Introduction

Attitudes towards consumption have shifted in recent years and brought increasing concern over ecological, societal, and developmental impact. A growing concern about climate change and a yearning for social embeddedness by localness and communal consumption (Albinsson & Perera, 2012; Belk, 2010; Botsman & Rogers, 2010) have made the collaborative consumption/sharing economy (The peertopeerbased activity of obtaining, giving, or sharing the access to goods and services, coordinated through communitybased online services) an appealing alternative for consumers. Past literature shows that people are turned away from ethical consumption because of economical and institutional reasons (Bray, Johns, & Kilburn, 2011; Eckhardt, Belk, & Devinney, 2010), yet with the development of new ways of consumption through the sharing economy, such as collaborative consumption (CC), these issues are addressed and potentially overcome. The sharing economy is an emerging economictechnological phenomenon that is fuelled by developments in information and communications technology (ICT), growing consumer awareness, proliferation of collaborative web communities as well as social commerce/sharing (Botsman & Rogers, 2010; Kaplan & Haenlein, 2010; Wang & Zhang, 2012). We consider the sharing economy as an umbrella concept that encompasses several ICT developments and technologies, among others CC, which endorses sharing the consumption

of goods and services through online platforms. In this study, we explore how continued participation is motivated in the part of the sharing economy that is concerned with CC, namely sharing the consumption of goods and services through activities such as renting, swapping, or trading. This includes services such as Zipcar, as well as Couchsurfing and Airbnb.

Forbes (Geron, 2013) has estimated that revenue flowing through the sharing economy directly into peoples wallets will surpass $3.5 billion, with growth exceeding 25% [SE is referring to only CC and microwork]. At the same time, investors regard the sharing economy as the new megatrend; investing hundreds of millions into related startups (Alsever, 2013). Further, the rise of the sharing economy is predicted to have a major societal impact, and thus holds relevance to both practitioners and policy makers (EU Environment, 2013). For instance, a potential change in ecommerce patterns may have a significant impact on online sales, which makes it important to examine the role and effects of CC in an online consumption context.

Despite a growing practical importance, there is a lack of quantitative studies on motivational factors that affect consumers attitudes and intentions towards CC. The context is of especially great interest since participation in CC communities and services is generally characterized as driven by obligation to do good for other people and for the environment, such as sharing, helping others, and engaging in sustainable behavior (Prothero et al., 2011; Sacks, 2011). However, CC may also provide economic benefits (saving money, facilitating access to resources, and freeriding), which constitute more individualistic reasons for participating. For these reasons there exists a real practical problem of how CC could become more widespread. In particular, the possible discrepancy between motivations and their effect on attitudes and behavior warrants an interesting context for research (Bray et al., 2011; Kollmuss & Agyeman, 2002).

This article explores peoples motivations to participate in CC. We explore how CC can be defined in more detail in the section, The Sharing Economy as a Technological Phenomenon, but we mainly consider CC to be based on access over ownership, the use of online services, as well as monetary and nonmonetary transactions such as sharing, swapping, trading, and renting (See Botsman & Rogers, 2010). We adopt the lens of intrinsic and extrinsic motivations in attitude formation and use intentions related to CC (see e.g., Deci & Ryan, 1985; Lindenberg, 2001). The research model and hypotheses were developed as a triangulation of three sources: (a) selfdetermination theory (classification of motivations into intrinsic and extrinsic motivations) (Deci & Ryan, 1985; Lindenberg, 2001); (b) previous studies on parallel sharing economiesrelated phenomena (HennigThurau, Henning, & Sattler, 2007; Lakhani & Wolf, 2005; Nov, Naaman, & Ye, 2010); and (c) contextspecific adjustments. The article is structured as follows. The next section presents the theoretical framework and background for our hypotheses. The subsequent section then outlines data and

methods, followed by the results. The article concludes with a discussion on implications and avenues for future research.

