

# Transport, mobility and active walking

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Getting back communities on their feet

Walk 21 Conference

The Hague, 2010, November, the 18th

# RATP?

- Le groupe RATP

- RATP EPIC
- RATP DEV

- Activities

- Operations
- Engineering

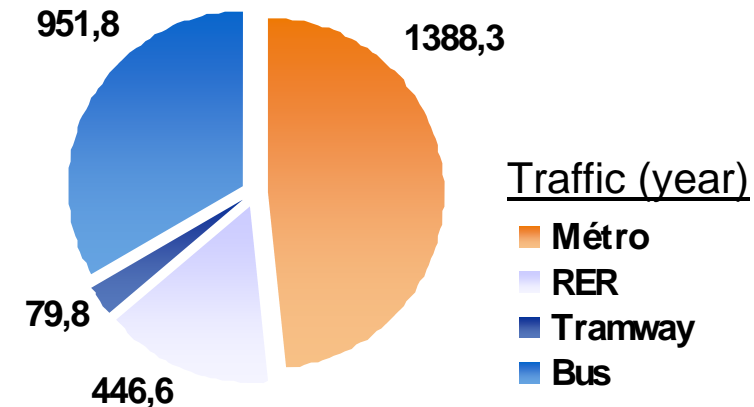
- Loving the city



## RATP in brief

- Public firm created in 1949
- Traffic (2009)
  - 11 million trips/day
  - > 3 billion trips/ year (world top 4)
- World first multimodal network
  - Metro, RER, Tramway, Bus, Batobus, bike, funicular,

45 000 agents



# Meaningful & useful mobility: walking in 21 st century

## Taking in to account changes in uses :

- Time shifts
  - Being mobile vs social exclusion
- Hyper-urban cities
  - Connected persons vs digital illiteracy
- Public health & body concern
  - Trip quality vs crowd pressure
- Environmental concern
  - Cleantech vs global warming
- From spaces to places
  - Territorial cohesiveness vs urban sprawl



# Transport and innovation

## Defining a diagnosis grid for innovation

(II)

- Responsive transport system
- Mobility cocktail (modal redundancy)
- Territorial covering (network density)
- Funding (design-to-cost)



# Why RATP Innovative Design team is interested by walking ?

# Some « popular » ideas...

- *PT = less walk possible ?*
  - WAlking = rapide mode , efficient, pleasant !
- *Walker = fragile, to be protected from...*
  - vs walking with (inside) other modes ! Particularly inside underground



Walk 21, 18/11/2010- D Laousse



# Méta & meta mode

- Walking is a regular mode like others
  - Which position according to other modes?
- Walking « at the heart of all modes »



