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Human Factors

Toine Molenschot - City of The Hague



2012 ANNUAL POLIS CONFERENCE

29-30 NOVEMBER
IN PERUGIA, ITALY



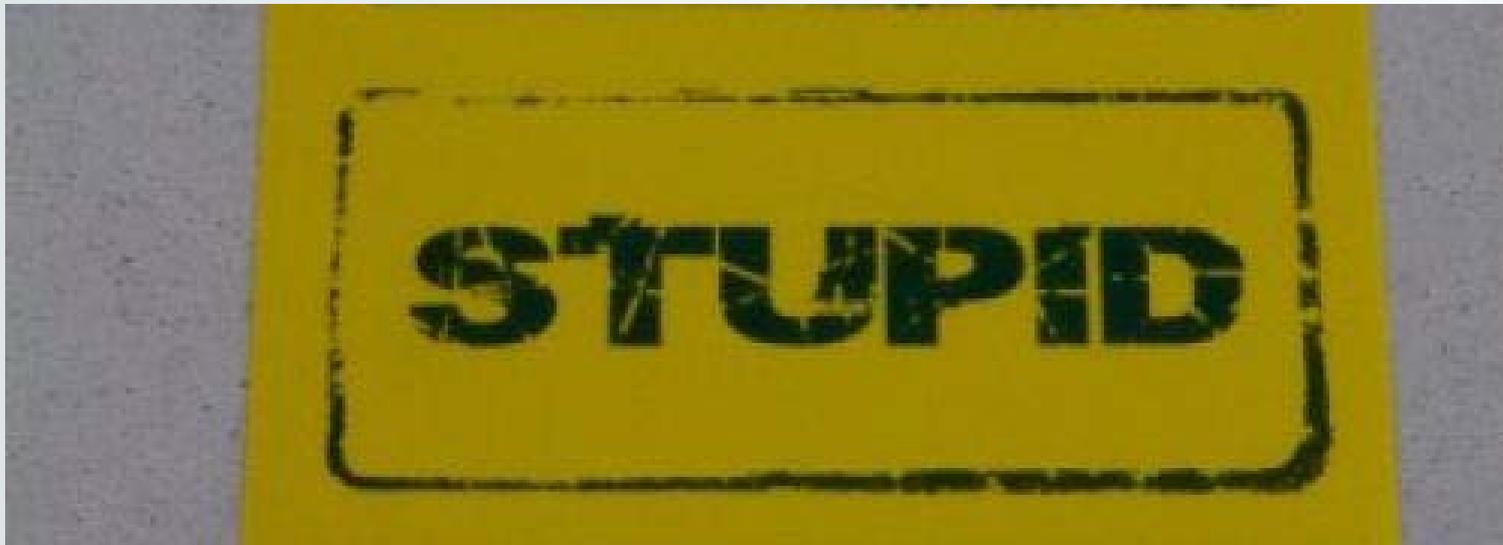


Human Factors both ways

- Natural behaviour / Habitat
- Change behaviour / Brain
- Both should lead to preference for slow modes
- But most of the time we choose opposite



Because we are





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Natural - Habitat



Supported



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Even in conditioned environment not safe



Out of our league





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Learning from nature ?