Background

This section gives an overview of how CC is positioned in the sharing economy as a technological phenomenon. As a first step, we present our mapping of 254 platforms to better understand the overall CC landscape. We then unravel the contextual understanding of the term sharing within the sharing economy and the characteristics it is assigned, such as the common traits of social dynamics and collectivism versus individual reputation.

The Sharing Economy as a Technological Phenomenon

The development of information technologies alongside the growth of web 2.0 has enabled the development of online platforms that promote usergenerated content, sharing, and collaboration (Kaplan & Haenlein, 2010). Classical examples of these include open source software repositories (e.g., SourceForge and Github), collaborative online encyclopedias (e.g., Wikipedia) and other content sharing sites (e.g., Youtube, Instagram), or even peertopeer file sharing (e.g., The Pirate Bay). More recent examples are peertopeer financing such as microloans (e.g., Kiva) and crowdfunding services (e.g., Kickstarter). These four examples, opensource software, online collaboration, file sharing, and peertopeer financing, are considered as different instances of the phenomenon we label the sharing economy. The phenomenon of the sharing economy thus emerges from a number of technological developments that have simplified sharing of both physical and nonphysical goods and services through the availability of various information systems on the Internet. We will thus view the sharing economy primarily through the lens of information technology.

We argue that although these different instances (open source, online collaboration, file sharing, peertopeer financing) of the sharing economy seem superficially different, they share a number of common aspects. To begin with, all have origins and growth stemming from the techdriven culture of Silicon Valley. This is easily attributed to open source and content sharing services, but as reported by, for example, Sacks (2011), this is also where the first, largest, and most successful CC services have emerged in the last few years. More importantly, the various instances of the sharing economy also share the characteristics of online collaboration, online sharing, social commerce, and some form of underlying ideology, such as collective purpose or a common good, as will be discussed in the section, Aspects of the Sharing Economy. All of these characteristics can also be attributed to CC services.

In this article, also CC is mainly positioned as a category of this contemporary technologydriven sharing economy. In our view this is an interesting and relevant approach to CC, because almost all practical CC activities are mediated

by various information systems, as we will outline here. Therefore, we study CC mainly as a technological phenomenon, as opposed to, for example, the perspective of an emerging consumer culture. We position our study in the literature on technology participation and adoption, as well as content contribution. We view CC as not just consumption but as an activity where both the contribution and use of resources are intertwined through peertopeer networks. The consumerrelated literature is also relevant. For example, CC could be viewed from perspective of sharing (e.g., Belk, 2014a, 2014b), borrowing (e.g., Jenkins et al. 2014), reuse and remix culture (e.g., Lessig, 2008), charity (e.g., Hibbert & Horne, 1996; Strahilevitz & Myers, 1998), secondhand markets, sustainable consumption (e.g., Young, Hwang, McDonald, & Oates, 2010), and for instance, even anticonsumption (Ozanne & Ballantine, 2010). We note, however, that although framing CC in the context of consumer studies is of course complementary, it is beyond the scope of this work.

We define the term CC broadly as the peertopeerbased activity of obtaining, giving, or sharing access to goods and services, coordinated through communitybased online services. This definition was formed by the combination of previous considerations as well as by the mapping of 254 CC websites of. The websites were identified by systematically going through all the categories (i.e., transport, equipment, children, etc.) of the directory on collaborativeconsumption.org. This contains a collection of various types of websites that relate their business to the sharing economy/ CC. The directory is continuously updated by adding CCs that are just starting out and also updated by removing those CCs that have halted operations.

To qualify for the mapping, the CC must be an online website, a mobile app, or a combination that is continuously used and maintained by the users. However, a website that advertises a standalone and purely offline activity, such as a flea market, would not qualify. The evaluation of each website was made by alphabetically and systematically going through the directory, opening the website, then reading and examining its content, and, if necessary, signing up for an account to look at any additional features. The mapping placed the CCs in different categories that described the mode of exchange: sharing, new purchase, secondhand purchase, renting, donating, swapping, and lending or borrowing. An overview of the mapping can be

seen in Table 1. Notably, some services facilitate multiple types of activities, such as renting as well as purchasing, and thus belong to more than one category.

