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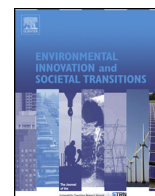
Sustainability framings of accommodation sharing

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ABSTRACT

The existing research often overlooks the fact that accommodation sharing is not a homogeneous sector but comprises rental, reciprocal and free platforms. This paper aims to compare sustainability narratives held by operators and users of the three platform types with the narratives identified in the literature. First, drawing on framing theory, environmental, economic and social framings of accommodation sharing are mapped based on the extant literature and expert interviews. Second, sustainability framings of operators and users from the three types of accommodation sharing platforms are presented. The data is collected via 10 in-depth interviews and 86 responses to a qualitative structured online questionnaire. We find that current framings of sustainability implications of accommodation sharing vary among those who formulate them as well as among the three platform types. This has implications for the role of these platforms in advancing different types of sustainability.

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1. Introduction

Sharing is an old phenomenon in a new disguise. It has recently moved from traditional sharing among family members and friends (Belk, 2010) to sharing, swapping, giving away, lending renting, and exchanging products and services among strangers (Schor, 2014). The latter kind of sharing is enabled by digital platforms that create new opportunities for providers and users to find each other (Schor, 2014; Belk, 2014; Botsman and Rogers, 2011; PwC, 2015; Demailly and Novel, 2014).

The sharing economy has been praised for being a sustainable alternative to the currently unsustainable economy (Stokes et al., 2014; Wosskow, 2014; Heinrichs, 2013; Martin, 2016). It is framed and advocated by its proponents as a transformative force that drives the shift from the ownership-based economy to the economy that celebrates the ideas of shared access, higher levels of utilisation of already produced but underutilised goods and exchange of services that otherwise are hard to find on the formal market (Botsman and Rogers, 2011). It is portrayed as being much more open, inclusive and democratic than the traditional economy haunted by cut-throat competition, market-driven distribution of wealth and social positioning based on material possessions (Gansky, 2012). The sharing economy is advocated as a more sustainable way of living and running business because it often extends products' life span through second-hand markets, thereby theoretically reducing the need for production of new goods and thus for using virgin resources (Novel, 2014). On the other hand, it has been framed as a phenomenon that stimulates consumption and provides access to consuming goods to people who could not afford them before (Schor and Fitzmaurice, 2014; Hill, 2016; Cohen, 2016). Being judged by its vanguards, such as Airbnb

and Uber, it is framed as an economy that creates unregulated marketplaces and unfair competition, enables tax avoidance and transfers risks to consumers (Martin, 2016). These different framings of the sharing economy demonstrate that it is a contested phenomenon.

Incumbent actors, the traditional industries that are being challenged by the sharing organisations, and newcomers, the sharing platforms themselves, employ different framings (Martin, 2016). Under "framing" we mean a process by which people devise a specific conceptualisation of an issue by consciously phrasing or presenting information in a way that activates particular values of individuals (Snow et al., 1988). An unexplored question is whether environmental, economic and social implications of the sharing economy are being framed similarly or differently by various types of sharing platforms and why, and how these framings affect its overall prospects. This paper sets out to explore these questions using accommodation sharing as an example.

Accommodation sector is an important consumption domain responsible for 25% of aggregated environmental impacts from households in Europe (EEA, 2013). Additional pressures are generated by the hotel industry. Alternative ways of providing housing are now emerging, in which accommodation is offered to, or shared with, travellers by private people organised by business-driven or non-profit on-line platforms. We define accommodation sharing as peer-to-peer, ICT-enabled, short-term renting, swapping, borrowing or lending of existing privately-owned idling lodging facilities. Accommodation sharing offers a solid empirical base for studying a diversity of sustainability[1] related framings used by sharing organisations that range from emerging local non-profit schemes to established global businesses that disrupt incumbent hotel industry.

This paper aims to compare sustainability framings held by operators and users of accommodation sharing platforms with the framings identified in the literature. This is achieved by 1) mapping environmental, economic and social framings of accommodation sharing based on the extant literature and guided by expert interviews; 2) investigating empirically how sustainability is framed and understood by the operators and users of accommodation sharing platforms.

In the next section 2 literature review of accommodation sharing is provided and a conceptual framework on framings is developed. Section 3 describes methodology and Section 4 presents findings and analysis. Discussion and conclusions are developed in Section 5.

2. Literature review of accommodation sharing and development of conceptual framework

2.1. Sharing economy and accommodation sharing

The sharing economy is a contested phenomenon that lacks a common definition. It includes a wide range of monetary or non-monetary exchanges, as well as business to consumer (B2C), business to business (B2B) and peer to peer (P2P) models (c.f. Schor, 2014; PwC, 2015; Botsman and Rogers, 2011; Belk, 2010; Frenken, 2016). The term "sharing economy" is used interchangeably with shareconomy, collaborative consumption, the collaborative economy, the gig economy and the mesh (Martin, 2016; Richter et al., 2015; Botsman and Rogers, 2011). However, central to the existing definitions is the utilisation of underused assets facilitated by ICT. In this research the sharing economy is defined as a variety of bottom-up initiatives, public-private-people partnerships, business start-ups and local government schemes, all of which utilise the idling capacity of our material world.

The idling capacity that can be utilised in sharing is often found in five sectors – automotive; technology; retail and consumer goods; hospitality; and entertainment, media and communications (PwC, 2015). So far, research has focused on large sharing organisations, especially in the automotive sector (Mont, 2004; Shaheen and Cohen, 2008; Martin et al., 2010). Academic studies of accommodation sharing have mainly analysed large organisations, such as Airbnb and Couchsurfing, neglecting many other platforms, which are rather distinct in their business models and sustainability potentials (Zvolska, 2015). Research exists on socio-economic profiles and user motivations to participate in accommodation sharing platforms (c.f. Tussyadiah, 2016; Forno and Garibaldi, 2015; Rosen et al., 2011), on institutional and business model aspects of Airbnb (c.f. Pelzer 2015; Grinevich and Huber, 2015), on issues of upscaling (c.f. Grinevich and Huber, 2015; Querbes, 2015; Isaak 2015) and the impact on the incumbent hotel industry (c.f. Zervas et al., 2015; Guttentag, 2015; Koblar and Kovac, 2015). Also issues of trust (c.f. Hendrickson et al., 2016; Mora, 2016) and regulation (c.f. Aloisi, 2015; Interian, 2016; Lines, 2015; Mattson-Teig, 2015; Dyal-Chand, 2015) are being studied. A holistic analysis of socio-economic and environmental implications of different types of accommodation sharing platforms is, however, missing in the current discourse. At the same time, the need for research on sustainability of the sharing economy has been highlight ed by scholars (c.f. Martin, 2016; Cohen, 2016). Thus, this paper seeks to contribute to this gap by focusing on how sustainability of the most populous type of accommodation sharing organisations – P2P platforms – is framed.

2.2. Sharing economy taxonomies

As there is no commonly accepted definition of the sharing economy, there is no single all-encompassing taxonomy of sharing organisations. For example, Cohen (2016) distinguishes sharing organisations based on ownership motivation

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[1] Sustainability is defined here as part of the concept of sustainable development with three interrelated goals: economic and social development, and environmental protection (WCED, 1987).

Table 1
A novel taxonomy of accommodation sharing organisations.

User-user interaction	P2P platforms
Free	E.g. BeWelcome, Couchsurfing, Warm Showers
Reciprocal	E.g. Home Exchange, My Twin Place, Home Link
Rental	E.g. Airbnb, Evergreen B&B, 9flats

(pecuniary or non-pecuniary) and ownership type (individual and conjoint). Taxonomy by Cohen and Munoz (2015) is sector based and maps sharing of energy, food, goods, mobility and transport, and space on the continuum between consumption and production (horizontal axis), and public and private interest (vertical axis). Celata et al. (2015) differentiates between community based vs network based initiatives, and gift exchange vs market exchange. Finally, the taxonomy by Schor and Fitzmaurice (2014) considers two variables: the business model (P2P vs B2C) and the type of monetary exchange (for-profit or non-profit), which is useful in addressing the organising logics of sharing platforms, their level of disruptiveness to the incumbent industry and their ability to expand.

These are only a few examples of probably dozens of emerging taxonomies. However, most of them are too crude to acknowledge the types of interactions among the users and relations with other dimensions. For example, accommodation sharing platforms Home Exchange[2] and Couchsurfing[3] would be placed into one category according to these taxonomies, while they are rather different. Although both platforms are P2P and for-profit, there is no monetary exchange among their users. Home Exchange is based on reciprocity of home sharing and Couchsurfing offers free accommodation to its users. These features are important for understanding how the platforms operate and ultimately for evaluating their sustainability dimensions. There is thus a need to devise a more comprehensive taxonomy of accommodation sharing organisations based on user–user interaction. To better reflect the characteristics of these organisations, we develop a new taxonomy that recognises free, reciprocal and rental P2P sharing organisations (Table 1).

