future because they encounter a group with a longer time horizon, such as policymakers who have more established plans about the future (and often have the capability to execute them). As a result, these

interactions affected the perspective of drivers who are more in line with the government-led perspectives rather than with driver-driven perspectives. In that sense, it could be that in imagining and creating, the future actors do not a priori possess ready-made imaginaries, but that these imaginaries emerge in social networks through dialog, interaction, and after considering the context and situation of different actor groups.

Lastly, using the MCM method contributed to helping individuals to focus and explore their future storylines without necessarily being influenced by social interactions. Especially the one-on-one MCM interviews were designed to enable individuals to focus on exploring their own ideas about the future and appraisal of future storylines. In this sense, MCM is an inclusive, participatory method that allows the less powerful or voiceless to articulate their knowledge and experiences. However, gathering multiple actors into one dialog session as part of the MCM method is challenging. One should recognize that there is an imbalance in how different participants experience structural power relationships in imagining the future. In the case of the futures of online taxis workshop, when drivers were asked to meet in the offices of decision-makers, they might have been confident about their visions of the future, at the same time feeling intimidated because of the setting and social relationships involved, and what would happen when they shared their views. Therefore, the limitation of this research is in supporting individuals to build more confidence in engaging in dialogue with higher authority individuals. In further research using MCM, this challenge should be better recognized and better navigated.

4.6   Conclusion

Building on research conducted in Indonesia, this study has addressed the question "What insights can be derived from diversifying future storylines in the online taxi industry in Indonesia?" It has explored socio-technical imaginaries for urban mobility future, and specifically online taxis, by embracing a participatory approach in the form of multi-criteria mapping (MCM). Using MCM analysis, this research initiated a dialog that opened up multiple ways of imagining the future and allowed participants to reflect on their own view about the future. This dialog enabled us to uncover four insights of a participatory technique in constructing future imaginaries: 1) future

storylines appraisal are never purely technological; 2) there is a difference in perceptions of time horizons among actors when imagining future; 3) perceptions of time horizons are shaped by actor backgrounds and social interactions; and 4) the MCM method contributed to helping individuals to focus and explore their future storylines. However, the MCM method still has shortcomings as a bottom-up participatory approach. It needs to open up more by engaging with social or cultural practices as alternatives to quantitative measurements in appraising options. Further research could have a more critical reflection on power structure and inequalities in the research design. This study contributes to futuring research by adopting MCM analysis as a tool for constructing future storylines with multiple actors.

CHAPTER 5

INFORMALITY AND INSTITUTIONAL WORK DURING THE COVID-19 CRISIS:

THE CASE OF MOTORBIKE ONLINE TAXI (OJOL) IN INDONESIA

Abstract

This study examines how platform economy actors in informal mobility respond to a major external crisis such as the Covid-19 pandemic. In answering this question, our research focuses on the institutional strategies employed by companies (Gojek and Grab), drivers, and the customers of 'ojol' in Indonesia. The research identifies institutional strategies including framing, collaboration, lobbying, and negotiation employed by these actors to keep motorbike taxi services operating during the pandemic, but also to seek strategic institutional change and renewed legitimacy. These strategies aimed to portray motorbike taxis as essential public services and positioned their drivers as "the heroes of the pandemic," a narrative that persisted beyond the crisis itself. The study reflects on four key roles of institutional work in (1) bridging the gap between legal and legitimate spheres, (2) redefining the legitimacy of ojol operations, (3) fostering trust in digital platforms and constructing social media as a site for employing strategies, and (4) safeguarding the informal economy through a bottom-up approach in legitimacy building. These reflections emphasise the need for transport policies that acknowledge the role of informal transport services, leverage technology for improved efficiency and trust-building, and adopt an inclusive approach that includes all relevant stakeholders.

5.1   Introduction

The case of Indonesian online taxis is an important example of contestation between informal online taxi practices and formalisation efforts by a platform company. There has been an established informal motorbike taxi since the 1980s in Indonesia which is popularly called 'ojek'. Ojek in Indonesia has long been positioned as 'informal transport' that operates "informally and illicitly, and somewhat outside officially sanctioned passenger transport" (Cervero, 2000). According to Frey (2020), the informal nature of Ojek has made the precarious and unprotected working conditions the norm for a long period. There were many attempts by local ojek riders to fill the institutional void to make their activities more legal.

It is not until the arrival of Gojek and Grab in 2015 as digital application companies opening online ojek services, or popularly called 'ojol', that significant new attempts at formalisation of ojek services emerges (Yuana, et al., 2019). However, the status of ojol is not yet legally well-defined due to many rejections on the safety aspect of motorbike as passenger transport services. The argument from those who reject the formalisation of ojol, which are mostly from Ministry of Transportation or transportation experts, is that motorbikes cause more accidents than cars.

The Covid-19 crisis represents an interesting period to study this case. For informal transport services, the pandemic was an external shock, and shocks can be generative to institutional change (Broto et al., 2014). Thus, this presents a good opportunity to see the dynamics of change in the formalisation processes of ojek as legal passenger transport. The Covid-19 pandemic in 2020 hit Indonesia's mobility dramatically, especially when the government advocated working and studying from home and closed all public schools and offices. The crisis has had a detrimental effect on ojek drivers who could not work from home and are dependent on driving for their daily income (ILO, 2020).

The consequences of the Covid-19 pandemic have been argued to be unevenly distributed, with emerging economies and informal sectors suffering more substantially (ILO, 2020; Webb et al, 2020). This study is concerned with understanding how actors in the informal economy in countries like Indonesia have been responding to the pandemic. At

the same time, the pandemic has brought significant improvement into the growth of the digital platform industry (OECD, 2021). As an example Uber's ride hailing demands surged nearly 200 percent in 2022 (New York Times, 2022).

Our study focuses on digital platform innovators who provide services in informal sectors and how they respond to exogenous forces such as Covid-19. Digital platform innovators are actors who create economic value by mediating transaction through digital application (Gawer, 2014; Kenney et al, 2019). There are growing numbers of startups that aim to transform the informal economy by using digital technology (Irawan et al., 2021; Tracey and Phillips, 2011; Wong et al., 2020). In practice, introducing digital platform innovations in an informal economy is considered by innovators or business players as an opportunity to nurture an unregulated market (Hamdoun, 2020; Prasetyo, 2022). Conversely, it is attractive for digital innovators to use the opportunity to introduce their applications in informal economy settings because there is limited regulation and they provide more flexibility for innovators to experiment with their business model. The dominant strategies of digital innovators are to formalise the business activities of already established informal services. However, this strategy comes with controversies and contestation (Unni, 2018).

Ride-hailing app companies, drivers and users conducted some institutional strategies and policies to overcome and negotiate the day-to-day struggles of operating transport services in times of pandemic. We analyse the dynamic of ojol in times of crisis using the concept of 'institutional work', which is defined as "the purposive action of individuals and organisations aimed at creating, maintaining and disrupting institutions" (Lawrence and Suddaby, 2006, p. 214). Institutional work can be categorised as activities such as framing, theorising, collaboration, lobbying, and negotiation. These categories provide a structured approach to the analysis of the institutional work of informal transport services in times of crisis.

This study deals with two interrelated questions, "*How do platform economy actors (companies, drivers, and users) in the informal mobility sector respond to a major external crisis like the Covid-19 pandemic? And what does this tell us about systemic change in the informal economy stimulated by exogenous shocks?*". In answering these questions, our research focuses on the institutional work strategies

employed by online motorbike companies (Gojek and Grab), the drivers, and the customers of 'ojol'.

Our study is thus both theoretically and empirically motivated. First, our contribution lies in the application of the institutional work framework to a new empirical location, i.e. institutional work in the context of informal urban mobility, and specifically to understand how actors navigate motorbike taxi services in times of physical distancing due to pandemic. Traditionally, the services of motorbike taxis are mostly part of informal mobility, which transport authorities in Indonesia largely frame as ill-functioning. Related to that, the platform companies in the taxi industry in Indonesia were motivated to formalise such practices by adopting similar strategies conducted in the developed economy (Frey, 2020). The digital platform innovation in taxi services which Uber pioneers led platform companies to encourage formalisation of such services as 'private regulator' (Van Dijk et.al, 2018). Even though our study focuses on the specific institutional context of informal urban mobility in Indonesia, the findings are arguably also relevant to other cases with a strong informal mobility presence.

Our second contribution is to unfold the dynamics of institutional work of digital platforms in times of crisis. Only a few studies discuss how the pandemic offers a unique opportunity to study institutional work in the context of crisis (Webb and McQuaid, 2020). The pandemic has been largely discussed as a phenomenon that may open windows of opportunity for institutional transformation. These temporarily situated events also resonate with discussions about 'critical moments' (Yuana, et.al, 2020) that are conceptualised as particular times and places where the dominant institutions are unhinged, potentially leading to institutional change. We mobilise institutional work concepts by Pacheco et al (2010) on strategies for institutional change to explore how actors deliberately try to enact institutional change in times of crisis. The notion of crisis as exogenous shocks could act as catalysts to the formalisation of the informal economy which is characterised by institutional work from multiple actors.

This chapter underscores the significance of examining individual behaviors and practices in the context of socio-technical systems. The significance of examining individual behavior and practices in the context of sustainability transitions and socio-technical systems is

particularly relevant to our study of informality among online taxi drivers during the pandemic crisis. By understanding the behavior and practices of these drivers, we gain insights into their adaptability and resilience in the face of a crisis. Their choices, such as adhering to safety measures or altering their service delivery methods, can illuminate how individual responses can impact the informal urban mobility sector's dynamics. Additionally, studying how these drivers navigate the crisis can shed light on the potential for sustainability transitions within this context. For instance, their adaptation to new norms, such as enhanced hygiene practices, can influence the institutionalization of safety standards in the sector, potentially paving the way for long-term sustainability improvements in the informal urban mobility system. Therefore, our research strategically aligns with the call for paper on sustainability transitions by bridging the gap between individual behaviors and broader socio-technical shifts, which is crucial for advancing our understanding of sustainability within the informal urban mobility sector during times of crisis.

5.2   Institutional Work

Our study investigates the role of crisis in institutional work of digital platform actors in informal transport. Recent studies have hinted at the role of digital platforms in fostering informal economic activity; namely, by recruiting workers who typically operate in the informal economy (Fudge and Hobden, 2018; Randolph et al., 2019). Informal institutions can be defined as "shared rules, usually unwritten, that are created, communicated, and enforced outside officially sanctioned channels" (Helmke and Levitsky, 2006, p. 5). The informality of those standards is determined by their unofficial, unwritten nature, but their "institutional" nature is defined by their enforcement. For the most part, informal institutions are usually maintained through interpersonal trust that actors have in the rules that govern the interactions they establish. Trust also plays an important role as a requirement for collaboration and networking in the sector (Pedersen 2001). In distinguishing informal institutions from formal institutions, Webb et al (2009) argue that the informal economy exists due to a discrepancy between what is defined as legal and legitimate by formal and informal institutions. "Legitimacy" is widely used in the literature to describe acceptance of both formal and informal institutions. (Bergek et al., 2015; Binz et al., 2016).

Not only looking at the interrelation between informal institutions and digital platforms, our study further unpacks the dynamic of crisis in shaping informal institutions. There are still only a few studies that investigate institutional work in the time of crisis. Taking Covid-19 as a crisis, Katta et al (2020) argue how the crisis has destabilised digital platforms and forced them to be more embedded to the institution of the location where it operated. A study from the International Labour Organization (ILO) also shows the detrimental effect of Covid-19 crisis on informal enterprises which account for eight out of every ten enterprises in the world. These informal enterprises and workers became vulnerable and were often excluded from financial assistance programmes (ILO, 2020). Furthermore, a study by Webb and McQuaid highlights the effect of Covid-19 on accelerating a better protection policy to the working condition of informal workers by moving to formalisation of employment and fairness for informal employees (Webb and McQuaid, 2020). These studies have foregrounded how informal institutions become more vulnerable and destabilised in times of crisis.

