

Article

Providers and Practices: How Suppliers Shape Car-Sharing Practices

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Abstract: Social practice theories can be useful for studying changes in mobility systems as regards automobility practices. However, many studies address the demand side and the user practices of consumers, without examining the supplier side. This Norwegian study focuses on the role of providers in car-sharing practices, using data from household interviews with car-sharing users, stakeholder workshops, and interviews with providers of car-sharing services. How are car-sharing providers shaping car-sharing practices, and with what implications? How do business models and platform technologies affect car-sharing practices? The results show how new car-sharing service companies, in addition to established firms such as car dealers and car rental companies, affect car-sharing practices by offering several alternatives for accessing cars. The implications of this are discussed, noting how car-sharing practices are shaped by car-sharing providers in the recursive relationship between practice-as-entity and practice-as-performance. The conclusions offer a critical view of how the providers contribute to various kinds of car-sharing understandings, as well as the implications for policy and practitioners.

Keywords: social practice theories; sustainability transitions; shared mobility; car-sharing



Citation: Svennevik, E.M.C. Providers and Practices: How Suppliers Shape Car-Sharing Practices. *Sustainability* **2021**, *13*, 1764. <https://doi.org/10.3390/su13041764>

Academic Editors: Sven Kesselring, Weert Canzler and Vincent Kaufmann
Received: 8 September 2020
Accepted: 26 January 2021
Published: 6 February 2021

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1. Introduction

Problems related to climate change, pandemics, and urbanizations put pressure for change on societies, organizations, institutions, and individuals [1]. Mobilities research, in particular on transitions of the system of automobility, can address challenges and changes in car-dependent societies [2]. Car-sharing has the potential to increase the overall efficiency of automobile use [3]—it can reduce the costs of travel to the individual as well as to society [4] by making it possible to rent locally available cars at any time and for any duration [5]. However, given the dominance of automobility and the expansive growth in communication technologies, a change like this is no simple matter. In a ‘risk society’ [6] where social structures become unstable and permeable, phenomena like these cannot be analyzed with the traditional categorical toolbox of mobility research [7].

Alternatives to car ownership are emerging in the transformation of the “system of automobility” [2] to the “system of mobilities”. Using cars for private transport facilitates the flexible mobility that society demands and is involved in shaping everyday life in modern societies—with major consequences for all competing transportation services [8]. Sharing platforms for bike and car use are new forms of the rental economy, enabled by the internet and the many new portable technologies increasingly used today [9]. Multiple models of mobility and transport shape this system; sharing becomes a way of connecting people, places, organizations, and events [7]. Sharing mobilities as an emerging system of socio-material relations, digital and tangible infrastructures, politics of access and connectivity, and co-created values offer potential as well as challenges [7].

The concept of “sustainable mobility” has evolved [10]. The uncertain sustainability implications of shared mobility create a need for new approaches [11] for analyzing multiplicity [12], low-energy innovation in everyday mobility [13], and a shift away from traditional vehicle ownership towards new concepts from the sharing economy [14]. We

need to examine the mundane and stable continuation of existing structures, while taking social and technical innovations into account [15].

Social practice theories (SPTs) with transition studies can be relevant here, suitable for studying aspects concerning everyday life [16] and consumption in socio-technical sustainability transitions [17–23]. The multilevel perspective (MLP) in the transitions literature [24,25] has proven useful as an analytical tool for identifying and engaging with diverse stakeholder groups, including mainstream (‘regime’) and alternatives (‘niches’) in the domain of sustainable transport research [26]. SPTs can deepen our understanding of the key social mechanisms and dynamics underpinning transitions in everyday life, and of the role of agency and collective action in processes of social change [27], such as understanding the role of users and car-sharing practices in puncturing the regime of automobility [28].

Various forms of car-sharing services are emerging as information technology is incorporated into mobility [29]. Recent empirical studies from Norway investigate the potential influence car-sharing has for car ownership [30], travel patterns for emerging new car-sharing practices [31,32], and the role of context and lifestyle for car-sharing [33]. Alternatives to car ownership are emerging in connection with decarbonizing Nordic transport systems [34]—and here the development of organized car-sharing in Norway can play a role [35].

There is a considerable body of knowledge on household practices associated with activities such as mobility and energy use [36,37], and car-sharing [32], but less is known about the dynamics of business models, platforms, and providers for car-sharing practices and mobility-system change. The present study addresses this gap by examining how providers contribute to shaping car-sharing practices. This approach is in line with suggestions to look at providers [38] and how new practices arise through the active and ongoing integration of images, artifacts, and forms of competence—a process involving consumers as well as producers [39]. An earlier related study focused on the user side, showing how car-sharing practices are executed, conceptualized as practice-as-performances [40]. Seeking to show how services shape practice, the present study turns to what is usually recognized as the practice of car-sharing, the generally understood type of practice, conceptualized as practice-as-entity. The empirical study is based on household interviews, stakeholder workshops, and interviews with providers.

Section 2 presents the literature on social practice theories and sustainability transitions. Section 3 presents materials and methods, Section 4 gives an outline of results, and Section 5 provides an outline of points to discuss. Section 6 concludes with implications for policy and research, and suggestions for future research directions.

2. Literature

2.1. Sustainability Transitions and Social Practice Theories

Sustainability transitions are conceptualized as a shift from a dominant socio-technical regime to a new regime, formed by interactions between the three levels of landscape, regimes, and niches. Established socio-technical systems can shift to more sustainable modes of production and consumption, with systemic changes in long-term, multidimensional, and fundamental transformation processes [41]. They may involve changes in environmental performance, economic prosperity, and societal equity [42].

SPTs are a family of theoretical approaches focusing on the multiple, everyday, routinized actions that constitute society [38]. Although “there is no unified practice approach” [43], a key assumption is that social structures are reproduced by performances of everyday practices [44–46]. Social practice theories connect micro- and macro-approaches to a social analysis by highlighting the interconnections between routinized everyday life and larger-scale sociotechnical developments [16], emphasizing that drivers of action tend to be located in “the site of the social”, rather than being driven by deliberative processes [47]. According to SPTs, changes in what people do cannot be reduced to the attitudes, behavior, or choices of individuals [48]. Social structures and technologies do not

exist outside or above individuals; rather, they are reproduced through routines performed by “practitioners” [49–51].

A “practice” refers to a routinized way in which objects are handled, bodies moved, subjects treated, things described, and the world is understood [50]. Practices are procedures of actions, seen as shared routinized ways of performing something [36,50,52]. Practices are constituted by distinct elements, such as people, forms of knowledge, artifacts [44,47,53,54], and their use [38]. This process is simplified in the suggestion to involve dynamic connections among the three main elements: materials, meanings, and competencies [51]. Elements and co-evolution between elements can uncover actor agency and changes in practices [46,50,55,56].

While earlier research with SPTs tended to focus on the continuation and persistence of practices, more recent studies have focused on how practices develop, sustain, and disappear. Thus, SPTs can offer insights into innovation and deep structural change in the context of sustainability [38]. SPTs show that human action depends on elements beyond the individual. Practices are more than what people choose to do, because forms of knowledge and technologies beyond the realm of individual actors are also implicated [38].