In *free* platforms, there is no monetary exchange among the users as hosting is motivated by non-monetary gains. However, the platforms themselves can be both for-profit (e.g. Couchsurfing) and non-profit (e.g. Be Welcome). *Reciprocal* platforms are based on a quid-pro-quo non-monetary exchange among the users where a guest becomes a host and vice versa. In some platforms, homes are swapped simultaneously, while in others the hospitality can be returned at a later occasion. *Rental* platforms are for-profit: they generate monetary gains both for platform operators and hosts who list their properties. This paper investigates similarities and differences between these three types of accommodation sharing platforms by analysing how their operators and users frame sustainability in terms of environmental, economic and social implications.

2.3. The concept of framing and core framing tasks

Framing is a social construction of a social phenomenon, a process by which people devise a specific conceptualisation of an issue by consciously phrasing or presenting information in a way that activates particular values of individuals (Snow et al., 1988). According to Lakoff (2010), experience and attitude of individuals towards socio-political issues are influenced by the ways the latter are framed in linguistic constructions. Framing theory posits that an issue can be perceived from different perspectives by various actors and be interpreted in numerous ways (Entman, 1993). Framing has been used for analysing how sustainability is understood and presented by different actors, how media shapes perceptions of the public on different issues and how social movements solicit support to their ideas from different groups in society, appealing to the latter's sets of values and attitudes (Steinberg, 1998). Framing can not only be used to present a certain view on an issue, but also to identify how desired situation or specific results related to the issue can be reached. When studying collective action frames, Snow et al. (1988) distinguished three types of core framing tasks – diagnostic, prognostic and motivational – that could be seen as steps in forming a comprehensive picture of a certain situation or phenomenon and soliciting support for action to change it. *Diagnostic framing* identifies and communicates a problematic situation and its causes. *Prognostic framing* suggests solutions to the situation or problem, develops specific strategies to solve it and even sets targets. *Motivational framing* encourages the public, certain actors or social movements to trigger action.

Framing theory and the three core framing tasks have been employed to analyse sustainability discourses, in addition to environmental and sustainability movements (Blühdorn, 2007; Karohs, 2013; Nambiar and Chitty, 2013). For example, Pelzer (2015), Martin et al. (2015) and Martin (2016) analysed a diversity of frames devised by incumbent actors, such as established and mainstream industries, and compared them to a range of framings used by the proponents of the sharing economy. However, few studies have sought to investigate how the sharing economy is being framed by different, non-incumbent, actors from a triple bottom line perspective,[4] although previous research (e.g. Martin, 2016) identified such a need. Existing analysis by Martin (2016) results in framings with overlapping components, making it challenging to distinguish what value

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[2] https://www.homeexchange.com/en/.
[3] https://www.couchsurfing.com/.
[4] The "triple bottom line" is a perspective on sustainable development that "involves the simultaneous pursuit of economic prosperity, environmental quality, and social equity" (Elkington, 1997)

and risks the sharing economy is associated with and which actors advance what framings. Furthermore, no empirical studies have been conducted so far about environmental, economic and social framings of the sharing economy. Therefore, this paper seeks to fill these gaps by focusing on accommodation sharing. It employs the concept of framing to analyse how operators and users of different types of accommodation sharing platforms frame sharing from the triple bottom line perspective.

2.4. Accommodation sharing and framings of sustainability

In this section, we collect existing environmental, economic and social framings of accommodation sharing organisations that are present in academic and grey literature.

2.4.1. Environmental framings of accommodation sharing

An article by Martin (2016) offers a comprehensive literature review of all sharing economy framings; yet, there are hardly any framings that include environmental issues, except for a question about increased resource efficiency briefly mentioned under predominantly economic framings. With this in mind, our literature review sought to identify several environmental framings.

Proponents of the sharing economy argue that sharing is a more sustainable way of living and running a business *(motivational framing)* as fewer goods need to be produced to deliver value to users (Botsman and Rogers, 2011; McLaren and Agyeman, 2015). The sharing economy is claimed to extend the lifespan of many products by opening up second-hand markets and increasing the intensity of use of products that were previously used only by their owners *(prognostic framing)* (Novel 2014). Similarly, in the accommodation sector, the expectation is that flats and houses owned by private people will be shared and their idling capacity will thereby be reduced. This will enable a more efficient use of physical capital, such as real estate (Sundararajan, 2014) and, consequently, fewer resources will be needed to build new properties.

However, concerns are raised that rather than being a substitute for the production of new goods, the sharing economy stimulates consumption and provides access to goods to people who could not afford it before *(diagnostic framing)* (Schor and Fitzmaurice, 2014; Cohen, 2016; Demailly and Novel, 2014; The Nielsen Company, 2014; Felländer et al., 2015). Indeed, in the accommodation sector, people who could not previously afford tourism accommodation get access to privately owned housing through sharing arrangements (Botsman and Rogers, 2011). Lower prices or even free of charge shared accommodation may lead to rebound effects, including an increased consumption of both accommodation and related travelling *(diagnostic framing)* – the so-called direct or first level rebound effects[5] (Lahti and Selosmaa, 2013). For example, a study by Tussyadiah and Pesonen (2015) shows that the use of peer-to-peer accommodation expands destination selection, increases travel frequency and the length of stay in destination.

When analysing environmental framings of accommodation sharing, it is important to consider two mechanisms through which consumption-related impacts can be affected in relation to status-quo: addition and substitution.[6] Addition occurs when users increase or intensify their consumption of accommodation, gain access to more energy intensive accommodation compared to the incumbent hotel industry, and/or travel more often or further away. Addition results in increased or intensified consumption, thus increasing pressure on the environment from higher greenhouse gas (GHG) emissions or resource use. Substitution, on the other hand, can be observed when travellers stay in rooms offered by sharing platforms instead of in traditional hotels. A study by Chenoweth (2009) demonstrates that accommodation sharing has a more favourable environmental profile than the mainstream hotel sector *(motivation framing)*.

2.4.2. Economic framings of accommodation sharing

Economic or commercial aspects of the sharing economy are among dominant framings both by advocates and opponents of the sharing economy (Martin, 2016). The main economic benefits of accommodation sharing put forward are cost savings for users, earnings for hosts and profits for operators of accommodation sharing platforms *(motivational framing)* (Fremstad, 2014). Economic framings largely focus on the economic opportunity, including market empowerment, micro-entrepreneurship development, income generation and job creation (Martin, 2016). This is demonstrated by for-profit accommodation sharing enterprises, such as Airbnb and 9flats, which enable users to earn extra money from renting unused premises, houses or rooms *(prognostic and motivational framings)* (Ikkala and Lampinen, 2015). As suggested by Wosskow (2014), such platforms can turn the United Kingdom into "a nation of micro-entrepreneurs" *(prognostic framing)*. The hope is that P2P businesses will "empower individuals previously constrained by employment at traditional corporations" *(diagnostic and motivational framings)* (Sundararajan 2014: 5). At macro-level, accommodation sharing has the potential to contribute to economic growth by creating new jobs *(motivational framing)* (Troncoso, 2014). The jobs generated are both direct, for

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[5] Secondary rebound effects, which arise when the money that users save on shifting from the purchase-ownership economy to access and temporary use marketplaces are spent on environmentally detrimental activities (Demailly and Novel, 2014) are not included in this study. For more information about definitions and types of rebound effects, see Greening, L. A., D. L. Greene and C. Difiglio (2000). Ënergy efficiency and consumption - The rebound effect - A survey.Ënergy Policy 28(6–7): 389–401 and Sorrell, S. and J. Dimitropoulos (2008). Ṫhe rebound effect: Microeconomic definitions, limitations and extensions.Ëcological Economics 65(3): 636–649.

[6] Alternative terminology with a similar meaning is used by Cohen (2016), who differentiates between substituting consumption and augmentative/stimulative consumption

example people working for the platforms under work contracts; and indirect, such as hosts or people who clean the properties. As many accommodation spaces are offered outside the main tourist zones, the economic benefits extend to other areas *(prognostic framing)*. For example, according to data from Airbnb collected in nine major destinations across the world (San Francisco, New York, Paris, Amsterdam, Berlin, London, Edinburgh, Sydney and Barcelona), 74% of shared properties were outside of the main hotel districts. In addition, Airbnb guests are shown to stay 2.1 times longer, spending more money than regular visitors while 42% of these guests spend their money outside the main hotel districts benefiting and strengthening peripheral neighbourhoods and communities (Airbnb, 2015a).