Our study aims to further unpack the interrelation between crisis, digital platform and informal institution. We are investigating how a crisis shapes institutional work, in particular in informal sectors. We adopt the following definition of Institutional work: "the purposive action of individuals and organisations aimed at creating, maintaining and disrupting institutions" (Lawrence and Suddaby, 2006, p. 214). In order to unpack the dynamic of institutional work we are inspired by the work of Pacheco et al. (2010) that proposes a categorization of five institutional change techniques, based on a thorough examination of the literature. Framing, theorisation, promoting collaboration, lobbying, and negotiation are the five primary techniques they identify for accomplishing institutional change. We follow their five-part classification system:

1. Framing: Stakeholders attempt to reframe the crisis as an opportunity and portray their services as essential in addressing the needs of the community.
2. Theorisation: Stakeholders develop new theories and narratives to explain the crisis and its impact on their businesses.
3. Collaboration: Stakeholders form partnerships and alliances with other organisations and companies to address the

challenges posed by the crisis.

4. Lobbying: Stakeholders engage in advocacy and lobbying efforts to influence government policies and regulations related to their businesses.

5. Negotiation: Stakeholders negotiate with various stakeholders, including government agencies and customers, to find mutually beneficial solutions to the challenges posed by the crisis

5.3   Data collection and data analysis

5.3.1   Case Selection

We conducted an in-depth case study into how Gojek and Grab tried to mobilise the institutional void of *ojek* during the beginning of Covid-19 outbreak in Indonesia to undertake institutional work. We consider the case well-suited for an analysis of institutional work in the Global South context for two reasons. First, it is a fitting demonstration of the impact of the digital platform economy on the evolution of informal institutions in transport.   *Ojek* in Indonesia has long been positioned as 'informal transport' that operates "informally and illicitly, and somewhat outside officially sanctioned passenger transport (Cervero, 2000).

"Ojek" or motorbike taxi has existed since 1970's in Indonesia. It was viewed as a transportation solution to inaccessible remote areas by car taxis or other public transports in the cities. The ojek's riders usually wait in the corner of the street sections and offer their services with informal methods i.e., no taxis licence, no standard pricing mechanism, etc. After the economic crisis in Indonesia in 1998, the numbers of ojek riders are increasing as a consequence of massive layoffs (Anggraeni, 2017). Traditionally, there was an institutional void in the position of ojek as public transport because the public authorities tolerate their existence and see it as temporary and invisible to the city's fabrics. There are no national level rules that legalise ojek as public transport, however local authorities provide local rules that allow the operations of ojek in specific areas (Yuana, 2019).

Even though local ojek riders conducted many attempts to fill the institutional void to be more legal, it is not until the emergence of Gojek

and Grab as digital application companies that bring a significant contribution to the formalisation of ojek services (Yuana, et al., 2019). Second, the Covid-19 outbreak in early 2020 has become an important critical moment for Gojek and Grab to redefine legal and social functions of ojek in Indonesian society. There have been five critical moments through which the online taxi discursive battle has taken place in Indonesia (further details on Yuana, et al, 2020). The Covid-19 outbreak, followed by social distancing policy has become a crucial battle to negotiate the normalisation of motorbikes as passenger transport. Our case study specifically looks into the case during the first social distancing phase, which in Indonesia is called PSBB (Pembatasan Sosial Berskala Besar).

The decision of PSBB was mainly following the international norms in social distancing, which means the government attempted to restrict physical interaction in the society to minimise the risk of transmitting the Covid-19 virus. However, the implementation of PSBB was facing multiple rejections especially from informal business sectors who rely on their economic activities from physical interaction. Ojek motorbike taxi riders were most severely impacted, because they were dependent on physical interaction with their passengers. At the beginning of PSBB ojek services were banned. However, influenced by multiple interactions between the digital application company, the drivers, the government and other stakeholders of ojek, the prohibition was lifted. This research focuses on the first social distancing policy, because we found there was an institutional void in the transportation services during this first social distancing that shaped the policy of government towards ojek services for the following social distancing policies.

5.3.2   Data Collection

The research utilised a qualitative methodology comprising three analytical steps. The first step involved conducting a systemic scan of public discussions in news and social media platforms. The purpose was to identify the dynamics and strategies employed between 1st March and 31st August 2020, during the period between the first and second PSBB (Large-Scale Social Restrictions) implementations. The national digital news media outlets, Kompas.com and Tempo.co, were scanned for relevant news articles. Additionally, Twitter posts from Gojek and Grab were monitored to identify their strategies and social communications. To gain insights from the community, the research

also examined the Facebook Group of Riders Association. We used a qualitative methodology which consisted of the following three analytical steps.

To obtain data for this step, a search query on the term "PSBB Ojek Online" was applied to the two news media outlets, resulting in a selection of 214 articles. These articles were first scanned for relevance and then coded into five institutional work strategies. Similar steps were followed to collect and analyse data from the Twitter accounts of Gojek and Grab, as well as the Facebook group of ojek riders. These social media platforms were commonly used spaces for ojek riders to communicate and socialise their aspirations.

The second step involved conducting interviews with key stakeholders involved in the ojek online industry, including two interviewees from the ojek rider's organization, two from the Ministry of Transportation, two experts on the digital economy, and two experts on the ojek riders' movement. A total of eight interviews were conducted, indicating a diverse range of perspectives and expertise. These interviews aimed to triangulate the insights from online data and to gather insights and perspectives from different actors who could provide valuable information regarding the impact of Covid-19 on the work of ojek online and the strategies employed to respond to these challenges.

The semi-open questions used during the interviews allowed for flexibility and encouraged participants to provide detailed responses based on their knowledge and experiences. The interview questions included:

1. What were the most significant impacts of Covid-19 on the work of ojek online? This question aimed to explore the specific challenges and disruptions faced by ojek riders as a result of the pandemic. It sought to identify the key areas that were most affected by the crisis.
2. What strategies were employed to respond to the impact of Covid-19? This question aimed to uncover the various approaches and initiatives undertaken by different stakeholders to mitigate the negative effects of the pandemic on the ojek online industry. It sought to identify both individual and collective efforts to adapt and sustain operations during this challenging period.

3. How did informal jobs evolve during Covid-19? This question aimed to understand the changes and adaptations that occurred in the realm of informal employment, specifically within the context of ojek online. It sought to explore whether there were shifts in work patterns, employment arrangements, or the overall nature of informal jobs in response to the pandemic

During the interviews, the researchers also discussed the list of institutional work strategies. This involved sharing and discussing the predetermined set of strategies relevant to the ojek online industry. These strategies included various approaches, policies, or initiatives that were considered effective or necessary for addressing the challenges posed by Covid-19. By discussing these strategies, the researchers aimed to gain further insights into their applicability and effectiveness within the specific context of ojek online and explore potential gaps or areas for improvement

In addition to the interviews and analysis of social media content, the research also collected data from a variety of documents and scholarly publications. This additional data source aimed to provide a broader understanding of the impact of Covid-19 on the platform economy, particularly focusing on the ojek online sector in Indonesia during the period of 2020 to 2021.

A total of 23 documents were collected as part of this research. These documents included official reports from the online taxi companies, policy documents from the Ministry, and blogs from online taxi company's official website that discussed the impact of Covid-19 on the platform economy. Furthermore, this research reviewed 10 scholarly publications that specifically addressed the impact of Covid-19 on the platform economy and, more specifically, on ojek online services in Indonesia.

5.3.3 Data Analysis

The collected data was analysed using NVivo 11, a software designed for qualitative data analysis. The analysis process involved coding and categorising the data based on the five identified institutional work strategies, which was conducted iteratively. Initially, a filtering approach was employed to select text passages that explicitly

Table 5.1 Samples of data categorisation

Strategies	Specific examples from our case	Data examples
Framing	Ojek riders are part of "high risks and vulnerable group"	"Our income is in ruins, people are already complaining, everyone is confused about the situation. Hopefully, the pandemic will be over soon," Ali, Gojek Driver (Kompas, 11th April 2020)
		"PSBB without the fulfilment of basic needs for vulnerable groups will be difficult to be effective. Because people have no choice. They have to continue working to meet their basic needs." (Kompas, 10th April 2020)
		"Previously, many online ojek drivers complained because the passenger transport feature was suspended during PSBB, even though the delivery feature for goods and food remained allowed. This is because 70 percent of their income comes from passenger transportation." (Kompas, 8th June 2020)
		"Let's support our local drivers and merchants for their 'heroic' efforts in continuing to provide you with delightful services during this difficult period" – Gojek's Blog 24 July 2020
	Ojek riders are part of the heroes of the pandemic.	"Ojek riders are our hero who deliver the society needs from local shop or restaurant to the our home" (Investor.id, 2021)
Theorisation	Platform companies and drivers mobilise social-media hashtag to develop new narratives in explaining their business transformation during the crisis	"Even though you are #dirumahaja (stay at home), you can still meet your daily needs with Gojek. You can order food through GoFood, shop with GoShop or GoMart. So, your daily needs can still be fulfilled." - Gojek Blog, 21st March 2020
		"The pandemic has set us on a new journey of innovation to come up with solutions to solve some of the many challenges the coronavirus pandemic is creating. For now, we implore each of you to stay home and stay healthy.#dirumahaja" - Gojek Blog, 20 April 2020
		"For those who are looking for driver services for: – Pick up or people transport – Delivery of goods / food – Take a shopping trip You can monitor the hashtag #ButuhDriver which is spread in many areas. At the same time, it can help drivers get additional income in difficult conditions like this. Thank you" @ryan_nus account on Twitter, 9 April 2020
Stimulating Collaboration	Gojek and Grab initiative of telemedicine by collaborating with local pharmacies, doctors or health providers to give online health consultation and medicine deliveries.	"We believe this collaboration will strengthen the COVID-19 handling system developed by the government comprehensively. The telemedicine solution offered is very helpful for the Indonesian health system in screening patients at risk for COVID-19. Not only that, Gojek and Halodoc have access to disseminate information and education on COVID-19 prevention to tens of millions of Indonesians," Oscar Primadi (IDNfinancials, 2020)
	Gojek and Grab initiative of financial support/lending to ojek riders by collaborating with financial banks or providers.	

Strategies	Specific examples from our case	Data examples
Lobbying	Advocacy to the Ministry of Transportation by digital application companies and ojek riders to ease the physical distancing restriction. Advocacy to the Ministry of Social by ojek riders to get social support Advocacy to the Ministry of Employment by ojek riders community to recognise the status of informal workers	"Where do we want to find income when there is a lockdown. When there is a lockdown, all activities are completely paralyzed for online motorcycle taxi drivers. And practically they lose their income. This is dangerous, because online motorbike taxis also need income to make a living and to pay vehicle repayments," Igun Wicaksono, the President of GARDA Indonesia, 18 March 2020
Negotiation	Digital application companies and ojek riders negotiate with the government about the meaning and implementation of physical distancing and health protocols for motorbike taxi services	"Then for two-wheeled vehicles, these two-wheeled vehicles are also permitted to be a means of transportation. Once again, it is only permitted to be a transporter for basic needs or indeed work in the permitted sector (health sectors, public services, etc)"- Governor Anies Baswedan, 9 April 2020 "This rule was based on the 'real' or practical reality of current mobility, but the government will consider the evolving dynamics and has the possibility of being changed and adjusted" - Ardita, Spokesperson of Ministry of Transportation, 12 April 2020.

mentioned keywords related to the research context, such as "crisis," "Covid-19," "pandemic," and "lockdown." This step enabled the researchers to focus on data directly relevant to the research objectives.

To further analyse the data, specific keywords associated with each institutional work strategy were employed to explore their presence in the articles and social media posts. Some examples of the keywords were: (1) Framing strategies: "frames", "opinion", "meaning", "problems", "impact" (2) Theorisation strategies: "theory", "model", "solution" (3) Stimulating Collaboration: "collaboration", "cooperation", "union", "solidarity" (4) Lobbying: "lobby", "advocate", "campaign", "deliberation" (5) Negotiation: "negotiation", "discussion", "forum", "consensus". The initial categorizations of data were utilised to construct a table representing the institutional work strategies. This table provided a structured overview of the identified strategies, serving as a foundational framework for subsequent analysis.

During the interview process, the researchers actively engaged with the interviewees to gather their perspectives on the pre-existing institutional work list, which had been built based on the initial data collection and was presented in Table 5.1. This interactive discussion allowed for valuable insights and practical inputs from practitioners

and experts, contributing to the refinement and validation of the table of institutional work strategies.

Additionally, the data obtained from the interviews played a crucial role in identifying the dynamic nature of institutional strategies in the field. Through these interviews, the researchers gained a deeper understanding of how the strategies were implemented, the nuances and tensions associated with their execution, and the interconnections between different strategies.

