

Uber

Airbnb

Shared Gadget

What is the first thing that comes to your mind when I say

Sharing Economy?

Electrical
Scooters

Bikes

Zipcar

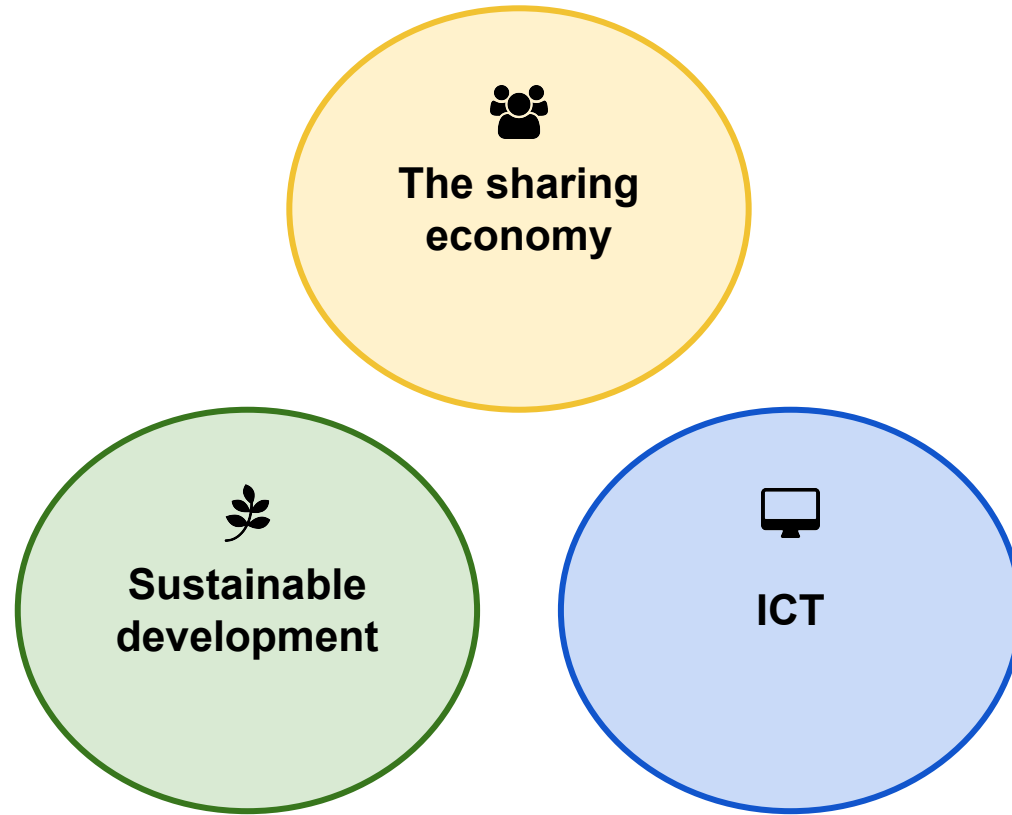
People sharing their
things for price

The Sharing Economy

An opportunity towards sustainability?

Thórhildur Thorleiksdóttir

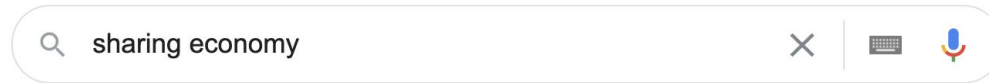
Digitalisation and the Rebound Effect seminar, HS2020, ETH Zürich