However, critics of the sharing economy organisations offer quite different framings. Concerns have been raised about the types and quality of the jobs that are being created *(diagnostic framing)* (Zimmerman, 2015; Schor, 2014). Acemoglu (2001) argues that in an economy where there are no minimum wage standards, regulations and unemployment benefits, low-wage, or the so-called "bad" jobs are created. Accepting low-wage jobs due to lack of other options negatively impacts the creation of "good" jobs due to "a race to the bottom" (Acemoglu, 2001). Thus, it can be argued that if people use accommodation sharing platforms to generate their sole income rather than additional, it will likely contribute to an overall decrease in job standards.

Opponents also warn that the sharing economy is shifting risks from platforms to their users (both hosts and guests) by creating unregulated markets *(diagnostic framing)* (Martin, 2016). Examples of this transfer of risk range from income instability and irreversible capital investments to unforeseen liabilities and low protection under force majeure, as well as low levels of security compared to jobs traditionally offered through the corporation safety nets (Rampell, 2015). Some accommodation sharing platforms, e.g. Airbnb, offer guaranteed insurance but only in selected countries, and encourage hosts to acquire private insurance (Zvolska, 2015). Many opponents now warn that some sharing economy organisations operate in a legal vacuum *(diagnostic framing)* (Kuttner, 2013; Griswold, 2014; Singer, 2014). The sharing economy has even been called "the hidden economy" with £5.9 billion of lost tax revenue in 2012–2013 (Houlder, 2015). For the accommodation sharing sector, income tax, tourism (city) tax and, especially, zoning laws need to be adjusted.

2.4.3. Social framings of accommodation sharing

Social framings of the sharing economy include claims that it empowers people *(motivational framing)* and builds "a social movement centred on genuine practices of sharing and cooperation" (Schor, 2014). The issue of empowerment is also highlighted under several framings identified by Martin (2016). Schor (2014) considers empowerment to be user-governed occurring through cooperative-owned platforms where users are able to capture the value they create *(prognostic framing)*. This framing, however, needs to be empirically explored: how are users engaged in the management and design of accommodation sharing platforms, and do they feel they can influence the organisational structure of the platform?

The sharing economy is also portrayed as being more open, inclusive and democratic than the traditional economy *(prognostic framing)*. It has potential to create trust among strangers and enhance social capital (Schor et al., 2016). The most tangible social benefits of sharing are enhanced social trust and social cohesion *(prognostic and motivational framing)* (Agyeman et al., 2013). Trust is argued to be the cornerstone of sharing platforms (PwC, 2015). For example, Airbnb markets its intentions as "creating community and a feeling of partnership" *(motivational framing)*. Indeed, 89% of people who are familiar with the sharing economy agree that it is based on trust between providers and users (PwC, 2015). Currently, accommodation sharing platforms actively facilitate trust creation by crowdsourced and shared ratings that review both hosts and guests (Hendrickson et al., 2016; Parigi and Cook, 2015). A study about Couchsurfing discovered that such a system makes relationships easier to establish, yet less surprising and less stable (Parigi and Cook, 2015). The latter also resembles the difference between cognitive trust – easily built through ICT mediated communication, which is fragile – and affective trust – requiring intrapersonal relations and physical meetings, which is more stable (Kandola, 2006).

To further undermine the issue of trust in the sharing economy, critics question whether the sharing economy is being built on trust or desperation as many people join it after losing their primary income *(diagnostic framing)* (Hendrickson et al., 2016; Huurne et al., 2016; Schor, 2014). In part, this criticism is a result of the sharing economy's emergence coinciding with the economic crisis of 2008. Therefore, some authors frame it as a necessity in times of hardship (Hamari et al., 2013).

2.5. Summary of framings

This literature review sought to fulfil the first objective of the paper and mapped out key sustainability framings of accommodation sharing reported in the literature utilising the triple bottom line perspective (Table 2).

Absent in literature are any systematic or comparative studies that examine sustainability promises of accommodation sharing platforms. Academic research and media often see the accommodation sharing sector as homogeneous, dominated by Airbnb. However, as seen through the literature review, different actors in the accommodation sharing sector put forward different and sometimes contrasting framings of the sharing economy and its sustainability features. Therefore, we hypothesise that rental, reciprocal and free accommodation sharing platforms differ not only in their organisational settings and financial models (Section 2.2), but also by the nature of sustainability framings they use and advance. By using the core framing tasks (Section 2.3), this paper investigates if and how operators and users of the three types of accommodation sharing platforms (Section 2.2) frame the sharing economy as a sustainable solution, and if they knowingly or unknowingly apply the core framing tasks to advance their propositions.

Table 2
Key sustainability framings of accommodation sharing present in the literature.

Framing types	Environmental	Economic	Social
Diagnostic	Accommodation sharing increases environmental pressure through rebound effects	Accommodation sharing organisations exist in unregulated markets	Accommodation sharing is built on desperation
Prognostic	Accommodation sharing enables more efficient resource use	Accommodation sharing creates opportunity for new micro-entrepreneurs to capitalise on underused assets	Accommodation sharing platforms create a sense of empowerment and trust
Motivational	Accommodation sharing is a more environmentally sustainable way of lodging away from home	Accommodation sharing generates incomes and creates jobs	Anyone can benefit from accommodation sharing

Table 3
Framework for data analysis.

Type of accommodation sharing platform	Framings within sustainability pillars		
	Environmental	*Economic*	*Social*
Rental *Reciprocal* *Free*	Diagnostic, prognostic, and motivational framings		

3. Methodology

This study builds on several research methods, including literature review, interviews and online qualitative survey. First, a review of literature on the sustainability framings of the sharing economy and accommodation sharing was conducted (Section 2). To ensure that we comprehensively capture main sustainability framings of accommodation sharing, we review multiple literature sources including academic publications, papers presented at two International Workshops on the Sharing Economy (IWSE),[7] scientific and business reports, grey literature, periodicals (e.g. Forbes, The Financial Times, The Guardian) and websites of accommodation sharing platforms. In addition, we take Martin's (2016)[8] analysis of 224 online articles and reports about sharing economy as a point of departure to ensure that we capture all key framings. Four expert interviews with academics also served as source of information as they helped to define the state of the art in the sharing economy and contributed to grasping the broader knowledge gaps on the sharing economy and sustainability. We make use of a number of publicly available, online databases such as Web of Science, SCOPUS, Google Scholar, EBSCO Host, LUBRIS and Research Gate. The initial keywords for search were: sharing economy; collaborative consumption; accommodation sharing; Airbnb; Couchsurfing; sustainability; for-profit; non-profit; environmental; economic and social impacts. Based on the literature review; a framework that differentiates between rental; reciprocal and free platforms; and takes into account sustainability framings; was developed (Table 3). This framework is used for empirical data collection and analysis.

To achieve the second objective, the sustainability framings were investigated in an exploratory empirical study of accommodation sharing (Section 4). In total, 11 accommodation sharing platforms are included in the analysis, of which four are rental, three reciprocal and four free (Table 4). To investigate how sustainability is framed and understood in real life, data was collected via 10 in-depth qualitative interviews with platform operators and is complemented with a qualitative structured online questionnaire with 86 users (hosts and guests) corresponding to each type of accommodation sharing platform (Table 4). The data were supported by platform specific information available through reports, online news and blogs, and other grey literature.

Of 10 interviews with platform operators, six were semi-structured and conducted over Skype (lasting between 30 and 120 min), and four were structured and performed via email. Interviews with representatives of the platforms provided background information and offered basis for comparison of environmental, economic and social framings with framings identified in the literature.

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[7] These include 1st International Workshop on the Sharing Economy (IWSE), Utrecht, the Netherlands, 4–5 June 2015; and 2nd IWSE, Paris, France, 28–29 January 2016

[8] Martin (2016) performed a systematic content analysis of 224 online articles and reports written by advocates, critics and commentators of the sharing economy

Table 4
Interviews with accommodation sharing platforms.

Platform type	Platform	Interviewee position	Number of interviewees	Number of respondents to online questionnaire
Rental	9flats	Accounting and PR	1	–
	Airbnb	Communications	1	30
	HomeAway	–	–	1
	Vacation Rentals by Owner (VRBO)	–	–	1
Reciprocal	Behomm	Founders	2	–
	Guest to Guest	Press	1	–
	Home Exchange	Top management	2	3
Free	Be Welcome	Top management	1	10
	Trustroots	Founder	1	–
	Couchsurfing	–	–	18
	Warm Showers	Volunteer	1	23

The online questionnaire was open for four weeks and was available via platform websites, forums and on social networks (e.g. Facebook) with permission from the platforms, and yielded 86 responses. Out of these, 32 came from rental platforms (24 guests and eight hosts), 51 from free (14 guests and 37 hosts) and three from reciprocal.[9]

4. Findings and analysis

In this section, we compare environmental, economic and social framings held by operators and users of free, reciprocal and rental accommodation sharing platforms with the framings identified in the literature (Table 2).