5.4   Impact of Covid-19 crisis to informal motorbike taxi

5.4.1   Impact of Covid-19 to informal motorbike taxi

The COVID-19 pandemic had a significant impact on ojek online in Indonesia. The restrictions on mobility and social distancing measures led to a decline in demand for transportation services, affecting the livelihoods of ojek drivers. The shift towards online and contactless services also made it more challenging for ojek drivers to find customers. Indonesian informal workers, such as motorcycle taxi drivers have suffered due to COVID-19 restrictions as their livelihood depends on daily earnings. These groups work in the informal service industry and require close contact with customers, causing them to be affected by social distancing and changes in consumer behaviour.

On the other hand, the pandemic also created new opportunities for ojek online companies as people become more reliant on delivery services for essential goods. The companies had to adapt to the new reality by implementing measures to ensure the safety of their drivers and customers, such as contactless delivery and enhanced hygiene protocols. As evidence of this opportunity, during the first PSBB (the first social distancing) food delivery orders doubled in the Gojek app and groceries orders tripled (Gojek, 2020).

In addressing the difficulties faced by online taxi drivers, online taxi stakeholders (companies, drivers and policy makers) employed multiple efforts. A survey by the Demography Institute of the Faculty of Economics and Business at Universitas Indonesia (LD FEB UI) of 41,393 Gojek partners revealed that despite the ongoing COVID-19 pandemic, the spirit of mutual aid among workers in the digital economy ecosystem remains strong. The survey found that within the

pandemic conditions, both the company Gojek, its partners and consumers within the ecosystem helped each other. The majority of Gojek partners (89%) reported receiving social assistance from the company Gojek, 21% from consumers, and 5% from other partners. Gojek partners also reported receiving government assistance for those affected by the COVID-19 pandemic.

5.4.2 Institutional works of motorbike ride-hailing

The first PSBB was a turning point for the institutional stability of informal transportation in Indonesia as it highlighted the limitations of the informal sector and the need for more formal regulations and support. The government had to respond to these debates and find ways to support informal transportation workers while also ensuring public safety and controlling the spread of the virus. It is critical since the policy in this PSBB period and its aftermath set the stage for ongoing debates and negotiations about the future of informal transportation in Indonesia. Here we analyse these developments through our institutional work framework.

Framing

During the first PSBB, ojek riders were framed as both 'high risk and vulnerable group' and 'the heroes of the pandemic'. This framing was used by various stakeholders, including online ojek companies, to emphasise the crucial role of ojek riders in providing essential transportation services during the crisis. By portraying them as high risk and vulnerable, it shed light on the challenges they faced, particularly when the passenger transport feature was suspended. As one ojek rider, Ali, expressed,

> *"Previously, many online ojek drivers complained because the passenger transport feature was suspended, even though the delivery feature for goods and food remained allowed. This is because 70 percent of their income comes from passenger transportation" - Ali, (Kompas, 11th April 2020).*

This situation highlighted the detrimental impact of the restrictions on their livelihoods. In addition, by portraying ojek riders as heroes, these stakeholders aimed to increase public support for the sector and raised awareness of the challenges faced by informal transportation

workers. As stated in the official blog of Gojek:

> *"Let's support our local drivers and merchants for their 'heroic' efforts in continuing to provide you with delightful services during this difficult period"* – Gojek's Blog 24 July 2020

The framing of ojek riders as heroes also served to counteract negative public sentiment towards informal transportation services, which were often seen as unregulated and unsafe. By highlighting the contributions of ojek riders in ensuring mobility during the pandemic, companies sought to improve the image of the sector and increase its legitimacy. For example, Gojek implemented "Covid-19 Prevention Points" as a framing strategy to create safe physical meeting spaces for its partners and app users. These points were equipped with temperature screenings, hand sanitizers, and masks, and reinforced physical distancing rules with safe queue management, including trained personnel and marking stickers. The implementation of these "Covid-19 Prevention Points" frames was a way for Gojek to ensure the safety and comfort of its partners and app users during the COVID-19 pandemic (Gojek, 2020).

A similar strategy was also employed by Grab to implement measures to protect the safety of its customers, merchants, and delivery partners. The company rolled out contactless delivery across multiple services such as GrabFood, GrabExpress and GrabKios. They also educated their merchant partners on taking employee temperatures before starting work and implemented daily temperature reporting for drivers and delivery partners. Additionally, the company distributed 2000 digital thermometer guns to merchant partners (Jakarta Post, 2020). Furthermore, the hero framing was used by online ojek companies to position themselves as socially responsible organisations and reinforce their mission to empower informal transportation workers. The framing served to reinforce the importance of informal transportation services during the pandemic and raise awareness of the challenges faced by informal transportation workers.

Theorisation

In response to the physical distancing measures during the COVID-19 pandemic, Gojek developed a new theory and narrative to explain the

crisis and its impact on their business. One of the key strategies that Gojek used was the hashtag #dirumahaja, which was designed to promote social interaction in response to the physical distancing measures. The hashtag #dirumahaja encouraged people to stay at home and limit physical contact with others. This new narrative became a novel way for Gojek to position digital services in relation to facilitating daily needs of the society e.g. food deliveries, groceries shopping, telemedicine, digital payment, etc. These daily needs orders were personally delivered by motorbike taxi drivers in an attempt to maintain job occupancy in ojek during the pandemic. This message was in line with the government's social restriction policy and aimed to help slow the spread of the virus. The hashtag was part of Gojek's larger narrative of empowering informal transportation workers and promoting social responsibility during the pandemic. To attract deeper solidarity between drivers and customers Gojek employed hashtag #KasihLebihan to encourage customers in giving extra tips to the drivers. Covid-19 crisis enabled momentum for Gojek to tweak the their ride-hailing services to the new circumstances as being stated in their official blog below:

> *"The pandemic has set us on a new journey of innovation to come up with solutions to solve some of the many challenges the coronavirus pandemic is creating. For now, we implore each of you to stay home and stay healthy. #dirumahaja "* - Gojek Blog, 20 April 2020

Another theorisation strategy emerged from drivers of the online taxi. The #ButuhDriver was a movement on Twitter started by Jakarta motorcycle taxi drivers in response to a ban on their services by the local government or PSBB. Drivers used Twitter to offer their services, such as food delivery, package delivery, and personal taxi service. The hashtag allowed customers to find drivers directly and avoid the fees associated with digital labour platforms like Gojek and Grab. Drivers were able to tailor their services to the specific needs of their customers, offering a more flexible and personalised solution (Octavia, 2021). The mechanism of the #ButuhDriver hashtag on Twitter was more flexible than the digital app of ride-hailing. Motorcycle taxi drivers in Jakarta would post tweets offering their services, including information about the type of delivery or transportation they could provide, their location, hours of operation, and other relevant details. They would then tag their tweets with the hashtag #ButuhDriver, which made it easier for customers to find them. By searching for this

hashtag, customers could see all the tweets from drivers offering their services in one place, and could directly contact the driver they were interested in using. One example of such a tweet is shown below:

> *"For those who are looking for driver services for:*
> – *Pick up or people transport*
> – *Delivery of goods/food*
> – *Take a shopping trip*
> *You can monitor the hashtag #ButuhDriver which is spread in many areas. At the same time, it can help drivers get additional income in difficult conditions like this. Thank you"* @ryan_nus account on Twitter, 9 April 2020

This post shows an example of institutional work conducted by ojek riders in Twitter through hashtag #ButuhDriver. This tweet was posted on 9 April 2020 and was one of the earliest responses to the PSBB restriction, which started in Jakarta from 10 April 2020. Even though PSBB prohibited ojek to do passenger transport services, this tweet still provided transport services for people and represented the informal mechanism of transportation during physical distancing measures.

Further, this hashtag allowed drivers to bypass the fees associated with using digital labour platforms like Gojek and Grab. By connecting with customers directly through Twitter, drivers could offer their services at a lower cost, since they did not have to pay the fees charged by the platforms. Additionally, the hashtag allowed drivers to be more flexible and personal in their services since they could tailor their offerings to the specific needs of their customers. In this way, the hashtag #ButuhDriver served as an alternative mechanism for Jakarta residents to find motorcycle taxi services, while also providing drivers with an opportunity to offer their services in a more cost-effective and personalised manner. Twitter's #ButuhDriver initiative successfully made up for the lost income suffered by motorbike taxi drivers in Jakarta. On average, drivers reported that at most they earned Rp300,000 (US$21) during the pandemic, which was close to the pre-pandemic earnings of Rp400,000 (US$28 (Octavia, 2021). Despite the success of the initiative, most drivers ended up working again through the digital platforms once the PSBB prohibition to ojol as passenger services was lifted.

Stimulating Collaboration

Online taxi companies in Indonesia, such as Gojek and Grab, utilised collaboration as a means of institutional work during the COVID-19 pandemic. In the face of the crisis, these companies saw the need to work together in order to respond to the changing circumstances and ensure the survival of their businesses. The collaborations conducted in the first PSBB were focused on three aspects: healthcare, information centre and social support.

First, in the healthcare sector, Gojek collaborated with the Ministry of Health and Halodoc (a digital app company for health providers) launched a telemedicine service called Check COVID-19 to help address the COVID-19 pandemic in Indonesia. This collaboration was officially launched on 23 March 2020 by the signing of a memorandum of understanding (MoU). The service, which was supported by over 20,000 licensed and experienced doctors within the Halodoc ecosystem, was available as a shuffle card on the Gojek app. Users of the app could choose the Check COVID-19 shuffle card and would be directed to the Check COVID-19 service on the Halodoc app, where they could consult with doctors about their symptoms and self-assess for COVID-19. If it was suspected that a user may have COVID-19, Halodoc doctors would try to manage their care remotely, including prescribing medication that could be delivered by Gojek to the user's home. If further treatment was needed, the user would be referred to a designated hospital. This telemedicine innovation was designed to strengthen the government's efforts to address the COVID-19 pandemic as being stated by Oscar Primadi, Secretary General of the Indonesian Ministry of Health during the official launching event:

> *"We believe this collaboration will strengthen the COVID-19 handling system developed by the government comprehensively. The telemedicine solution offered is very helpful for the Indonesian health system in screening patients at risk for COVID-19. Not only that, Gojek and Halodoc have access to disseminate information and education on COVID-19 prevention to tens of millions of Indonesians,"* Oscar Primadi (IDNfinancials, 2020)

According to the World Health Organization, about 80% of COVID-19 patients worldwide had mild symptoms and recovered at home without needing hospitalisation, therefore this type of collaboration

was imperative in sustaining informal motorbike taxis services in times of physical distancing. (Gojek, 2020) .

At the same time, Grab Indonesia also offered their resources and network to multiple government ministries as they worked to combat the COVID-19 pandemic. The company set up GrabHealth to alleviate some of the burden on hospitals by offering free in-app consultations for initial COVID-19 checks. They also offered free COVID-19 testing for healthcare workers and their driver-partners. GrabHealth partnered with Good Doctor to provide free preliminary COVID-19 telehealth screenings through the GrabHealth service. This service allowed users to consult with doctors and get a screening to determine whether or not they had COVID-19. The GrabHealth service was appointed as a trusted partner of the Health Ministry. Grab also worked with the Ministry of Agriculture and major livestock and food supply partners, to ensure that all Indonesians could continue to have convenient access to livestock and food products even as they stayed home during PSBB, delivered via GrabExpress right to their doorstep (Jakarta Post, 2020)

Second, Gojek partnered with the Indonesian Ministry of Health and the National Disaster Management Agency (BNPB) to create a COVID-19 Taskforce. As part of this collaboration, Gojek developed a COVID-19 Info Center within its app. This center provided real-time information about the COVID-19 situation in Indonesia, including the locations of referral hospitals and contact information for assistance. The COVID-19 Info Center also included a guide on health protocols that people could follow to protect themselves and others from the virus. By providing this information through its app, Gojek was helping to ensure that people in Indonesia had access to reliable and up-to-date information about COVID-19.

Third, Gojek and the Anak Bangsa Bisa Foundation also started providing food packages to healthcare workers (nakes) who were on the frontlines of caring for COVID-19 patients. This initiative was implemented in several referral hospitals in the Jakarta area, including the Dr. Sulianti Saroso RSPI and the Wisma Atlet Emergency Hospital. The food packages were provided by local small and medium-sized enterprises (UMKM) partners through GoFood Festival and GoFood Kitchen and were delivered using the GoBox service. This initiative was part of a broader collaboration between

Gojek, the Indonesian Ministry of Health, and the Indonesian Hospital Association (PERSI) to address the COVID-19 pandemic, which previously involved the distribution of travel vouchers through GoRide and GoCar to healthcare workers. In addition to this initiative, Gojek was also encouraging its customers to participate in its #bantugardaterdepan campaign by making at least three transactions per week on GoFood. These transactions would help to contribute to the program of providing food packages to Gojek drivers and healthcare workers. Many GoFood merchants were also offering special treats for online drivers that could be ordered by customers as a way to show their support and kindness.

