praktische kennis direct toepasbaar

kennisplatform CROW




DESIGN STANDARDS: STRAITJACKET OR TICKET TO FREEDOM

Hillie Talens, project manager

THERE IS MORE TO CYCLING THAN INFRASTRUCTURE?

NOT JUST INFRASTRUCTURE

- Logical part of society
- Bicycle as default
- Vehicle safety
- Laws and regulations
- Cycling inclusive policy
- Smart environmental planning
- Discourage car use
- Bicycle parking

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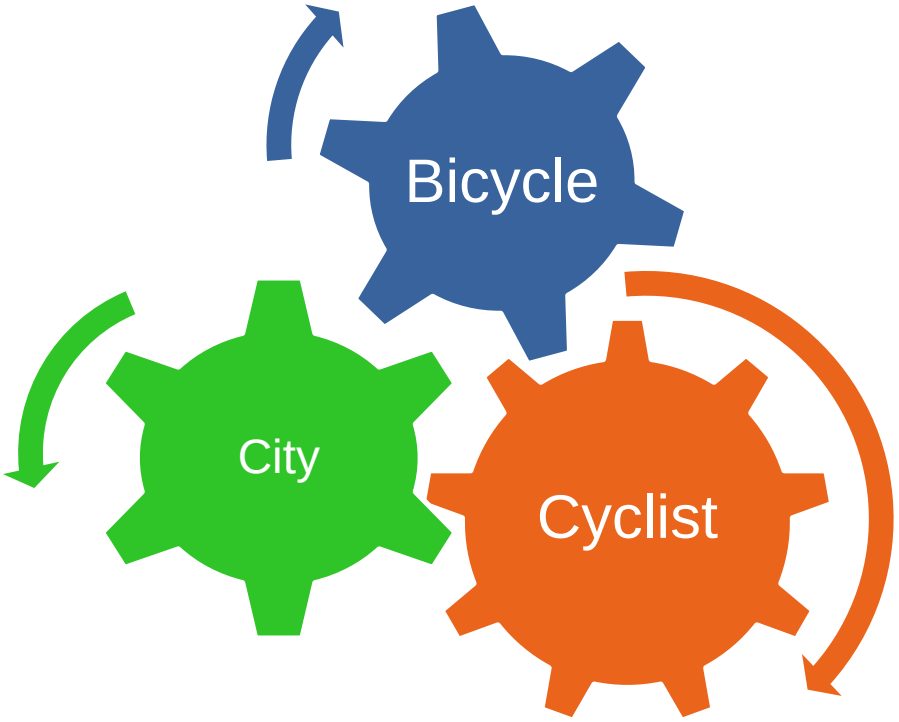
BICYCLE INFRASTRUCTURE

TRANSPORTATION SYSTEM

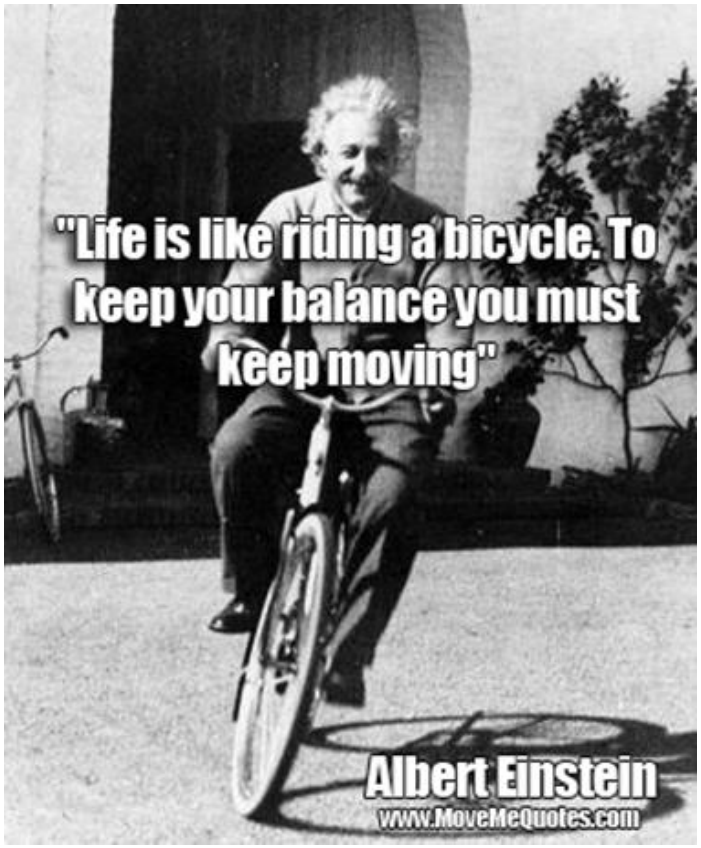


CHARACTERISTICS CYCLIST

- Human beings
- Muscle power
- Open air
- Social activity
- App 0.75m wide

CHARACTERISTICS BICYCLE

- Balance (two wheels)
- No suspension,
- No crumple zones
- No airbags
- App. 0.75m wide