4.1. Sustainability framings of rental accommodation sharing platforms

4.1.1. Environmental framings

Diagnostic framing: Accommodation sharing may increase environmental pressure through rebound effects. According to the literature, accommodation sharing is framed as allowing people to travel more due to lower lodging costs – the so-called rebound effect (Lahti and Selosmaa 2013). In considering rental accommodation sharing platforms, empirical data challenges this framing as 23 out of 24 corresponding rental questionnaire respondents claimed that they would travel to the same destination, even if the sharing option was not available. For accuracy, they were asked to reflect upon the last trip they undertook. Interestingly, no one indicated they would not have travelled at all had the platform not been available, and one respondent would have travelled closer. Our results suggest that rental accommodation sharing platforms do not lead to a significant growth of travel and consequently to increased GHG emissions as suggested by Chenoweth (2009), since the respondents, in the majority of cases, substituted the traditional accommodation in an already planned trip.[10]

Prognostic framing: Accommodation sharing enables more efficient resource use. Rental accommodation sharing organisations seem to be aware of environmental problems inherent to the tourism sector and they are investing in environmental assessments to demonstrate that accommodation sharing is a more environmentally benign activity than, for example, the hotel industry. According to a study by Airbnb (2014), staying in accommodation booked on their site results in lower water consumption, less energy consumed, GHG emitted and waste generated. The study further concludes that as more people travel and stay longer in the destination, the environmental benefits outweigh the impacts of the travel.[11] Airbnb uses the study to advance motivational framing, displaying accommodation sharing as a preferred option of lodging and soliciting more users to join in. At the same time, they refrain from formulating diagnostic framings as they do not refer to any environmental problems associated with tourism when discussing their activities and impacts.

Motivational framing: Accommodation sharing is a more environmentally sustainable way of lodging away from home – a framing advanced by rental accommodation sharing organisations: *"(. . .) we use the resources which already exist, so we can say that it's environmentally friendly."* (Pers. Comm. Interviewee 1.). Airbnb reinforced this framing by joining a partnership with United Nations Environment Programme (UNEP). Their website provides tips on how to be more sustainable while travelling, which seeks to motivate their guests to "do more to protect our planet". Furthermore, the organisation frames home sharing as *"[promoting] a more efficient use of existing resources and [being] an environmentally sustainable way to travel."* (Airbnb Action, 2016). However, the questionnaire indicates that sustainability is not an important motivational factor among the users as only one respondent agreed that they hosted on the rental platform to contribute to a sustainable

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[9] The attribution of users to a certain platform and their classification of "guests" and "hosts" are based on the latest user experience with the platform. It is therefore not suggested that these respondents have used only one platform or belong to only one category. The users of reciprocal platform are both "hosts" and "guests" at the same time as they engage in accommodation exchange.

[10] At the same time, it must also be noted that tourism is not an environmentally neutral activity, particularly when carbon intensive modes of transport are involved.

[11] The results of this study should be taken with caution, as methodology has not been disclosed by Airbnb.

way of travelling. Similarly, most of the guests (13/24) neither agreed nor disagreed that they arranged their trip through a sharing platform because they wanted to travel in a sustainable way. This suggests that while rental accommodation sharing organisations use environmental sustainability as a motivational framing to attract new users, their users do not engage in accommodation sharing for environmental reasons.

4.1.2. Economic framings

Diagnostic framing: Accommodation sharing organisations exist in unregulated markets. Empirical data shows large differences in whether rental, free and reciprocal platforms see themselves as existing in unregulated markets. Interviewee 7 noted that: *"It is up to the host to follow the legal rules, and we advise them to do so in our Terms and Conditions".* The legal rules may apply to zoning, health and safety rules, and tourism and income taxes (Pers. comm. Interviewee 1). Both interviewees pointed out that a sharing platform was unable to check compliance with tax payments for all hosts. One of the interviewed rental platforms was open to collecting city tax directly from the hosts, should the cities require it – a solution that was pioneered by Airbnb (Airbnb, 2015b). Another issue broadly discussed in accommodation sharing is unclear rules when it comes to access to insurance against property damage for hosts. While insurance is available on 9flats and Airbnb,[12] the user questionnaire showed that only one of eight hosts relied on insurance from a platform while seven had their own. Interviewee 1 believes that as the sharing economy grows, there will be more rules designed for sharing platforms, with which they are willing to comply (Pers. comm. Interviewee 1). They foresee the eventual need to cooperate with cities on zoning laws and tourism tax and also recognised that laws and regulations affect them *(diagnostic framing).* Airbnb has already signed agreements with several cities. Rental platforms were willing to work on the solutions together with municipalities: *"We're asking for rules and we are happy to follow them (. . .) The cities are not our enemies, they are our friends"* (Pers. comm. Interviewee 1). Consequently, they were motivated to adhere to the rules set up by local governments so they can continue operating on the market. In conclusion, rental platforms were found to employ all three framings when addressing the issue of unregulated markets.

Prognostic framing: Accommodation sharing creates opportunity for new micro-entrepreneurs to capitalise on underused assets. We investigated what constitutes the underused accommodation and who the micro-entrepreneurs are. "Underused assets" include couches, rooms, entire flats and houses, and serviced apartments. Rental platforms have two types of hosts, private individuals who offer tourist accommodation in the flat or house they normally live in (the so-called micro-entrepreneurs who capitalise on own underused assets), and (semi) professional companies offering holiday rentals. As 19% of Airbnb hosts do not rent out the home they live in (Pers. comm.), a question arises whether these (semi) professionals still adhere to the concept of micro-entrepreneurs of the sharing economy.

Motivational framing: Accommodation sharing generates income and creates jobs. While the sharing economy is framed as having the potential to create jobs (Troncoso, 2014), rental accommodation sharing organisations refrain from using the term "jobs", but rather frame the financial benefits their users gain as "extra income" (Pers. comm. Interviewee 1). Similarly, the study on economic impact published by Airbnb (2016) shows the number of jobs the organisation "supports" in eight cities and highlights that *"hosting income has allowed [hosts] to pursue other professional or personal interests, supporting a strong, creative and innovative society."* It also notes that the money helps the hosts cover the increasing costs of living. The motivational framings used by rental organisations therefore go beyond extra income as they also address the current issues of many urban dwellers, such as lack of free time and increasing cost of living. The online questionnaire with Airbnb hosts confirms the framing that accommodation sharing generates income as seven out of eight hosts indicated that they made financial profit. They were both male and female between 19 and 55 years old. For them, accommodation renting was a way to generate additional income, even though none of them self-reported to have low income. Additionally, six of them indicated that the extra income helps them pay for household expenses.

4.1.3. Social framings

Diagnostic framing: Accommodation sharing is built on desperation. Critics of the sharing economy warn that many hosts only join rental organisations after losing their primary income, resulting in the sharing economy being built on desperation. However, when comparing the framing from literature to our empirical results, it appears that those hosts surveyed do not engage in rental platforms as a result of desperation, economic or otherwise. In fact, seven out of eight respondents had a full-time, paying job.

Prognostic framing: Accommodation sharing platforms create a sense of empowerment and trust. Our data also support this framing as most users (23/32) (strongly) agreed that they trust the people they meet through the platforms. Since trust is a critical element of any sharing organisation, most platforms develop and employ cross-evaluations of hosts and guests and actively encourage their users to check for references before they meet to foster trust among them. As for empowering the users, we see divergent narratives presented by platforms and users. Airbnb posits that they "*consider [their] hosts [their] business partners, and bring them in on as many decisions and at as many touch points as possible"* (Pers. comm.). Other interviews confirm that rental platforms frame their activities as empowering hosts, mostly by the possibility to provide feedback. However, the platforms expect this feedback to only suggest minor changes in operations (Pers. comm. Interviewee 1). Other types of interaction between platform users (either hosts or guests) and platform operators are not very transparent.

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[12] Airbnb's insurance is only valid in 36 countries.

The questionnaire among users suggests that neither hosts nor guests feel that they have any noteworthy influence over the way rental platforms are operated because almost half of the respondents disagreed that they can influence the way the platform is run.

Motivational framing: Anyone can benefit from accommodation sharing. Although Airbnb statistics show that their hosts have low to medium income (Airbnb, 2016), the seven hosts we interviewed self-reported their income as medium or high. This suggests that people with higher incomes are better positioned to participate and benefit from the sharing economy. Furthermore, only people with suitable homes or accommodations in prime locations are likely to generate the largest financial profits. Therefore, rental sharing platforms seem to be less inclusive than they claim, and might be associated with increased wealth inequality.