Such practice-based analysis takes everyday practices as the unit of analysis and considers individuals as the carriers of practices. Practices may be approached as entities and as performance [50]. Practice-as-entity refers to practice as the generally understood ideal type of practice—what people usually recognize as a practice and what kinds of elements are connected to it. People can talk about and understand it, also without performing it. Practice-as-performance, by contrast, is the unique performance of a practice in a specific time/place setting. Although a performance will always differ somewhat from other performances of the same practice, it resembles the general doing of the practice enough to be recognized as the practice [57].

2.2. System of Practices

A general (mis)understanding and mistaken simplification is that transition studies focus on production, and SPTs on consumption. Connecting production and consumption, and overcoming these misinterpretations, SPTs in transition studies are applied beyond the user-practice focus [38,57–61], challenging the supply/demand dichotomy [62]. Applying social practice theory to studies of the supply side and businesses and organizations is common elsewhere, as within management studies indicating a practice-based view of knowing and learning in organizations [63,64]. Practice theories are used for studies of social and organizational phenomena, such as interaction processes in business network businesses [65], building on practice-based approaches within organization studies [43,50,51,54,64,66–68], and market studies [69–76]. By contrast, the present study does not investigate practices within organizations and business developments, but instead includes relevant business models and platform technologies in seeking to explain how providers contribute to shape practices.

In transitions to a decarbonized transport system, a systemic practice approach can draw attention to how practices co-evolve across diverse locations and levels of the socio-technical system [36]. Instead of studying this solely in terms of niche and regime dynamics, such processes can be seen as co-evolutions of practices—as with the shift from driving and recruitment to cycling [36]. Such a “system of practice” approach implies that changes to the system may result from shifts in practice at any level—for example, changes such as peak oil at the landscape level of the MLP may result in recruitment to cycling practices [36].

Building on this “system of practice” approach, studies of energy and food practices have paid attention to networks and providers [37,38,77]. Further, a “system-of-provision” perspective for studies of changes in energy systems examines how the uptake of new technologies relates to connections between providers of energy services, consumers, and infrastructure networks [59]. Other studies have included providers when drawing on practice theory and socio-technical sustainability transitions [58]. For example, an integrated approach for regime analysis has been developed [61] and changes in agricultural

fertilization practices analyzed by focusing on the practice elements of materials, meanings, and competencies [57].

Although practice theories represent an emerging approach to analyzing sustainability transitions [57], and studies show examples of this [78–82], the integration of SPTs with transition studies has been questioned due to different ontologies [52,83–85]. Regardless, applying SPT in connection with sustainability transition studies is held to be useful because individualized models of consumption—like marginal lifestyle changes, consumption emissions reduction, and technological innovations—cannot alone satisfy the ambition of achieving an environmentally sustainable society [86,87]. By foregrounding practice as the central unit of social scientific analysis, SPTs transcend the dualisms of agency/structure and holism/individualism, offering insights into processes of socio-technical change [27].

Although this increasing body of work includes networks and providers, most research still uses SPT in transition studies to examine aspects of the users. Few empirical studies have focused on the role of providers in practices involving new technologies and policies. This study seeks to fill that gap by addressing the research question: how do car-sharing providers shape car-sharing practices, and with what implications? The research objective is to explore how business models and platforms contribute to shaping car-sharing practices.

3. Materials and Methods

Qualitative methods of interviews with households and providers of car-sharing services and stakeholder workshops were chosen for this study because people can talk about practices [88]. The combination of different types of data corresponding to the demand and supply side provides opportunities for analyzing car-sharing in a mobility-system context [89]. Primary data were obtained through household interviews with users and a stakeholder workshop with representatives from car-sharing services, public transport companies, members of city councils, and neighboring counties and municipalities. The secondary data stem from interviews with representatives of providers of car-sharing services in Oslo.

On 31 October 2018, a half-day stakeholder workshop was organized with representatives from three car-share operators (Bilkollektivet, Hertz Bilpool, NSB/VY Bybil), public transportation services (Ruter), public authorities (Oslo City Council, Akershus County, Bærum Municipality), mobility organizations (Møller Mobility Group), and research representatives (CICERO). The workshop involved groupwork, followed by plenary discussions. The three groups (SWG1, SWG2, and SWG3) discussed car-sharing as part of a sustainable transport system, and shared opinions on how car-sharing in a mobility system would look like, focusing on what can be done by various stakeholders. Groupwork conversations were recorded and transcribed; see Table 1 for list of participants and the three stakeholder workshop groups (SWGs).

Table 1. Stakeholder workshop participants.

Stakeholder Participant	Stakeholder Description	Stakeholder Workshop Group SWG ID
Bilkollektivet	CS Cooperative	SWG1
Bilkollektivet	CS Cooperative	SWG2
Hertz Bilpool	CS Service Corporate	SWG1
Møller Mobility	Car company	SWG2
NSB/VY Bybil	CS from Norwegian State Railroads City Car	SWG3
Ruter	Public transport operator	SWG2
CICERO	Research institute	SWG3
Oslo City Council	Section for the Urban Environment	SWG1
Akershus county	Neighboring county to Oslo	SWG2
Bærum municipality	Neighboring municipality to Oslo	SWG3

The household interviews were conducted in the respondents' homes in May–July 2017, October–November 2017, and January–March 2018. Semi-structured interviews

were held with 39 households; the author of this study was involved in 34 interviews. Respondents were recruited through an announcement on the Facebook pages of car-share suppliers. An overview of possible participants was made, and interviews were then booked, targeted towards variation in age, location, and the number of family members. The households were registered members of three different kinds of car-sharing services: a business-to-consumer (B2C) cooperative (Bilkollektivet), a B2C corporate provider (Hertz Bilpool), and a peer-to-peer provider P2P (Nabobil). Table 2 gives an overview of the interviews. The households varied—couples or singles, with and without children living at home. Thirty-three of the households used car-sharing services (two were members who provided cars on the peer-to-peer platform; four were members but nonusers). Interview guides for users and nonusers were developed; these included questions about life situation, daily travels, leisure travels, car-sharing use, motivation, and implications. Respondents were informed about confidentiality and privacy and agreed on a confidentiality statement. Interviews lasted from 45 min to two hours, mostly with all adults in the household, and were recorded and transcribed.

Table 2. Overview of household interviews.

Type of Car-Sharing Service	Household Interview Oslo HIO ID
B2C cooperative	1,8,9,13,15,16,20,22,23,25,26,27,29,30,36,37,38,39
B2C corporate	4,5,6,7,14,17,21,31,33,34,35
P2P	2,3,10,11,12,18,19,24,28,32

Interviews with providers were conducted with employees in six car-share companies in January 2017. Providers were a car-sharing cooperative (Bilkollektivet), services providing car-sharing (AVIS NOW) in collaboration with housing corporations (OBOS), a platform providing peer-to-peer car-sharing services (Nabobil), and two companies providing hubs of station-based car-sharing (Move About and Hertz Bilpool). The interviews followed a semi-structured interview guide, with initial questions concerning the establishment of the company, services provided, and further plans for the company, followed by questions concerning customer relations, channels for customer communication, sales of the services with revenue streams, ownership structures, and core competence in the company. Ultimately, questions concerned connections with other car-sharing companies, policymakers, and public transport providers, and their views on the prospects of car-sharing as part of alternatives for urban mobility. (See Table 3). These interviews were used as secondary data in this study as the author was not present.