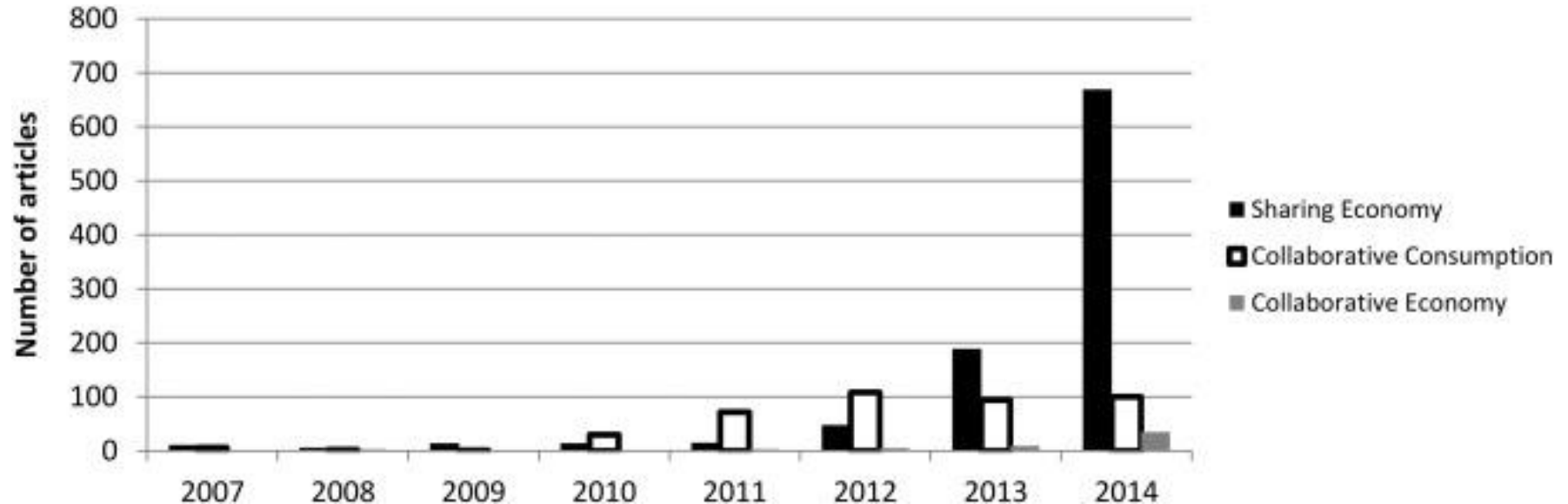
(Martin, 2016) Sharing Economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?
Ecological Economics 121 (2016) 149-159, Pouri et al., 2018) Conceptualizing the Digital Sharing Economy in the
Context of Sustainability.

What is the sharing economy?

- **07.04.2015:** 863.000 results
- **16.10.2020:** 778.000.000 results

The Google logo is displayed in its standard multi-colored font (blue, red, yellow, green, red).

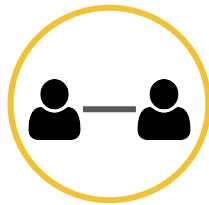
What is the sharing economy?



(Martin, 2016) Sharing Economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics* 121 (2016) 149-159

What is the sharing economy?

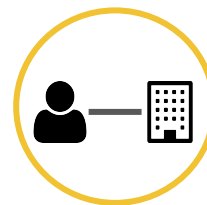
- Sharing Economy or Access Economy?
- An economic and social system that enables shared access to products by sharing information



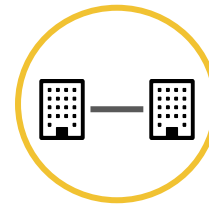
P2P



B2P



P2B

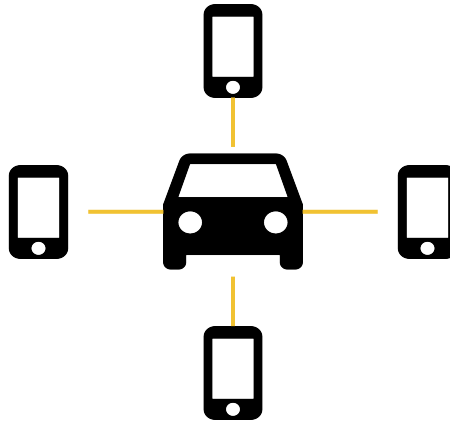


B2B

(Heinrichs, 2013) Sharing Economy: A Potential New Pathway to Sustainability. *Gaia*, 22(4), 228-231, (Martin, 2016) Sharing Economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics* 121 (2016) 149-159, (Pouri et al., 2018) Conceptualizing the Digital Sharing Economy in the Context of Sustainability,

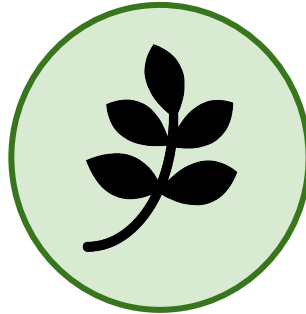
The digital sharing economy

“A digital sharing economy is a **resource allocation system**, based on sharing practices, that is enabled by ICT and coordinated through participation of individuals and possibly commercial organisation with the aim to provide **temporary access to resources** that involves either direct or indirect monetary value”



Opportunity for sustainability?

