



Regulating the sharing economy

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Abstract: In this introductory essay, we explore definitions of the ‘sharing economy’, a concept indicating both social (relational, communitarian) and economic (allocative, profit-seeking) aspects which appear to be in tension. We suggest combining the social and economic logics of the sharing economy to focus on the central features of network enabled, aggregated membership in a pool of offers and demands (for goods, services, creative expressions). This definition of the sharing economy distinguishes it from other related peer-to-peer and collaborative forms of production. Understanding the social and economic motivations for and implications of participating in the sharing economy is important to its regulation. Each of the papers in this special issue contributes to knowledge by linking the social and economic aspects of sharing economy practices to regulatory norms and mechanisms. We conclude this essay by suggesting future research to further clarify and render intelligible the sharing economy, not as a contradiction in terms but as an empirically observable realm of socio-economic activity.

Keywords: Sharing economy, Peer-to-peer (P2P), Crowd-sharing

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REGULATING THE SHARING ECONOMY

INTRODUCTION: WHAT 'SHARING'?

The sharing economy is on the rise. In 2015 gross revenue from sharing economy companies across the EU doubled from 2014 and totaled 28 billion EUR (EU, 2016) and it is estimated to be worth 335 billion USD globally by 2025 (PriceWaterhouseCoopers, 2015). A third of Europeans have used the services of a sharing platform (EU, 2016), rising to 72% of North Americans (Pew Research Center, 2016). Today, there is little dispute that the sharing economy impacts lives and livelihoods and that technologies underpinning it both structure behaviour and facilitate emerging and expanding business. Yet, as ongoing and numerous legal actions and injunctions against companies like Uber and Airbnb across the world demonstrate, opinion differs on the extent to which the sharing economy should be regulated, resisted or embraced. Similarly, there is little research into how the technological affordances and infrastructures that underpin the sharing economy structure and shape human interactions and transactions, and, crucially, what this means in a wider cultural or socio-economic context. This special issues seeks to address this.

One obstacle to a deeper understanding of the ‘sharing economy’ has been ambiguity about its definition. Sharing, which evokes familiar exchanges and intimate relationships, seems to be at odds with economic activity driven by anonymous transactions and rational, rather than altruistic behaviour (Belk, 2010; Schor et al, 2015). Political debates about the status of sharing economy services highlight tensions in the social and economic dimensions of these new services. The way that society and policymakers define the sharing economy will influence how we choose to regulate its activities. The purpose of this introduction to the special issue is firstly, to provide a definition of the sharing economy and secondly, to discuss how empirical approaches, such as the contributions to this collection, can help inform policy concerns.

In brief, we advance a definition of the sharing economy which incorporates both its social and economic relationality. For us, the present ‘sharing economy’ is defined by the *aggregation* of individual offers (of goods, labour, creative expression) into a common pool. The practice of sharing in our proposed definition is not dependent on shared ownership or access to products or services, since sharing economy goods may be excluded from those who do not pay. Rather it is the shared, collective status of users who offer something of their own to the aggregated pool which constitutes mutuality (in however weak a form).

Networked, mobile technologies make possible communication between previously anonymous participants, and can foster a range of reciprocal and non-reciprocal interaction. However, unlike gift economies where reciprocity aids in strengthening group ties, or commons-based peer production where ownership of collaboration is shared, commercial sharing economy platforms are not held together by reciprocity or shared ownership of goods. Consumers of these services may come and go: they may be inspired after a successful transaction to join the service with an offer of their own, or they may not.

Sharing economy goods are typically excludable and rivalrous (for example a bicycle sharing app which permits paying customers exclusive use of a peer’s bicycle for an appointed period of time). Consequently, the goods exchanged in the sharing economy do not themselves constitute a shared commons. This highlights one of the faultlines in debates about the status of sharing in the sharing economy. In traditional societies as well as certain forms of commons-based peer production, the beneficiaries of sharing are also contributors themselves (that is, sharing practices are interwoven with social and political capital and group membership). Now, anonymous, decentralised, peer-to-peer matchmaking replaces pre-existing social ties, leading to new political and economic subjectivities (Schor et al., 2015; Erickson, 2015). However, as we discuss below, social and personal motivations for taking part in aggregated sharing economy markets remain key to their growth as well as the policies designed to regulate them. We thus cannot ignore the social and relational features present alongside economic incentives in the commercial sharing economy.