Table 3. Interviews with car-sharing providers.

Provider	Description	Interview ID
AVIS Now	CS with housing companies	IAN
Nabobil	Peer-to-peer CS, P2P	INB
OBOS	Housing company	IOB
Move About	CS	IMA
Bilkollektivet	CS Cooperative	IBK
Hertz Bilpool	CS Corporate company	IHB

Some of the data have previously been used for other studies, for example in a published study that used the household interviews to show performances of car-sharing practices [40]. The present study is a continuation of this. Data analysis involved three steps: data were first synthesized; then, the coding was guided by concepts from social practice theories and transition studies; thirdly, the results from the coding were combined, evaluated, and cross-checked and also compared against the other, related, studies.

Possible limitations of this study concern the data collection and analytical process; biases concern the possible self-selection issues in the sample of respondents. Further, it should be noted that the study was conducted by only one author.

4. Analysis and Results

The results address the research question of how car-sharing providers shape car-sharing practices. Section 4.1 presents car-sharing services by first explaining how new actors offer car-sharing services in the Oslo urban area, and then notes how existing auto-mobility actors also offer variants of car-sharing services. Section 4.2, on the providers' role in car-sharing, describes this as a practice-as-entity and elaborates on three elements: meanings of mobility, car and communication competencies, and objects and infrastructures.

4.1. Car-Sharing Services in Norway

Both new actors and established companies offer variants of car-sharing services in Norway. Cooperatives are nonprofit car-sharing services offering station-based, round-trip car-sharing through fleets of cars available for their members in specific locations. Other types of car-sharing services include free-floating models, where cars are not station-based, but are picked up and delivered within a delimited area. Car-sharing is also offered through online sharing platforms, where cars owned by persons using the platform are announced, organized as peer-to-peer (P2P) business models. In addition to the emergence of these recent car-sharing services, existing actors, such as established automotive companies, now offer types of car-sharing services—for example, through subscription models, short-term leasing, and/or apps for using station-based cars. Services may be used by private consumers in a business-to-consumer (B2C) model, or by companies in business-to-business (B2B) models.

“Bilkollektivet” (lit: “the car collective”) is a user-owned, nonprofit organization, established in 1995 as the first formal car-sharing service provider in Norway [35]. Members may be companies or private customers; they buy a share on joining, and book cars and pay for their use through an online service. “Move About”, another station-based car-sharing service, is organized as a corporate company, as a for-profit organization.

The peer-to-peer car-sharing platform “Nabobil” enables communication and payment of sharing of privately owned cars. Nabobil (lit: “neighbor car”) is often compared to Airbnb, as a sharing platform for cars instead of housing. Like Airbnb, which rents out rooms and apartments on a short-term basis, P2P car-sharing is suitable for people seeking to rent vehicles for use, as well as car-owners who want to earn something from the excess capacity of the vehicles they own [35].

Public transportation actors also offer car-sharing. One of the largest transport groups in the Nordic countries is the Vy Group, owned by the Norwegian government and Ministry of Transport and Communications. Their car-sharing service, “Bybil” (lit: “city-car”), was launched as the first free-floating car-sharing platform in Norway in 2018, at the time provided by the Norwegian State Railways (NSB), in partnership with the Danish company GreenMobility [35].

Further, the established car rental companies Hertz and Avis provide station-based car-sharing services. “Hertz BilPool” was started in 2010 as a corporate acquisition of Oslo Bilpool. “AVIS Now” is part of the car rental company, AVIS Budget Group, established in 2016 as a pilot project with the housing cooperative OBOS [90]. These various services differ in their models for access, such as memberships, whereby one can, for example, pay a higher monthly fee with a cheaper price per kilometer, or a smaller monthly fee at greater cost per kilometer.

Companies that previously only sold cars are now developing their own car-sharing services and are otherwise involved in developing new alternatives to ownership, such as short-term leasing and subscription models. For example, the retail automobile company, the Møller Group, marked the shift by symbolically adding “Mobility” to the company name. In 2017, they were engaged in establishing “Mobility Lab”, a project intended to provide an arena for exchanging ideas and experiences, and networks aimed at promoting an entrepreneurial environment for developing mobility solutions to deal with environmental problems and transport challenges. In 2018, they established the car-sharing service Hyre (“hire”), which offers station-based car-sharing through an app used to book and open

cars and pay for usage [91]. Further, Hertz and AVIS Now are examples of established car rental companies that now offer car sharing.

Car owning and car rental and the various types of supporting services (car loans, insurance, maintenance plans, used car sales, etc.) have been the dominant way of obtaining and using cars. This is now changing, with both established and new actors offering variants of car-sharing services. Table 4 shows the variants of car-sharing services investigated in this study.

Table 4. Variants of car-sharing services investigated in this study.

Provider	Scheme	Type of Car-Sharing
Platform	Peer-to-peer	“Neighbor” car-sharing
Car collective	Station-based	“Cooperative” car-sharing
Car rental company	Station-based	“Self-service rental” car-sharing
Housing company	Station-based	“Community” car-sharing
Public transport company	Free-floating	“City-car” car-sharing

4.2. Practice-as-Entity

Practice-as-entity is how people usually recognize an action—it includes the elements that constitute the practice and elements that connect to the practice. In the three-element approach, practices are constituted by the elements of meaning, material, and competence and their interconnections. Car-sharing practices include processes of searching and booking a vehicle, finding and opening it, driving and parking, and completing the transaction and paying. Through Internet access, hardware devices, and software programs, users can access cars, organize insurance, maintenance, communication, and key-less opening technologies. The various ways car-sharing services are offered are here explained as consisting of elements, and connections and co-evolutions between the elements.

4.2.1. Meanings of Mobility, Objects and Infrastructures, Car and Communication Competences

A common concern for new services and incumbents alike was whether cars will continue to be part of the mobility system. Some incumbents aimed to identify ways of continuing with cars as part of the mobility system. This also involved preventing the demand for private cars from disappearing. According to a respondent from a (former) car rental company, they wanted to participate “in the war for car customers” and needed to find new ways of renting out cars that will prove profitable in the long run (IAN).

A representative of the new actor Move About explained that their main objectives were to provide mobility solutions instead of cars as such:

Move About simply does not focus on the car itself, but on the users who need mobility (IMA).

We want there to be as few cars as possible that are used as much as possible (IMA).