Grab Indonesia also focused on helping MSMEs (micro, small, and medium enterprises) stay open for business during the pandemic. With foot traffic to physical stores declining, the company introduced GrabMart, a daily delivery service for goods in Jakarta, Bandung, Makassar, Surabaya, Semarang, Yogyakarta and Bali, as well as GrabExpress Nalangin in 234 cities. GrabExpress Nalangin, also known as GrabAssistant, was a service similar to Cash on Delivery (COD) that allowed customers to buy goods of up to Rp 200,000 (US$ 12.86) using the feature and make the payment on delivery. Customers could also use GrabExpress Nalangin Car if they prefered to buy more goods of up to Rp 1 million maximum. The service allowed driver-partners to inform how much cash they have and the value of the GrabExpress Nalangin orders they receive would be adjusted accordingly. This gave social sellers and small merchants a platform to continue selling their goods. With more merchants on the platform, Grab driver-partners had more earning opportunities and were playing a critical role in helping to keep the Indonesian economy moving. To further support them, the company rolled out the GrabCare support package for driver-partners that included financial and medical assistance, and also distributed thousands of staple food packages. (Jakarta Post, 2020)

Lobbying and Negotiation

The first period of PSBB in Jakarta was a critical moment in the transition of urban mobility in times of crisis. This moment represented an institutional void because there was a lack of institutional measures in place during that time. This moment brought challenges to the ride-hailing industry due to physical

distancing measures. Despite these challenges, ride-hailing companies and their stakeholders engaged in various lobbying and negotiation tactics to maintain the legitimacy of their services as a means of transportation for passengers. These strategies aimed to ensure that ride-hailing services remained an acceptable mode of transportation despite the restrictions put in place during the PSBB.

According to the Minister of Health Regulation No. 9 of 2020, signed by Minister of Health Terawan on April 3, 2020, during the first period of PSBB, ojols were not permitted to carry passengers and were only allowed to be used for delivering goods/food. This regulation was enacted as part of efforts to mitigate the spread of COVID-19 and maintain physical distancing measures during the PSBB.

As a response to the planning of PSBB in Jakarta, the National Presidium of Garda Indonesia, which represents motorbike riders and online motorcycle taxi (ojek) drivers, responded to the restrictions on carrying passengers during the first period PSBB as follows:

> *"Where do we want to find income when there is a lockdown. When there is a lockdown, all activities are completely paralyzed for online motorcycle taxi drivers. And practically they lose their income. This is dangerous, because online motorbike taxis also need income to make a living and to pay vehicle repayments,"* Igun Wicaksono, the President of GARDA Indonesia, 18 March 2020

They rejected the restrictions and argued that motorcycles are a crucial means of transportation for everyday activities for the general public, particularly for those in poverty, and for ride-hailing drivers, motorcycles are their source of income. The head of the organisation called for the governor of DKI Jakarta to not ban drivers from carrying passengers and issued a statement expressing their opposition on April 9, 2020 (Detik News, 9 April 2020)

Subsequent lobbying was attempted by the Governor Anies Baswedan of DKI Jakarta, who actively worked to persuade the national government to allow ride-hailing services, including online motorcycle taxis and online taxis, to carry passengers during the implementation of PSBB. The initial regulations of the PSBB prohibited ojeks from carrying passengers but allowed online car-taxis to do so during the first two weeks of implementation. Governor Anies emphasised that

the provincial government was working with ride-hail operators and had measures in place to prevent the spread of the virus. He announced the results of his lobbying efforts in a press conference on April 10, 2020 through the Facebook Official Account of Pemprov DKI Jakarta. (Facebook, 2020) as being quoted below:

"Then for two-wheeled vehicles, these two-wheeled vehicles are also permitted to be a means of transportation. Once again, it is only permitted to be a transporter for basic needs or indeed work in the permitted sector (health sectors, public services, etc)"- Governor Anies Baswedan, 9 April 2020

As part of these lobbying efforts from ride-hailing stakeholders, on 12 April 2020 the Indonesian Ministry of Transportation issued regulation Permenhub No 18, 2020. . The regulation outlined the protocols to be followed before, during, and after transportation, such as the requirement for transportation operators and facilities to disinfect their vehicles and attributes, and for drivers to wear masks and gloves. The regulation also allowed motorcycles, including ride-hailing services, to carry passengers with strict conditions, including the requirement to follow health protocols.

Figure 5.1 shows the health protocols for ojol, which were the result of negotiations between digital application companies, ojek riders and the government in manifesting the meaning of safety and social distancing in times of pandemic. In the picture, ojek riders were sprayed by disinfectant in some health protocol spots provided by the digital application companies. The ojek riders were equipped with a plastic shield on their back to ensure social distancing. This regulation

Figure 5.1: Health Protocols for Ojol during PSBB
(photo credit: CNN Indonesia/Farid and Antara/Arif Firmansyah).

prescribed that, to be able to transport passengers, online motorcycle drivers must meet several requirements including (1) only transport passengers as long as they are not related to activities prohibited during PSBB; (2) disinfecting vehicles and equipment before and after transport; (3) wearing masks and gloves; and (4) not driving if they are sick or have a temperature above normal. The Ministry of Transportation argued the legitimacy of this measurement as follows:

> *"This rule was based on the 'real' or practical reality of current mobility, but the government will consider the evolving dynamics and has the possibility of being changed and adjusted"* - Ardita, Spokesperson of Ministry of Transportation, 12 April 2020.

However, the regulation from the Ministry of Transportation allowing motorbikes as passenger services was controversial, because it was in conflict with the regulation from the Ministry of Health, which prohibited it. This created confusion and conflicting guidelines for ride-hailing services, including ojeks. The difference in regulations between the two government agencies led to debates and negotiations on the meaning of safety in transportation services.

Transportation experts and consumer representatives offered further critiques. Through public media, the transportation expert, Agus Pambagio, stated that the regulation from the Acting Minister of Transportation, Luhut, conflicted with the main regulations that formed the basis of PSBB, including the Health Minister Regulation Number 9 of 2020, the Health Quarantine Law Number 6 of 2018, and the Government Regulation Number 21 of 2020. He also noted that the implementation of the Governor of DKI Jakarta Regulation Number 33 of 2020, which was the specific basis for the PSBB in the capital city, was problematic. Agus suggested that the regulation from the Ministry of Transportation should be revoked and revised as soon as possible to make the PSBB in the number one city in Indonesia run effectively and clearly. He argued:

> *"The authorities become ambiguous in enforcing the law. Without enforcement, the PSBB would be useless because the transmission of Covid-19 can still occur through the transportation of two-wheeled vehicles, both commercial and private."* - Agus Pambagio (Kompas, 12 April 2020).

In the same media, the Ministry of Transportation responded to this statement:

> *"This regulation is not conflicting with the Health Minister Regulation Number 9 of 2020, because we have coordinated with the Minister of Health and the Governor of DKI Jakarta"* - Spokesperson of Ministry of Transportation, 12 April 2020.

The Indonesian Consumer Foundation (YLKI) evaluated that this regulation showed that the government is playing around in handling the spread of the corona pandemic. Therefore, YLKI asked the government to revoke Minister of Transportation Regulation (Permenhub) Number 18 of 2020 concerning transportation control in the prevention of the spread of Covid-19. Tulus Abadi, the Secretary-General of YLKI, evaluated that the government should not take compromising actions in controlling Covid-19:

> "*The government still appears not serious and appears to be playing around in controlling this outbreak. This provision is very misleading, has potential for many violations and is misused,*" Tulus Abadi (Kompas, 12 April 2020).

In the regulation issued by The Ministry of Transportation (Permenhub), according to Article 11 paragraph 1 point c of Permenhub, the application-based motorcycle is limited to use only for the transportation of goods. However, in point d, online motorcycles can transport passengers in certain circumstances. YLKI evaluated that if Permenhub is implemented, PSBB will be useless:

> "*Because it diametrically violates health protocols. We ask online motorcycle applications not to comply with this Permenhub.*" (Kompas, 12 April 2020).

However, to respond to this concern, the Director of Land Transportation of the Ministry of Transportation Ahmad Yani said that applications such as Gojek and Grab prepared technology to support the supervision of Permenhub:

> "*They said they were ready.*" (Kompas, 12 April 2020).

Ride-hailing companies and drivers became the biggest supporters of

Permenhub regulation. Gojek welcomed the release of Permenhub 18, 2020 which allows ojek transportation to carry passengers during social restrictions. The Chief of Corporate Affairs of Gojek, Nila Marita, stated that the regulation could help mobility for people who are still allowed to go outside their homes according to PSBB rules, and also help the online motorbike drivers maintain their income for their families. Gojek stated that they have taken various steps to protect the health of its drivers and passengers, such as distributing hundreds of thousands of health packages to drivers in the Jakarta area and other cities in Indonesia.

Similar support was stated by the Head of Public Affairs Grab Indonesia, Tri Sukma Anreianno, who spoke about the Ministry of Transportation Regulation (Permenhub) No. 18 of 2020, which allowed online motorcycles to transport passengers during PSBB. He said Grab was still waiting for guidance until the regulation is fully implemented. Claiming to speak on behalf of Grab drivers, he appreciated the government for listening to input from drivers regarding the regulation, which was at the time in the legislative process. As part of negotiation efforts in redefining the meaning of safety, Grab prepared various health procedures outlined in PM 18 and ensured the readiness of drivers and passengers. Grab stated that they actively encouraged all its drivers and delivery partners to prioritise their health and take comprehensive preventive measures, including wearing masks and gloves at all times, regularly disinfecting vehicles and delivery bags, frequently washing their hands, and maintaining safe distances through contactless delivery procedures for GrabFood, GrabExpress, GrabFresh, and GrabMart.

In this uncertain period of the legitimacy of motorbike taxi as passenger transport, ojek riders employed a lobbying strategy through Facebook group and Twitter by adding more arguments regarding the urgency of allowing motorbike as passenger transport during PSBB. In the Facebook Group of the Association of Online Motorcycle Taxi drivers, Igun Wicaksono as the head of the Garda Indonesia association, stated that the income of drivers operating in the area of Jakarta had decreased by 80 to 90 percent due to the conflicting regulation on carrying passengers. Although ojols were still allowed to carry goods or food this could not cover the cost of living for drivers. According to him, the number of deliveries was also decreasing. In addition, in doing their delivery jobs ojols must have capital to take

food orders, and if they did not, they were facing difficulties. Igun stated he had sent a letter to the Presidential Palace so that ojols could transport passengers again during PSBB due to fulfilling their daily livelihood demand:

> *"Yesterday we lobbied with a letter to the President, asking for a solution to allow ojols to carry passengers again."* (Kompas, 15 April 2020)

5.4.3. Institutionalization through Strategic Behavior

The examination of individual behavior and practices within the context of sustainability transitions and socio-technical systems takes on a strategic dimension in our study of informality among online taxi drivers during the COVID-19 crisis. This perspective on behavior considers actions as strategic, intentional maneuvers undertaken by a range of actors, including niche innovators, established firms, government agencies, and other organizational entities (Kaufman et al., 2021). In our study, it is evident that the behavior of online taxi companies, driven by strategic intentions, was central to the institutionalization process within the transportation sector during the pandemic.

The institutionalization efforts of these companies extended beyond their own business operations and actively engaged with regulatory institutions, such as the Ministry of Transportation and the Ministry of Health. These strategic interactions aimed to establish protocols and guidelines for driver and passenger safety during the crisis, which, in turn, positioned online taxi companies as essential service providers within the broader transportation sector. This strategic behavior was not merely a reaction to the crisis but an intentional effort to influence and shape the behavior of regulatory institutions and the perception of online taxi companies.

Our study aligns with this strategic behavior perspective by recognizing that the behavior of online taxi companies, as well as the regulatory institutions they interacted with, was driven by a deliberate pursuit of their interests. These actions aimed to influence the behavior of others, including the public, drivers, and regulators, with the ultimate goal of solidifying their position as essential service providers during and after the pandemic. The strategic behavior of

these actors had far-reaching implications for the institutionalization of motorbike taxi services, transforming them from informal and unsafe transportation options into essential services integrated into the overall transportation system in Jakarta.