Human behaviour – Act Natural





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Different species





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Human behaviour - Dangerous





Solutions

- **Choices:**
- **Adapted high speed**
- **Adapted low speed**



Fast solution: Technology





Driver assistance

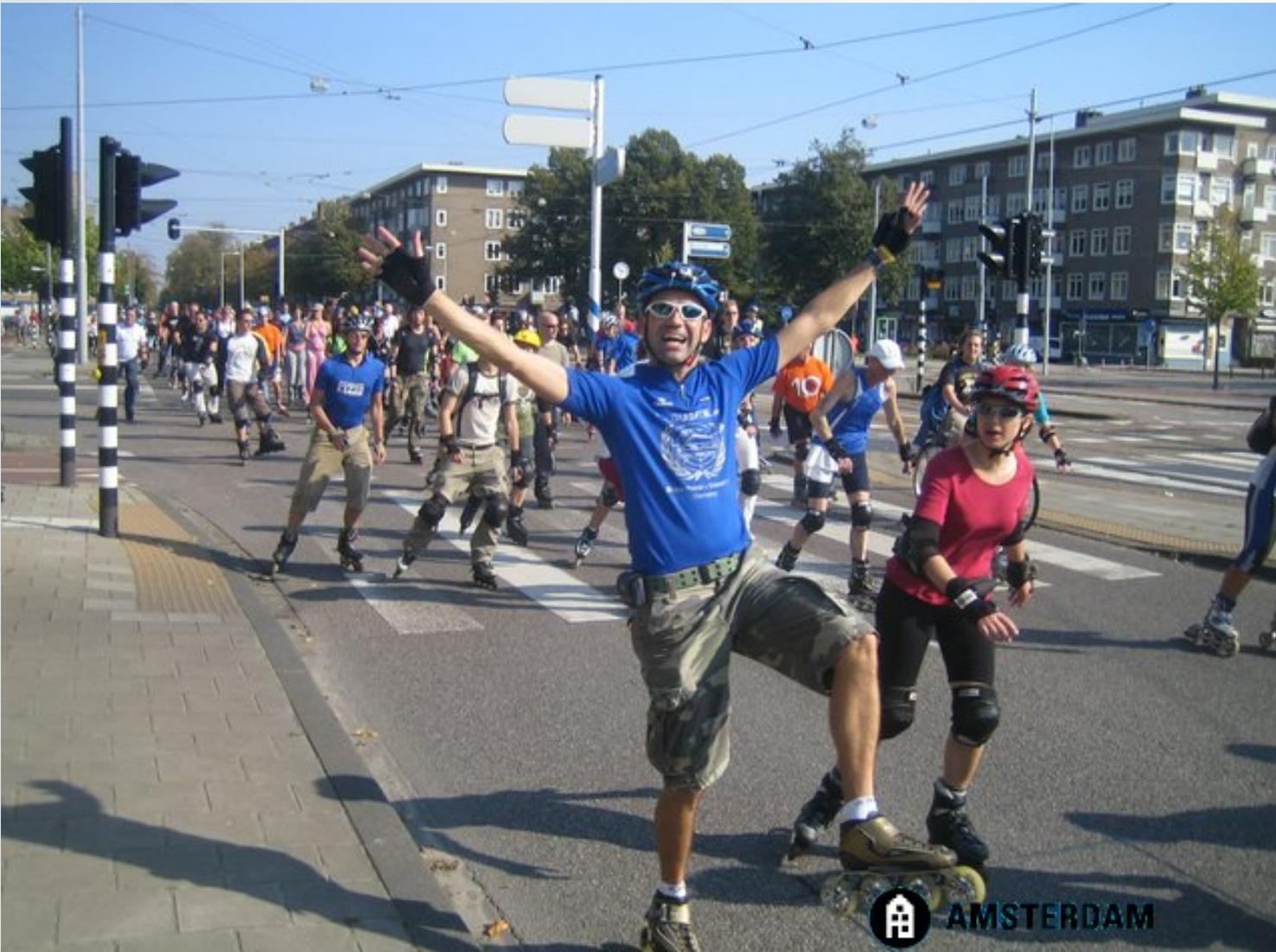


Taken over by Google ?



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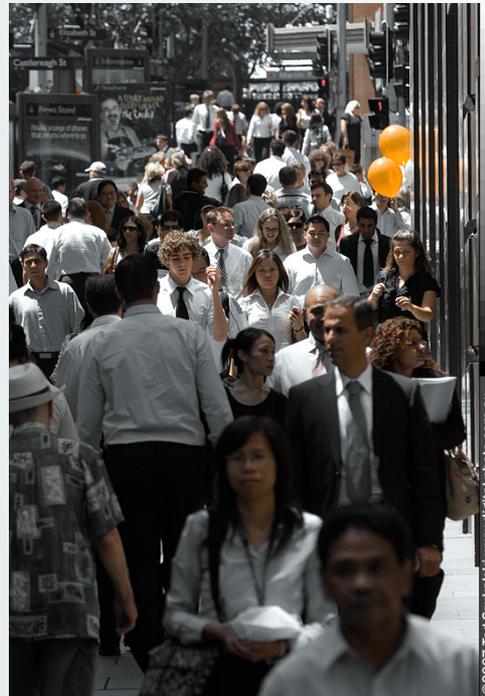
Slow solutions: Humanity





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Walking



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Cycling





And.....