A reduction in the car fleet means that Move About does a good job. That contrasts with car-sharing companies that view this as short-term car rental. Mobility is the key, not the cars themselves (IMA)

Representatives of Move About stress that their business is not cars as such: offering mobility solutions are the core value and goal of the company (IMA):

Today, car-sharing is our main task, but in the future, other solutions concerning mobility on demand are the main goal: the mobility you need, when you need it. Car-sharing is part of this picture and does not exist alone (IMA).

We do not provide car-sharing, but the delivery of mobility services. Today, the car is the key asset, but in the future, we cannot know for sure what it will be (IMA).

Representatives from Hertz stated that they wanted to contribute to sustainable urban development, adding that the station-based round-trip model can contribute to reduced car ownership and driving. They do not aim to eliminate the need for cars, but

to change the use-patterns (IHB). Also, Bilkollektivet was concerned with changing the use patterns for cars—they provide vehicles when these are needed, offering accessibility and flexibility. Further, as a cooperative, they listen to the users, as they are also the owners. Representatives stressed the importance of long-term profitability (IBK). Nabobil spokespersons explained that the objective is to be responsible for providing distribution channels for cars (INB).

The material element of car-sharing practice includes physical and digital objects and infrastructures related to cars and platform technologies. The car is the object in use, and the various car-sharing business models and platforms provide ways of accessing these vehicles. For example, the car collective owns or leases a hub of cars, which are made available to members, whereas the P2P car-sharing service provides only the platform. All providers of car-sharing saw technology as central.

Competencies on both cars and communication matters, where car fleet management is central for the providers of station-based and free-floating schemes, and the P2P services need competence for the platform technology. Some providers stated that they drew on their experience within the automotive industry. Services that previously provided car rentals—AVIS Now and Hertz—emphasized the importance of the already established skills in handling cars in their new car-sharing services. Hertz representatives saw their core competencies—operation, large network, car dealers, service, and research experience—as important for their car-sharing service (IHB). AVIS Now stated that their core competence is related to logistics, car rental, car technology, and is a foundation for their work with car-sharing (IAN). They emphasized that new ways of renting and sharing vehicles through online communication can reduce employment costs compared to car rental offices (IAN).

4.2.2. Connections between Elements and Connections to Other Practices

Three types of connections tie the elements together and affect what is understood and recognized as car-sharing. The various business models and platforms and the ways in which they offer solutions for booking and payment, opening and accessing the vehicle, and driving and parking.

Associated with booking and payment, the business models and platforms are relevant because of which costs are covered—for example, usage in time periods and distances, fuel and parking, and insurance and maintenance. This leads to variations on how car-sharing is used for preplanned travels or impulse trips, and whether members are committed to specific services through monthly fees or use multiple services randomly. The providers offer insurance and maintenance options as part of the car-sharing practice. Many households see car-sharing as a way of having access to cars without committing to obligations concerned with repairs and annual vehicle fees.

Take the opening of a car by means of a smartphone instead of a key. This involves both the material element, with the communication devices, and the competence element, because of the knowledge on how to open the car this way, as well as the meaning element, with the flexibility to open the car without needing a specific key.

Parking is involved in the beginning, throughout, and at the end, depending on whether the services are station-based or free-floating. There can also be other specific encounters, e.g., charging electrical vehicles (EVs). The car-sharing service AVIS Now collaborated with the housing cooperative OBOS and had their cars parked in housing companies, and they saw facilitating necessary infrastructure, especially charging and parking, as important parts of their car-sharing service (IOB). Hertz Bilpool has supported this view of the importance of public parking spaces and charging. They addressed two issues concerning public parking spaces. First, they raised a concern that current parking policies regarding, for instance, residential parking should also deal with parking for car-sharing cars, and not be restricted to privately owned cars. Second, they proposed that local regulations with building norms for minimum parking spaces in a housing development could be reduced if they include car-sharing (IHB). OBOS has supported this as well,

viewing dispensations from the parking norms, good public transport, and dedicated parking spaces for shared cars as drivers for the further development of car-sharing (IOB).

Connections to other elements and practices include connections to other shared-mobility alternatives, such as bike-sharing schemes, as well as public transport, housing, and workplaces. As one respondent noted, car-sharing relates to other mobility practices, public transport in particular:

Good public transport is important for alternative systems such as car-sharing to work well enough and be a good alternative to private car ownership. (IMA)

Travelers use car-sharing services in addition to public transportation; partnerships, especially in collaboration with public transportation or towards the mobility-as-a-service model (MaaS), is, therefore, a possible future scenario (IAN). Here, bicycle-sharing and electric bicycles also play a role—the idea for the future is for users to request mobility roundtrip to a certain destination, through a mobility service offering various alternatives in addition to car-sharing (IMA).

5. Discussion

We have seen how providers are involved in shaping car-sharing practices, but what are the implications of this? The services examined in this study include cooperatives with station-based cars, peer-to-peer platforms with access to privately owned cars, and a public transport company offering free-floating services. The various ways cars are made accessible through these services affect the way car-sharing is used. First, I look at what this implies for changes in the (auto)mobility system. Then, I discuss how car-sharing practices are shaped and steered by car-sharing providers in the recursive relationship between practice-as-entity and practice-as-performance.

5.1. Moving Mobility

The analysis has shown how car-sharing providers are contributing to changes in the mobility system, as car-sharing services are part of providing mobility to users. Alternatives to car ownership are emerging in the transformation of the “system of automobility” [2] to a “system of mobilities”. Car-sharing providers are causing both stability and instability when they provide access to cars, because of how this affects consistency in cars for personal mobility. The providers contribute to making cars available through access-based models. Instead of contributing to change, the providers of car-sharing also contribute to reinforcing old, persistent meanings. With the incumbent’s role in continuing with automobility, in addition to facilitating the generation of new meanings of accessibility to cars, existing meanings of cars for mobility were stabilized. This is in line with former research stating that carsharing is both immersed in and distinct from the regime of automobility [28].

The established car retailers and car rental companies offering car-sharing services indicate changes in both the regime and niches. Developments in business models and platform technologies contribute to incumbents changing in the existing regime of automobility. This implies that providers play a role in changes both in regime- and niche- practices, adding to research that suggests including providers, and regime- and niche- practices in integrated frameworks of social practice theories and transitions theories [36,39,92–96].

5.2. Shaping and Steering Practices

The provision of mobility services shapes what is understood as car-sharing, the “practice-as-entity”. Social practice theories (SPTs) can be used to explain a social phenomenon as an alternative to studying action resulting from intentional individual interests. SPTs see practices as everyday actions of individuals that recursively make up the social structures. Phrased in terms of structuration theory [44], practices entail both structure (as an entity of related elements) and agency (concrete enactment and performance) [97]. Following this understanding, we can see a recursive relationship between the practice-as-entity as something that holds together an understanding of a phenomenon and as a

type of “structure”, and the practice-as-performance in ways of executing and doing a phenomenon as a kind of “agency.”

We have seen that car-sharing practices involve several business models and platform technologies. The types of services offered are emerging, leading to a larger understanding of what car-sharing involves, in turn leading to emerging ways of doing car-sharing. Figure 1 illustrates this by showing that practice-as-entity is what is commonly thought of and recognized as a “doing”, whereas practice-as-performance is what is involved when people actually carry out this doing. Practices can also be further changed when practitioners perform new practices in new situations, and different practices come into contact with each other [98].