Furthermore, negotiations with the Ministry of Health strategically addressed public health policy and regulation in Indonesia. Online taxi companies collaborated with the Ministry to establish pandemic safety guidelines, including mandatory driver temperature checks, healthcare check-up points, and financial aid for COVID-19 positive drivers. Additionally, these companies forged alliances with healthcare providers to introduce telemedicine services. Consequently, these actions positioned online taxi companies and drivers as pivotal service providers during the pandemic, reinforcing the hero framing, as articulated by Coordinating Minister of Economy Airlangga Hartarto:

> *"Ojek riders are our heroes who deliver society's needs from local shops or restaurants to our homes" (Investor.id, 2021).*

This strategic approach led to a transformation in the institutionalization process of motorbike taxi services, redefining them from informal and unsafe options into essential services that catered to public needs. This transformation persisted beyond the initial pandemic phase, with motorbike taxi services seamlessly integrated into the broader transportation system in Jakarta.

5.5   Institutionalization of motorbike taxis

In this section, we draw strategic behavior insights from the study's exploration of the connection between institutional work and the informal economy during times of crisis. First, in alignment with Webb et al.'s (2009) argument that the informal economy arises due to a disparity between the legal and legitimate realms defined by formal and informal institutions, our analysis illuminates the strategic institutional work undertaken during the PSBB and its implications for the informal economy. The ride-hailing actors' institutional work strategies played a pivotal role in shaping the perception and acceptance of ojol services within both formal and informal institutional frameworks. By strategically framing ojol riders as "heroes of the pandemic" and positioning their services as essential for

meeting public needs, these actors aimed to legitimize their operations and bridge the gap between the legal and legitimate spheres. This framing strategy aligns with the concept of legitimacy, which involves gaining acceptance within both formal and informal institutions (Bergek et al., 2015; Binz et al., 2016).

Second, the institutional work conducted during the PSBB reveals the dynamic nature of the informal economy and its interaction with formal institutions. Initially, the ban on passenger transport for ojol services, as mandated by Permenkes No. 9 Tahun 2020, reflected the formal institution's definition of legality. However, the subsequent issuance of Permenhub No. 18 2020 by the Ministry of Transportation to allow ojol services during the PSBB demonstrated the influence of institutional work in redefining the legitimacy of ojol operations within the informal economy. This underscores how the informal economy coexists within the context of formal institutions' legal definitions while actively seeking legitimacy through strategic institutional work.

Third, the institutional work employed during the exogenous shock of the crisis played a crucial role in establishing trust and promoting digital platforms as a viable solution within the informal economy. The strategies and actions undertaken by various actors contributed to building trust in the services provided by informal workers and advancing the use of digital platforms as reliable solutions. This aligns with Pedersen's argument, asserting that informal institutions rely on trust as a critical mechanism for their enforcement and continuity. Trust serves as a foundational element for collaboration, networking, and the establishment of interactions within the informal sector (Pedersen, 2001).

During the PSBB, trust-building was pivotal for ojol drivers and companies to maintain their operations and engage customers. By adhering to standard health protocols, such as using plastic shields, providing hand sanitizers, wearing masks, and establishing "safe points" for passenger pickups, ojol drivers demonstrated their commitment to customer safety and well-being through various forms of strategic institutional work. Additionally, it is worth noting that social media platforms played a significant role in facilitating institutional work and trust-building, providing platforms for stakeholders to voice their opinions. In this context, Twitter and Facebook became critical spaces for institutional work during the

COVID-19 pandemic, enabling individuals and institutional actors to continue their activities and influence institutions.

Fourth, concerning policy responses to the crisis, our study aligns with Webb and McQuaid's (2020) findings regarding the acceleration of better protection policies for informal workers in the wake of Covid-19. While many studies have highlighted the vulnerability and destabilization of informal institutions during crises, our analysis sheds light on the strategies employed during the PSBB to mitigate these challenges and foster trust in the informal economy. Through their engagement in strategic institutional work, both platform companies and workers contribute to the construction of legitimacy within the informal economy. These strategies exemplify a bottom-up approach to legitimizing policy, emphasizing the shared agenda of protection held by digital platform companies and their workers. This underscores the strategic behavior of these actors in pursuing collective interests within the context of the informal economy.

Fifth, within the specific context of online taxi services in Indonesia, our study reveals how strategic behavior (Kaufman et al., 2021) played a pivotal role in navigating the complex web of formal and informal institutions during a crisis. The strategic institutional work undertaken by online taxi companies demonstrates their proactive approach in establishing and redefining their place within the transportation sector. By framing their drivers as "heroes of the pandemic" and positioning their services as essential for public well-being, these companies strategically altered perceptions and fostered trust within the informal economy, emphasizing their role as legitimate service providers.This strategic behavior extends to negotiations with regulatory institutions, such as the Ministry of Transportation and the Ministry of Health, highlighting the active role played by online taxi companies in influencing policy decisions. The change from an initial ban on passenger transport to the subsequent allowance during the PSBB underscores the capacity of institutional work to redefine the legitimacy of online taxi operations within both formal and informal spheres. This strategic adaptability, even within a rigid regulatory environment, showcases the online taxi industry's resilience and adaptability during crises.

5.6.   Conclusion

This chapter explores the responses of platform economy actors, including companies, drivers, and users, within the informal mobility sector to a major external crisis like the Covid-19 pandemic. This inquiry is closely linked to the study of sustainability transitions and individual behavior. We focus on the impact of institutional work by ride-hailing actors, such as Gojek and Grab, during the pandemic crisis, shedding light on the dynamics of systemic change within the informal economy in response to exogenous shocks.

This chapter asked two interrelated questions: *"How do platform economy actors (companies, drivers, and users) in the informal mobility sector respond to a major external crisis like the Covid-19 pandemic? And what does this tell us about systemic change in the informal economy stimulated by exogenous shocks?"*. In addressing these questions, we find that platform economy actors employed a range of institutional strategies, including framing, theorization, collaboration, lobbying, and negotiation, to counter the prohibition of online taxi services during the Covid-19-induced physical distancing policy. These strategies were aimed at constructing a robust image of motorbike taxis as essential public services and "the heroes of the pandemic," an approach that endured even beyond the Covid-19 crisis.

Our insights resonate with the study of sustainability transitions and individual behavior in several ways. Firstly, the institutional work strategies used during the pandemic aimed to bridge the gap between the legal and legitimate aspects of the informal economy, shaping perceptions and acceptance of ojol services. This mirrors the exploration of individual behaviors and the role of culture and norms in influencing sustainability transitions. Secondly, our case highlights the dynamic relationship between formal institutions and the informal economy, showcasing how institutional work played a crucial role in redefining the legitimacy of ojol operations within the informal economy. This reflects the interplay between formal regulations and individual behaviors, a core element of sustainability transitions.

Thirdly, institutional work was instrumental in building trust and promoting digital platforms as solutions within the informal economy. This mirrors the role of trust in shaping individual behaviors and

fostering sustainability transitions. Fourthly, our study underscores a bottom-up approach to legitimizing policy, driven by the collective agenda of digital platform companies and their workers in protecting the informal economy. This emphasis on the collective agenda aligns with the call for research on the collective aspects of individual behavior in the context of sustainability transitions. Lastly, in the specific context of online taxi services in Indonesia, our study reveals how strategic behavior played a pivotal role in navigating the complex web of formal and informal institutions during a crisis. The strategic institutional work undertaken by online taxi companies demonstrates their proactive approach in establishing and redefining their place within the transportation sector.

Looking ahead, future research can delve deeper into the role of social media in shaping the institutional work of informal economies, exploring how online communities and activism impact the formalization and legitimation of informal sectors. Additionally, cross-country comparisons of ride-hailing services and their institutional work strategies on social media platforms can shed light on the influence of cultural and political differences on framing and negotiation strategies. Furthermore, research on the role of technology, such as artificial intelligence, in shaping the institutional work of ride-hailing companies can help us understand how technology and digital platforms influence norms, rules, and power relations within the informal sector in the context of sustainability transitions.

CHAPTER 6

CONCLUSION

In the context of dynamic shifts in urban mobility transition patterns within emerging economies, this concluding chapter serves as a focal point. Here, the various threads of inquiry come together, forming a cohesive tapestry of insights. Throughout this academic journey, the research has delved deep into the complexities of online ridesharing, shedding light on the intricate interplay of contestation, conflicts, and crises that intertwine with the evolution of urban transportation. As the culmination of this exploration, this chapter presents the outcomes derived from analysis and synthesis, offering a roadmap to navigate the urban mobility transitions in developing regions. I start with the summary of main findings in each chapter (Section 6.1) and implication for transition research and governance (Section 6.2), followed by the main conclusions and reflections on the interplay of contestation, conflict, and crisis in transition studies and its scientific and societal contribution (Section 6.3). Finally, I reflect on the limitations as well as future directions (Section 6.4)

6.1   Summary of main findings

Chapter 2 explored the discursive debate of ridesharing in the media of developing economies. Indonesia and the Philippines are part of a group of developing economies that are being introduced to the sharing economy and its digital platforms. A media-frame analysis was conducted to understand the disruptive consequences of digital ridesharing in these countries. Five dominant frames were identified, including (1) the commuter solution, (2) unregulated passenger transport service, (3) cooperative business, (4) non-conformity, and (5) informal livelihoods. These frames were found to be highly embedded within the specific economic and spatial contexts in which they operate, such as densely populated cities with chronic gridlock problems and the utilization of informal transport.

The identified frames also reflected shape distinct policy responses to ridesharing in Indonesia and the Philippines. The policy responses of both countries are often geared towards addressing the absence of legal categories and easing traffic congestion, with ridesharing seen as an alternative transport mode. Legalizing ridesharing is viewed as a means to secure its operation and prevent further opposition. However, in the longer term, legal enforcement remains a challenge. In contrast to prevailing trends in the Global North, where the sharing economy often intersects with notions of sustainability and environmental consciousness (Heinrichs, 2013; Cohen and Kietzmann, 2014; Martijn, 2016; Gruszka, 2017; Palgan, 2017; Sharp, 2018) the insights gleaned from this chapter underscore the profound shifts that the introduction of digital ridesharing brings to the landscape of transport governance in both Indonesia and the Philippines. Specifically, in the cases of Indonesia and the Philippines, the rise of ridesharing is driven more by commercial and legal considerations rather than being inherently tied to environmental sustainability. This divergence underscores the significant impact of context-dependent and reflects local values and priorities (Raven et al., 2017) in shaping the discourse surrounding the sharing economy, particularly in Global South contexts.

Within chapter 2, I delve into two other discernible characteristics that define ridesharing within the context of the Global South. Firstly, ridesharing emerges as a direct response to the rapid urbanization and ensuing traffic congestion prevalent in these regions. It functions as an

accessible alternative for commuters seeking efficient transportation options and relief from the challenges of congested roadways.

Secondly, motorcycle ridesharing plays a distinctive role as an informal solution within these contexts, and this aligns with Cervero's conceptualization of motorcycles as 'paratransit' (Cervero, 2000). In a tri-fold manner, motorcycles serve strategically in ridesharing to bridge transportation gaps in densely populated urban areas. In this study, I develop the discussion on informal transport by adding the advent of innovative digital platforms in extended ridesharing services to a broader spectrum of affluent users, making them an attractive and efficient mode of transportation. Additionally, the evolution of traditional informal motorcycle ridesharing toward a semi-formalized system exemplifies the adaptive nature of ridesharing in response to transitional urban mobility demands. This finding resonates with the research conducted by Sengers and Raven (2014), emphasizing the hybrid nature of motorbike services combined with digital platforms. Thus, the study aligns with and builds upon Cervero's perspective by providing empirical evidence of how motorcycle ridesharing operates within the framework of paratransit, shedding light on its strategic role and adaptive evolution in the changing landscape of urban mobility.

It can be reflected that ridesharing is driving a transformative shift in urban mobility, reshaping transportation paradigms and fostering a more connected and user-centric approach. Discerning urban mobility transitions requires consideration of technological, regulatory, and societal changes, as well as shifts in consumer behaviors. The end goals of these transitions are dynamic, initially driven by convenience and congestion reduction but evolving over time to potentially prioritize environmental sustainability, inclusivity, and equity. Despite the positive aspects, such as convenience, connectivity, and evolving goals towards sustainability and equity, it is imperative to recognize that not all stakeholders may benefit equally. Traditional taxi drivers, for instance, may face economic challenges, underscoring the need for a nuanced understanding of the winners and losers in the evolving landscape of urban mobility. This recognition emphasizes the importance of adaptable governance strategies that address potential negative consequences and ensure a more inclusive and equitable transition for all involved parties.

