

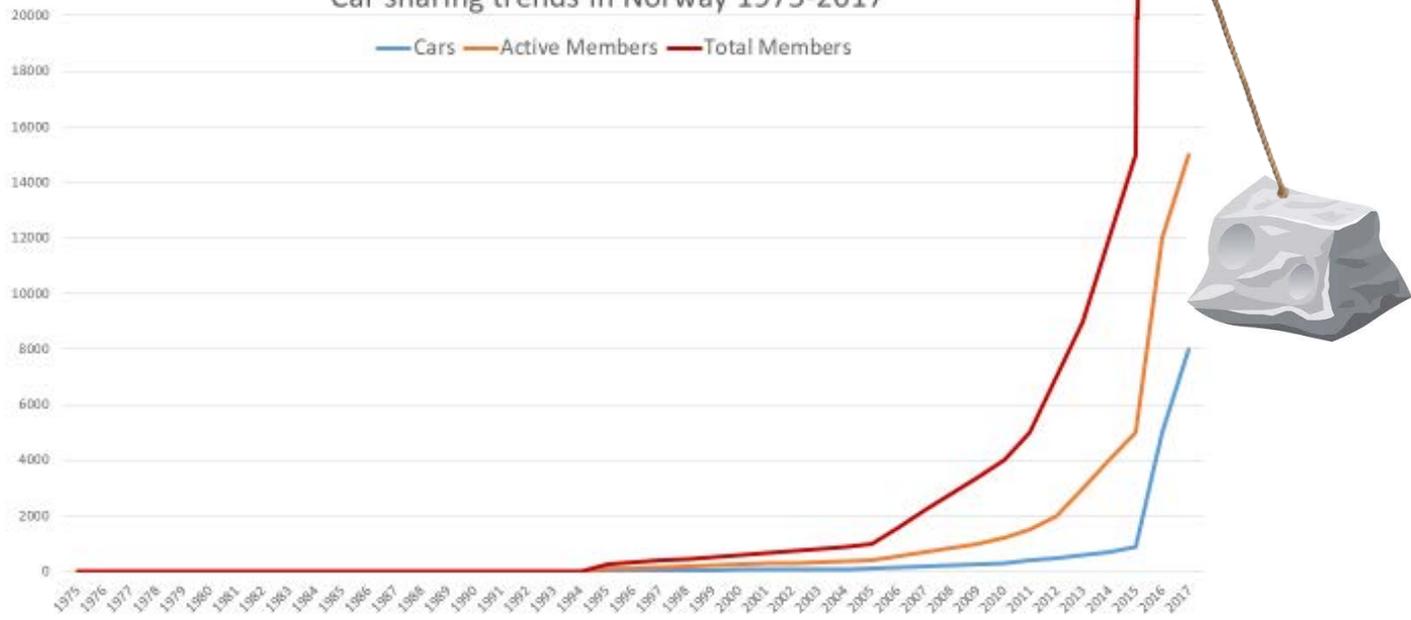
Car sharing and context

Urban mobility [behavior](#) in Oslo

What is car sharing?

- Car sharing:
 - Short term rental
 - Organizational structure
 - Self service
 - User operated
 - ITC supported
- Not car sharing:
 - Ride hailing/sourcing
 - Car pooling
- Operational models:
 - Station based
 - Free-floating
 - P2P
- Business models:
 - B2C
 - B2B
 - P2P

Car sharing trends in Norway 1975-2017



History of car sharing in Norway

1995	Bilkollektivet
1996	Bergen bildelingen
1996	Trondheim bilkollektivet
2004	Oslo bilpool (later Hertz bilpool)
2009	Move About
2015	Go More
2015	Nabobil
2016	Avis/OBOS (eventually ZipCar)
2017	Hyre
2018/9	NSB/Greenwheels
2018/9	Hayk
2018/9	Flaate
2018/9	Biliblant
2018/9	Mobility Park

1. Norway's first car sharing service providers
 - cooperatives business model
 - inspired by Swiss/German examples
 - located in largest metros
 - focus on private customers
2. Entry of corporate and international actors
 - corporate business model
 - incumbent rental car company
 - expansion into smaller metros
 - services to business customers
3. Peer-to-peer platforms
 - enabled by ICT
 - facilitation rather than service provision
 - rapid expansion of membership
 - large geographic coverage
4. Blurring the boundaries
 - hybrid business model
 - collaborative ventures
 - link with residency
 - fractional ownership/leasing
 - free floating car sharing

Brukere, biler og bestillinger i norske bildelingsordninger (Nenseth & Julsrud 2019)