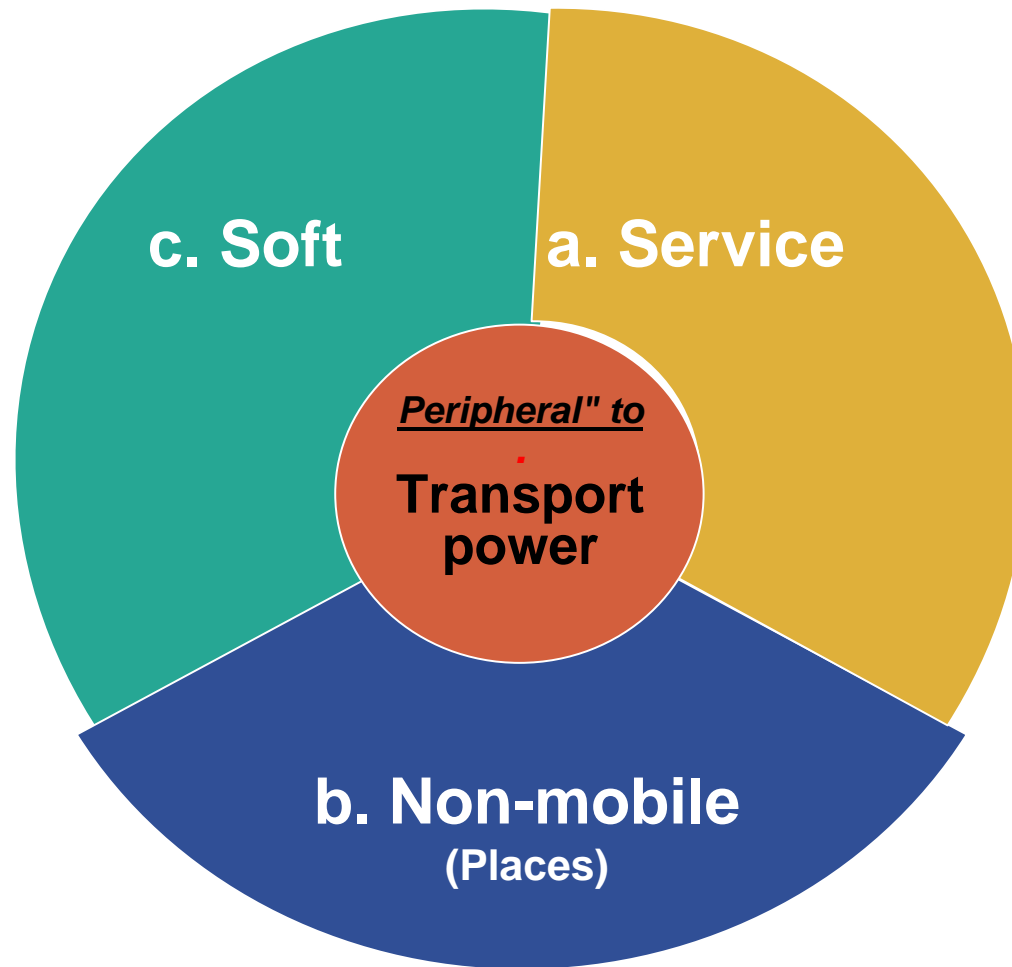
# Walking at the heart of mobilities

Field of urban mobility is in complete mutation :

Individual more active

from « transport » (flow) to « mobility » (mobile person / walker)

# Walk and innovation



# An approach of innovative design

- Beyond classic représentation commune of modes
  - Analogy with bike (Velo'v/Vélib= disruption)
- Walk as a field of innovation for RATP

First seminar (2007) : Sharing knowledge

Collective innovative design (2008-2009)

Emerging experiments

# Walking with underground !

A privileged link between walking & underground

Paris underground : densest in the world

Modal share in Paris : 54 % !

# A component of mobility system

- The most complementary mode
  - The most combinable
  - The most « on-board »
- ⇒ The basis of multimodality
- Mode of interchange
  - Mode of feeding
  - The chain for « door-to-door »



# Couplage des modes

- Combination of walking & underground is the most efficient.
  - Underground as landmark
  - GRid and density of underground stations
- Strategy to relate (=optimization)
  - Walker with equipment (Shoes & ICTs)