4.2. Sustainability framings of reciprocal accommodation sharing platforms

4.2.1. Environmental framings

Diagnostic framing: Accommodation sharing increases environmental pressure through rebound effects. Similarly to rental platforms, Interviewee 6 believed that their platform encouraged people to travel more often. Contrary to rental platforms, this framing was also supported by the questionnaire, as two out of three respondents would not have travelled at all had the platform not been available, and one would have travelled to a destination closer to their home.

Prognostic framing: Accommodation sharing enables more efficient resource use. Interviewees 3 and 4 claimed that the utilisation of idling homes leads to fewer hotels being built and consequently to a reduced need for virgin raw materials, which they believed was better for the environment: Interviewee 6 further noted: "*Just by virtue of encouraging sharing it helps the environment because you are not building anything new. Your things do not sit idle. Following the reduce-reuse-recycle steps, you are reusing your home*". These framings support claims by Chenoweth (2009), who argues that the largest environmental impacts from the accommodation sector occur when dedicated facilities for tourists are built and maintained on a daily basis regardless of whether they are occupied or not as opposed to private housing offered to tourists.

Motivational framing: Accommodation sharing is a more environmentally sustainable way of lodging away from home. Reciprocal organisations frame home swapping as "environmentally friendly": "*Since we share our spaces, [it means] fewer hotels and less construction are needed, [so it is] better for the environment.*" (Pers. comm. Interviewees 3, 4). At the same time, they note that they do not purposefully encourage environmentally friendly practices among their users. We found that this is consistent across reciprocal organisations. Most of the interviewees mentioned that home swapping embodied a higher level of environmental sustainability than their incumbent counterparts. However, none of the three organisations used this framing on their websites. In the questionnaire, two out of three users stated that they booked the trip through the reciprocal platform because they wanted to travel in a sustainable way. At the same time, the primary self-reported reasons to use such platform were lower cost and building social connections.

4.2.2. Economic framings

Diagnostic framing: Accommodation sharing organisations exist in unregulated markets. The interviewees did not believe that zoning, licencing or health and safety rules should apply to them (Pers. comm. Interviewees 3, 4, 6). Instead, they employ a different motivational framing from that of rental and free platforms. They acknowledge that since they belong to fee paying platforms, some legal liability might be expected from them, even though their members do not make any profit (Pers. comm. Interviewee 7). On the other hand, they are not "*100% sure if they should adhere to any legal rules (...) it's like swapping with relatives.*" (Pers. comm. Interviewee 6). However, zoning and licencing rules appeared to be an issue in the US, where some home owners were bound by the rules of Home Owners Associations: "*Sometimes, the rules [of Home Owners Associations] are interpreted as you cannot rent, nor exchange [your home]. In those situations, we have been successful in persuading the Associations that exchanges are not rentals.*" (Pers. comm. Interviewee 7). This interviewee called for a better understanding of home swapping to prevent it from being merged with short-term rentals. One of the reciprocal platforms organises member meet-ups open to the media and public, during which its representatives explain how their business model differs from rental platforms. In other words, reciprocal platforms take a pro-active approach by educating city governments about their activities to ensure their users are allowed to swap their homes. Insurance is another important issue within the unregulated reciprocal market. The exchange of houses is currently covered by damage insurance on the platform GuestToGuest. Although the platform Home Exchange once offered insurance against damage, they cancelled it because it was too expensive and has never been claimed (Pers. comm.). Home Exchange considers offering insurance to their users in the future if a suitable solution for the sharing economy is offered on the insurance market. Users of Behomm are also advised to have their own insurance (Pers. comm.). Interviewee 7 believed that exchanging homes is an insurance in itself: "*It's surprising how high the level of trust is. [This is] because we're fundamentally different from the other platforms. In for-profit companies, there is a lack of personal connection, which makes it easier not to deal with potential damages*" (Pers. comm. Interviewee 7).

Prognostic framing: Accommodation sharing creates opportunity for new micro-entrepreneurs to capitalise on underused assets. While the underused assets exchanged through reciprocal platforms are mostly entire homes which people normally live in, they can also be second homes or summer houses. However, micro-entrepreneurship (Wosskow, 2014; Woodruff, 2014) is less relevant for reciprocal platforms as income is not generated during the accommodation swap.

Motivational framing: Accommodation sharing generates incomes and creates jobs. Reciprocal platforms do not use this framing when addressing their users because no monetary exchanges occur. On the other hand, incomes and small number of jobs are generated for people operating reciprocal platforms. Instead of motivating their users to join for extra income, reciprocal platforms highlight the opportunity to meet like-minded travellers, travel anywhere, live like locals and stay for free (Home Exchange, 2016). Similarly, GuestToGuest use the following motivational framings: free travel, flexibility and a different way of travelling: *"Live an authentic experience. Discover the local culture and the lifestyle of your hosts"* (GuestToGuest, 2016).

4.2.3. Social framings

Diagnostic framing: Accommodation sharing is built on desperation. This framing is not supported by users of reciprocal platforms since all of them own or rent real estate assets suitable for exchange and thus it is reasonable to assume that they use the platforms for reasons other than necessity.

Prognostic framing: Accommodation sharing platforms create a sense of empowerment and trust. Our data show that users of reciprocal platforms trusted the people they met through the sharing platform. Similarly to rental platforms, reciprocal platforms have incorporated review systems to create and enhance trust among users. However, users may only suggest small changes to the way reciprocal platforms are run (Pers. comm. Interviewees 5, 6, 7), which is similar to the rental platforms. The previously mentioned member meet-ups, organised by one of the platforms, create additional opportunity to provide feedback. Thus, it seems that reciprocal platforms are more open to communicating with their users. Overall, two of the three questionnaire respondents agreed that they could influence how the platform is run.

Motivational framing: Anyone can benefit from accommodation sharing. Members of reciprocal platforms must have access to accommodation suitable for swapping. This makes the platforms exclusive, rather than inclusive. Interviewees reported that the average member is a woman who is employed and married with children, which also distinguishes reciprocal platforms from rental and free platforms.

4.3. Sustainability framings of free accommodation sharing platforms

4.3.1. Environmental framings

Diagnostic framing: Accommodation sharing increases environmental pressure through rebound effects. This framing is not supported by our data, which indicate that arranging accommodation through free platforms does not result in any additional travel. The majority of the surveyed guests (13/14) would have travelled to the same destination had the platform not been available, and one would have travelled further away. In addition, longer and more frequent trips booked through Warm Showers, a platform that specialises on free accommodation for touring cyclists, should not lead to increased levels of GHG emissions. We acknowledge, however, that Warm Showers is a unique platform.

Prognostic framing: Accommodation sharing enables more efficient resource use. This framing is supported by our empirical data. If a host shares their accommodation with a guest, the use of some resources, such as heating and lighting, is shared, thereby leading to more efficient resource use per capita (Chenoweth, 2009). Interviewee 8 noted: *"We share resources and we do not build new hotels. We share what is already there"* (Pers. comm.). Interviewees 8, 9 and 10 also believed that interaction between users raises awareness about environmental issues: *"People on hospitality networks open their lives to a stranger so [they] have to be open-minded, and they share information. [They] are very well aware about environmental issues (. . .) and many of them are activists. Meeting people through hospitality exchange networks spreads the knowledge about environmental issues"* (Pers.comm. Interviewee 9). According to Interviewee 8, one of the major differences between rental and free platforms is the personal interaction between hosts and guests, which is not augmented by monetary obligations and is therefore more genuine, which in turn maximises information exchange.

Motivational framing: Accommodation sharing is a more environmentally sustainable way of lodging away from home. Free accommodation sharing was framed as a sustainable way of lodging by both platform operators, as mentioned above, and hosts. The majority of hosts (32/37) (strongly) agreed that they became hosts to contribute to a sustainable way of lodging. This motivation factor ranked second after "connecting with people from other cultures". For the guests, desire to travel cheaper, meet people from other cultures, and experience an adventure were more important than sustainability.