CITY - INFRASTRUCTURE
(BICYCLE FACILITIES)

- Local opportunities
- Limited space
- Social activities
- Existing patterns and buildings
- Local policy goals

MAIN REQUIREMENTS

- Coherence
- Directness
- Attractiveness
- Safety & health
- Comfort

COHERENCE

- Consistancy of quality
- Ease of way finding
- Mobility chain
- Choise for more than one route

DIRECTNESS

- No unnecessary detours
- Faster than car
- Constant speed
- Minimum delays

ATTRACTIVENESS

- Psychological elements
- Perception
- Social safety
- Go side by side
- Use environmental opportunities

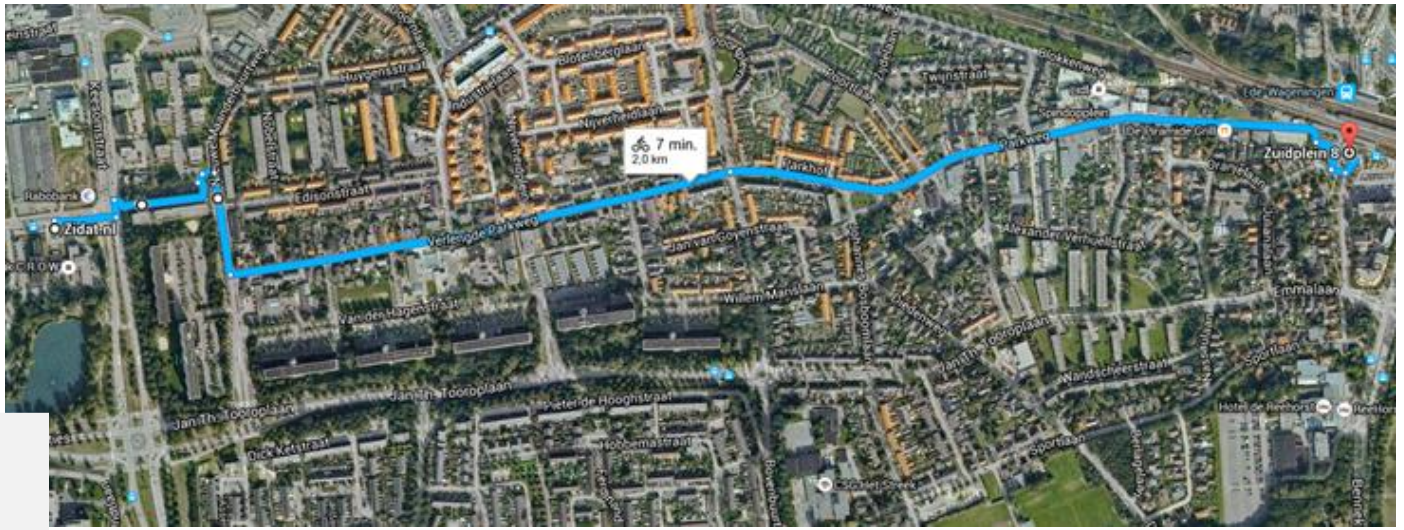
SAFETY & HEALTH

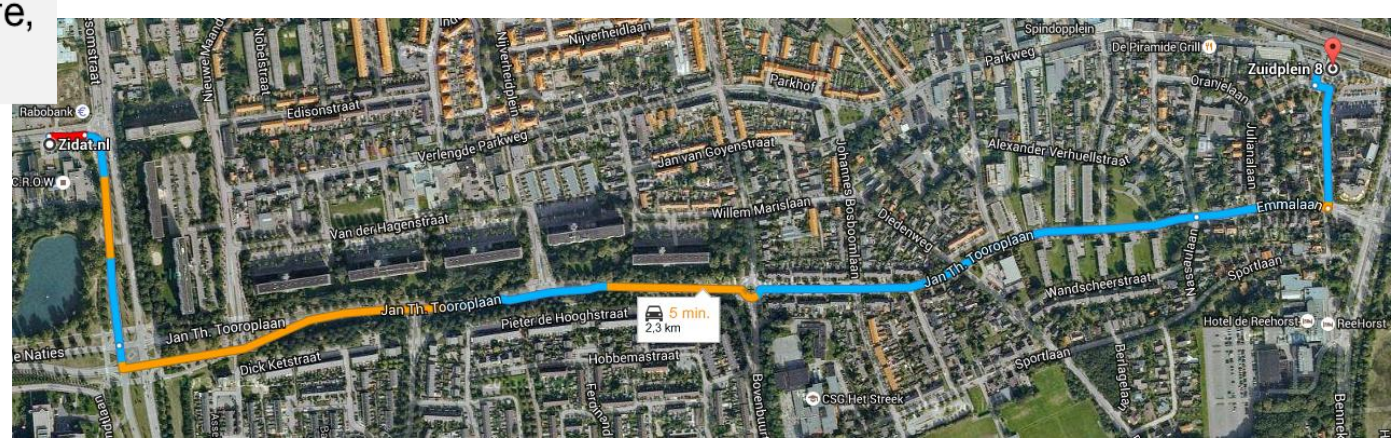
- Mix if possible, seperate when necessary (low speed and low volume)
- Infrastructure and land use
- Vehicles (technique)
- Road users (behaviour)
- Alternative parallel (high volume motorized traffic)

EDE

Railway station
– CROW office

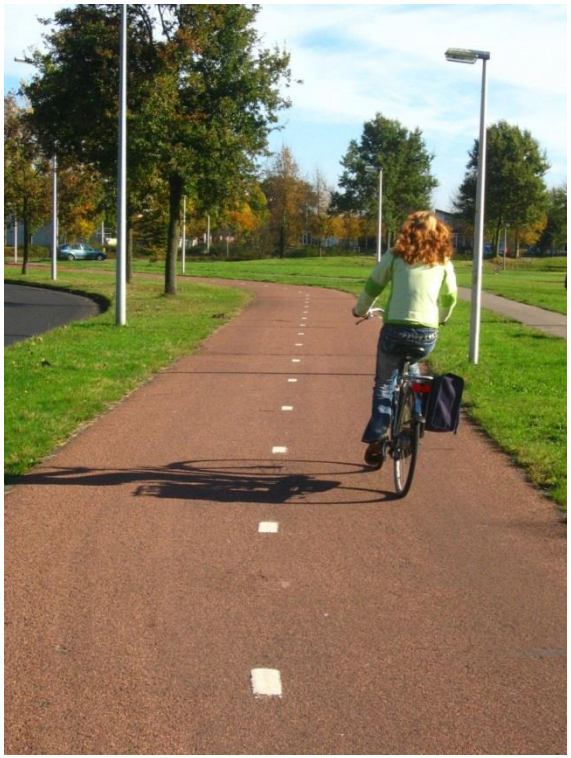
- 30km/h-zone (safe)
- Buildings (safe)
- Less car traffic (safe, comfort)