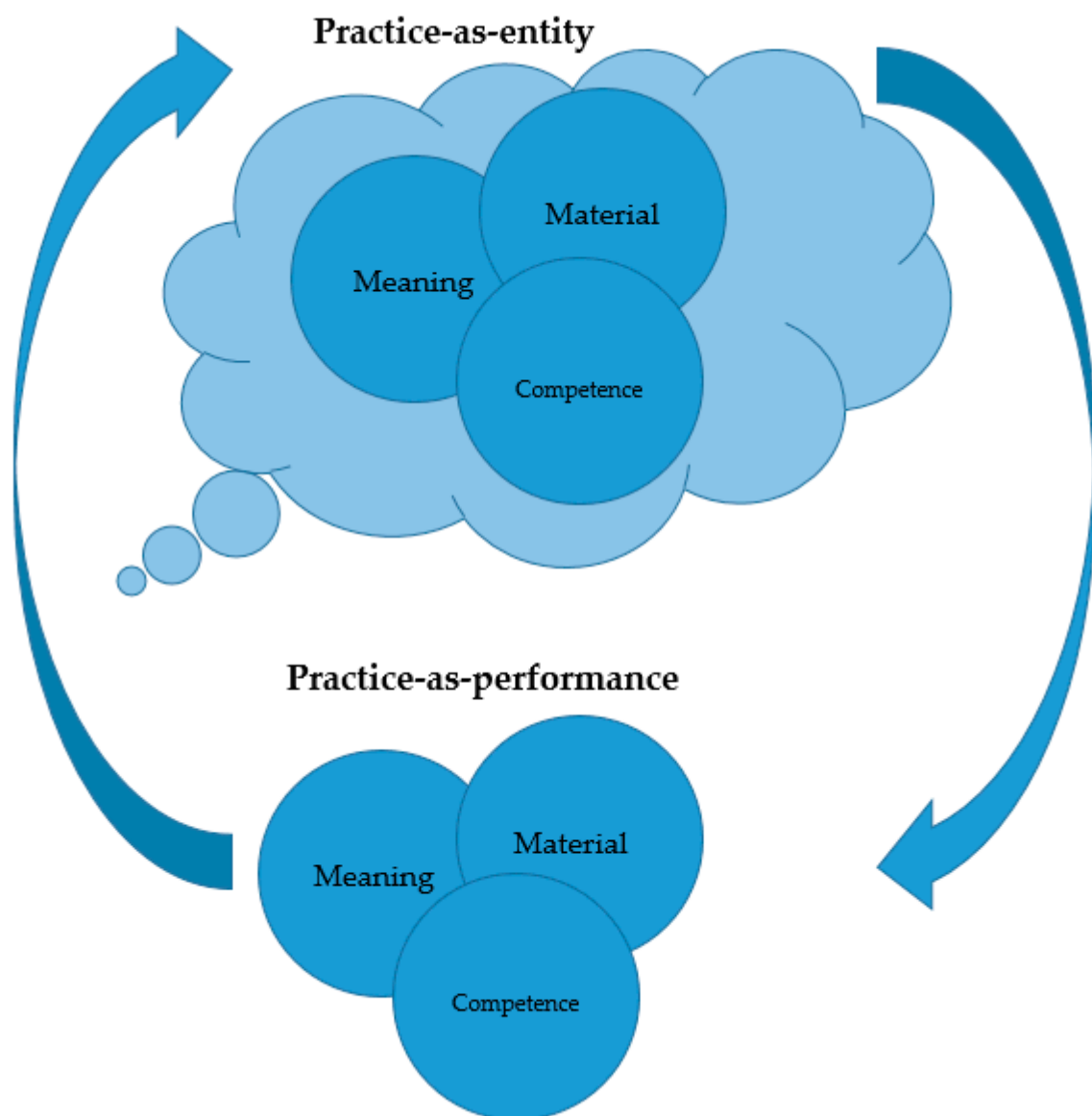


Figure 1. Recursive relationship between practice-as-entity and practice-as-performance.

This means that neither car-sharing practice-as-performance nor practice-as-entity is fixed or static. Car-sharing is both understood differently and done differently, and the results of this study highlight how providers contribute to different understandings. This analysis sheds light on how the increased provision of car-sharing services constitutes a central part of this relationship between what car-sharing is understood as “the entity”—

with implications for how it is manifested and executed in the “performance”. The analysis, therefore, sheds light on the role of providers in this recursive relationship.

With the growing provision of car-sharing services and access to these, car-sharing becomes more acceptable. If car-sharing gradually is adopted as an unwritten rule or norm, in turn, that may influence the performances of individuals. With this recursive two-way relationship, a wider understanding of what car-sharing is can lead to more ways in which it is done. Practices can reinforce existing norms or create new potentials for expansive action that deviates from social norms, creating dissensus and transformative change within social structures. Therefore, in addition to examining how car-sharing is done, it is crucial to understand what car-sharing entails and how this can differ.

6. Conclusions

This article has shown how new and incumbent actors offer car-sharing services in the urban area of Oslo in Norway, as part of the practice of car sharing. The providers’ role in car-sharing is described as practice-as-entity, with elaborations of connections between the three key elements described as meanings of mobility, objects and infrastructures, and car and communication competencies. By investigating the recursive relationship between practice-as-entity and practice-as-performance, the findings show how car-sharing practices are shaped and steered by car-sharing providers.

This gives rise to critical concerns as to how car-sharing is perceived in terms of the sharing economy, service innovation, and social innovation. This article does not aim to add further explanations to the variations of car-sharing definitions in these fields, instead, it aims to highlight that car-sharing can be done and understood differently depending on developments in business models and platform technologies. Policy interventions should thus take into account that the practices are not static and fixed. Further research could investigate these matters more, especially concerning policy interventions, by, for example, relating this to research on other sharing schemes such as within housing. Other forms of car use such as subscription models and short-term leasing could also be further studied to shed light on changes in car-sharing practices.

Funding: This research was funded by the Research Council of Norway under the ENERGIX project TEMPEST, grant number 255430.

Institutional Review Board Statement: The Norwegian Center for Research Data (NSD) approved the data collection of the primary data for this study, and the study was conducted according to their approval and guidelines.

Informed Consent Statement: Informed consent was obtained from all subjects in the primary data collection in the study.

Data Availability Statement: The corresponding author stores the data according to the approval from NSD.