	Biler	Brukere/medlemmer	Bestillinger siste år	Bestillinger pr. bruker	Bestillinger pr. bil
Bilkollektivet	325	7000	64000	9,1	197
Bildeleringen	200	1930	60551	31,4	303
Trondheim Bilkollektiv	95	1800	35000	19,4	368
Hertz Bilpool	103	6684	13271	2,0	129
Move About	90	9000	25000	2,8	278
Nabobil	6000	130000	25000	0,2	4
GoMore	2008	50000	-	-	-
Hyre	140	-	-	-	-
Totalt 2018	8911	205814	187822	0,9	21

Why Norwegian Cities?

"...we do not take for granted that a transition to sustainable transport will happen...If a transition will take place, a further question is what kind of path will it follow? Will a future sustainable transport system be based on 'green' cars? Or will this system look very different from our current transport systems, with intermodal linkages between various sub-systems and less prominence for cars?"

~ Kemp, Geels and Dudley (2012)

Electric

- initial registration fees
- recurring registration fees
- toll on all national roads
- ferry charges
- municipal parking
- charging stations
- collective lanes

Post-automobility

- promoting compact cities
- zero-growth objective
- bilfritt sentrum/byliv
- bysykkel
- removal of parking
- congestion pricing
- public transit*

User adoption of innovations

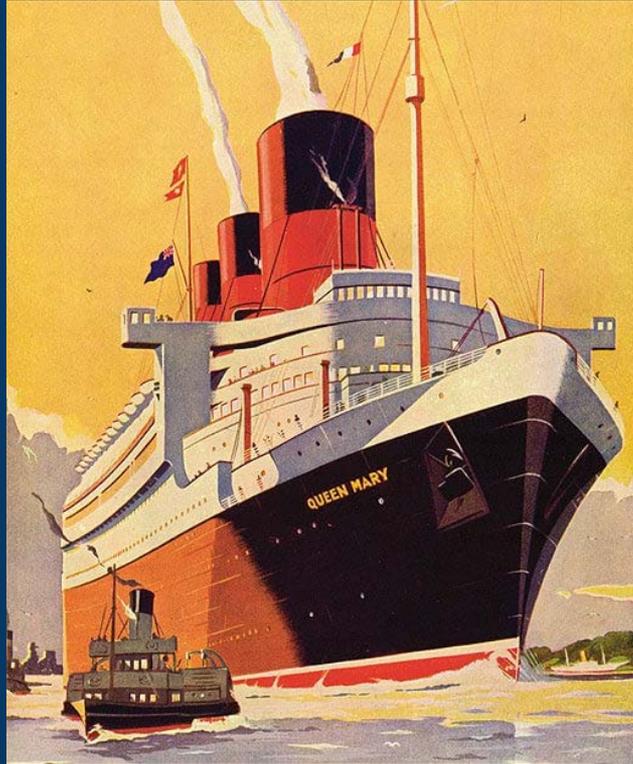
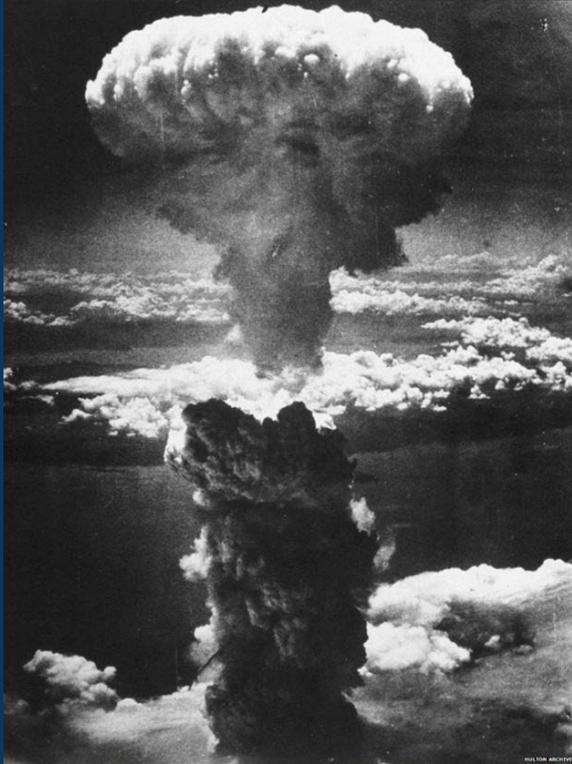