4.3.2. Economic framings

Diagnostic framing: Accommodation sharing organisations exist in unregulated markets. Free platforms do not face any of the legal issues rental and reciprocal platforms described. According to interviewees 8 and 10, zoning permits were not required from them because they were non-profit organisations, and their members were not bound to tourism or city tax since they did not generate income. Hosting on free platforms was framed as offering a room to a relative or a friend, which is the same framing employed by reciprocal platforms. One of the free platforms checked their status with a legislative body in Belgium, where it was confirmed that the platform did not need to follow the same health and safety issues as the hotel industry (Pers. comm. Interviewee 8). Therefore, free platforms did not find it necessary to liaise with city governments. According to Rampell (2015), free platforms may become subjected to the same regulations as larger rental platforms, particularly in connection with insurance. None of the free platforms currently offer damage insurance as they are non-profit and cannot afford it (Pers. comm. Interviewees 8, 9, 10). According to interviewees 8, 9 and 10, it is always up to the platform member to take due care when hosting travellers. Free platforms also advise their users to only host members with positive references,

completed profile and those who are active on the platform. Our data show that more than half of the hosts from free platforms did not have insurance against damage. In addition, everyone in the study who stated their home was not insured was member of a free platform (Be Welcome, Couchsurfing or Warm Showers). The hosts from free platforms are therefore more vulnerable than their counterparts from rental and reciprocal platforms.

Prognostic framing: Accommodation sharing creates opportunity for new micro-entrepreneurs to capitalise on underused accommodation assets. This framing is not supported by operators or users of free platforms because hosting does not generate any income.

Motivational framing: Accommodation sharing generates incomes and creates job. Similarly to reciprocal platforms, free platforms do not use this framing when communicating to their users since there is no monetary exchange between hosts and guests. A small number of jobs and minor income is generated for owners or employees of platforms. For example, Warm Showers employs one person to run the website and Trustroots plans to employ someone in the future. The main motivational framings used by free platforms appear to be inter-cultural connections and knowledge sharing between local residents and people from all over the world: *"Imagine arriving in a city like Paris or Mumbai and, instead of trying to find a taxi, there is somebody already waiting for you. Imagine that instead of going to eat at the place recommended by the guidebook, someone shows you their favourite restaurant. Imagine the experience staying as a personal guest of your new friend rather than sleeping in an impersonal hotel room"* (BeWelcome, 2016). These two framings are also employed by Couchsurfing and Trustroots, and by rental platforms. However, while the main motivational framing by rental organisations is of economic nature, free platforms employ social framings instead.

4.3.3. Social framings

Diagnostic framing: Accommodation sharing is built on desperation. This framing is not supported by the hosts of free platforms since there is no monetary exchange between the users of free platforms thus participation in them is not motivated by the possibility to earn extra income. For guests, it may be a question of "desperate" travelling since they have ranked low cost of the trip as the main reason to stay with a free accommodation sharing platform.

Prognostic framing: Accommodation sharing platforms create a sense of empowerment and trust. Compared to users of rental platforms, the level of trust appears to be higher among users of free platforms. All respondents confirmed that they trusted the people they met through free sharing platforms. In terms of empowerment, contrary to rental and reciprocal platforms, the free platforms Trustroots, Warm Showers and Be Welcome encourage their members to become volunteers, shape the organisational structure and influence the way these platforms operate. Be Welcome has a strong network of volunteers who can be democratically elected as board members. Trustroots is also open to board members who originate from their user database, as long as they bring value or skills to the entire community. Eight of nine respondents from Be Welcome believed they could influence how the platform was run, which is not surprising given the platform's core values of transparency and democracy. The 18 respondents from Couchsurfing (organisation that changed its status from non-profit to for-profit) showed significantly lower belief that they can influence how the platform is run. Seven (strongly) disagreed that they can influence the platform compared to only two who (strongly) agreed with the statement. Couchsurfing therefore lags behind Be Welcome and Warm Showers in member empowerment. Overall, out of 51 respondents from free accommodation sharing platforms, 19 (strongly) agreed that they can influence how the platform is run and 17 (strongly) disagreed. The rest of the respondents were neutral.

Motivational framing: Anyone can benefit from accommodation sharing. Out of the 51 respondents from free platforms, 17 assessed their income as low, 27 as medium and 7 as high. Most of them (37) completed higher education. The literature showed that the types of people who benefitted from the sharing economy depended on what was shared. The reviewed studies often demonstrated different or contradicting results depending on the segment in the sharing economy and the sharing platforms they focused on. Our questionnaire shows that the type of sharing platform in which people were members was not influenced by the level of education, gender or income. It also indicates that different demographic groups are presented across all platform types. The respondents were of all age categories, both male and female, most of them with completed higher education, and 50% with medium income.

5. Discussion and conclusions

This research brings in new insights to the discourse on the sharing economy by analysing how environmental, economic and social implications of the sharing economy are framed by operators and users of three types of accommodation sharing platforms. In this section, we aim to shed light on how these framings affect the overall prospects of the sharing economy.

Our results show that current framings of environmental, economic and social implications of the sharing economy in general and accommodation sharing in particular vary between those who formulate them, and between platform types (rental, reciprocal and free). Therefore, any generalisations of sustainability framings to the broad sharing economy or to its sectors may be misleading. For example, the framing that sharing is built on desperation is hardly relevant for the accommodation segment – perhaps only in the sense that home owners seek to secure the current state of their wealth (i.e. accommodation assets) rather than being desperate to secure income in order to survive (unlike, for example, drivers on car sharing platforms).

At the same time, the ways in which sustainability of the sharing economy is framed is likely to affect its further development. Our findings show that *diagnostic framings* are mainly put forward by the opponents of the sharing economy or

other concerned parties positioning the sharing economy as a risky endeavour for the environment, economy, and society. Sharing economy proponents, on the other hand, mainly hold to *prognostic framings,* positioning the sharing economy as an alternative solution to sustainability problems, however, often ignoring diagnostic framings. Sometimes, we found it difficult to distinguish between prognostic and motivational framings. Our study shows that the two framings can go hand in hand when accommodation sharing platforms seek to engage their users or solicit support for their activities from other actors, e.g. municipalities who are interested in job creation. *Motivational framings* are mainly put forward by the proponents, who seek to solicit support and encourage action, while the opponents often choose to criticise the newcomers without offering any solution or suggesting line of action.

We have also observed a lack of *environmental framings* about the sharing economy in general and accommodation sharing in particular as opposed to, for example, abundant socio-economic framings. The lack of environmental framings by platform operators is often reflected in the absence of attention to environmental implications of the sharing economy by its users. We found that environmental framings were the strongest among free accommodation sharing platforms, which seem to be more genuine in holding on to their environmental and social values. Rental platforms use environmental sustainability as a motivational framing to attract new users, although their users do not seem to engage in accommodation sharing for environmental reasons. Reciprocal platforms do not employ such motivational framing, and their users choose the platform due to the lower cost of lodging and a possibility to establish social connections.

While the dominant *framings* of the sharing economy are *economic* (Martin 2016), they have quite different implications for rental, free and reciprocal accommodation sharing platforms. For example, empirical data shows large variability in whether these platforms see themselves as existing in unregulated markets. While taxation and legal questions are an issue for rental platforms, these are irrelevant for free platforms as there is no money transactions between their users, and reciprocal platforms land "in between" with no clarity of whether they are subject to regulations or not. When it comes to insurance, the hosts on the free platforms appear to be much more vulnerable than hosts on the other platform types, as the lack of insurance among them seems to be a common issue. Also, rental accommodation sharing platforms, due to the presence of monetary exchange between their users, seem to deliver higher economic value by creating opportunity for entrepreneurs to capitalise on underused assets. However, such entrepreneurs could be both micro-actors, i.e. individuals, and larger semi-professional organisations, such as bed & breakfasts or owners of real estate. The latter blurs the lines between micro-entrepreneurship and business-as-usual. While the sharing economy is framed as having the potential to create jobs (Troncoso, 2014), rental accommodation sharing platforms refrain from using the term "jobs", but rather frame the financial benefits their users gain as "extra income". This framing holds neither for reciprocal nor for free platforms since there is no monetary exchange among their users. The question whether the net economic impact in the destination exceeds the lost economic impact in the home location of accommodation sharing platform users is debatable. One can imagine that the economic impact in the destination would be positive since the people on vacation tend to spend more; however, this question needs further research.

Similar to the environmental and economic framings, differences between the three types of accommodation sharing platforms have been observed for the *social framings*. With regards to the issue of empowerment, neither hosts nor guests feel that they have any noteworthy influence on the way rental platforms operate. The same holds true for the reciprocal platforms while the free platforms encourage their members to become volunteers, shape the organisational structure and influence the way these platforms operate. With regards to trust, the users of free platforms report the highest levels compared to the two other platform types. They are followed by users of reciprocal platforms, which "trust their counterparts more" than the users of rental platforms. The question arises whether this is because the review systems of reciprocal platforms are superior to those of the rental ones, or because people swap homes and thus feel a much higher sense of responsibility in sharing each other's spaces. Or, is it because they swap homes with people, who they feel belong to the same societal group, judged for example by income, but also possibly by taste and other subjective factors? This is an interesting question for further research. We also conclude that the framing that anyone can benefit from accommodation sharing is rather exaggerated. For all types of accommodation sharing platforms, their users need to hold financial or physical assets to be able to participate. While such possessions are less demanding for the free platforms (hosts need to have a roof over their heads and a spare couch, and guests need to have money for the trip), social inclusiveness is becoming a contested issue for reciprocal and rental platforms as only those who own properties in primary tourist destinations can benefit. In the case of rental platforms, their guests pay both for the trip and the lodging, which makes it the least inclusive of the three platform types.