Acknowledgments: This article was developed as part of the TEMPEST project, and I am grateful to all project partners and in particular, Eivind Farstad, Cyriac George, Tom Erik Julsrud, Ove Langeland, and Tanu Priya Uteng for work with the data collection. I am also grateful for assistance with booking and transcribing the interviews and I wish to thank the participants in the interviews and stakeholder workshop.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Büscher, M.; Freudendal-Pedersen, M.; Kesselring, S.; Kristensen, N.G. Handbook of Research Methods and Applications for Mobilities. In *Handbook of Research Methods and Applications for Mobilities*; Edward Elgar Publishing: Cheltenham, UK, 2020.
2. Urry, J. The ‘system’ of automobility. *Theory Cult. Soc.* **2004**, *21*, 25–39. [[CrossRef](#)]
3. Frenken, K.; Schor, J. Putting the sharing economy into perspective. *Environ. Innov. Soc. Trans.* **2017**, *23*, 3–10. [[CrossRef](#)]
4. Shaheen, S.; Sperling, D.; Wagner, C. *Carsharing in Europe and North America: Past, Present, and Future*; University of California Transportation Center: Berkeley, CA, USA, 1998.

5. Frenken, K. Towards a prospective transition framework. A co-evolutionary model of socio-technical transitions and an application to car sharing in The Netherlands. In Proceedings of the International workshop on the sharing economy, Utrecht, The Netherlands, 2015.
6. Beck, U. *Risk Society: Towards a New Modernity*; SAGE Publishing: Thousand Oaks, CA, USA, 1992; Volume 17.
7. Kesselring, S.; Freudendal-Pedersen, M.; Zuev, D. (Eds.) *Sharing Mobilities: New Perspectives for the Mobile Risk Society*; Routledge: Abingdon, UK, 2020.
8. Canzler, W.; Kaufmann, V.; Kesselring, S. *Tracing Mobilities: Towards a Cosmopolitan Perspective*; Ashgate Publishing, Ltd.: Farnham, UK, 2008.
9. Freudendal-Pedersen, M.; Kesselring, S. Sharing mobilities. Some propaedeutic considerations. *Appl. Mobilities* **2018**, *3*, 1–7. [[CrossRef](#)]
10. Holden, E.; Gilpin, G.; Banister, D. Sustainable Mobility at Thirty. *Sustainability* **2019**, *11*, 1965. [[CrossRef](#)]
11. Akyelken, N.; Banister, D.; Givoni, M. The Sustainability of Shared Mobility in London: The Dilemma for Governance. *Sustainability* **2018**, *10*, 420. [[CrossRef](#)]
12. Hodson, M.; Geels, F.W.; McMeekin, A. Reconfiguring Urban Sustainability Transitions, Analysing Multiplicity. *Sustainability* **2017**, *9*, 299. [[CrossRef](#)]
13. Schwanen, T. The Bumpy Road toward Low-Energy Urban Mobility: Case Studies from Two UK Cities. *Sustainability* **2015**, *7*, 7086–7111. [[CrossRef](#)]
14. Kane, M.; Whitehead, J. How to ride transport disruption—A sustainable framework for future urban mobility. *Aust. Plan.* **2017**, *54*, 177–185. [[CrossRef](#)]
15. Kesselring, S. *The Mobile Risk Society Tracing Mobilities: Towards a Cosmopolitan Perspective*; Ashgate Publishing, Ltd.: Farnham, UK, 2008; pp. 77–102.
16. Greene, M. Socio-technical transitions and dynamics in everyday consumption practice. *Glob. Environ. Chang.* **2018**, *52*, 1–9. [[CrossRef](#)]
17. Mu, W.; Spaargaren, G.; Lansink, A.O. Mobile Apps for Green Food Practices and the Role for Consumers: A Case Study on Dining Out Practices with Chinese and Dutch Young Consumers. *Sustainability* **2019**, *11*, 1275. [[CrossRef](#)]
18. Liu, W.; Oosterveer, P.; Spaargaren, G. Promoting sustainable consumption in China: A conceptual framework and research review. *J. Clean. Prod.* **2016**, *134*, 13–21. [[CrossRef](#)]
19. Spaargaren, G. The cultural dimension of sustainable consumption practices: An exploration in theory and policy. In *Innovations in Sustainable Consumption*; Edward Elgar Publishing: Cheltenham, UK, 2013; pp. 229–251.
20. Spaargaren, G. Theories of practices: Agency, technology, and culture: Exploring the relevance of practice theories for the governance of sustainable consumption practices in the new world-order. *Glob. Environ. Chang.* **2011**, *21*, 813–822. [[CrossRef](#)]
21. Spaargaren, G.; Oosterveer, P. Citizen-Consumers as Agents of Change in Globalizing Modernity: The Case of Sustainable Consumption. *Sustainability* **2010**, *2*, 1887–1908. [[CrossRef](#)]
22. Spaargaren, G.; Martens, S.; Beckers, T.A. Sustainable Technologies and Everyday Life. In *User Behavior and Technology Development*; Springer: Dordrecht, The Netherlands, 2006; pp. 107–118.
23. Spaargaren, G. Sustainable Consumption: A Theoretical and Environmental Policy Perspective. *Soc. Nat. Resour.* **2003**, *16*, 687–701. [[CrossRef](#)]
24. Geels, F.; Kemp, R.; Dudley, G.; Lyons, G. *Automobility in Transition?: A Socio-Technical Analysis of Sustainable Transport*; Routledge: Abingdon, UK, 2011.
25. Geels, F.W. A socio-technical analysis of low-carbon transitions: Introducing the multi-level perspective into transport studies. *J. Transp. Geogr.* **2012**, *24*, 471–482. [[CrossRef](#)]
26. Whitmarsh, L. How useful is the Multi-Level Perspective for transport and sustainability research? *J. Transp. Geogr.* **2012**, *24*, 483–487. [[CrossRef](#)]
27. Köhler, J.; Geels, F.; Kern, F.; Onsongo, E.; Wieczorek, A. A research agenda for the Sustainability Transitions Research Network. In *Sustainability Transitions Research Network (STRN)*; Sustainable Consumption Institute, University of Manchester: Manchester, UK, 2017.
28. Kent, J.L.; Dowling, R. Puncturing automobility? Carsharing practices. *J. Transp. Geogr.* **2013**, *32*, 86–92. [[CrossRef](#)]
29. Bergman, N.; Schwanen, T.; Sovacool, B.K. Imagined people, behaviour and future mobility: Insights from visions of electric vehicles and car clubs in the United Kingdom. *Transp. Policy* **2017**, *59*, 165–173. [[CrossRef](#)]
30. Svennevik, E.M.C. The existing and the emerging: Car ownership and car sharing on the road towards sustainable mobility. *Int. J. Automot. Technol. Manag.* **2019**, *19*, 281. [[CrossRef](#)]
31. Julsrud, T.E.; Farstad, E. Car sharing and transformations in households travel patterns: Insights from emerging proto-practices in Norway. *Energy Res. Soc. Sci.* **2020**, *66*, 101497. [[CrossRef](#)]
32. Julsrud, T.E.; Farstad, E.; George, C. Recruitment, stabilization and defection: Exploring car-sharing pathways of young urban households. In *Sharing Mobilities: New Perspectives for the Mobile Risk Society*; Freudendal-Pedersen, M., Kesselring, S., Zuev, D., Eds.; Routledge: New York, NY, USA, 2020; pp. 132–153.
33. Uteng, T.P.; Julsrud, T.E.; George, C. The role of life events and context in type of car share uptake: Comparing users of peer-to-peer and cooperative programs in Oslo, Norway. *Transp. Res. Part D Transp. Environ.* **2019**, *71*, 186–206. [[CrossRef](#)]