Table 2. Overview of households interviewed

Household	Informants	Date	Duration (min)	Neighborhood	No. <u>members</u> in household	Car sharing user?	Car owner?
1	1A 1B	01.11.2016	94	Grünerløkka	4	<u>yes</u>	<u>no</u>
2	2A 2B	03.11.2016	93	Grünerløkka	3	<u>no</u>	<u>yes</u>
3	3A 3B	14.11.2016	66	<u>Gamle Oslo</u>	4	<u>yes</u>	<u>no</u>
4	4A 4B	15.11.2016	100	Grünerløkka	3	<u>no</u>	<u>yes</u>
5	5A	09.01.2017	44	Grünerløkka	2	<u>yes</u>	<u>no</u>
6	6A 6B	30.01.2017	119	Grünerløkka	3	<u>yes/no*</u>	<u>no**</u>
7	7A 7B	27.03.2017	121	<u>Østensiø</u>	4	<u>yes</u>	<u>no**</u>

* Former user.

** Have decided to lease a car.

Theories of practice

A practice can be understood as:

“a routinized type of behavior which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.” (Reckwitz, 2002, p. 249)

Homo Economicus



Humans are rational, informed, self-interested agents that make deliberate choices.

HOMO SOCIOLOGICUS



Humans are conditioned by society and bow to norms, values and expectations.

Materiality of car sharing

- The car: absence/presence, limited space, comfort
- **Cargo**: extension of the home, car seat installation and storage when not in use
- Material environment: proximity, urban form, weather
- Interface: ICT innovations

“because we have moved so far from the nearest pool, it’s not that practical as it was when I was in Grünerløkka. In Grünerløkka I had a pool just 2 minutes away and another 3 or 4 pools 5-10 minutes away. It was always that if that pool was empty, I could look at the next pool then.”

~ Informant 7B

Skills and competence

- Using the digital interface: smartphones, web browser
- **Planning**: spontaneous use, finances (subscription)
- Vehicle **operation**: ability to drive, rules of the road

“the thing that is most difficult is **spontaneous uses of cars**. But then again an advantage is that you generally don't plan for spontaneous car use over weekends... (Parenthood) changes how you visit one another, because everything is very, often planned, and planned well in advance, so there's little of the spontaneous. That doesn't really happen a lot.”

~ Informant 1B

Meanings associated with car sharing

- **Freedom and flexibility**: freedom to, freedom from
- Environmental/sustainability: positive side-effect, **Δ meaning**
- Social relations: family, friends
- **Alternative lifestyle** (business models): cool, co-op

We always walk, it's our way to live...it's our way to get to know new things, get to know better where we live. It's a chance to move your body. It's healthy and it's relaxing. There's no stress. Of course, it's a little bit more time consuming, but it's your time – it's time for yourself. (Informant 3A)

I'm an extremely urban person – I really love to sit at a café and spend 150 Kroner for a coffee and a donut. (Informant 2B)

You have to actually present an alternative that will let people keep their identity bits, or at least change their identities into something that's equally valuable to them...Because it's cars as a status symbol...It's a very hipster symbol...not owning a car is a statement in and of itself. (Informant 1B)

Importance of residency

- Urban lifestyles as a project
- Need for car doesn't disappear
- Re-urbanization

The project of urbanism was far more important to the informants than any feelings they had about car sharing. Car sharing allows informants to have their cake (live in the urban core) and eat it too (have access to a car for the few instances in which they need to drive).

Conclusions

RQ 1: How does the car sharing relate to other practices for urban households in Oslo?

- Complementarity with active transit
- Somewhat competitive with public transit
- Direct competition with rental cars
- Auxiliary practices: parking and maintenance
- Shopping
- Dependency on residential behavior

RQ 2: Why do urban households in Oslo use car sharing services?

- Occasional access to a vehicle, without having to fully embrace the logic of automobility.
- Car sharing is “part of” a the urbanism project.
- They use because they can and know how.
- Sharing and “freedom from”.

Implications

Theoretical:

- Recruitment/retention adds temporal dimension to user adoption
- Urbanism as potential landscape forces

Policy:

- Housing and zoning
 - Integration with housing
 - Dedicated parking
- Post-automobility vs. electric automobility

More research based on representative data is needed, but for now, advocates of electric vehicles and green car pathways should take these results as a warning that any effort to transcend automobility that lead to a greater number of vehicles on the road, albeit cleaner ones, would likely meet resistance. Advocates of integrated pathways and related plans (e.g. Bilfritt byliv in Oslo) should see these results as a sign of encouragement, but wait for more representative results before celebrating.