To conclude, our research demonstrates that the diversity of accommodation sharing platforms is reflected in the type of framings they develop and put forward. This has implications for the role of accommodation sharing platforms in advancing sustainability in society. For-profit accommodation sharing platforms use the ethos of sustainability to attract more users (both hosts and guests), but nevertheless prioritise economic prosperity over environmental or social dimensions. Non-profit platforms seem to have environmental and social benefits as priorities, and thus are not limited or narrow-sighted by the profit generation. The latter observation, however, needs to be tested.

Acknowledgements

References

Acemoglu, D., 2001. Good jobs versus bad jobs. J. Labour Econ. 19 (1), 1–21.

Airbnb Action, 2016. Airbnb and UNEP Team up to Promote Sustainability. Airbnb Action, https://www.airbnbaction.com/unep-en/.

Airbnb, 2014. Environmental impacts of home sharing around the world. In: The Airbnb Blog – Belong Anywhere. Airbnb, July 31. http://blog.airbnb.com/environmental-impacts-of-home-sharing/.

Airbnb, 2015a. Airbnb Economic Impact Airbnb. Airbnb, http://blog.airbnb.com/economic-impact-airbnb/.

Airbnb, 2015b. In What Areas Is Occupancy Tax Collection and Remittance by Airbnb Available? Airbnb, https://www.airbnb.com/help/article/653/in-what-areas-is-occupancy-tax-collection-and-remittance-by-airbnb-available?locale=en.

Airbnb, 2016. Airbnb's Positive Economic Impact in Cities Around the World. Airbnb, Accessed February 23. https://www.airbnb.co.uk/economic-impact.

Agyeman, Julian, McLaren, Duncan, Schaefer-Borrego, Adrianne, 2013. "Sharing Cities." Friends of the Earth. http://www.foe.co.uk/sites/default/files/downloads/agyeman_sharing_cities.pdf.

Aloisi, A., 2015. The rising of on-Demand work, a case study research on a set of online platforms and apps. In: Presented at the First International Workshop on the Sharing Economy, Utrecht, June.

BeWelcome, 2016. About BeWelcome – The Concept (Accessed September 11. http://www.bewelcome.org/about).

Belk, Russel, 2010. Sharing. J. Consum. Res. 36 (5), 715–734, http://dx.doi.org/10.1086/612649.

Belk, Russel, 2014. You are what you can access: sharing and collaborative consumption online. J. Bus. Rese. 67 (8), 1595–1600, http://dx.doi.org/10.1016/j.jbusres.2013.10.001.

Blühdorn, Ingolfur, 2007. Self-Description, self-Deception, simulation: a systems-Theoretical perspective on contemporary discourses of radical change. Soc. Mov. Stud. 6 (1), 1–19, http://dx.doi.org/10.1080/14742830701251229.

Botsman, Rachel, Rogers, Roo, 2011. What's Mine Is Yours: How Collaborative Consumption Changes the Way We Live, 2nd ed. Collins, London.

Celata, F., Andersen, M.M., Yungmee Hendrickson, C., Sanna, V.S., 2015. From community-Minded to profit-Oriented? In: Critical Geographies of the Sharing Economy. Presented at the First International Workshop on the Sharing Economy, Utrecht, June, http://www.uu.nl/en/files/iwse201540-fcelataetalsharinggeographiesutrechtpdf.

Chenoweth, Jonathan, 2009. Is tourism with a low impact on climate possible? Worldwide Hospitality Tourism Themes 1 (3), 274–287.

Cohen, B.D., Munoz, P., 2015. Sharing cities and sustainable consumption and production: towards an integrated framework. J. Clean. Prod., 1–11, http://dx.doi.org/10.1016/j.jclepro.2015.07.133 (in press.

Cohen, Maurie J., 2016. Sharing in the new economy. In: The Future of Consumer Society: Prospects for Sustainability in the New Economy. Oxford University Press, Oxford.

Demailly, D., Novel, Anne-Sophie, 2014. The Sharing Economy: Make It Sustainable. IDDRI, http://www.iddri.org/Publications/Collections/Analyses/ST0314_DD%20ASN_sharing%20economy.pdf.

Dyal-Chand, R., 2015. Regulating Sharing: The Sharing Economy as an Alternative Capitalist System. SSRN Scholarly Paper ID 2743959. Social Science Research Network, Rochester, NY, http://papers.ssrn.com/abstract=2743959.

EEA, 2013. Environmental Pressures from European Consumption and Production: A Study in Integrated Environmental and Economic Analysis. European Environment Agency (EEA), http://www.eea.europa.eu/publications/environmental-pressures-from-european-consumption/at_download/file.

Elkington, J., 1997. Cannibals with Forks: The Triple Bottom Line of 21 st Century Business. Capstone, Oxford.

Entman, Robert M., 1993. Framing: toward clarification of a fractured paradigm. J. Commun. 43 (4), 51–58, http://dx.doi.org/10.1111/j.1460-2466.1993.tb01304.x.

Felländer, Anna, Claire, Ingram, Robin, Teigland, 2015. The Sharing Economy. Embracing Change with Caution. Entreprenörskapsforum, http://entreprenorskapsforum.se/wp-content/uploads/2015/06/Sharing-Economy_webb.pdf.

Forno, Francesca, Garibaldi, Roberta, 2015. Sharing economy in travel and tourism: the case of home-Swapping in Italy. J. Q. Assur. Hosp. Tour. 16 (2), 202–220, http://dx.doi.org/10.1080/1528008X.2015.1013409.

Fremstad, Anders, 2014. Gains from Sharing: Sticky Norms, Endogenous Preferences, and the Economics of Shareable Goods. Economics Department Working Paper Series (February, 34).

Frenken, Koen, 2016. Opening of the first international workshop on the sharing economy. In: Presented at the 1 st International Workshop on the Sharing Economy, Utrecht, June 4.

Gansky, Lisa, 2012. The Mesh: Why the Future of Business Is Sharing (Reprint edition. Portfolio).

Grinevich, Vadim, Huber, Franz, 2015. Upscaling in the sharing economy: insights from the UK. In: Presented at the First International Workshop on the Sharing Economy, Utrecht, June 4.

Griswold, A., 2014. The Problem With Jobs in the Sharing Economy. Slate (May 29. http://www.slate.com/blogs/moneybox/2014/05/29/uber_and_driverless_cars_the_sharing_economy_is_not_the_future_of_labor.html.

GuestToGuest, 2016. Adopt Home Exchange. GuestToGuest, Accessed September 11. https://www.guesttoguest.com/en/.

Guttentag, Daniel, 2015. Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. Curr. Issues Tour. 18 (12), 1192–1217, http://dx.doi.org/10.1080/13683500.2013.827159.

Hamari, J., Sjöklint, M., Ukkonen, A., 2013. The sharing economy: why people participate in collaborative consumption. J. Assoc. Inf. Sci. Technol. 28, http://dx.doi.org/10.1002/asi.23552.

Heinrichs, H., 2013. Sharing economy a potential new pathway to sustainability. Gaia 22, 228–231.

Hendrickson, Yungmee, C., Celata, F., Sanna, V.S., 2016. Can I Trust You? Digital Reputation and the Value of Trust in the Sharing Economy (In, 2. Paris, France).

Hill, S., 2016. Is the sharing economy truly green? Sierra Club, March 14. http://www.sierraclub.org/sierra/2016-2-march-april/green-life/sharing-economy-truly-green.

Home Exchange, 2016. Mission. https://www.homeexchange.com/en/about/.

Houlder, Vanessa, 2015. Revenue & Customs Goes Online to Tax the Sharing Economy. Financial Times, July 25. http://www.ft.com/intl/cms/s/0/07e878a6-3205-11e5-91ac-a5e17d9b4cff.html#axzz3mTvJuBE0.

Huurne, M. ter, Renes, R.J., Corten, R., Buskens, V., 2016. Explanations of Consumers' Trust in the Sharing Economy: A Review of Current Literature (In, 3. Paris, France).

Ikkala, T., Lampinen, Airi, 2015. Monetizing network hospitality: hospitality and sociability in the context of airbnb. In: Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing, ACM, pp. 1033–1044 http://dl.acm.org/citation.cfm?id=2675274.

Interian, Johanna, 2016. Up in the air: harmonizing the sharing economy through airbnb regulations. Boston College Int. Comp. Law Revi. 39 (1), 129.