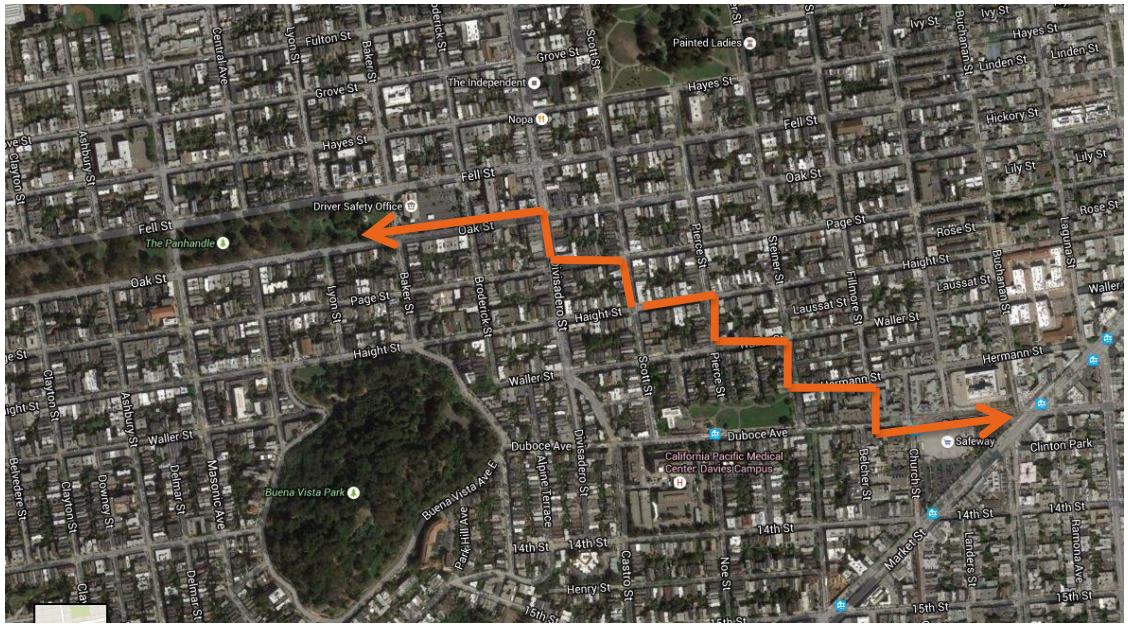


COMFORT

- Smooth suface
- Minimum stops
- Protection against weather
- Enough space (side by side)
- Avoid sharp curves
- Design speed 30km/h (20m/h)
- Avoid steep slopes



SAN FRANSISCO - THE WIGGLE



- Between Market Street and residential areas
- Follows course of old kreek
- Avoid steep hills
- Residential area

THE WHOLE ~~EQUALS~~ IS MORE THAN THE SUM OF ITS PARTS

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BICYCLE INFRASTRUCTURE AND FACILITIES

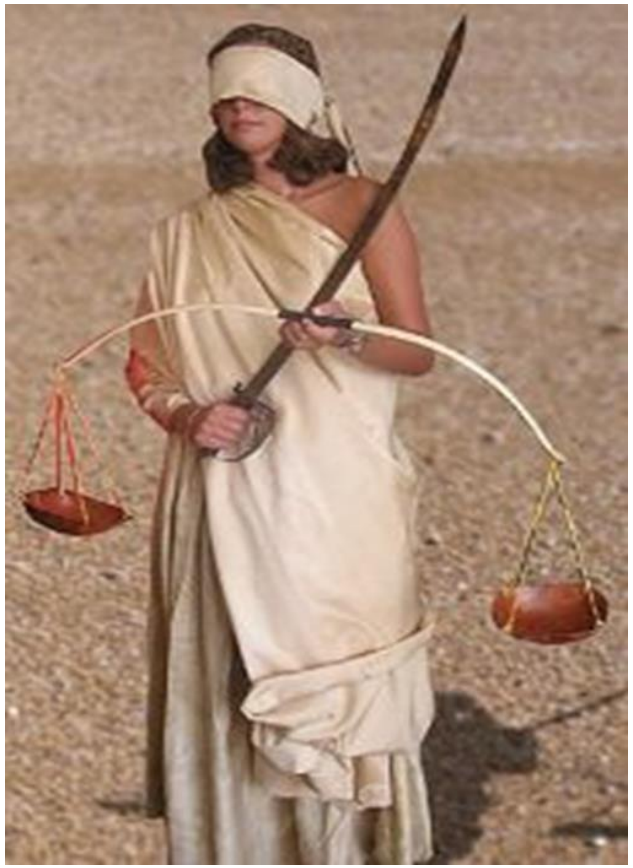
- Bicycle highways
  - Priority
  - Tunnels & bridges
- Main bicycle network
  - Bicycle streets
  - Bike lanes
  - Seperated bicycle paths
- Basic network
  - Short cuts
  - Recidential streets (30km/h)
  - Home zones

LAWS, STANDARDS AND GUIDELINES

Basisregel voor ons werk

DEFINITIONS

- Law, Royal Degree, order
  - need to be followed
- Standard
  - deviate only in very special unforeseen situations
- Guideline
  - deviate only with good arguments



GUIDELINES THE NETHERLANDS

- Independent, collective
- Represents the expertise and experience available in (and sometimes outside) The Netherlands
- Used in the court of law

GUIDELINES FOR GOOD DESIGN

Based on:

- Sustainable safety
- Results of scientific research
- Results out of experiments in practice

GUIDELINES FOR GOOD DESIGN

Design in such a way, that:

- The road user always knows what is expected from him;
- And knows what can be expected from other;
- No great differences in mass speed and direction;
- The road will be used where it is designed for;
- There is no dead penalty on failure.

