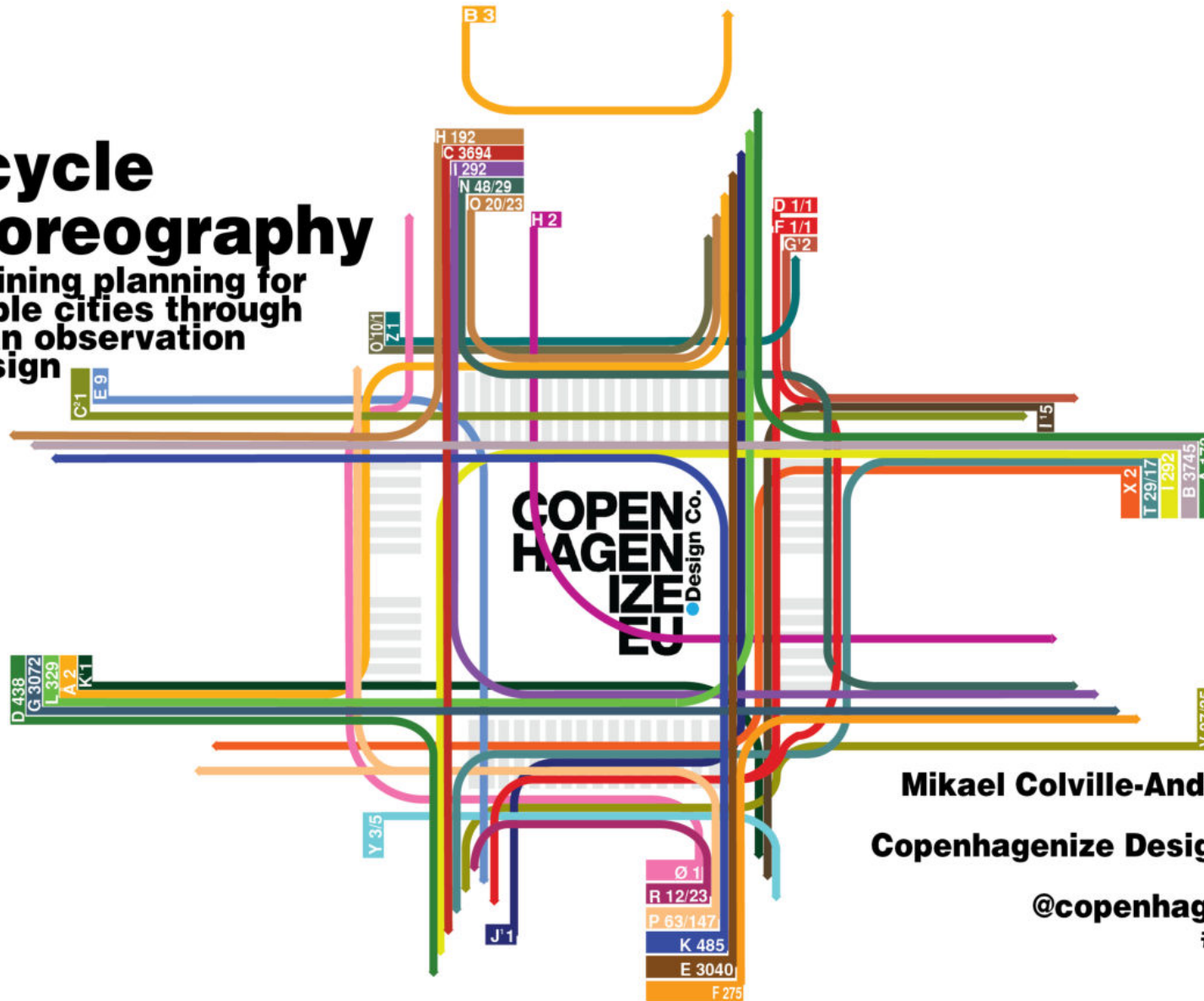


# Bicycle Choreography

redefining planning for  
liveable cities through  
human observation  
& design



**Mikael Colville-Andersen**  
**CEO**  
**Copenhagenize Design Co.**

**@copenhagenize**  
**#vc13**



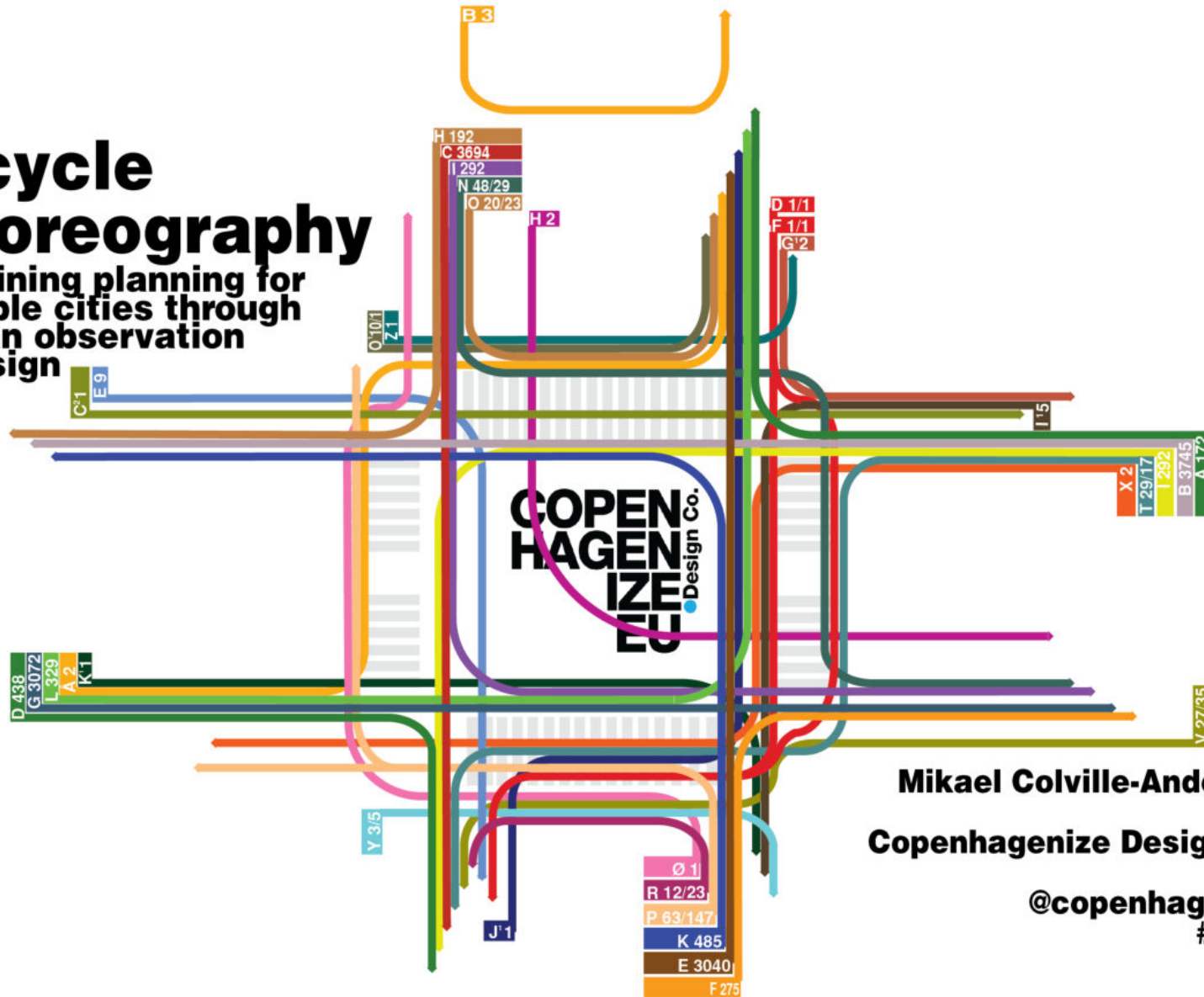






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## Streets

- For 7000 years they were public domain
- The most democratic space in the history of homo sapiens





## **“Public Utilities”**

- Thanks to traffic engineering they are now regarded as public utilities
- After a century of traffic “engineering” people are still dying.
- All we know is that if you create more space for cars... more cars come. Period.