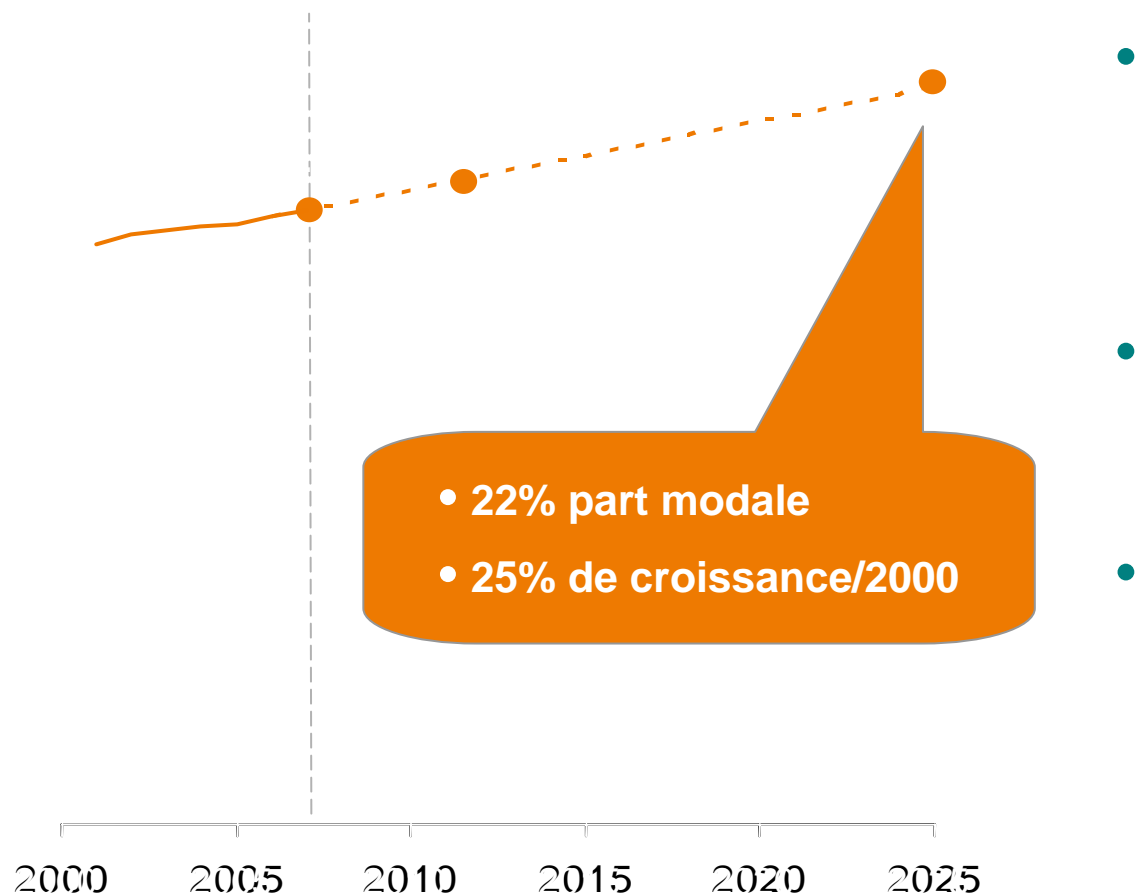


# Mode of interchange

- PT user walks 600- 800 m/day
- Increasing walking attractivity
  - comfort, security, path valorisation... transport spaces
  - Links with city
- Simplifying use of PT
  - optimize interchange
  - proposing alternative during incidents



# London Walking: 7 millions trips on 2025



# Legible London (TfL)

- Pilot Experiment on Oxford Street!

