Bremen: Cycling City or Car City?

Objective and Subjective Safety in Contested Spaces

Richard Grassick Beatrix Wupperman

www.movingfilms.eu

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Cycling and Society Conference
Newcastle-upon-Tyne

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smallest federal state

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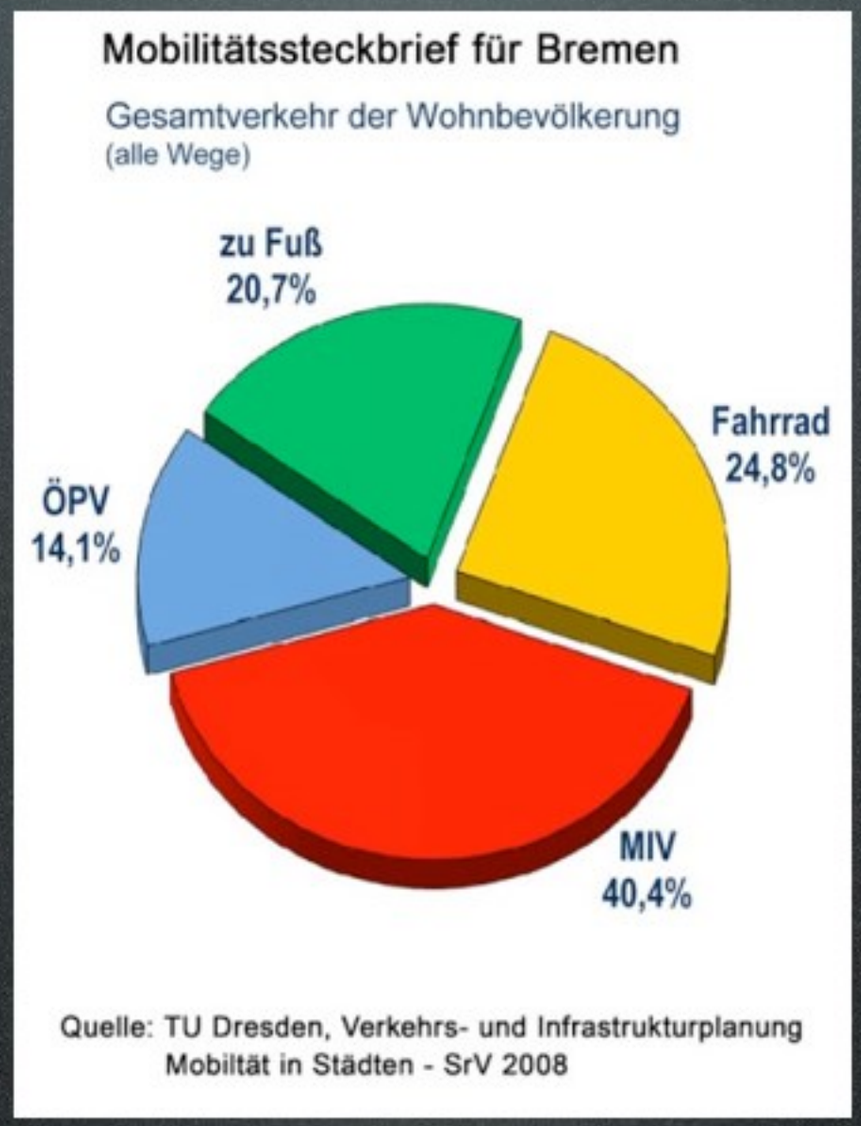
"Bremen ist eine Autostadt - Bremen is a Car City"

- Jens Böhrnsen, Mayor and Prime Minister of Bremen.