Isaak, A., 2015. Failing to scale and scaling to fail: how social entrepreneurs exploit impure non-Profits in order to attain economies of scale. In: Presented at the First International Workshop on the Sharing Economy, Utrecht, June.

Kandola, Pearn, 2006. The Psychology of Effective Business Communications in Geographically Dispersed Teams. Cisco Systems http://newsroom.cisco.com/dlls/2006/eKits/psychology_business_comm.pdf.

Karohs, Karoline, 2013. A Sustainable Technology?: How Citizen Movements in Germany Frame CCS and How This Relates to Sustainability. http://www.diva-portal.org/smash/record.jsf?pid=diva2:624612.

Koblar, K., Kovac, M., 2015. Sharing platforms, market distortions, transaction costs and rent-Seeking: a case of existing tourism industry. In: Presented at the First International Workshop on the Sharing Economy, Utrecht, June.

Kuttner, Robert, 2013. The Task Rabbit Economy. The American Prospect (October 10. https://prospect.org/article/task-rabbit-economy).

Lahti, V.-M., Selosmaa, J., 2013. A Fair Share –Towards a New Collaborative Economy. Sitra, Helsinki.

Lakoff, G., 2010. Moral Politics: How Liberals and Conservatives Think, second edition. University of Chicago Press.

Lines, G.E., 2015. Hej, not hej Dà: regulating airbnb In the new age of arizona vacation rentals. Arizona Law Review 57 (4), 1163–1182.

Martin, E., Shaheen, S.A., Lidicker, J., 2010. Impact of carsharing on household vehicle holdings: results from north american shared-Use vehicle survey. transportation research record. J. Transp. Res.h Board 2143 (1), 150–158.

Martin, Chris J., Upham, Paul, Budd, Leslie, 2015. Commercial orientation in grassroots social innovation: insights from the sharing economy. Ecol. Econ. 118 (October), 240–251, http://dx.doi.org/10.1016/j.ecolecon.2015.08.001.

Martin Chris, Chris J., 2016. The sharing economy: a pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecol. Econ. 121, 149–159.

Mattson-Teig, B., 2015. Residential managers police Airbnb 'Guests'. J. Prop. Manage. 80 (5), 32–36.

McLaren, Duncan, Agyeman, Julian, 2015. Sharing Cities: A Case for Truly Smart and Sustainable Cities. MIT Press, Cambridge and London.

Mont, Oksana, 2004. Institutionalisation of sustainable consumption patterns based on shared use. Ecol. Econ. 50 (1–2), 135–153.

Mora, Emanuela, 2016. Intimacy and Sociability in Some Practices of Sharing Economy (In, 2. Paris, France).

Nambiar, Prithi, Chitty, Naren, 2013. Meaning making by managers: corporate discourse on environment and sustainability in India. J. Bus. Ethics 123 (3), 493–511, http://dx.doi.org/10.1007/s10551-013-1848-2.

Novel, A.S., 2014. Is sharing more sustainable? the environmental promises of the sharing economy. In: Grosclaude, J.Y., Pachauri, R.K., Tubiana, L. (Eds.), Innovation for Sustainable Development. , pp. 139–144.

Parigi, Paolo, Cook, Karen, 2015. Trust and Relationships in the Sharing Economy Viewpoints on the Sharing Economy 1. Contexts.

Pelzer, Peter, 2015. Changing institutions in the sharing economy. In: Presented at the 1 st International Workshop on the Sharing Economy, Utrecht, June 4.

PwC, 2015. The Sharing Economy. PwC: Consumer Intelligence Series http://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf.

Querbes, A., 2015. Growth, reputation and information diffusion in the profit-Based sharing economy. In: Presented at the First International Workshop on the Sharing Economy, Utrecht, June 4 http://www.uu.nl/en/files/iwse201541-aqrutrechtproposalpdf.

Rampell, C., 2015. The Dark Side of 'sharing Economy' Jobs. The Washington Post https://www.washingtonpost.com/opinions/catherine-rampell-the-dark-side-of-sharing-economy-jobs/2015/01/26/4e05daec-a59f-11e4-a7c2-03d37af98440_story.html.

Richter, Chris, Kraus, Sascha, Syrjä, Pasi, 2015. The shareconomy as a precursor for digital entrepreneurship business models. Int. J. Entrep. Small Bus. 25 (1), 18, http://dx.doi.org/10.1504/IJESB.2015.068773.

Rosen, D., Lafontaine, P.R., Hendrickson, B., 2011. CouchSurfing: Belonging and Trust in a Globally Cooperative Online Social Network. New Media & Society (March, 1461444810390341. 10.1177/1461444810390341).

Schor, J., Fitzmaurice, C., 2014. Collaborating and connecting: the emergence of a sharing economy. In: Handbook on Research on Sustainable Consumption (forthcoming). Edward Elgar, Cheltenham.

Schor, Juliet B., Fitzmaurice, Connor, Carfagna, Lindsey B., Attwood-Charles, Will, 2016. Paradoxes of openness and distinction in the sharing economy. Poetics 54 (February), 66–81, http://dx.doi.org/10.1016/j.poetic.2015.11.001.

Schor, Juliet, 2014. Debating the Sharing Economy. Great Transition Initiative http://www.greattransition.org/publication/debating-the-sharing-economy.

Shaheen, S.A., Cohen, A.P., 2008. Worldwide Carsharing Growth: An International Comparison. Institute of Transportation Studies, March. http://escholarship.org/uc/item/1139r2m5.

Singer, Natasha, 2014. In the Sharing Economy, Workers Find Both Freedom and Uncertainty. The New York Times, August 16. http://www.nytimes.com/2014/08/17/technology/in-the-sharing-economy-workers-find-both-freedom-and-uncertainty.html.

Snow, D.A., Benford, R.D., et al., 1988. Ideology, frame resonance, and participant mobilization. Int. Soc. Mov. Res. 1 (1), 197–217.

Steinberg, Marc W., 1998. Tilting the frame: considerations on collective action framing from a discursive turn. Theory Soc. 27 (6), 845–872.

Stokes, K., Clarence, E., Anderson, L., Rinne, A., 2014. Making Sense Of The UK Collaborative Economy. Collaborative Lab and Nesta http://www.collaborativeconsumption.com/wp-content/uploads/2014/09/making_sense_of_the_uk_collaborative_economy_full_report_fv.pdf.

Sundararajan, Arun, 2014. What Airbnb Gets About Culture That Uber Doesn't. Harvard Business Review, November 27. https://hbr.org/2014/11/what-airbnb-gets-about-culture-that-uber-doesnt.

The Nielsen Company, 2014. Is Sharing the New Buying? Reputation and Trust Are Emerging as New Currencies. The Nielsen Company http://www.nielsen.com/content/dam/nielsenglobal/apac/docs/reports/2014/Nielsen-Global-Share-Community-Report.pdf.

Troncoso, S., 2014. "Job Creation and the Sharing Economy", May. http://www.resilience.org/stories/2014-05-09/job-creation-and-the-sharing-economy.

Tussyadiah, Iis P., Pesonen, Juho, 2015. Impacts of peer-to-Peer accommodation use on travel patterns. J. Travel Res. (0047287515608505).

Tussyadiah, Iis P., 2016. Factors of satisfaction and intention to use peer-to-Peer accommodation. Int. J. Hosp. Manage. 55 (May), 70–80.

WCED, 1987. Our Common Future. World Commission on Environment and Development and Oxford University Press, pp. 374.

Woodruff, J., 2014. Making Room for Micro-Entrepreneurs in the Sharing Economy. PBS NewsHour http://www.pbs.org/newshour/bb/sharing-economy-enrich-micro-entrepreneurs-promote-unregulated-big-business/.

Wosskow, Debbie, 2014. Unlocking the Sharing Economy: An Independent Review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf.

Zervas, G., Proserpio, Davide, Byers, John, 2015. A First Look at Online Reputation on Airbnb, Where Every Stay Is Above Average. SSRN Scholarly Paper ID 2554500. Social Science Research Network, Rochester, NY http://papers.ssrn.com/abstract=2554500.

Zimmerman, E., 2015. Sharing-Economy Chefs: Don't Quit Your Day Job. Recipe for Full-Time Income Eludes These Homemade Cooks. Grain's New York Business, April 8. http://www.crainsnewyork.com/article/20150408/SMALLBIZ/304059996/sharing-economy-chefs-dont-quit-your-day-job.

Zvolska, L., 2015. Sustainability Potentials of the Sharing Economy: The Case of Accommodation-Sharing Platforms. Master Thesis. International Institute for Industrial Environmental Economics (IIIEE), Lund University, Lund, Sweden.