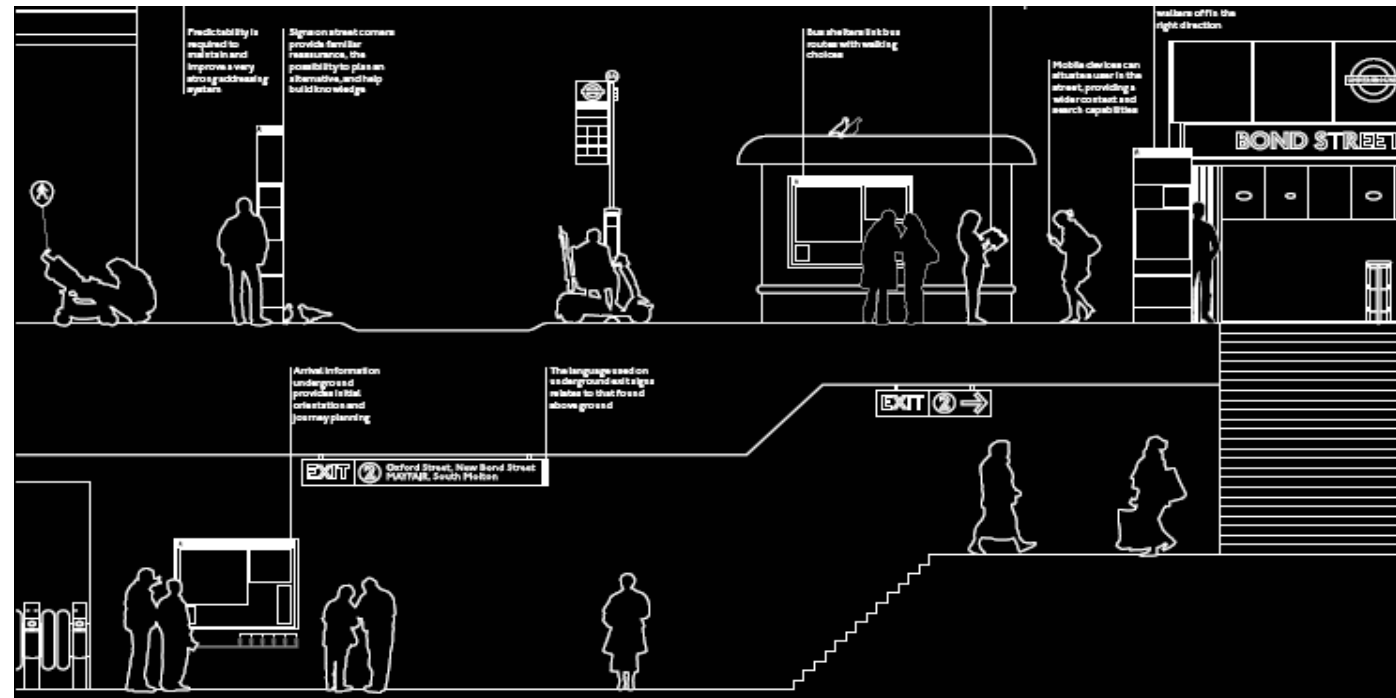
- 6 sectors/ 300 landmarks

- Principles

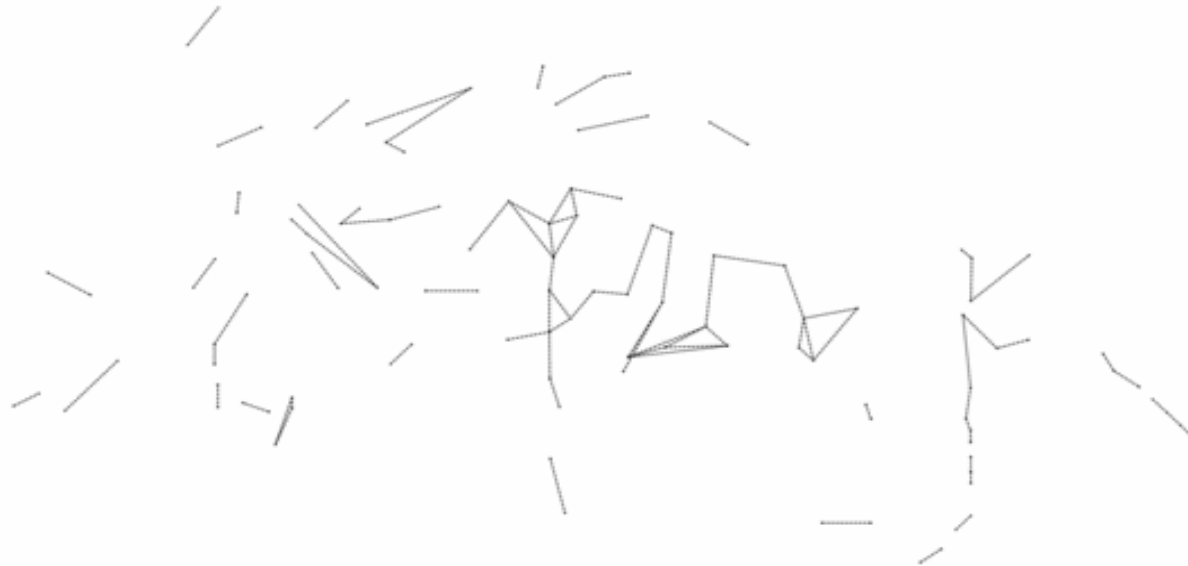
- Gaining time
- Modal share
- Continuity of trip
- Public health

- R&D

- Walking & cognition
- Tool box

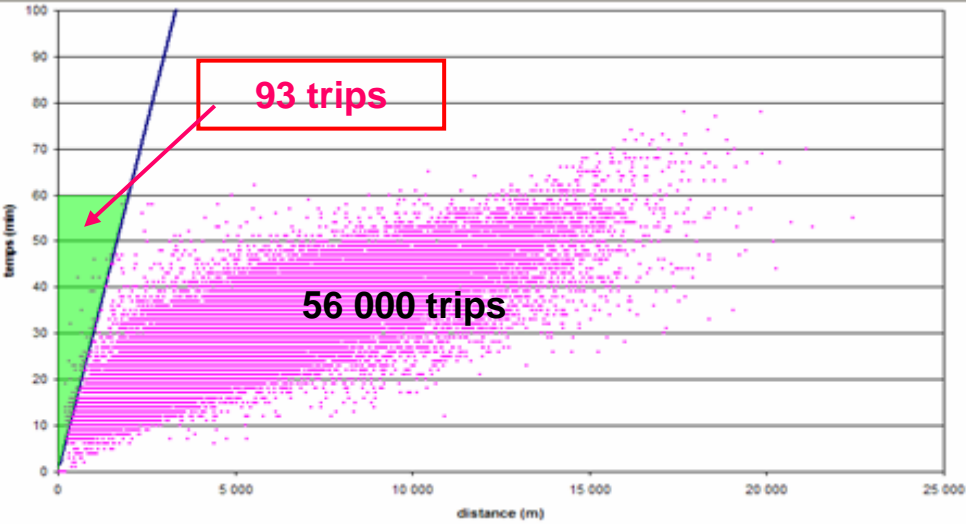


# Walk-Lines on London tube map



London Tube Map with Walk-Lines: sometimes it's quicker to walk  
[http://rodcorp.typepad.com/rodcorp/2003/10/london\\_tube\\_map.html](http://rodcorp.typepad.com/rodcorp/2003/10/london_tube_map.html)