SOCIAL FEATURES, FROM PEER-TO-PEER TO COLLABORATIVE CONSUMPTION

‘Sharing’ has been a social and transactional practice long before it was coupled with ‘economy’, of course, and is neither new to the internet nor society at large. Some have argued that the practice of sharing is hardwired into humans as social beings and is a necessity for survival (Price (1975) as cited in Belk, 2009, p. 715 and Nicholson, 1998). Sharing is integral to the socialisation process that takes place from childhood in most communities. The right to decide

what is being shared and amongst whom varies culturally, and reflects the norms and hegemonies within a given society (Belk, 2009; Tomasello et al., 2005, pp. 683-4). In democracies with social-democratic leanings this is often imbued with social responsibility; for example, infants in the English-speaking world learn that 'sharing is caring'.

From early in its inception, the web was envisaged as an open space for all to share information (The World Wide Web Foundation, 2016). In line with this, a large body of academic work explored both reciprocal and non-reciprocal modes of sharing, motivated by a range of rewards, such as for example explored by Barbrook (1998), Benkler (2004; 2006), Boyle (2003: 45) and Lessig (2008). Analyses of online sharing practices such as these focused on the peer-to-peer, non-hierarchical features of networks of commons-based production. Digital networks appeared to flatten hierarchies in numerous ways, such as by cutting out intermediaries and gatekeepers that were seen as commercially-driven profiteers or restrictive of creative freedom.

It is precisely these prerequisites for effective peer-to-peer (p2p) sharing networks and communities, that have precipitated the 'sharing economy'. With Web 2.0, the growth of the 'sharing economy' has been propelled by at least two factors: networked p2p communication enabled by digital innovation on the one hand, and on the other technological advances in online banking enabling consumers to make secure transactions and micropayments (features that Jenkins (2004: 39) identified as facilitating 'convergence'). The convergence between the affordances of social media platforms and the economic propositions based on sharing of resources and secure transactional technologies, combined with circumnavigation of traditional intermediaries, form the foundation of what constitutes the sharing economy today and the new commercial transnational players and gatekeepers therein (Van Dijck, 2013).

This paradox lies at the core of the debates that surround sharing economy practices today. On the one hand the discourse – and for some, reality – of sharing resonates with community, reciprocity, equality, flexibility and freedom from interference by intermediaries. This is supported by the fact that non-reciprocal sharing platforms and economies evidently work effectively and inspire their communities. For example, crowd-sharing practices flourish on Freecycle where recycled and reused goods are exchanged in kind (Phipps, 2015). Helpful contributors to the Mumsnet community advise on products and activities for young families. Crowdfunding platforms like Kickstarter and Indiegogo do the work of arts funders and enterprise offices (Sørensen, 2013). It is of course important to note that both crowdwork and the reasons for engaging in such ventures predate the internet. For example, patronage of the arts goes back to at least antiquity and operated on a near industrial scale in Renaissance Italy. The first Oxford English dictionary was co-created by a group of contributors in 1858 and long preceded Wikipedia. Today and then, these practices and participation in sharing and collaborative ventures are motivated by a variety of factors. For example, patronage; the wish to 'do good'; the feeling of belonging to a community; and the social status or capital accrued by the act of sharing (Benkler, 2012, 2014; Belk, 2009; Mollick, 2014). In the case of new sharing economy platforms - even when sharing is mediated by a transaction and occurs between strangers - many of the same intrinsic motivations appear to remain (Phipps, 2015).