34. Langeland, O.; Andersson, M.; Julsrud, T.E.; Sarasini, S.; Schnurr, M.; Tongur, S. *Decarbonising the Nordic Transport System: A TIS Analysis of Transport Innovations*; TØI Report 1678/2018; Institute of Transport Economics: Oslo, Norway, 2018.
35. George, C.; Julsrud, T. *The Development of Organised Car Sharing in Norway: 1995–2018*; TØI Report 1663; Institute of Transport Economics: Oslo, Norway, 2018.
36. Watson, M. How theories of practice can inform transition to a decarbonised transport system. *J. Transp. Geogr.* **2012**, *24*, 488–496. [[CrossRef](#)]
37. Higginson, S.; Thomson, M.; Bhamra, T. “For the times they are a-changin’”: The impact of shifting energy-use practices in time and space. *Local Environ.* **2013**, *19*, 520–538. [[CrossRef](#)]
38. Langendahl, P.-A.; Cook, M.; Potter, S. Sustainable innovation journeys: Exploring the dynamics of firm practices as part of transitions to more sustainable food and farming. *Local Environ.* **2016**, *21*, 105–123. [[CrossRef](#)]
39. Shove, E.; Pantzar, M. Consumers, producers and practices. Understanding the invention and reinvention of Nordic walking. *J. Consum. Cult.* **2005**, *5*, 43–64. [[CrossRef](#)]
40. Svennevik, E.M.C.; Julsrud, T.E.; Farstad, E. From novelty to normality: Reproducing car-sharing practices in transitions to sustainable mobility. *Sustain. Sci. Pr. Policy* **2020**, *16*, 169–183. [[CrossRef](#)]
41. Markard, J.; Raven, R.R.; Truffer, B. Sustainability transitions: An emerging field of research and its prospects. *Res. Policy* **2012**, *41*, 955–967. [[CrossRef](#)]
42. Truffer, B.; Coenen, L. Environmental Innovation and Sustainability Transitions in Regional Studies. *Reg. Stud.* **2012**, *46*, 1–21. [[CrossRef](#)]
43. Cetina, K.K.; Schatzki, T.R.; Von Savigny, E. (Eds.) *The Practice Turn in Contemporary Theory*; Routledge: London, UK; New York, NY, USA, 2001.
44. Giddens, A. *The Constitution of Society, Outline of the Theory of Structuration*; University of California Press: Berkeley, CA, USA, 1984.
45. Lyons, A.P.; Bourdieu, P.; Nice, R. Outline of a Theory of Practice. *ASA Rev. Books* **1980**, *6*, 232. [[CrossRef](#)]
46. Schatzki, T.R. *Social Practices: A Wittgensteinian Approach to Human Activity and the Aocial*; Cambridge CUP: Cambridge, UK, 1996.
47. Schatzki, T.R. *The Site of The Social: A Philosophical Account of the Constitution of Social Life and Change*; Penn State Press: University Park, PA, USA, 2002.
48. Shove, E. Beyond the ABC: Climate Change Policy and Theories of Social Change. *Environ. Plan. A Econ. Space* **2010**, *42*, 1273–1285. [[CrossRef](#)]
49. Strengers, Y.; Maller, C. *Social Practices, Intervention and Sustainability: Beyond Behaviour Change*; Strengers, Y., Maller, C., Eds.; Routledge: London, UK, 2014.
50. Reckwitz, A. Toward a theory of social practices: A development in culturalist theorizing. *Practic. Hist.* **2004**, *5*, 259–277. [[CrossRef](#)]
51. Shove, E.; Pantzar, M.; Watson, M. *The Dynamics of Social Practice: Everyday Life and How it Changes*; SAGE Publications: London, UK, 2012.
52. Shove, E.; Walker, G. Governing transitions in the sustainability of everyday life. *Res. Policy* **2010**, *39*, 471–476. [[CrossRef](#)]
53. Bourdieu, P. *Distinction: A Social Critique of the Judgement of Taste*; Harvard University Press: Cambridge, MA, USA, 1984.
54. Reckwitz, A. The status of the “material” in theories of culture: From “social structure” to “artefacts”. *J. Theory Soc. Behav.* **2002**, *32*, 195–217. [[CrossRef](#)]
55. Gram-Hanssen, K. Standby Consumption in Households Analyzed With a Practice Theory Approach. *J. Ind. Ecol.* **2009**, *14*, 150–165. [[CrossRef](#)]
56. Warde, A. Consumption and Theories of Practice. *J. Consum. Cult.* **2005**, *5*, 131–153. [[CrossRef](#)]
57. Huttunen, S.; Oosterveer, P. Transition to Sustainable Fertilisation in Agriculture, A Practices Approach. *Sociol. Rural.* **2016**, *57*, 191–210. [[CrossRef](#)]
58. Jakku, E.; Taylor, B.; Fleming, A.; Mason, C.; Fielke, S.; Sounness, C.; Thorburn, P. “If they don’t tell us what they do with it, why would we trust them?” Trust, transparency and benefit-sharing in Smart Farming. *NJAS Wagening. J. Life Sci.* **2019**, *90*, 100285. [[CrossRef](#)]
59. Judson, E.P.; Bell, S.; Bulkeley, H.; Powells, G.; Lyon, S. The Co-Construction of Energy Provision and Everyday Practice: Integrating Heat Pumps in Social Housing in England. *Sci. Technol. Stud.* **2015**, *28*, 26–53. [[CrossRef](#)]
60. Maye, D. Examining Innovation for Sustainability from the Bottom Up: An Analysis of the Permaculture Community in England. *Sociol. Rural.* **2016**, *58*, 331–350. [[CrossRef](#)]
61. Morrissey, J.; Miroso, M.; Abbott, M. Identifying Transition Capacity for Agri-food Regimes: Application of the Multi-level Perspective for Strategic Mapping. *J. Environ. Policy Plan.* **2013**, *16*, 281–301. [[CrossRef](#)]
62. Labanca, N.; Pereira, Á.G.; Watson, M.; Krieger, K.; Padovan, D.; Watts, L.; Moezzi, M.; Wallenborn, G.; Wright, R.; Laes, E.; et al. Transforming innovation for decarbonisation? Insights from combining complex systems and social practice perspectives. *Energy Res. Soc. Sci.* **2020**, *65*, 101452. [[CrossRef](#)]
63. Nicolini, D. *Practice Theory, Work, and Organization: An Introduction*; Oxford University Press: Oxford, UK, 2012.
64. Nicolini, D.; Gherardi, S.; Yanow, D. Introduction: Toward a practice-based view of knowledge and learning in organization. In *Knowing in Organizations—A Practice-Based Approach*; Nicolini, D., Gherardi, S., Yanow, D., Eds.; M. E. Sharpe: New York, 2003.
65. La Rocca, A.; Hoholm, T.; Mørk, B.E. Practice theory and the study of interaction in business relationships: Some methodological implications. *Ind. Market. Manag.* **2017**, *60*, 187–195. [[CrossRef](#)]