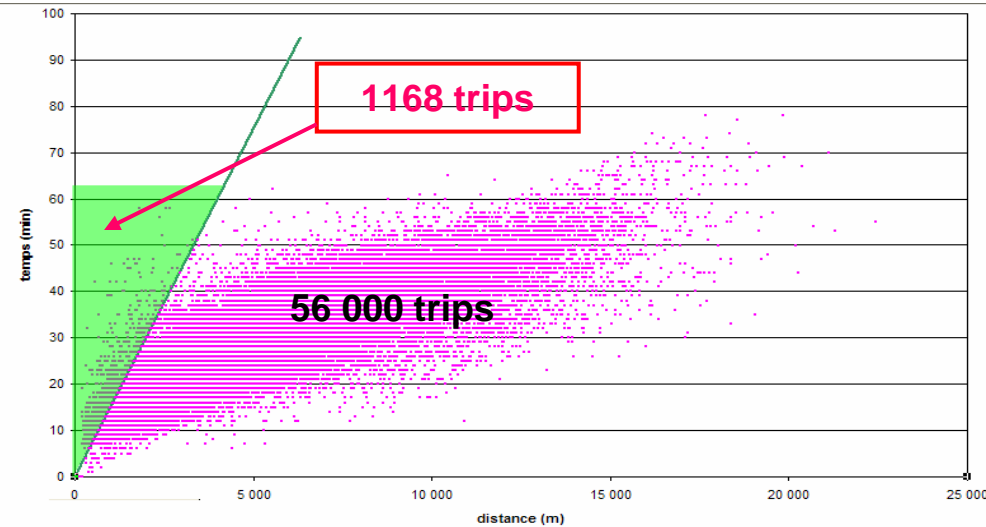
# Efficiency of walking in Paris (I)



**Slow walk (2 km/h)**

- 93 trips quicker/ underground
- Stations « nearby/far away »