**CONFINED  
SPACE**





**We live in cities controlled by  
mathematical models - often bizarre and  
outdated - cost-benefit analyses,  
feasability studies, statistics, numbers ...**



**thinkdifferently**





# Human Observation









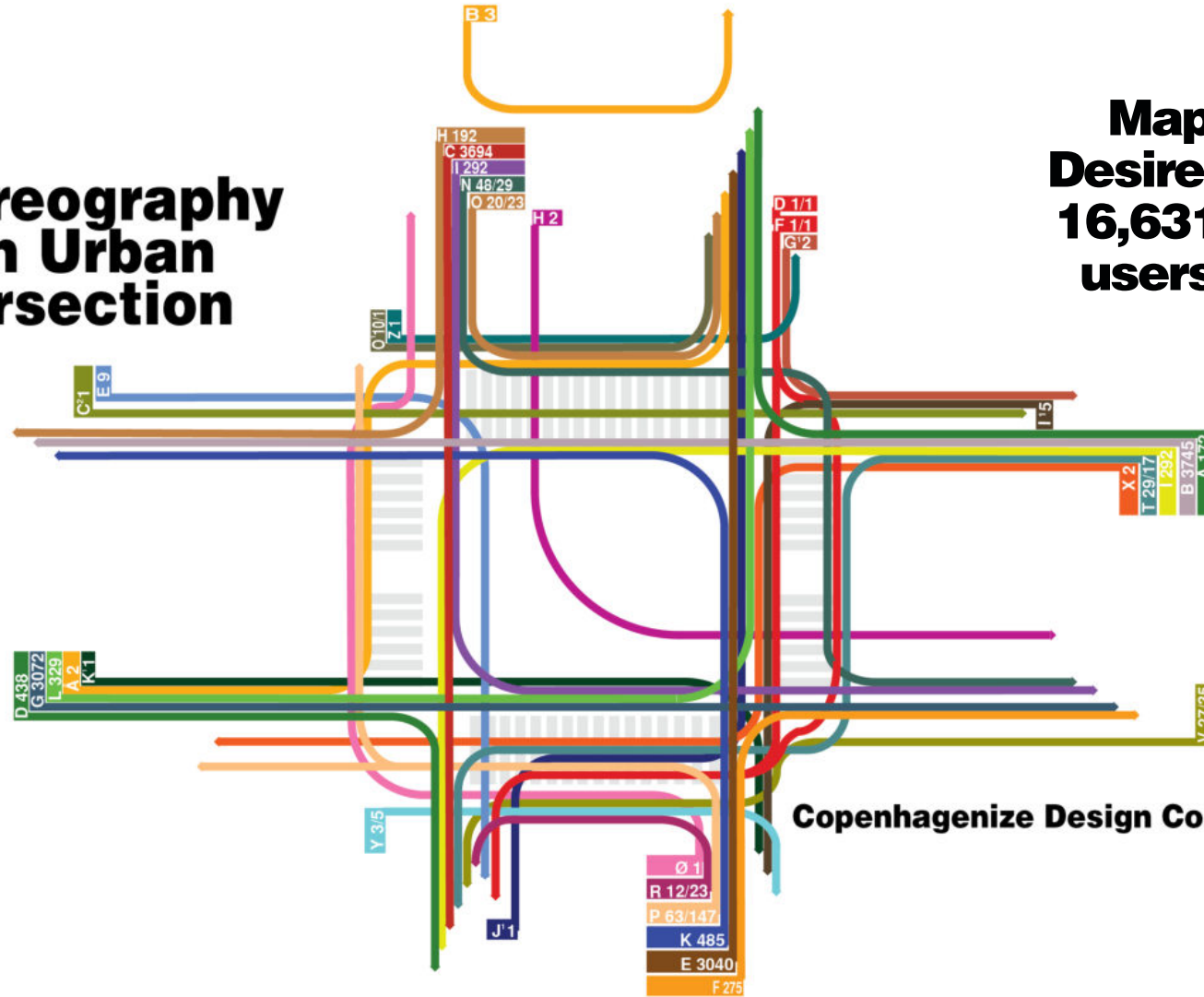
# Desire Lines

**Gaston Bachelard - Philosopher  
Poetics of Space - 1958**

**Modern cities listen and  
watch and act**



# The Choreography of an Urban Intersection



**Mapping the  
Desire Lines of  
16,631 bicycle  
users over 12  
hours.**

**Copenhagenez Design Co.**

A photograph of a city street scene. In the foreground, a red-paved sidewalk runs diagonally from the bottom left towards the top right. A series of vertical metal bollards are spaced along the edge of this red path, separating it from a grey asphalt road on the left. A silver sedan is parked on the road. In the background, the lower legs and feet of two people are visible on a grey sidewalk. A yellow and black object, possibly a camera or sensor, is visible in the bottom right corner. The text "No regard for design, the human experience or logic." is overlaid in white on the bottom left.

**No regard for design,  
the human experience  
or logic.**





**Trying to fit bicycles into The Matrix**



FRB ELSKER **BILER** MEREEND DIG

← **KRYDS VED KRYDS** →