Chapter 3 provides a more plural and complex analysis of the ridesharing conflict in Indonesia by employing a critical moments analysis and adding dramaturgical elements. I employ critical moments as units of analysis to examine the discursive dynamic of conflict and the performance of actors within the storylines. I discuss five critical moments where the dominant storylines were unhinged, leading to power struggles for marginal storylines. Adding the dramaturgical analysis helps to reveal hidden power structures and political strategies used by actors to mobilize their storylines.

In transition studies, conflict is typically framed as a contest between an incumbent regime and emerging niches in the context of the Multi-level Perspective. Instead, I propose a reconsideration of social conflict as a fundamental analytical framework for conceiving transitions, as advanced by Cuppen (2019). In this study, I propose critical moments in conflict as units of analysis. Through analyzing critical moments, we can gain a more nuanced and inclusive understanding of conflict in transition. Critical moments offer analysis converged on time and space, and using dramaturgical analysis can help to explain why and how discursive strategies succeed or fail to become dominant discourse. The analysis includes the role of situational context in understanding how conflicts in transition play out, and thus unpacks the battleground of conflict which upholds a non-binary view in transition. For example, the conflict surrounding ridesharing in Indonesia is not simply a matter of incumbent players versus ridesharing companies. Instead, critical moment analysis reveals that the conflict is multi-layered and involves various actors such as conventional taxi drivers, policymakers, and ridesharing drivers and companies. By using critical moments, I was able to move away from simplistic assumptions about the nature of conflict, e.g. incumbent versus niche players, and gain a more nuanced understanding.

I also highlight the importance of dramaturgy in understanding how discursive storylines become dominant in particular contexts. While discourse analysis is often used in transition studies (Bosman et al., 2014; Geels, 2014; Hajer, 1995, 2003; Lee and Hess, 2019; Lovell, 2008; Jensen, 2012; Schor, 2014; Smith and Raven, 2012; Stirling, 2011; Pesch, 2015; Rosenbloom et al., 2016; Hess, 2019), it often overlooks the dramaturgy aspect of these discourses and the role of context in shaping their success or failure. A dramaturgical analysis would aim to understand not only "what people say" but connect its

influence to "how they say it, where they say it, and (especially) to whom" (Hajer, 2009, p.65). By analyzing the specific settings and performances of different critical moments in the conflict over ridesharing in Indonesia, I demonstrate how dramaturgy sheds light on why some discourses became dominant while others did not. The dramaturgy analysis enables us to show how the material design of the battleground can affect the outcome of the conflict. Actors who control the material aspects of the conflict, such as the setting of negotiations or the blocking of roads, have an advantage in shaping the dominant discourses. Therefore, I argue that incorporating the dimension of dramaturgy brings a material perspective to conflict analysis in transition studies.

In **chapter 4**, I delve into the realm of futures articulation in transition studies, which is characterized by a myriad of uncertainties. The aim of this chapter is to dissect and illuminate the intricate elements of uncertainty within this context. It addresses the inquiry of how the process of diversifying future storylines within the online taxi industry can provide invaluable insights. Future storylines wield the potential to mold society's socio-technical structure and incite actions for immediate transformative impact (van Lente 2012, Beckert 2016). When future storylines enter the collective repertoire of diverse stakeholders, they become impossible to dismiss, even for those who do not align with them, as they integrate into social reality (Konrad, 2006; van Lente and Bakker, 2010; Smith & Raven 2012; van Rijnsoever et al., 2014).

In this chapter, I elaborate on diversifying future storylines by addressing the varying perceptions of time horizons in future studies (Masini, 1993; Marien, 2002; Brier, 2005), emphasizing the need to understand how they relate to socio-institutional processes (Sovacool and Geels, 2016). Furthermore, I underscore the significance of social interactions in shaping future storylines and how certain storylines gain dominance, reflecting the power dynamics involved (Tidwell, 2016). I utilize the multi-criteria mapping (MCM) method in my research to shed light on these dynamics (Stirling and Mayer, 2001; Raven et al., 2017).

Through the MCM analysis, the research initiated a dialogue that allowed participants to reflect on their own views about the future and opened up multiple ways of imagining it. As a result, the chapter

identified four key insights into the use of participatory techniques in constructing future storylines. Firstly, future storylines appraisal are not purely technological. In this research, I explore criteria to appraise future storylines of ridesharing in Indonesia. The result shows that non-technological aspects, such as regulation, social impact, and economic issues, are more prominent than technical aspects in the articulated future. This observation aligns with a well-established tradition in the socio-technical imaginaries research (Konrad and Böhle, 2019), and highlighting the need to evolve approaches that decenter the role of technology in future-oriented technology assessments (Truffer et al., 2017).

Secondly, I observe participants in this research hold varying timeframes for envisioning the future storylines. Some think long-term (20-50 years), while others focus on the immediate (less than 5 years) or medium-term (5-10 years). In the case of ridesharing in Indonesia, policymakers often plan mobility futures for the next 5-20 years, but drivers prioritize the immediate future due to income concerns. These preferences do not indicate cognitive ability but rather differing priorities. For transition studies, considering the time window of future storylines can help in understanding some of the fundamental challenges of pluralizing future storylines beyond the involvement of experts and professionals. Pluralizing future storylines with involvement beyond the usual suspects not only widens the range of interests to be considered in a future storyline, but also broadens the range of time horizons to be considered.

Thirdly, in addition to the temporal diversity this chapter also highlights that the future storylines emerge through interactions among diverse actors. For instance, my research findings illustrate how the drivers' community, primarily concerned with short-term goals, tends to adopt a more pessimistic outlook when discussing future uncertainties in the presence of policymakers. Policymakers, on the other hand, possess longer-term plans and the capacity to implement them, influencing the perspectives of the drivers. This underscores that actors do not inherently possess preconceived storylines but rather construct them through social networks, dialogues, and contextual considerations involving various groups.

Fourthly, the concept of 'bounded imaginaries' introduced by Smith and Tidwell (2016) resonates with the dynamics observed in my study.

It provides a framework for exploring how social dynamics and power dynamics intersect with temporal perspectives, ultimately shaping the prominence of specific future storylines. Essentially, the formation of future storylines is not solely a product of individual imaginings but is significantly shaped by dialogues, interactions, and contextual factors. The convergence of temporal perspectives and 'bounded imaginaries' becomes evident in how specific groups, based on their ability to envision the future, interact and shape their storylines. For instance, the drivers' community, with its focus on shorter-term horizons, may encounter skepticism when engaging with policymakers who have longer-term visions. This interaction, influenced by 'bounded imaginaries,' highlights how power dynamics which means a person's capability to have future imaginations shaped by the decision makers. Essentially, the power to shape future imaginings is not evenly distributed, and those who hold influence, such as decision-makers, play a crucial role in steering collective perspectives on what the future should or could look like. Understanding these power dynamics is essential for comprehending how different voices, influenced by various factors, contribute to the overall discourse and shaping of future narratives.

Highlighting the impact of crises, dynamic ridesharing in Indonesia has been shaped not only by conflicts but also significantly by the COVID-19 pandemic in 2020, resulting in reduced demand, financial challenges for drivers, and the need for industry practice reevaluation. **Chapter 5** emphasizes the interplay between conflict and crisis in shaping informal institutions within the digital platform transition, which is a characteristic feature of developing economies. Recent research has shown that digital platforms often engage workers from the informal economy (Fudge and Hobden, 2018; Randolph et al., 2019). Informal institutions, in this context, are "shared rules, usually unwritten, that are created, communicated, and enforced outside officially sanctioned channels" (Helmke and Levitsky, 2006, p. 5). These institutions are often maintained through interpersonal trust, and crucial for collaboration and networking (Pedersen 2001). The acceptance and definition of what is legal and legitimate are influenced by both formal and informal institutions (Bergek et al., 2015; Binz et al., 2016; Boon et al., 2019).

In this chapter, I investigate the correlation between informal institutions and digital platforms in ridesharing, while also delving

into how crises impact informal institutions. Previous research has illustrated that crises like COVID-19 can disrupt digital platforms, compelling them to become more integrated into the local institutions where they operate (Katta et al., 2020). The COVID-19 crisis has also had adverse effects on informal businesses and workers, who often do not have access to financial aid programs (ILO, 2020). Consequently, policymakers are taking steps to formalize employment and promote equity for informal workers (Webb and McQuaid, 2020). In essence, existing studies suggest that informal institutions become more susceptible and destabilized during times of crisis.

Chapter 5 delves into the interrelationships among crises, digital platforms, and informal institutions, specifically examining the influence of crises on the deliberate efforts made within informal sectors to create, maintain, or modify institutions. Institutional work, as defined by Lawrence and Suddaby (2006), encompasses purposeful actions carried out by individuals and organizations to establish, sustain, or modify institutions. To dissect and analyze this institutional work, I employ the framework introduced by Pacheco et al. (2010) in institutional work. I explore the implications of institutional work and its connection to the informal economy during the Covid-19 crisis, delving into what this means for the field of transition studies. First, I examine how ride-hailing actors strategically framed ojol riders as "pandemic heroes" and positioned their services as essential during the crisis, bridging the gap between legality and legitimacy, in line with Webb et al.'s (2009) argument's that the informal economy is situated in spaces where legality and legitimacy do not overlap and which are influenced by formal and informal institutions. Second, I discuss how institutional work reshaped the perception of ojol operations within the informal economy during the Covid-19 crisis, highlighting the dynamic relationship between formal institutions and the informal sector, which holds significance for transition studies.

Third, I emphasize the role of institutional work in building trust and promoting digital platforms as reliable solutions during the crisis, aligning with Pedersen's trust-based approach to informal institutions (Pedersen, 2001), and how this trust-building process can inform transition studies. Lastly, I note the significance of social media platforms like Twitter and Facebook in facilitating institutional work during the Covid-19 crisis and highlight how the crisis expedited

improved protection policies for informal workers. These observations shed light on the evolving nature of institutional dynamics in transition studies, particularly in the context of crises and informal economies.

6.2 Implications for transition research and governance

In the preceding sections, I have examined urban mobility transitions within the Global South, with a specific focus on Indonesia's ridesharing industry. Throughout this exploration, I have addressed various key objectives. Firstly, I challenged the conventional niche-regime binary framework in unpacking sustainability transition by introducing the concept of critical moments and dramaturgy to better understand the behaviors of actors within this context. Secondly, I delved into the intricate dynamics of power, encompassing bounded imaginaries, decision-making access, and differing time horizons, shaping mobility transitions. Additionally, I dealt with the challenge posed by the introduction of mobility solutions that are shaped following preferences and institutions of the Global North, notably digital platforms, into Indonesia's transportation landscape. Simultaneously, I explored the coexistence and interaction of formal and informal elements within the mobility ecosystem, recognizing the unique complexities this adds to the transition process. The forthcoming discussion section will delve further into the implications of these findings for transition research and governance.

6.2.1 Implications for transition research

This thesis has significant implications for the study of contestation, conflict, and crisis in the context of urban mobility transitions. It challenges the traditional perspective that views these elements as signs of transition destabilization (Turnheim and Geels, 2013; Bergek et al., 2013; Geels, 2014; Kivima and Kern, 2016; Wolf and Dooren, 2018) particularly in the Global South. Instead, it presents them as essential mechanisms of self-organization within societies in the process of urban mobility transition (Leach and Scoones, 2007; Cuppen, 2018).

For urban mobility transitions, this means reevaluating the role of contestation. Rather than being perceived as a disruption to established norms, contestation is seen as a catalyst for change in the

urban mobility sector. It can drive the development and adoption of alternative transportation solutions, fostering innovation and adaptability in response to evolving urban transportation needs.

In the realm of conflict, this thesis broadens the understanding by introducing non-actor-based variables. This thesis shows that when we focus on the dramaturgy of conflict it will foreground the influence of material and immaterial artefacts in shaping strategies to form the outcome of the battle. The dramaturgy analysis brings up the non-actor dimension and articulates that the actors who control the material and immaterial design of the battleground have an advantage. This encourages a more inclusive approach, where various actors, non-actors, and perspectives play a role in shaping the future of urban mobility.

