Spatiotemporal Variation of Bicycling Collision and Injury in Berlin: Implications for Local Transport Policy Making

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Study background
> Part of the Berlin case study, component of my Ph.D. thesis “Obduracy and Change in Urban Mobility Sociotechnical Ensembles Involving Information and Communication Technologies (ICTs)”

Theoretical background and method
> Social Construction of Technology (SCOT)
> Theory of Sociotechnical Change; obduracy in urban sociotechnical change
> Hypothesis: the recent ICTs pervasiveness in the Berlin bicycle sociotechnical did not change (or did not effect) the long term established practices in urban bicycling research, planning and transport policy making
> How things could be otherwise? Which bicycle road type is safer?
> Qualitative part: social groups identification, controversy mapping, problem definition
> Quantitative part: data collection based in ICTs, data analysis, modelling

Controversy mapping
> In research and planning, and in local transport policy making
Data collection: ICTs as spatiotemporal data sources / Berlin police; Berlin senate; BikeCitizens

Bicycling origins and destinations

“Clean” bicycling data set histogram

Bicycling traffic volumes variation

Monthly variation of bicycling traffic volume.
Bicycling road infrastructure and types

Spatiotemporal distribution of bicycling crashes
Muito obrigado!

Visit the online GIS visualization tool made for this investigation!

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