**A city advertising their inability (or unwillingness) to be able to break out of The Matrix.**



**Design Principles.**

**Functional. Practical. Elegant.**





**Designers put themselves in the mind  
of the user of the product.**

**Designers work with the Four Types of Pleasure**  
**Physio-pleasure**  
**Body, senses.**

**Socio-pleasure**  
**Social pleasures derived from interaction with others**

**Psycho-pleasure**  
**Peoples reactions and psychological state during using the product**

**Ideo-pleasure**  
**Appreciation of aesthetics, quality and whether the product enhances life**





**Designing for bicycles and pedestrians is like designing any other product.**

**Toothbrushes, toasters, smartphones...  
or chairs....**





# Design is Seductive

**The seductive power of objects can transcend other important issues like price or performance or... weather.**





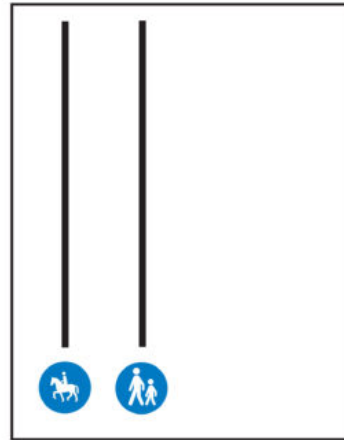
A group of cyclists are riding on a city street at dusk. In the foreground, a woman is pushing a stroller. The cyclists are wearing winter clothing, including scarves, hats, and jackets. A utility pole is visible in the center of the frame. The background shows other cyclists and city lights.

**Good design improves  
behaviour.  
Citizens react to  
infrastructure design  
with their behaviour.  
Positively or negatively.**

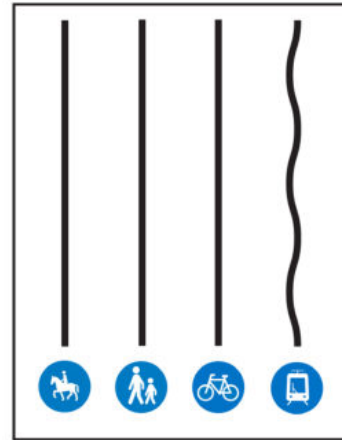
**Design changes behaviour**



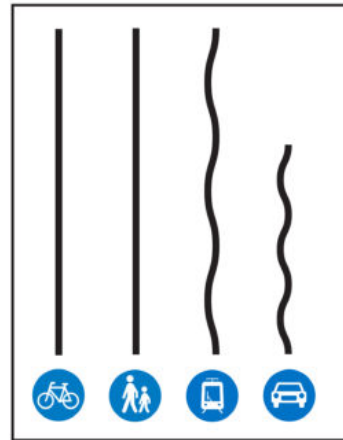
## A Short History of Traffic Engineering