The mapping of 254 CC platforms revealed that the activities may be separated into two main categories of exchange: access over ownership and transfer of ownership. However, it is possible for a platform to facilitate both modes of exchange. This occurs when the platform has more than one type of trading activity, such as lending (access over ownership) and donating (transfer of ownership), causing an overlap between the main categories. Out of the 254 platforms, 191 were identified as facilitating access over ownership while 139 provided the transfer of ownership. A total of 76 platforms had overlapping categories.

Access over ownership is the most common mode of exchange. Access over ownership means that users may offer and share their goods and services to other users for a limited time through peertopeer sharing activities, such as renting and lending (see Bardhi & Eckhardt, 2012). Most common was renting. For example, MonJouJou rents out childrens toys for a duration of 15, 30, or 60 days. Other examples are AirBnb, and RentTheRunway where goods and services can be accessed by users for a certain amount of time and often for a fee. Another example, Berlinbased Drivenow is a paid carsharing service where a user may book any of the designated cars randomly distributed throughout the city and when the user is done, he may park the car anywhere within the assigned city area.

Alternatively, the transfer of ownership passes ownership from one user to another through swapping, donating, and purchasing of primarily secondhand goods. For instance, services such as Swapstyle or ReSecond help users to swap unwanted clothes. Other examples are Zilch and ThredUp. Swapping or donating are the most popular categories followed by the least popular category, namely purchasing used goods. An overview of the mapping can be seen in Table 1.

Furthermore, this analysis sheds light on numerous aspects of the sharing economy but particularly on the multiplicity of the term sharing. We want to emphasize that our definition of the sharing economy differs slightly from those of other scholars (Belk, 2007, 2010), as well as some other definitions of sharing economy (Lessig, 2008; Sacks, 2011) or collaborative consumption (Belk, 2014a, 2014b; Botsman & Rogers, 2010).

\Moreover, CC operates through technological platforms, such as a website or mobile app, yet relies heavily on social dynamics for the actual sharing and collaboration. In fact, Wiertz and de Ruyter (2007) propose that firms that own and operate such online platforms do not control the actual sharing at all. Instead, the development is led by social dynamics, such as enjoyment and selfmarketing of a community (Lin and Lu, 2011; Wasko & Faraj, 2000). Therefore, sharing economy (and in particular CC) platforms act merely as economicaltechnological coordination providers. This resembles for example, GitHub and Torrent trackers, which do not necessarily have control of the content distributed, exchanged and coordinated. Collaborative consumption communities represent such coordinating centers in the context of CC.

In summary, this article suggests that CC is a peertopeerbased activity of obtaining, giving, or sharing access to goods and services, coordinated through communitybased online services. This is based on existing definitions that are combined and refined with the findings from the mapping of the 254 platforms. Nevertheless, there remains a difficulty in defining this phenomenon, because of the wide variations in existing terminology. A definition should include CCs socioeconomical as well as technological aspects, taking into account that it manifests varying degrees of digital and physical exchange. In this way, CC also affords several equally important perspectives for analysis. However, mainstream media have merely defined CC as an economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership (Botsman, 2013). Another previous scholarly definition restricts CC only to nonmonetary transactions the acquisition and distribution of a resource for a fee or other compensation (Belk, 2014b, p. 1597). However, this is where the definitions diverge based on whether monetary exchange is allowed as a part of CC. Moreover, as we discussed earlier, publicly available listings of CC services include a variety of services that have different features and modes of exchange including monetary transactions. In this article we have primarily investigated CC as a technological development, and have viewed it from the perspective of research on peertopeer technologies, such open source software repositories (e.g., SourceForge and Github), collaborative online encyclopedias (e.g., Wikipedia), and other content sharing sites (e.g., Youtube, Instagram), or even peertopeer file sharing (e.g., The Pirate Bay). This approach provides a solid bridge to tie the CC phenomenon into the existing literature, both conceptually and in terms of theory.