- “Sustainable development is a development that meets the **need** of the present without compromising the ability of future generations to meet their own **needs**”
 - In particular the essential **needs** of the world’s poorest people, to which overriding priority would be given
- Sharing economy: “sharing instead of owning”



Research methods

Socio-technical transition theory and Framing theory

1

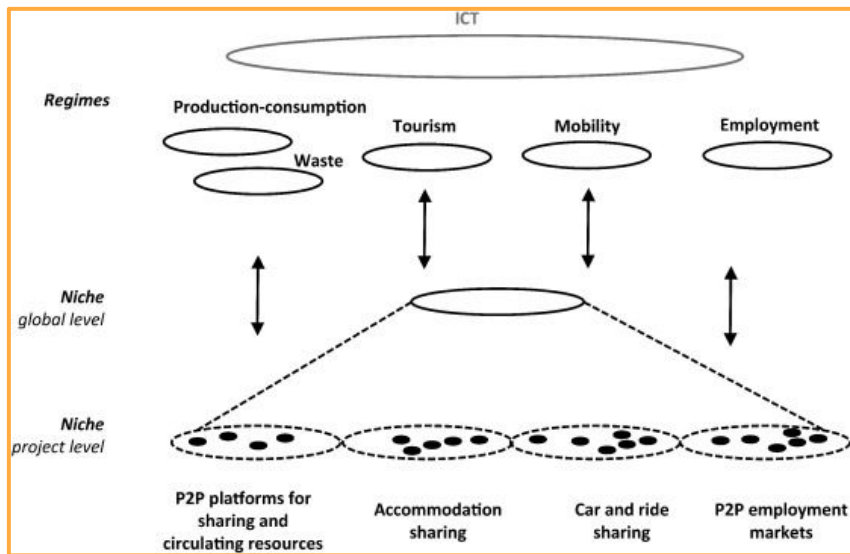
The LES model

2

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Socio-technical transition theory

- Multi-Level Perspective Model (MLP)
- Interactions between the multi-level socio-technical structures
- Three levels:
 - Landscape
 - **Regime**
 - **Niche**



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Framing theory

- How actors are framing the sharing economy
- Niche and regime actors outline how and why they would like to see it develop
- Three sub-frames within the system framing process
 - The **diagnostic** sub-frame: Problems
 - The **prognostic** sub-frame: Solutions
 - The **motivational** sub-frame: Rationale to take action



Framings of the sharing economy

- Focus was on how framing is applied by niche and regime actors
 - **Empower** or **resist** the development of the sharing economy
- Six potential framings of the sharing economy

Economic opportunity

More Sustainable form of consumption

A pathway to decentralised, equitable, and sustainable economy

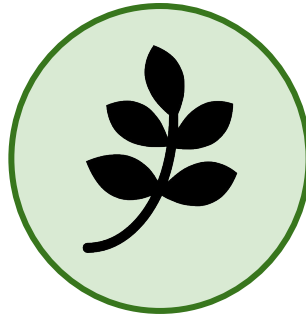
Creating unregulated marketplaces

Reinforcing the neoliberal paradigm

An incoherent field of innovation

Sustainability transitions?

- Both niche and regime actors give a conflicting image of the sharing economy's potentials
- Sustainable consumption or corporate co-options?
- Focus on which digital sharing innovation can address which social and environmental challenges



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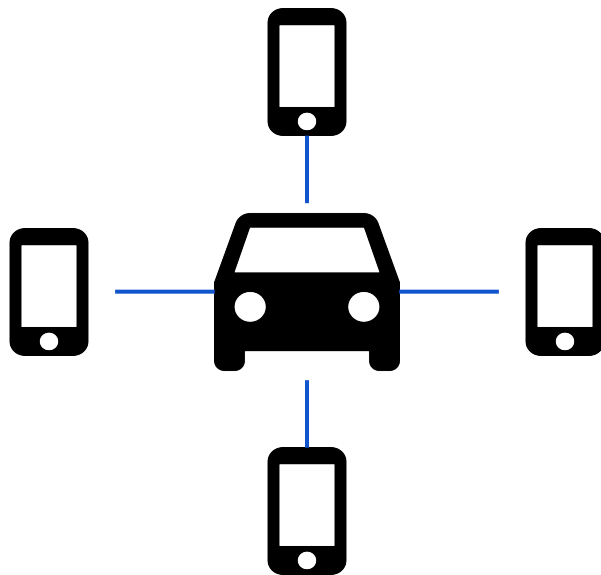
LES Model for sustainability of digital sharing