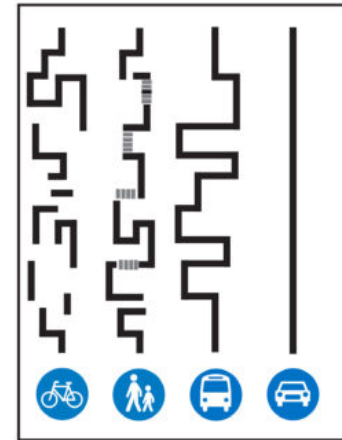
1800



1900



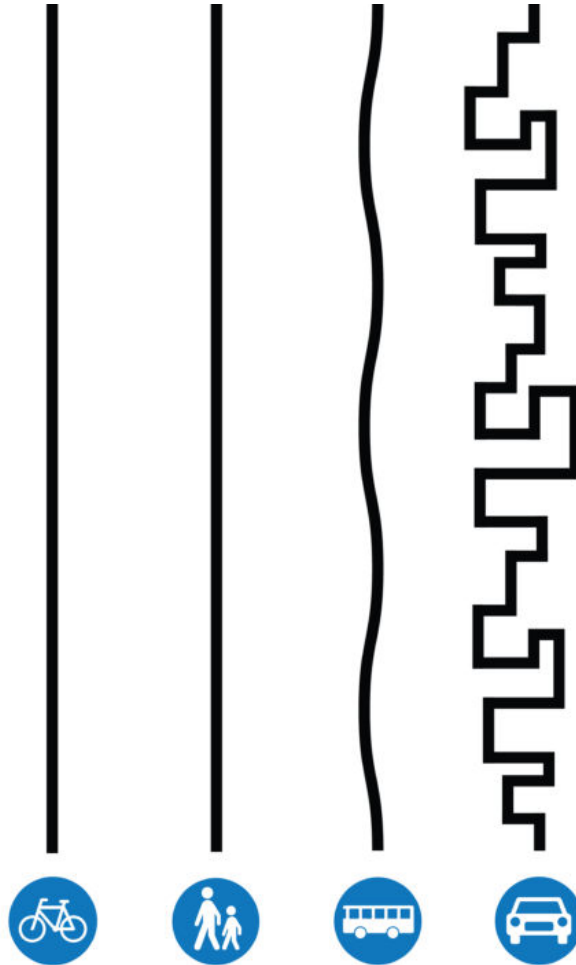
1920



1950 - present

**Design  
as a tool  
for  
simplification.**

**The only way  
to change  
motorist  
behaviour.**



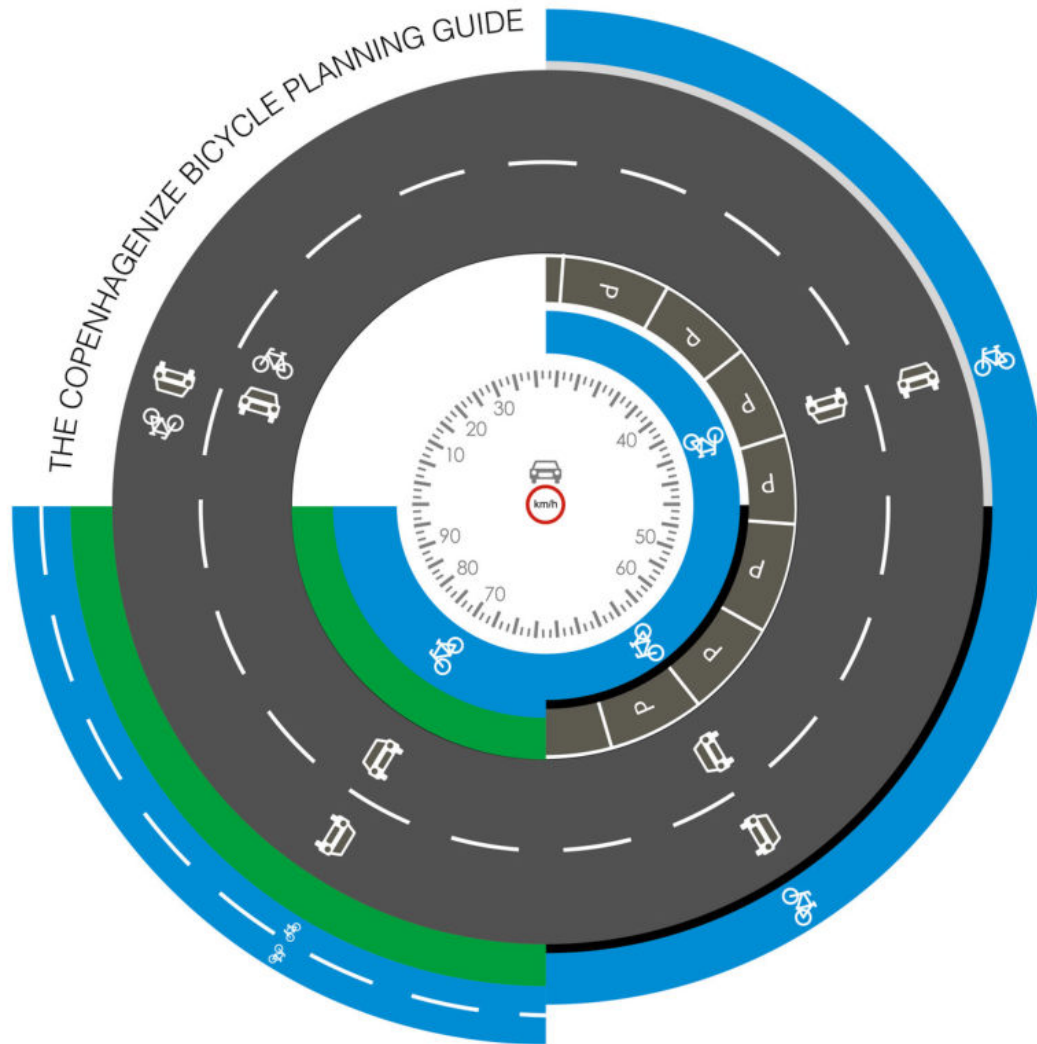
The Copenhagenize Traffic Planning Guide  
for Modern Cities

**COPENHAGENIZE**  
EU

Mixed Traffic Architecture 2012



# The 4 types of bicycle infrastructure in Denmark.



**the greatest minds**





**Lulu-Sophia**







**“When will my city fit  
me, Daddy?”**





**the life-sized city**



**Felix**



**3rd grade  
at La Cour  
Vej School**







- **Uglier cars**
- **Max. 15 km/h**
- **Fence between cycle track and car lane**
- **Light signals**
- **One way streets**
- **Speed bumps**
- **Glass roofs**



logic&**rationality**  
free**our**minds

# **William of Ockham**

**1287-1347**

## **Occam's Razor**

**“Simpler explanations are generally better than more complex ones”**

**Choose the simplest, most rational solution.**





**What would our streets look like if our main consultants were five year-olds, 3rd graders, teams of young design students and a 13th century religious dude?**