Although on many sharing economy platforms social ties between participants are weak or non-existent, a discourse of sociality continues to be adopted by commercial networks and players in the market (Lury, 2015). Notions of collaboration, freedom and flexibility are offered in response to challenges which include poor working conditions, liability and lack of regulation (Newsnight, BBC2, 2016). These practical and discursive dissonances around sharing economies complicate the analysis of their dynamics.

ECONOMIC FEATURES: PRIVATE GOODS, CLUB GOODS OR COMMON RESOURCES?

Economic definitions of the sharing economy focus on the efficient allocation of resources through mutual agreement by networked participants to grant access to goods or services they own. Economic ‘gains from sharing’ are realised as previously underutilised private goods are made available to more consumers (Fremstad, 2016). Sharing economy exchanges may be reciprocal or non-reciprocal, however an important distinguishing feature is that the aggregated, p2p organisation of sharing platforms does not require users to return an equivalent product or service to the pool. One could choose to always remain a consumer, or a provider, of goods. Highlighting the consumptive, coordinated market character of the practice, the sharing economy has also been closely identified with ‘collaborative consumption’ (Belk, 2014) or ‘access economy’ (Eckhardt & Bardhi, 2015).

At its core, the sharing economy consists of an agreement between participants to contribute an owned resource (labour, goods, creative expression) to a common pool from which others may draw, with or without a commercial transaction. The benefits to the contributing participant are potentially (i) a share in the reduction of transaction costs² achieved by collectively aggregating the exchange, (ii) access to a larger market attracted by the size of the aggregated offer. The customer in a sharing economy transaction likewise benefits from reduced costs (i), while also being able to browse a larger collection of offers (ii).

Operators of sharing economy businesses are engaged in a platform business model in which they generate value via their contribution to (i), by innovating new systems to carry out transactions swiftly and efficiently between participants, and they benefit from network effects (ii) which allow them to capture increasing value (profit) as long as the combined price of the participant’s offer plus the platform fee is enticing to consumers attracted by the size of the market (See Russo & Stasi, this issue; also see Baden-Fuller & Haefliger, 2013). This business model is not fundamentally new, closely resembling the physical swap-meet business model which pre-dates the internet. Digital networked communication further enables sharing economy businesses to decentralise the exchange (both in time and space), benefiting from indirect network effects and economies of scale.

Although peer-to-peer networks enable communication and exchange, they present a risk to platform operators: there is little to stop new collectives from forming around cheap and widely-available matchmaking tools. Commercial sharing platforms must constantly seek to reduce transaction costs between participants and customers while also ensuring the aggregated offer is competitive. Paradoxically, sharing economy businesses are incentivised to keep participants (sharers) from communicating with one another, as this could provide a basis for collective action or the emergence of competing services. This logic runs counter to traditionally sustainable means of governing common-pool resources, where close ties and communication between providers and appropriators are crucial to sustaining governance (Ostrom, 1990).

The business model logic of the commercial sharing economy helps to explain cognitive dissonance in definitions which seem alien from everyday experiences of ‘sharing’ (in which, for example, community ties are strengthened via repeat interaction). Sharing economy businesses are aggregated but not necessarily collective. The mutuality fostered by sharing economy platforms is that of membership in a market, not shared possession of a good (See Belk, 2010:

79). We suggest that for sharing economy platforms like Airbnb and Uber, the shared possession which constitutes the commons is not the softness of the beds or the cleanliness of the taxis, but membership itself (who gets to drive, who gets to ride, etc.). This may explain preoccupation with self-regulatory rating systems rather than external controls on the quality of goods or public interest concerns.

One of the dangers posed by the sharing economy is that regulators and citizens confuse sharing economy goods with public or semi-public goods. Public goods are non-excludable, and are therefore ‘shared’ among users by default. As a result of non-excludability, public goods are frequently under-produced by society, making it a desirable aim of regulators to provide them. Sharing economy goods are used by many but excludable, making them more like club goods (Buchanan, 1965; Fremstad, 2016). Sharing economy services may optimise the use of a durable good or an underemployed worker by making them available to more consumers, but those who cannot pay are excluded from use. Importantly, the algorithms, trademarks and technologies that make up sharing economy platforms themselves are private goods, protected by corporate secrecy, contract and intellectual property rights.