Safe crossings for the future





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How do we

CHANGE



*Elke ochtend ga ik met
mijn fiets naar het werk...*



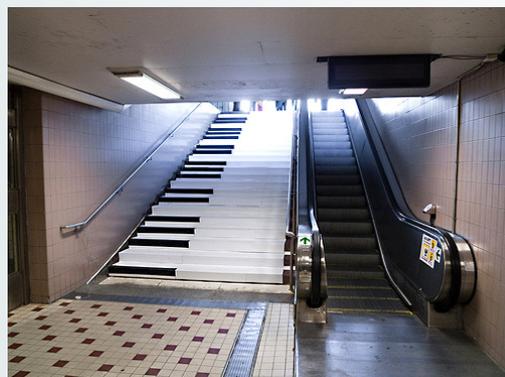
Incentives





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Playing games



VANSNAAR4
Mijn mobielste spel van Nederland

OVERZICHT | INVOLLEN | RANGLISTEN | STATISTIEKEN | TEAM MANAGER | FAQ & HELP | ADMIN

Berichten

- Ge feliciteerd! Je hebt level 3 bereikt!
- Speler 2 heeft de laatste rangschikking overgenomen!
- Je hebt 100% in afgelopen week geresen van de 4e naar de 3e plaats!

Mobi update

Vandaag wordt het laatste schouwen!

Speel ook de mobielste game en verdien extra punten voor jou en je team!

Reisgedrag

100% FILE MIJDEN

Week resultaat

100% FILE MIJDEN

Score

Speler 1
1024 pnt.

Awards

DEELNEMERS

RANKING	NAAM	SCORE
1	Speler 1	1024
2	Speler 2	800
3	Speler 3	600
4	Speler 4	400
5	Speler 5	200





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Tons of examples



CIVITAS



ELTIS

THE URBAN
MOBILITY PORTAL





Get into their brains





Apply rules

- 1. Is the road user able to absorb the ITS information sufficiently?
Information that is not observed does not affect the route choice selection process.
- 2. Does the road user understands the ITS information?
Understands the road user what is expected of him, what behaviour he should show and what benefits it brings to him?
- 3. Can he actually conduct the desired behaviour?
This has much to do with task complexity.
- 4. Is he also willing to conduct the desired behaviour?
This has everything to do with motivation, acceptance, confidence in accuracy and timeliness of information and ideas about their own knowledge and skills (call it stubbornness).



Twelve Human Principles to Change Behaviour

- › 1. **Social comparison:** Many people will follow up advices.
- › 2. **Sympathy:** Reflect the voice of the users.
- › 3. **Authority:** Use reliable information only. Proof accuracy.
- › 4. **Here and now:** Deliver super fast real-time information.
- › 5. **Priming:** Give information from a positive perspective.
- › 6. **Bidirectional:** Include option for contact.
- › 7. **(Dis)advantage:** Give user the idea he will lose less time (instead of gaining time).
- › 8. **Paste:** Positioning of ITS in a perfect story. Use references.
- › 9. **Consistency:** Ask for small changes in the beginning, then expand.
- › 10. **Reciprocity:** What's in it for me.
- › 11. **Shortage:** “There are only a few spaces free.”
- › 12. **Individualism:** Try to approach the users individually.



Notices from our mobilists

Report Consumer acceptance Traffic Information 2011 (RWS)

- Traffic Information important and accepted. Used pre-trip and on-trip to prevent, overcome and explain delays.
- Traffic Information should be actual, accurate and real-time
- Traffic Information is reliable. Level of Quality depends more on channel than source.
- Radio most used on-trip. Not always actual/relevant.
- SatNavs upcoming. For comfort and accuracy.
- VMS indispensable. Most accurate and relevant information.
- Smartphone upcoming. Regulations prevent use while driving.
- Lack of information leads to frustration. Mostly in unexpected situations and on local roads.
- Role of social media in Traffic Information not clear.



Notices from our mobilists

- › Survey Zuidvleugel (The Hague/Rotterdam) ongoing

- › Results:



- › Not yet available 😞