Furthermore, this thesis introduces a critical moment analysis, challenging the conventional incumbent vs. newcomer paradigm in urban mobility transition. It reveals that this transition is marked by multidimensional conflict, with significant events blurring the line between incumbents and newcomers as both work to maintain or challenge the status quo. Additionally, the thesis employs dramaturgy analysis to highlight the role of material elements in shaping conflict outcomes, emphasizing the context-specific nature of sustainability transitions. Moreover, it explores the temporal dimension of conflict, extending beyond the present, providing a more comprehensive understanding of conflict dynamics and the roles of different actors in shaping the urban mobility transition. This multifaceted approach enhances the understanding of transition processes in urban mobility, vital for sustainable transportation solutions.

Regarding crises, the thesis highlights how crises can act as external shocks that bring informal mechanisms to the forefront in the urban mobility transition process (Morone et al., 2016; Madsen et al., 2022) . In this context, crises serve as catalysts for revealing persistent informal strategies and can prompt changes that enhance the resilience and adaptability of urban transportation systems.

Moreover, addressing informal economies during transitions not only provides essential insights for transition management in the Global South but also sheds light on the inherent inequality issues embedded in these processes. It is crucial to recognize that transitions have

winners and losers, and informal workers often find themselves disproportionately affected. Therefore, strategies to tackle this complex challenge must not only encompass the recognition of informal workers' struggles and needs but also explicitly address the inherent inequalities within these transitions. Context-specific and tailored policies should aim at inclusivity and the active participation of all affected stakeholders, ensuring that the voices of those often marginalized are heard. Additionally, capacity building, financial inclusion, clear regulation, and ongoing monitoring and evaluation become imperative tools in mitigating the adverse impacts of transitions on vulnerable populations. These lessons emphasize the pressing need for comprehensive, context-specific approaches that not only facilitate formalization but also prioritize the protection and upliftment of informal workers.

Therefore, this thesis suggests that contestation, conflict, and crisis are integral components of the urban mobility transition dynamics, and overlooking their role can lead to an incomplete understanding of the complexities involved. It calls for a more context-specific and nuanced approach in urban mobility transition research, one that recognizes these elements as vital drivers of change, innovation, and adaptability rather than destabilizing factors. This reevaluation is particularly relevant in the context of urban mobility, where the need for sustainable and efficient transportation solutions is paramount.

This thesis serves as a critical examination of implicit assumptions within transitions research, particularly the Northern bias that presupposes a robust government role while downplaying the dynamics of the informal sector (Pansera, 2013). Through a detailed exploration of Indonesia's ridesharing industry, the research unveils nuanced realities that challenge these prevailing assumptions. The empirical insights highlight the intricate interplay of contestation, conflict, and crisis, illustrating that these elements are not disruptive forces but rather integral drivers of change and innovation in urban mobility transitions. By specifically focusing on the dynamics of the informal sector within the transition process, the thesis presents concrete examples from the ridesharing industry in Indonesia. It demonstrates how informal economies play a pivotal role, influencing the trajectory of urban mobility transitions. The thesis contends that overlooking these informal dynamics can lead to an incomplete understanding of the complexities involved. For instance, the research

reveals how informal strategies and mechanisms within the ridesharing sector respond and adapt to external shocks like the COVID-19 pandemic, showcasing their resilience and adaptability.

6.2.2 Implications for transition governance

The implications of this thesis for transition governance are multifaceted. It provides new perspectives and analytical tools that extend beyond the formalization of institutions, emphasizing the importance of informal institutions, everyday-life contestation, conflict, and crisis in shaping the legitimacy of transition processes, especially in the Global South (Sengers and Raven, 2014; Fuenfschilling and Truffer, 2014; Pedersen, 2017; Mejía et al., 2018; Hansen, 2018; Cherunya et al., 2020; Ghosh et al., 2021). By highlighting the role of informal institutions alongside formalization, this thesis offers nuanced insights into the trajectory of institutional transition. Governance strategies must extend beyond the conventional focus on formalization, recognizing the integral role played by informal institutions, everyday-life contestation, conflict, and crisis. This perspective suggests a need for more inclusive and adaptive governance structures, acknowledging the diverse voices and dynamics that shape transitions, especially in the context of developing economies.

The multi-temporal approach introduced in the thesis allows for a more comprehensive examination of contestation, spanning the present, past, future, and in-time aspects during crises. This temporal perspective enhances the understanding of how transitions unfold and the dynamics involved in governance. Moreover, the research underscores the role of conflict and crisis in transition governance, emphasizing the spatial and material elements at play. It provides a platform for marginalized voices and actors to articulate their perspectives, facilitating cooperation among conflicting parties and offering valuable tools for navigating uncertainties in governance.

Societally, the research contributes to a nuanced understanding of the discourse surrounding ridesharing in developing economies, highlighting unique challenges and opportunities in the Global South. This understanding can inform future policy decisions in these regions, particularly regarding the emergence of ridesharing as a new mode of transportation. Policymakers can consider a dual-pronged

approach: first, acknowledging the distinct challenges faced by developing economies, such as the prominence of informal economies and varying socio-economic conditions; second, tailoring policies that not only regulate ridesharing but also foster an environment where it can effectively address local needs and challenges.

At the policy level, this thesis emphasizes the need for a pluralistic approach to policymaking, engaging a range of stakeholders, including policymakers, ridesharing company representatives, traditional transportation providers, online taxis drivers, online taxis customers, etc. This approach ensures that policies are responsive to the needs and concerns of all stakeholders, promoting effectiveness, equity, and long-term sustainability in ridesharing regulation and urban mobility transition. Ultimately, this thesis broadens the perspective on transition governance by incorporating informal institutions, temporal dimensions, and diverse stakeholder engagement. This emphasis on the role of informal institutions provides policymakers with valuable insights and practical lessons for navigating transitions, managing conflicts, and addressing the complexities posed by informal elements, particularly crucial in the context of the Global South. Policymakers can learn several concrete lessons from this thesis to improve their approach to transitions and related conflicts, controversies, and informal institutions:

1. **Recognizing Informal Institutions**: Policymakers should acknowledge the significance of informal institutions in transition processes, particularly in the Global South. This recognition requires a shift in perspective, understanding that formalization of institutions is not the sole goal. Embracing the coexistence of informal and formal institutions is essential for holistic governance.
2. **Multi-Temporal Analysis:** Policymakers can adopt a multi-temporal approach to better understand and navigate transitions. This involves analyzing the past, present, and future aspects of controversies and conflicts. By doing so, they can anticipate potential challenges and opportunities, fostering a more proactive and informed decision-making process.
3. **Inclusive Stakeholder Engagement:** Policymakers should prioritize the inclusion of diverse stakeholders in the policymaking process, including marginalized voices and actors. This inclusive approach can help mitigate conflicts and

controversies by addressing the concerns of all parties.

4. **Future-Oriented Analysis:** Policymakers can enhance their decision-making by embracing future-oriented analysis. This involves considering alternative scenarios and innovative solutions in the face of crises.

5. **Balancing Formalization and Informality:** Recognizing and addressing the informal economy's challenges can be complex due to its often-hidden nature. Policymakers must actively develop strategies to uncover and address these complexities. Balancing formalization and informality is crucial, ensuring policies support the strengths of informal institutions while addressing their limitations for a more responsive approach.

6. **Context-Specific Policies:** Policymakers can benefit from tailoring policies to the specific context of their region. Transition management strategies should consider the unique socio-economic conditions, cultural norms, and characteristics of the informal economy in their decision-making processes.

6.3   Main conclusions and reflections

From this thesis, I investigate the research question of: **"How do contestation, conflicts, and crises shape the future of online ridesharing in urban mobility transitions in developing economies?"**. This thesis focuses on the interplay of contestation, conflict, and crisis in shaping the future of online ridesharing in urban mobility transitions in developing economies. These three elements are not destabilizing factors but rather essential catalysts for change, offering opportunities for reflection and transformation. Contestation challenges established norms, policies, and practices, inviting marginalized and/or informal voices to be heard and fostering a more inclusive and democratic mode of transition governance. Conflict, when harnessed constructively, leads to the birth of new ideas, innovative solutions, and the addressing of long-standing injustices. It is not merely a binary interaction between incumbents and newcomers, but a multidimensional, temporal, and spatial phenomenon. Crisis, as a disruptive force, amplifies both contestation and conflict, prompting accelerated change and encouraging adaptation, innovation, and collaboration in the face of adversity. My argument aligns with research on tension and conflict during transitional periods, emphasizing that conflict can be a catalyst for fostering inclusivity and deliberation in policy processes, leading to

the development of context-specific strategies and a heightened focus on justice (Cuppen, 2012; Hoffman and Loeber, 2015; Ciplet and Harrison, 2019).

Reflecting on the interconnectedness of these phenomena compels us to consider the power dynamics, vested interests, and structural inequalities that fuel contestation and conflict (Geels and Schot, 2010; Avelino et al., 2016). It also highlights the transformative potential of crisis and the opportunities it presents for reshaping our collective future. This deeper understanding encourages us to embrace diversity, value constructive dialogue, and navigate through challenges with resilience and empathy. In light of these insights, it is evident that transition governance in developing economies should adopt a more pluralistic approach, one that recognizes the transformative potential of contestation, conflict, and crisis. This approach should prioritize the inclusion of diverse stakeholders, foster a proactive and informed decision-making process, and balance formalization efforts with the preservation of informal mechanisms (Wirth et al., 2013; Köhler et al., 2019) . By doing so, we can create more inclusive, adaptive, and equitable urban mobility transitions, ultimately contributing to a more sustainable and resilient society.Developing economies often face unique challenges, and the findings presented here underscore the relevance of understanding these challenges in the specific context of urban mobility transitions within the Global South. In light of these insights, it is evident that transition governance in developing economies should not merely replicate strategies from developed nations but adopt a more tailored and pluralistic approach. The relevance and difference lie in the unique socio-economic conditions, cultural norms, and characteristics of informal economies prevalent in these regions.

6.4   Limitations and future research

The thesis has limitations regarding its scope and generalizability. It may not universally apply to all sustainability transitions, particularly those with minimal conflicts. Future research should explore the adaptability of conflict analysis in various transition types. Additionally, the retrospective analysis might not always directly inform prospective tools. Nonetheless, the thesis's inclusion of Global South experiences offers valuable nuances to the understanding of sustainability transitions, despite these limitations.

Table 6.1. Summary of Implications for Transition Research and Transition Governance

Implication for Transition Research

	Paper 1	Paper 2	Paper 3	Paper 4	Overarching point
Contestation	The ridesharing promises sustainability by utilizing idle capacity and making product use more efficient. However, this study suggests that the motives behind the sharing economy's responses are primarily commercial and legal, rather than driven by sustainability concerns.	Binary contestation and power struggle between incumbents and newcomers should be avoided in transition. Conflict is an arena where political contestation is staged and processes of building coalitions, alliances and mediation played out.	This study reveals contestation on envisioning the futures of transition between short sighted and long sighted actors. Contestation emerged from different time-horizon	This study highlight the contestation between the formalization efforts and reinforcement of informality of motorcycle taxis	Contestation analysis serves as a guide to comprehend how transitions unfold in the Global South. It aids in discerning effective strategies, considering the distinct challenges and factors specific to this region. This understanding is crucial for formulating targeted plans for urban mobility transitions in the Global South.
Conflict	Enactment of regulation influenced by the scale of resistance portrayed in the media	Critical moments as units of analysis in transition studies to unpack the multidimensional natures of conflict. It integrates the temporal and spatial dimension of conflict.	Social interaction and social conflict forms an important factor in shaping the individual time horizon. The conflictual interaction with a more far-sighted actors shapes a shorter time horizon to the individual. The friendly interaction with a more far-sighted actors shape longer time horizon to the individual	Social media becomes a site of social conflict and institutional work in times of physical distancing due to Covid-19 crisis. This highlights the importance of social media for institutional activities during challenging times	The main challenge in analyzing social conflict is the inherent limitations of institutions designed to encompass diverse public values and interests; thus, this thesis introduces non-actor-based variables to address this institutional void.
Crisis	Sustainability motives of ridesharing overshadowed by transport crisis and the need for economic growth	Crisis led to critical moments where dominant discourses are unhinged and open up opportunities for change.	Crisis becomes an experimental arena for actors to reinterpret the futures and imagine alternative storylines.	Crisis foreground the necessity of informal services and therefore strengthening the legitimacy of informal transport services	In the context of the Global South, crises act as external shocks that bring to the forefront informal mechanisms that are typically persistent.