REGULATORY CHALLENGES

The changes in social and economic relations implicated by the sharing economy highlighted above have generated particular regulatory challenges. These include issues related to working conditions, trust, risk, liability and individual agency.

Labour / working conditions: One claim made by platform operators is that participants are not ‘employees’ but something else, like ‘micro-entrepreneurs’ (Schor et al., 2015; Rogers, 2016). Participants contribute freely to the common pool and can withdraw their offer at any time, so in that sense, they are not employees (companies like Airbnb and Lyft have their own, actual employees who manage the platforms and try to extend the territorial reach of the brand). However, due to precariousness introduced by global systemic crises, sharing economy activity could substitute for what feels like ‘work’ for many who participate (Cherry, 2016; Walker, 2015). In the absence of traditional permanent employment, sharing economy gig work may constitute a larger proportion of income for some participants. And from the point of view of customers of services like TaskRabbit or Fiverr, the services offered are equivalent to labour. As highlighted in this literature, a major outcome of the change in relationship between worker and employer in the sharing economy is that participants are exposed to greater risk, reduced benefits and lower job security. Consequently regulation may be desirable to protect workers rights and well-being (De Stefano, 2016).

Trust: With reduced social ties compared to other kinds of shared commons, a central regulatory concern for sharing economy services is trust between participants. Relative anonymity and substitutability across the range of offers means that buyers and sellers typically have less information than they would in a traditional exchange. As a response many sharing economy platforms have introduced rating systems (effectively distributing part of the cost of regulating the platform to members). User ratings are problematic in a number of ways: (i) their capacity to be manipulated by dishonest or malicious participants (Lee, 2015) (ii) related, the lack of transparency in the way ratings are assigned, which could conceal bias on the part of the commercial platform, (iii) their simplicity as single-digit reporting devices, masking other important contextual information (Parigi et al, 2013); (iv) alternatively their intrusion into private aspects of participants’ lives and disciplinary function. Even assuming that user rating

systems can be well-defended from malicious attack and do not mask systemic biases introduced by commercial interests, the removal of traditional commercial parties from exchanges means that those responsibilities must be displaced elsewhere. The trust represented in user ratings might be significant, but the risk is disproportionately borne by individual participants.

Risk and liability: In crowdworking platforms, considerable legal liability is displaced to participants and users themselves. For example Lyft, Uber and similar platforms require that participants have their own driver's licence and insurance. Requirements for criminal records checks and other status checks vary between countries and companies. For Airbnb, home insurance needs to be provided by individual participants. Similarly, there are no health and safety inspections and although, for example, Airbnb 'encourages' hosts to install smoke or carbon monoxide gas detectors they do not require proof for this. Also, there are no requirements to provide a clean criminal record for hosts or guests and, potentially, violent offenders could be host or guests (Airbnb, 2016a; 2016b). This poses obvious risks to both workers and customers. Further to this, there is limited clarity on how the continued status of permits, insurance, and qualifications are updated, monitored or maintained.³

This shift from corporate to private responsibility also has implications for the provision for diverse groups in society. It becomes the prerogative of individual service provider whether to provide adequate wheelchair access to Airbnb rooms, or for ride-sharing drivers to cover rural areas or cater for children, as described in Leiren and Aarhaug's article (2016, this issue). All of these factors have obvious public interest implications that have not yet been adequately addressed, either by the platforms themselves or by national legislators.