66. Feldman, M.S.; Orlikowski, W.J. Theorizing Practice and Practicing Theory. *Organ. Sci.* **2011**, *22*, 1240–1253. [[CrossRef](#)]
67. Miettinen, R.; Samra-Fredericks, D.; Yanow, D. Re-Turn to Practice: An Introductory Essay. *Organ. Stud.* **2009**, *30*, 1309–1327. [[CrossRef](#)]
68. Orlikowski, W.J. Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organ. Sci.* **2002**, *13*, 249–273. [[CrossRef](#)]
69. Araujo, L. Markets, market-making and marketing. *Market. Theory* **2007**, *7*, 211–226. [[CrossRef](#)]
70. Araujo, L.; Kjellberg, H. Shaping Exchanges, Performing Markets: The Study of Market-ing Practices. *SAGE Handb. Market. Theory* **2012**, 195–218. [[CrossRef](#)]
71. Araujo, L.; Kjellberg, H.; Spencer, R. Market practices and forms: Introduction to the special issue. *Mark. Theory* **2008**, *8*, 5–14. [[CrossRef](#)]
72. Azimont, F.; Araujo, L. Category reviews as market-shaping events. *Ind. Mark. Manag.* **2007**, *36*, 849–860. [[CrossRef](#)]
73. Kjellberg, H.; Helgesson, C.-F. Multiple versions of markets: Multiplicity and performativity in market practice. *Ind. Mark. Manag.* **2006**, *35*, 839–855. [[CrossRef](#)]
74. Kjellberg, H.; Helgesson, C.-F. On the nature of markets and their practices. *Mark. Theory* **2007**, *7*, 137–162. [[CrossRef](#)]
75. Mason, K.; Spring, M. The sites and practices of business models. *Ind. Mark. Manag.* **2011**, *40*, 1032–1041. [[CrossRef](#)]
76. Rinallo, D.; Golfetto, F. Representing markets: The shaping of fashion trends by French and Italian fabric companies. *Ind. Mark. Manag.* **2006**, *35*, 856–869. [[CrossRef](#)]
77. Higginson, S.; McKenna, E.; Hargreaves, T.; Chilvers, J.; Thomson, M. Diagramming social practice theory: An interdisciplinary experiment exploring practices as networks. *Indoor Built Environ.* **2015**, *24*, 950–969. [[CrossRef](#)]
78. McMeekin, A.; Southerton, D. Sustainability transitions and final consumption: Practices and socio-technical systems. *Technol. Anal. Strat. Manag.* **2012**, *24*, 345–361. [[CrossRef](#)]
79. Hargreaves, T.; Longhurst, N.; Seyfang, G. Up, Down, round and round: Connecting Regimes and Practices in Innovation for Sustainability. *Environ. Plan. A Econ. Space* **2013**, *45*, 402–420. [[CrossRef](#)]
80. Geels, F.W.; McMeekin, A.; Mylan, J.; Southerton, D. A critical appraisal of sustainable consumption and production research: The reformist, revolutionary and reconfiguration positions. *Glob. Environ. Chang.* **2015**, *34*, 1–12. [[CrossRef](#)]
81. Seyfang, G.; Gilbert-Squires, A. Move your money? Sustainability Transitions in Regimes and Practices in the UK Retail Banking Sector. *Ecol. Econ.* **2019**, *156*, 224–235. [[CrossRef](#)]
82. Huber, A. Theorising the dynamics of collaborative consumption practices: A comparison of peer-to-peer accommodation and cohousing. *Environ. Innov. Soc. Transit.* **2017**, *23*, 53–69. [[CrossRef](#)]
83. Shove, E.; Walker, G. Caution! Transitions Ahead: Politics, Practice, and Sustainable Transition Management. *Environ. Plan. A Econ. Space* **2007**, *39*, 763–770. [[CrossRef](#)]
84. Shove, E.; Walker, G. What Is Energy For? Social Practice and Energy Demand. *Theory Cult. Soc.* **2014**, *31*, 41–58. [[CrossRef](#)]
85. Geels, F.W. Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Res. Policy* **2010**, *39*, 495–510. [[CrossRef](#)]
86. Kennedy, E.H.; Cohen, M.J.; Krogman, N.T. Social practice theories and research on sustainable consumption. In *Putting Sustainability into Practice*; Edward Elgar Publishing: Cheltenham, UK, 2016; pp. 3–22.
87. Welch, D.; Southerton, D. After Paris: Transitions for sustainable consumption. *Sustain. Sci. Pr. Policy* **2019**, *15*, 31–44. [[CrossRef](#)]
88. Hitchings, R. People can talk about their practices. *Area* **2012**, *44*, 61–67. [[CrossRef](#)]
89. Polydoropoulou, A.; Pagoni, I.; Tsirimpa, A. Ready for Mobility as a Service? Insights from stakeholders and end-users. *Travel Behav. Soc.* **2020**, *21*, 295–306. [[CrossRef](#)]
90. Langeland, O.; Nielsen, A.F. Car sharing in the Oslo region. In *Working Paper 51709 Tempest 4307*; The Institute of Transport Economics: Oslo, Norway, 2017.
91. HYRE. Available online: <https://www.hyre.no/om-oss/> (accessed on 10 October 2020).
92. De Haan, J.H.; Rotmans, J. Patterns in transitions: Understanding complex chains of change. *Technol. Forecast. Soc. Chang.* **2011**, *78*, 90–102. [[CrossRef](#)]
93. Bachus, K.; Vanswijgenhoven, F. The use of regulatory taxation as a policy instrument for sustainability transitions: Old wine in new bottles or unexplored potential? *J. Environ. Plan. Manag.* **2017**, *61*, 1469–1486. [[CrossRef](#)]
94. Hölsgens, R.; Lübke, S.; Hasselkuß, M. Social innovations in the German energy transition: An attempt to use the heuristics of the multi-level perspective of transitions to analyze the diffusion process of social innovations. *Energy Sustain. Soc.* **2018**, *8*, 8. [[CrossRef](#)]
95. Liedtke, C.; Hasselkuß, M.; Welfens, M.J.; Nordmann, J.; Baedeker, C. Transformation towards sustainable consumption: Changing consumption patterns through meaning in social practices. In *Proceedings of the 4th International Conference on Sustainability Transitions*; Zurich, Switzerland: 19–21 June 2013, 21 June 2013.
96. Geels, F.W. Regime Resistance against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective. *Theory Cult. Soc.* **2014**, *31*, 21–40. [[CrossRef](#)]
97. Mylan, J. Understanding the diffusion of Sustainable Product-Service Systems: Insights from the sociology of consumption and practice theory. *J. Clean. Prod.* **2015**, *97*, 13–20. [[CrossRef](#)]
98. Hargreaves, T. Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change. *J. Consum. Cult.* **2011**, *11*, 79–99. [[CrossRef](#)]