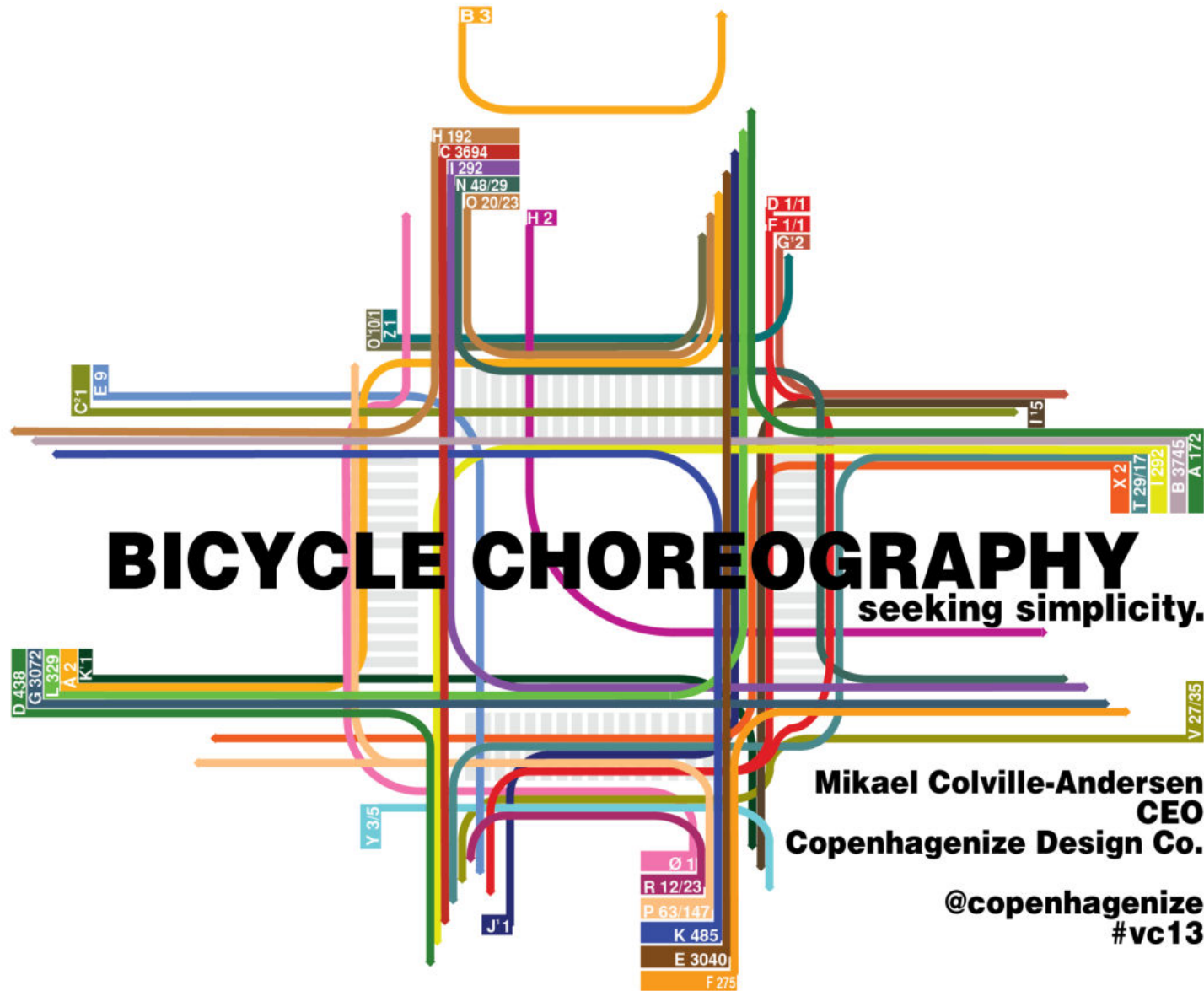
**MOTORISTS  
DISMOUNT**



**TO  
CROSS  
ROADWAY**

COPEN  
HAGEN  
IZE  
EU





# BICYCLE CHOREOGRAPHY

seeking simplicity.

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