Agency: Related closely to the above, the status of individual and community agency in the sharing economy has been raised by a number of academic commentators (Rahman, 2015). There are two dimensions to these critiques. Firstly, individual participants in sharing economy networks are limited in their choice about who to transact with and how. Platforms are standardised and anonymised (to take advantage of the efficiencies of technological convergence discussed above). Prices are normally constrained by platform operators and can sometimes be altered by algorithms (e.g. surge pricing) over which participants have little control. With the presence of network effects and in the absence of competition (or portability) between services, participants may find themselves locked into a single platform and subject to unfavourable conditions. Secondly, the ability of communities to impose national or local regulation on sharing economy platforms is reduced due to their novelty, their reliance on non-transparent algorithmic systems and their global reach. In the case of Uber and other ride-sharing applications, one outcome has been that certain municipalities have chosen to outright ban the services from operating, rather than be able to reach an agreement with the platform satisfying the local regulatory context.

CONTRIBUTIONS TO THIS SPECIAL ISSUE

Each contribution to this special issue provides a lens on economic and social dimensions of sharing economy practice. Articles are focused on issues of concern rather than individual case studies of platforms. The issues of concern covered by the contributions in this issue are the ontological status of shared goods, the conditions of crowdworking, regulation of trust between strangers, definition of relevant markets for competition regulation and European media policy concerns.

As discussed above, some commercial sharing economy platforms have linked their brands to affectively meaningful offline analogues (e.g., Bed and Breakfast accommodation or informal ride-shares). The ontological status of goods transacted in the sharing economy has implications for how they should be regulated. A central concern for research on the sharing economy is the extent to which the market which is virtualised through peer-to-peer communication rivals other markets constrained by geography and other factors. What features does Airbnb share with a traditional bed-and-breakfast? To what extent can Uber's service be compared to the licensed taxi driving profession? The contribution by Merethe Dotterud Leiren and Jørgen Aarhaug shows that the difference between taxi and non-taxi is not simply a semantic trick to evade classification and resultant regulation. Rather, as the authors demonstrate through interviews with providers on both sides of the divide, the 'taxi' signifies a range of professional, communitarian and public interest effects which are not present or are altered in the virtual taxi service brought to life by sharing economy platforms.

In their contribution, Ayad Al-Ani and Stefan Stumpp provide a typology of P2P crowdworking platforms. These range from anonymised platforms catering to efficiencies of scale in unskilled work such as Amazon's Mechanical Turk, to crowdsourcing platforms offering efficiencies of scope such as InnoCentive. Employment arrangements may be flexible or more formalised and regular, depending on the nature of the work. The authors report on results of a new survey conducted with crowdworkers on the international platform *jovoto*, measuring workers' motivations and concerns. Supported by these data, the authors explore whether existing regulatory frameworks are relevant for workers in the sharing economy or whether organisations like trade unions could potentially play a role in safeguarding their rights. A key finding is that participants report strong intrinsic motivations for participation: 'learning' and 'fun' are invoked more frequently than 'money' by the sample of creative crowdworkers.

Examining trust in online exchange of piratical material, Roberto Tietzmann and Liana Gross Furini provide an empirical window on anonymous, commons-based peer production in a setting where there is no commercial platform intermediary. The authors analyse the way that community consensus formed around naming conventions on a piratical file-sharing website. Although trust between participants is assumed to be low in anonymous, online communities, particularly when illegal infringement is involved, this research unearths incentives and mechanisms by which stable and sustainable practices are formed. The paper offers key insights for sharing economy researchers, offering new data on the rate of cooperative and non-cooperative behaviour under adverse conditions. These insights point the way toward future research to assess and improve trust mechanisms in more formal sharing economy settings, which often rely on peer-to-peer monitoring (ratings) and the possibility of sanctions by the platform provider. In conditions where those mechanisms are unavailable or inappropriate, other commons-based norms may offer alternatives to coordination.