Implication for Transition Governance

	Paper 1	Paper 2	Paper 3	Paper 4	Overarching point
Contestation	Role of contexts and the interplay between global debates, the national regulatory process and local dynamics shape the ridesharing transformation.	Critical moment as an analytical tool to identify contrasting discourses.	Inclusion of short-sighted actors in envisioning the future storylines. Broaden the range of time-horizon to consider.	In condition of formal-informal debates, foreground the interest of informal workers in times of crisis as they being most impacted (and mostly underprotected working condition)	A multi-temporal approach is crucial for obtaining a more nuanced comprehension of contestation, as it enables the analysis of the present, the past, the future, and the in-time aspects during a crisis.
Conflict	The legal status of ridesharing has sparked a global debate, and each region has responded differently. In the case of Indonesia and the Philippines, the speed of policy response is influenced by the level of resistance from existing players, with Indonesian incumbents displaying more resistance compared to their Filipino counterparts.	Dramaturgy analysis provides a useful framework to uncover where and how conflict plays out. Dramaturgy analysis brings spatial and material elements to conflict analysis. Conflict offers opportunities to highlight the voices of marginalized actors and discourse.	MCM is a method that allows the short-sighted or the voiceless actors to articulate their knowledge and further unpack the uncertainty of the future.	Crisis open up opportunity for conflicting actors to work together in overcoming the changing circumstances and ensure the survival of their lifes/business	Conflict, as revealed through dramaturgy analysis and through the use of methods like MCM, not only underscores the spatial and material elements involved but also provides a platform for marginalized voices and actors to articulate their perspectives, thus helping to navigate uncertainties and foster cooperation among conflicting parties in the face of crises.
Crisis	Motorcycle ridesharing becomes imperative as transport in transition.	In times of crisis, mapping the discursive battle and how it is played out (the dramaturgy) induces more resilience and firm policy	Crisis generate alternatives futures storylines	Crisis represent institutional void in transition of motorcycle taxis	Crisis serves as a catalyst for the evolution of governance. Moments of crisis not only generate alternative future scenarios but also highlight institutional voids in the ongoing transition.

In the context of urban mobility transition, the identified limitations call for further research to tackle the intricacies of ridesharing practices within cities and across regions. This prompts an exploration of how to govern transnational sharing economy actors and whether a transnational approach to sharing-economy governance is necessary. Additionally, the research underscores the importance of understanding how sharing-economy initiatives align

with sustainability values in various urban settings. This is particularly significant as environmental concerns may not consistently be the primary driver of the sharing economy. Future research can provide insights into strategies for promoting the adoption of sharing-economy initiatives that enhance environmental sustainability within the evolving landscape of urban mobility transition.

In terms of transition research, there are several avenues that could be explored. Firstly, it may be useful to conduct comparative studies of sustainability transitions across different contexts and regions to better understand the role of conflict in different settings. Such studies could also examine how conflict analysis can be integrated into existing transition governance frameworks, such as the X curve in the Transition Management (see Loorbach, 2014; Sharpe et al., 2016; Hebinck et al., 2022) Additionally, future research could delve further into the politics and places of everyday conflict in the Global South to identify how they shape the sustainability outcomes of different transitions (Dia, 1996; Gille, 2010; Milbourne, 2012; Ghosh et al., 2021). In summary, there is potential for future research to leverage conflict analysis in exploring how policymakers and practitioners can enhance the effectiveness of sustainability initiatives, ultimately contributing to more informed and impactful policy and practice in the field.

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Summary

This thesis unravels the dynamics of Indonesia's ridesharing industry, shedding light on pivotal aspects shaping urban mobility transitions in the Global South. The primary aim of this thesis is to delve into the emergence of online ridesharing and how this influences the ongoing urban mobility transition. Central to this exploration are the contestation, conflicts, and crises that invariably emerge during this transformative process.

To illuminate this intricate interplay, the overarching research question that guides this study is: "How do contestations, conflicts, and crises shape the future of online ridesharing in urban mobility transitions in the Global South?" The research challenges prevailing perspectives on contestation, conflict, and crisis, presenting them not as destabilising factors but as essential mechanisms for self-organisation in societies navigating urban mobility transitions.

Exploring media discourse dynamics, the study identifies five frames influencing policy responses. Contrary to Western trends, ridesharing in Indonesia is driven more by commercial and legal considerations than environmental sustainability. The thesis then delves into multidimensional conflict, challenging binary views and incorporating material elements and temporal dimensions in the analysis. It introduces critical moments as units of analysis, offering a nuanced understanding of conflicts involving diverse actors, such as conventional taxi drivers, policymakers, and ridesharing entities.

Examining future uncertainties, the research highlights diverse perceptions of time horizons and emphasises the role of social interactions in shaping future storylines. Through multi-criteria mapping, it engages participants in envisioning various futures, revealing non-technological aspects' prominence in articulated futures.

The thesis further explores the interplay of conflict and crisis, demonstrating the COVID-19 pandemic's role in shaping informal institutions within digital platform transitions. It underscores the significance of informal institutions, emphasising a contextualised approach to transition management in the Global South.

Implications for transition research involve a reevaluation of contestation as a catalyst for change, a broader understanding of conflict, and a recognition of the role of crises in revealing informal strategies. Transition governance implications emphasise the importance of informal institutions, a multi-temporal approach to governance, inclusive stakeholder engagement, future-oriented analysis, and context-specific policies.

Samenvatting

Dit proefschrift ontrafelt de dynamiek van de Indonesische ridesharing-industrie en werpt licht op cruciale aspecten die de stedelijke mobiliteitstransities in het Zuiden vormgeven. Het primaire doel van dit proefschrift is om zich te verdiepen in de opkomst van online ridesharing en hoe dit de voortdurende stedelijke mobiliteitstransitie beïnvloedt. Centraal in deze verkenning staan de strijd, conflicten en crises die steevast naar voren komen tijdens dit transformatieproces.

Om dit ingewikkelde samenspel te verhelderen luidt de overkoepelende onderzoeksvraag die als leidraad dient voor dit onderzoek: "Hoe bepalen controverses, conflicten en crises de toekomst van online ridesharing in de stedelijke mobiliteitstransities in het Mondiale Zuiden?" Het onderzoek daagt de heersende perspectieven op betwisting, conflict en crisis uit, en presenteert deze niet als destabiliserende factoren, maar als essentiële mechanismen voor zelforganisatie in samenlevingen die zich door stedelijke mobiliteitstransities heen bewegen.

Door de dynamiek van het mediadiscours te onderzoeken, identificeert de studie vijf frames die de beleidsreacties beïnvloeden. In tegenstelling tot de westerse trends wordt ridesharing in Indonesië meer gedreven door commerciële en juridische overwegingen dan door ecologische duurzaamheid. Het proefschrift duikt vervolgens in multidimensionale conflicten, waarbij binaire opvattingen worden uitgedaagd en materiële elementen en temporele dimensies in de analyse worden opgenomen. Het introduceert kritieke momenten als analyse-eenheden en biedt een genuanceerd inzicht in conflicten waarbij diverse actoren betrokken zijn, zoals conventionele taxichauffeurs, beleidsmakers en rittenorganisaties.

Door toekomstige onzekerheden te onderzoeken, belicht het onderzoek uiteenlopende percepties van tijdshorizonten en benadrukt het de rol van sociale interacties bij het vormgeven van toekomstige verhaallijnen. Door middel van het in kaart brengen van meerdere criteria betrekt het deelnemers bij het visualiseren van verschillende toekomsten, waarbij de prominente rol van niet-technologische aspecten in gearticuleerde toekomsten wordt onthuld.

Het proefschrift onderzoekt verder de wisselwerking tussen conflict en crisis, waarbij de rol van de COVID-19-pandemie wordt aangetoond bij het vormgeven van informele instellingen binnen digitale platformtransities. Het onderstreept het belang van informele instituties en benadrukt een gecontextualiseerde benadering van transitiemanagement in het Mondiale Zuiden.

Implicaties voor transitieonderzoek omvatten een herevaluatie van betwisting als katalysator voor verandering, een breder begrip van conflicten en een erkenning van de rol van crises bij het onthullen van informele strategieën. De implicaties van transitiebestuur benadrukken het belang van informele instituties, een multitemporele benadering van bestuur, inclusieve betrokkenheid van belanghebbenden, toekomstgerichte analyses en contextspecifiek beleid.

Ringkasan

Tesis ini mengungkap dinamika industri *ridesharing* atau taksi daring di Indonesia, menyoroti aspek-aspek penting yang membentuk transisi mobilitas perkotaan di Dunia Selatan. Tujuan utama dari tesis ini adalah untuk menyelidiki munculnya layanan taksi daring dan bagaimana hal ini mempengaruhi transisi mobilitas perkotaan yang sedang berlangsung. Inti dari eksplorasi ini adalah kontestasi, konflik, dan krisis yang selalu muncul selama proses transformatif ini.

Untuk menjelaskan interaksi yang rumit ini, pertanyaan penelitian menyeluruh yang memandu studi ini adalah: "Bagaimana kontestasi, konflik, dan krisis membentuk masa depan layanan taksi daring dalam transisi mobilitas perkotaan di Dunia Selatan?" Penelitian ini menantang perspektif yang ada mengenai kontestasi, konflik, dan krisis, dengan menampilkan hal-hal tersebut bukan sebagai faktor yang mengganggu stabilitas, namun sebagai mekanisme penting untuk partisipasi mandiri warga yang sedang menjalani transisi mobilitas perkotaan.

Dengan mengeksplorasi dinamika wacana media, penelitian ini mengidentifikasi lima kerangka yang mempengaruhi respons kebijakan. Bertentangan dengan tren di Barat, layanan taksi daring di Indonesia lebih didorong oleh pertimbangan komersial dan hukum dibandingkan kelestarian lingkungan. Tesis ini kemudian menggali konflik multidimensi, menantang pandangan biner dan memasukkan elemen material dan dimensi temporal dalam analisisnya. Laporan ini memperkenalkan momen-momen kritis sebagai unit analisis, yang menawarkan pemahaman berbeda mengenai konflik yang melibatkan beragam aktor, seperti pengemudi taksi konvensional, pembuat kebijakan, dan entitas ridesharing.

Menelaah ketidakpastian di masa depan, penelitian ini menyoroti beragam persepsi mengenai jangka waktu dan menekankan peran interaksi sosial dalam membentuk alur cerita di masa depan. Melalui pemetaan multi-kriteria, kegiatan ini melibatkan peserta dalam membayangkan berbagai masa depan, mengungkap keunggulan aspek-aspek non-teknologi dalam artikulasi masa depan.

Tesis ini mengeksplorasi lebih jauh keterkaitan antara konflik dan

krisis, serta menunjukkan peran pandemi COVID-19 dalam membentuk institusi informal dalam transisi platform digital. Hal ini menggarisbawahi pentingnya lembaga-lembaga informal, dengan menekankan pendekatan kontekstual terhadap manajemen transisi di negara-negara Selatan.

Implikasi terhadap penelitian transisi melibatkan evaluasi ulang kontestasi sebagai katalis perubahan, pemahaman konflik yang lebih luas, dan pengakuan terhadap peran krisis dalam mengungkap strategi informal. Implikasi tata kelola transisi menekankan pentingnya lembaga informal, pendekatan tata kelola multi-temporal, keterlibatan pemangku kepentingan yang inklusif, analisis berorientasi masa depan, dan kebijakan yang spesifik konteks.

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About the author

Suci Lestari Yuana (1986), born in Bali, Indonesia is a lecturer at the Department of International Relations, Faculty of Social and Political Sciences, Universitas Gadjah Mada. She graduated from the same department in 2009 and later earned her master's degree in international development from the Paris School of International Affairs, Sciences Po, France in 2013. During her PhD studies in the Department of Innovation Studies at the Copernicus Institute of Sustainable Development, Utrecht University, she developed a strong interest in the governance of digital technology innovation. She embodies her middle name, "Lestari," meaning sustainable, in her commitment to research at the intersection of digital technology and sustainability and she actively promotes interdisciplinary discourse through initiatives like the STAIR Community at Universitas Gadjah Mada. Yuana is committed to leveraging technology for positive societal and environmental impact, focusing on fostering sustainable development through her research and teaching endeavors.