- Created to structure the impacts of ICT on sustainability
- Pouri et al. frame the digital sharing economy as a use case of ICT
- LES model:
 - **Life-cycle impacts**
 - **Enabling Impacts**
 - **Structural impacts**

Analyse specific sharing system (LES model)

Car and ride sharing platforms

Car and ride sharing platforms



Car and ride sharing platforms - Life cycle impacts



vs. ICT

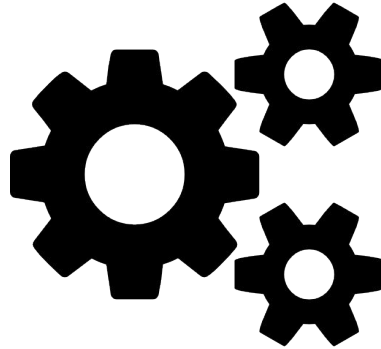
Car and ride sharing platforms - Enabling impacts

- The most obvious effects on sustainability can be described in this part of the model
- Can bring the sharing system closer to theoretical optimum in resource efficiency



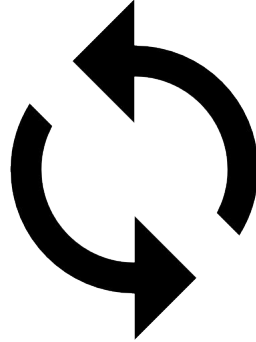
Car and ride sharing platforms - Structural impacts

- Efficient ride sharing systems can be disruptive for current mobility systems
- Enabling impacts over the long term can enable structural impacts
- Environmental impacts are debatable



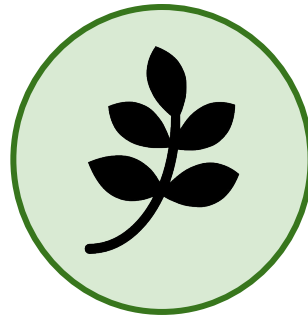
Car and ride sharing platforms - Rebound effects

- Increased demand can balance out the positive impacts in shared consumption (direct rebound effect)
- Time/money saved spent on other consumption (indirect rebound effect)



Sustainable solution?

- The act of sharing is balancing the need of new products
- Sustainable pathway for sustainable consumption patterns?
- Not certain whether the overall trend of the sharing economy is following a sustainable pathway

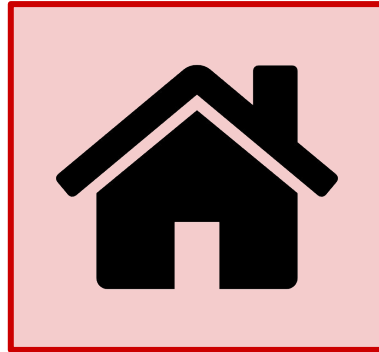


More examples?



Part of the sharing economy or not?

- Hotels and taxi are not considered a part of the sharing economy
- Is there a difference in booking a room on Airbnb vs. booking.com?
- Airbnb vs. CouchSurfing?



Sharing instead of owning?

- Mobility Car
 - Focus on sharing instead of owning
 - Users can offset their CO₂ emissions
- BlaBla Car
 - Share a ride
- Uber?

mobility

 BlaBlaCar

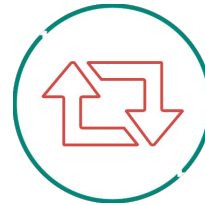
Uber

<https://www.mobility.ch/en/sustainability>

<https://blog.blablacar.com/about-us>

Sharing Cities

- Europe's sharing cities (2016-2021): Lisbon, London, Milan, Bordeaux, Burgas, Warsaw
- Aims to improve living environment
- Reduce energy costs through
 - Managing data and city infrastructure
 - Sharing practices, solutions, results and experience



Conclusion

- Users of the sharing economy have increased with evolving technology
- Expected to minimize the unsustainable consumption patterns
- Balancing force
- Specific solutions within the sharing economy can be studied further
- Rebound effects



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