Considering sharing economy platforms from a competition law perspective, Francesco Russo and Maria Luisa Stasi argue in their paper for a more systematic definition of relevant markets covered by sharing economy platforms. The authors suggest that particularly in the case of two-sided markets characterised by network effects, competition authorities should consider not only disruption on traditional markets (for example taxis or hotels), but should examine competition between platforms where offers are supplied. Specifying their relationship to existing markets in order to effectively regulate their new services and markets within current legislative frameworks. Approaching the issue from a legal perspective, Russo and Stasi argue in their paper for the necessity of defining the markets covered by the sharing economy and their relationship to existing markets in order to effectively regulate their new services within current

legislative frameworks. In sharing economies where network effects play a key role, competition law becomes particularly pertinent.

Exploring European media policy in the making, Ibrus and Rohn's paper centres on the traditional media industry and the evolution of the European Union's Audiovisual Media Services Directive (AVMSD). Ibrus and Rohn demonstrate how defining what a media company is and how production and distribution are understood, becomes crucial for effective regulation, especially when seeking to legislate for diverse new services and platforms in the media industries. In their paper, the authors explore the implications of including online video sharing platforms in the proposed AVMSD. Video sharing platforms, and in particular YouTube increasingly operate like broadcasters and distributors, with multiple channels and premium ad-free subscription options (such as YouTube Red). Yet, where VOD services like Netflix and Amazon Prime are included in the legalisation by the AVMSD, video sharing platforms are currently *not* regulated by the AVMSD but fall under the eCommerce Directive.⁴ Ibrus and Rohn argue that further inclusion of transnational sharing platforms like YouTube in the newly proposed AVMSD (proposed on 25 May 2016) would undermine the AVMSD legislative power. The pooled, aggregated offer of user-generated content on services like YouTube challenges traditional and existing broadcast regulation, precisely because it is user-generated, crowdsourced and shared. Including these platforms in the Directive effectively undermines the protection of European production and content quotas - the very quotas that the new AVMSD directive is set out to safeguard.

CONCLUSIONS

By 2025 the sharing economy is expected to generate 335 billion USD in global revenue according to PricewaterhouseCoopers estimates.⁵ It will permeate a wide and diverse range of service industries and sectors, from finance, transport, accommodation, media, and secretarial services to creative production and software.

This will impact the composition and constitution of new and established industries, the production of goods and services, the conditions of workers and the customers and users. Consequently it affects policy on all these levels. The collection of papers in this issue of *Internet Policy Review* explore some of the main policy implications, shortcomings and needs in this multifaceted, complex and evolving landscape. The sharing economy is a growing area of productivity, innovation and industry, but maybe also a growing concern. In all the papers in this issue the authors note the dissonance between the connotations and ideals of 'sharing' and the ways these practices play out in a market context where the emphasis is very much on 'economy'.

As a consequence, approaches to studying the sharing economy will need to take account of social as well as economic aspects. The mutuality implied by shared membership in aggregated platforms invites sociological precision. What are the personal motivations, group dynamics, and social norms that govern membership and breathe life into these markets? Importantly, how are the costs and benefits of mutuality shared between members and platform operators? Economic questions concern not only the effects of sharing economy practices for established industries and society as a whole (these will continue to be important). We also need to better understand the economic relations between participants in different configurations of the sharing economy and competitive dynamics between platform service providers and new entrants.

As it grows in size and scope, the sharing economy will undoubtedly attract further attention from policy studies researchers. Throughout the contributions to this special issue there is an implicit - and sometimes explicit - movement towards self-organisation, regulation and legislation. This drive is evident across communities; from supposedly unregulated and anarchic pirate sites as described by Tietzmann and Furini to cross-territory European Union media regulation, as discussed by Ibrus and Rohn. This regulatory impulse exists alongside market transactions and exchanges which take place on these platforms. Discussion around the policy implications, requirements and needs in relation to the sharing economy have just begun.