- Mercedes Benz in Bremen: 12,700 employees
- Borgward employed 18,000 workers in 1960

Modal Split in Bremen 2008

Pedestrians / Public Transport / Cars / Bicycle



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Bicycle Modal Share in German Cities

(with over 500,000 Inhabitants 2008)

Bremen	25%
Dresden	16%
Leipzig	14%
Berlin	13%
Frankfurt/Main	13%
Düsseldorf	11%

- Source: TU Dresden 2008

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Cycle Paths: A Bremen History

1897: First Cycle Paths (leisure routes for middle classes)
1931: 37.4 km
1937: 141 km
1958: 280km (50% along main roads)
1980: 650 km
2014: > 700 km

Cycle Paths: Policy History

1973: Mozarttrasse-Conflict
1978: Kommunales Fahrrad (Klaus Hinte)
1979: ADFC founded in Bremen
1980: 1st International Velo-City-Conference

The 1980s concept - reallocate space

Klaus Hinte's Contrescarpe

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Activists in the 70s and 80s

(Konrad Zaiss and the ADFC)

Campaigned for:

-Cycle Paths on every main road
-All One Way Roads with Contra Flow
-Cycle Parking according to Demand

Das Viertel

Sielwall 1972

Sielwall 1981

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Das Viertel

Sielwall 1981

Sielwall 1986

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Das Viertel

1986

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Bremen Cycling History

Cycling Modal Share

1937: 23.5%
1961: 10.7%
1970: 5.3%
1980: 19%
But for 25 years hardly any change:
1992: 22%
2002: 22%
2014: 25%

The 1990s

ADFC's New Agenda

"At junctions cyclists are considerably safer on the road or (…) on cycle lanes than on a cycleway. (…) The proportion of junction accidents is significantly higher on roads with cycleways than on those without."

- 1992: „Schnüll-Study" On the behaviour of cyclists continuing straight ahead on major urban roads

Conclusions

Schnüll:

Increase Safety at Junctions e.g.:
Raise cycle paths at junctions without traffic lights
At junctions lead cyclists close to traffic, onto the road or on cycle lanes

ADFC:

Cyclepaths are objectively dangerous
1997: Successful Appeal to German Supreme Court to get rid of mandatory use of cycle paths

Objective vs. Subjective Safety

Objective Safety: measured by numbers of accidents or incidents, „Crash risk“
Subjective Safety: perceived safety by cyclists

“In Germany, 96% of cyclists stay on cycle paths even if they are not mandatory. The remaining 4% are overwhelmingly men between 18 and 44 years”

- Bundesanstalt für Straßenwesen 2009, p. 34

Objective Safety & Vehicular Cycling

- John Forester, British-US Traffic Engineer (*1929) developed Concept of Vehicular Cycling: "Effective Cycling educational program" :

  - "Cyclists fare best when they act as, and are treated as, operators of vehicles."
  - Prevented Cycling Infrastructure in the USA

Response by Senator, ADFC, Car Club, Police

(hard measures)

Humboldtstraße

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Humboldtstraße

1983 and 2013 before "Cycle Street"

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Humboldtstraße

2013 before "Cycle Street"

Humboldtstraße

Before: Pavement with Cycle Path

After: Wider Pavement, no Cycle Path

Humboldtstraße

Road width before

Road width after

Humboldtstraße - Recent monitoring

22% of all cyclists stay on widened Pavement

- TAZ 25/08/2014

Bremen

- 99% of all Cyclists stay on Cycle Paths even if they are not mandatory

- VEP, Bremen Local Transport Plan Study 2012

Response by Senator, ADFC, Car Club, Police

(soft measures)

"You are allowed to ride on the road"

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ADFC Bremen

"Traffic studies show that cycling on the road is in most cases safer than on the cycle path because motorists and cyclists see each other much better on a joint road; that improves safety."

New Studies 1

- 32% of all motorists do not look over their shoulder before turning right (p.30)
- Another 28% look but still turn right, ignoring the cyclist's priority (p. 30)
- 91% of motorists cause the accidents (p.65)
- 95% of motorists make mistakes when turning (p.66)

But only

- 7% of cyclists jump red lights (p. 29)
- 4% of cyclists cycle on the wrong side (p. 29)

- "Accidents with right-turning cars/lorries and cyclists"
Union of the German Insurance Companies 2013

New Studies 2

- 63% less rear-end crashes car:bike due to traffic separation (by tracks) (p. 9).
- 10% more crashes and injuries after construction of bicycle tracks and lanes (p. 14)

Due to cycle tracks:

- 20% more bicycle traffic mileage
- 10% less motor vehicle traffic mileage (p.12)

- "Bicycle Tracks and Lanes: A Before-After Study"
Søren Underlien Jensen, Copenhagen 2007

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