GUIDELINES FOR GOOD DESIGN

- Latest state of science and technology
- Standard solutions
- Deviate when guideline is not applicable
- Custom-made design

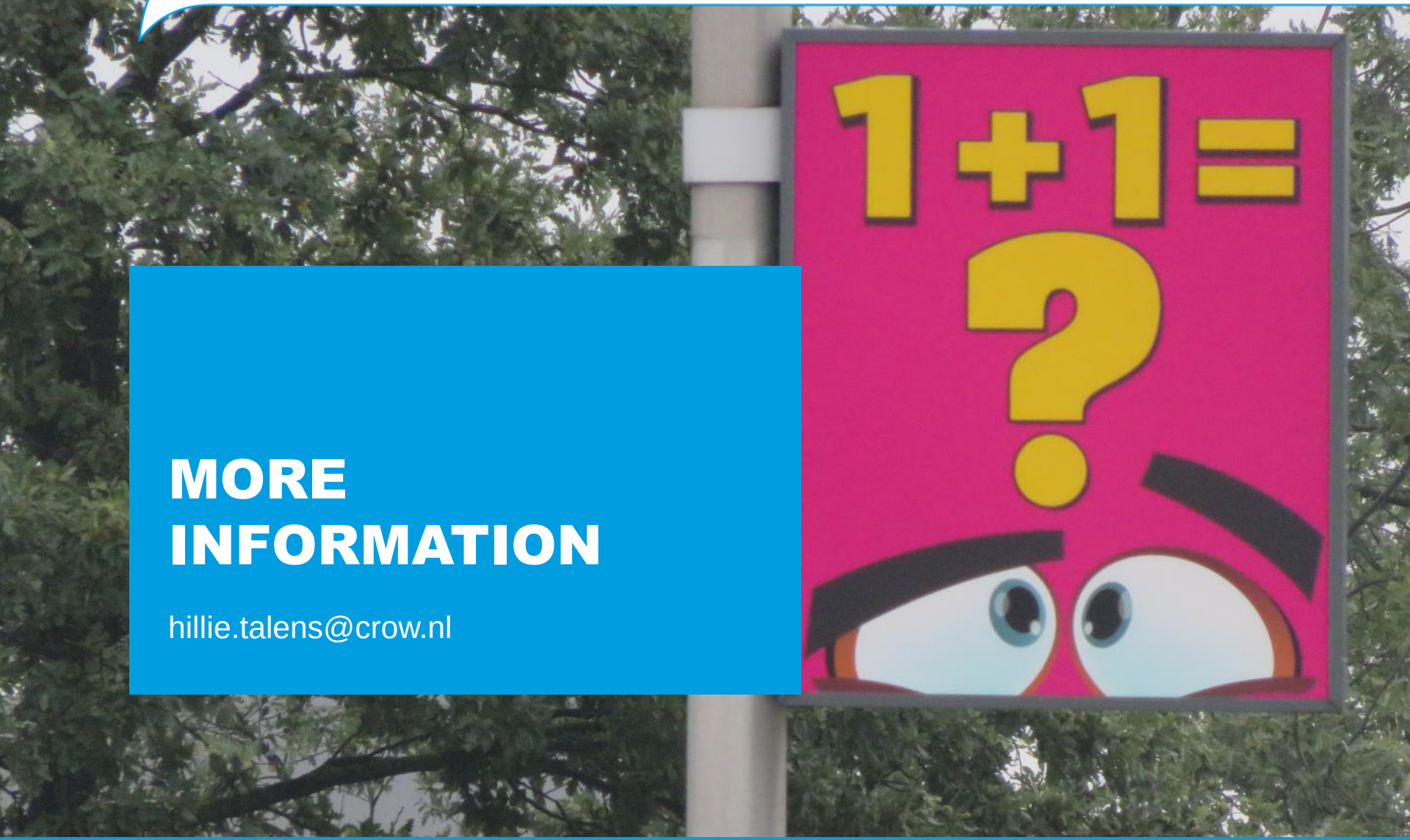
GUIDELINES FOR GOOD DESIGN

Deviation is allowed only when:

- well-considered;
- in the spirit of the guidelines;
- suited to the expectations of the road users

CONCLUSIONS

- Cyclist is not a pedestrian with wheels
- Bicycle facilities need to be tailor-made (use local opportunities)
- Handbooks should be for inspiration
- Cycling is not just a sport
- Cycling is not only for kids
- Bicycle is not a poor man’s Mercedes



MORE INFORMATION

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