REFERENCES

- Airbnb (2016a). 'I'm a host. Am I required to have a smoke and CO detector installed?' Available at: <https://www.Airbnb.co.uk/help/article/515/i-m-a-host--am-i-required-to-have-a-smoke-and-co-detector-installed?topic=359> (Accessed on 10/06/2016).
- Airbnb (2016b). 'What legal and regulatory issues should I consider before hosting on Airbnb?' Available at: <https://www.Airbnb.co.uk/help/article/376/what-legal-and-regulatory-issues-should-i-consider-before-hosting-on-Airbnb?topic=197> (Accessed on 10/06/2016).
- Baden-Fuller, C., & Haefliger, S. (2013). Business models and technological innovation. *Long range planning*, 46(6), 419-426.
- Baldia, S. (2013). The Transaction Cost Problem in International Intellectual Property Exchange and Innovation Markets. *Northwestern Journal of International Law and Business*, 34(1), 1-52.
- Barbrook, R. (1998). The hi-tech gift economy. *First monday*, 3(12). Available at: <http://firstmonday.org/ojs/index.php/fm/article/view/631/552>Levine (Accessed on 10/06/2016).
- Barta, K., & Neff, G. (2016). Technologies for Sharing: lessons from Quantified Self about the political economy of platforms. *Information, Communication and Society*, 19(4), 518-531.
- Belk, R. (2010). Sharing. *Journal of consumer research*, 36(5), 715-734.
- Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595-1600.
- Benkler, Y. (2004). Sharing nicely: On shareable goods and the emergence of sharing as a modality of economic production. *Yale Law Journal*, 114, 273-358.
- Benkler Y (2006). *The Wealth of Networks*. New Haven and London: Yale University Press.
- Botsman, R. (2013). The Sharing Economy Lacks a Shared Definition. Available at: <http://www.collaborativeconsumption.com/2013/11/22/the-sharing-economy-lacks-a-shared-definition/> (Accessed on 19/07/2016).
- Buchanan, J. M. (1965). An economic theory of clubs. *Economica*, 32(125), 1-14.
- Cheng, D. (2014). Is sharing really caring? A nuanced introduction to the peer economy. *Report of the Open Society Foundation Future of Work Inquiry*.
- Cherry, M. A. (2016). Beyond Misclassification: The Digital Transformation of Work. *Comparative Labor Law & Policy Journal*, 37(3). Accessed online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2734288
- De Stefano, V. (2016). The Rise of the "Just-in-Time Workforce": On-Demand Work, Crowd Work and Labour Protection in the "Gig-Economy". *Comparative Labor Law & Policy Journal*, 37(3). Accessed online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2682602
- Eckhardt, GM & Bardhi, F (2015). The Sharing Economy Isn't About Sharing At All. *Harvard Business Review*. January 28, 2015. Accessed online: <https://hbr.org/2015/01/the-sharing-economy-isnt-about-sharing-at-all>

Erickson, K. (2015). Topological London. In I. Franklin, H. Chignell & K. Skoog (eds.) *Regional Aesthetics: Mapping UK Media Cultures*. London: Palgrave.

European Commission (2016). A Fact sheet. European agenda for the collaborative economy. Available at: http://europa.eu/rapid/press-release_MEMO-16-2002_en.htm (Accessed on 18/07/2016).

Fremstad, A. (2016). Sticky Norms, Endogenous Preferences, and Shareable Goods. *Review of Social Economy*, 74(2) 194-214.

Jenkins, H. (2004). The cultural logic of media convergence. *International journal of cultural studies*, 7(1), 33-43.

Lee, C.W. (2015). The Sharer's Gently-Used Clothes. In Juliet B. Schor J., Edward T. Walker E.T., Lee C., Parigi P & Cook K., Viewpoints. On the Sharing Economy. *Contexts*, 14(1), 12-19.

Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. Penguin

Lury, C. (2015). The Sociality of Sharing. Conference Proceedings. Available at: <http://www.ce-cp.org/2015/09/the-sociality-of-sharing-university-of-warwick-23-sept-2015/> (Accessed on 10/06/2016).

Mollick E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing* 29(1), 1–16.

Newsnight (2016). BBC2. 02/06/2016. Available at: <https://www.youtube.com/watch?v=m5P9bpj54IY> (Accessed on 10/06/2016).

Nicholson N. (1998). How hardwired is human behavior? *Harvard Business Review*, 76, 134-147.

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.

Ostrom, E., & Gardner, R. (1993). Coping with asymmetries in the commons: Self-governing irrigation systems can work. *The Journal of Economic Perspectives*, 7(4), 93-112.

Parigi, P., Dakhlallah, D., Corten, R., & Cook, K. (2013). A Community of Strangers: The Dis-Embedding of Social Ties. *PloS one*, 8(7), 67388.

Pew Research Centre (2016). Shared, Collaborative and On Demand: The New Digital Economy. Report. Available at: <http://www.pewinternet.org/2016/05/19/the-new-digital-economy/> (Accessed 10/06/2016).

Phipps, Lauren F. (2015). "A Give and A Take": Lived Experiences in a Real Sharing Economy. Pitzer Senior Theses. Paper 61. Available at: http://scholarship.claremont.edu/pitzer_theses/61 (Accessed on 10/06/2016).

Rahman, K. S. (2015). Curbing the New Corporate Power. *Boston Review*, May 4 2015. Available at: <http://bostonreview.net/forum/k-sabeel-rahman-curbing-new-corporate-power> (Accessed on 10/06/2016).

Rogers, B. (2016). Employment Rights in the Platform Economy: Getting Back to Basics.

Harvard Law & Policy Review, 10(2), 480-519.

Schor, J. B., Walker, E. T., Lee, C. W., Parigi, P., & Cook, K. (2015). On the Sharing Economy. *Contexts*, 14(1), 12-19.

Sørensen, I. E. (2015). Go Crowdfund Yourself. In Geert Lovink, Nathaniel Tkacz & Patricia de Vries (eds.), *The Moneylab Reader. An Intervention in the Digital Economy*. Amsterdam: Institute for Networked Cultures, 268-280.

Tomasello M, Carpenter M, Call J, Behne T, and Moll H (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences* 28(5), 675–735.

Walker, E.T. (2015). Beyond the rhetoric of the sharing economy. In Juliet B. Schor J., Edward T. Walker E.T., Lee C., Parigi P & Cook K., Viewpoints. On the Sharing Economy. *Contexts*, 14(1), 12-19.

Van Dijck J. (2013). *The Culture of Connectivity*. Oxford: Oxford University Press.

The World Wide Web Foundation (2016). The History of the Web. Available at: <http://webfoundation.org/about/vision/history-of-the-web/> (Accessed on 10/6/2016).

FOOTNOTES

1. For example, in March 2015, the Higher Regional Court of Frankfurt ruled against Uber and upheld a ban in Germany of the UberPOP service. See LG Frankfurt, docket no. 3-08 O 136/14. The courts in Spain have referred 4 questions to the Court of Justice of the European Union (CJEU) asking for clarification of the status of Uber as a transport service or an information society service. See Asociación Professional Elite Taxi, Case C-434/15. Similar cases are currently before the courts in Denmark in 2016.

2. Baldia (2013) summarises transaction costs as the ‘search costs, bargaining costs, and enforcement costs of entering into a transaction’ between parties. In the context of the current sharing economy, lowering transaction costs is achieved through automated, geolocate matchmaking, standardisation of offers and instant electronic payment, among other features.

3. Corporate responsibility can be shifted to individual workers and the providers of this service. Phipps (2015) describes how a traffic accident involving an Uber car was deemed the responsibility of the driver and not the company and only after several cases of rape were reported in the global press did a clean criminal record become a requirement for drivers of Uber cars.

4. The newly proposed AVMSD does not include video sharing platforms in its definition of providers of ‘TV-like’ services and therefore not in its legislation, but it does propose to regulate video sharing platforms in respect to protection of children.

5. See PricewaterhouseCoopers (2015) The sharing economy - sizing the revenue opportunity Accessed online: <http://www.pwc.com/gx/en/about/global-annual-review-2015/colliding-megatrends/the-sharing-economy.html>