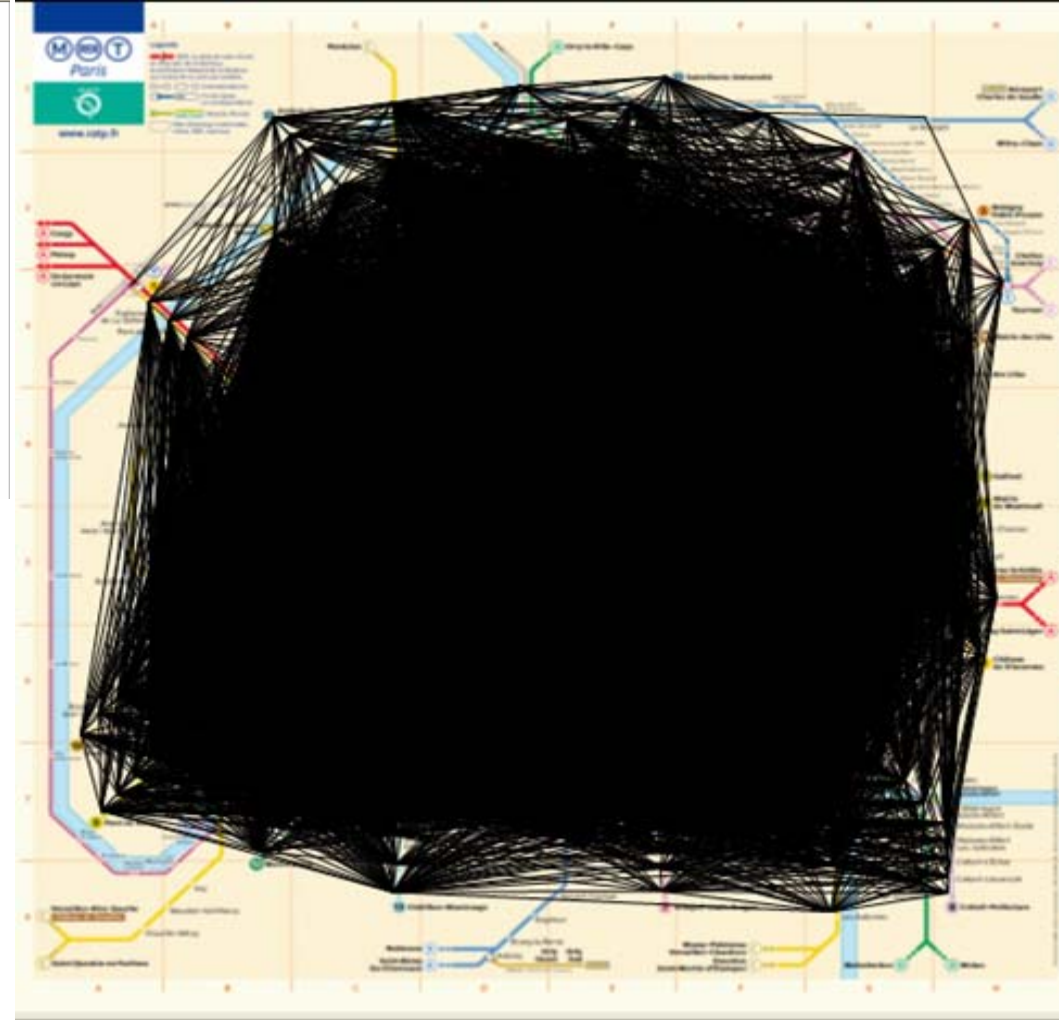
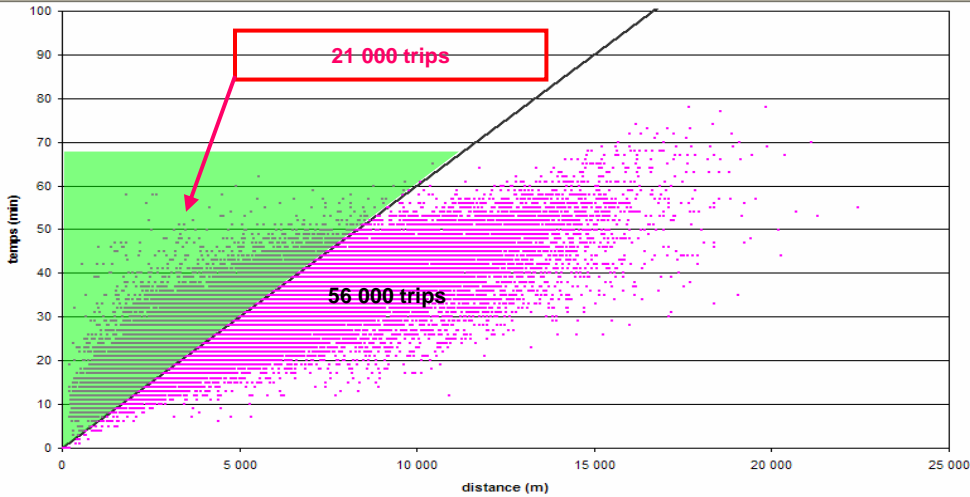
# Efficiency of walking in Paris (II)



## Regular walk (4 km/h)

- 1168 trips quicker/underground
- 2% of all trips but **58% of trips <1 km**

# And bike in PAris?



**Slow biking (10 km/h)?**

- 21 000 trips quicker/underground
- 40% of all trips but **84% of trips <4km**

# Urban correspondances

- Faciliter, simplifier, sécuriser correspondances métro/bus, tramway/métro, tramway/bus...
  - Signalling, user information, urban design
- « Sécurité de walkers in a public space of transport : urban design and urban mood »
  - research Ville de Paris/RATP (Fondation sécurité routière, 2008)



# Station: key element

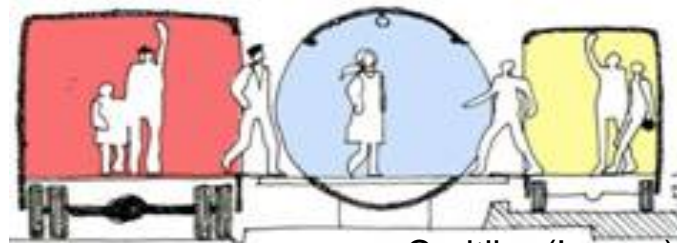
- Station « commensale »
- Walker use existing places
  - Bench, café, bus station, Vélib' station ...
- Places to invent
- Network of places...



# Places, interfaces, hubs...

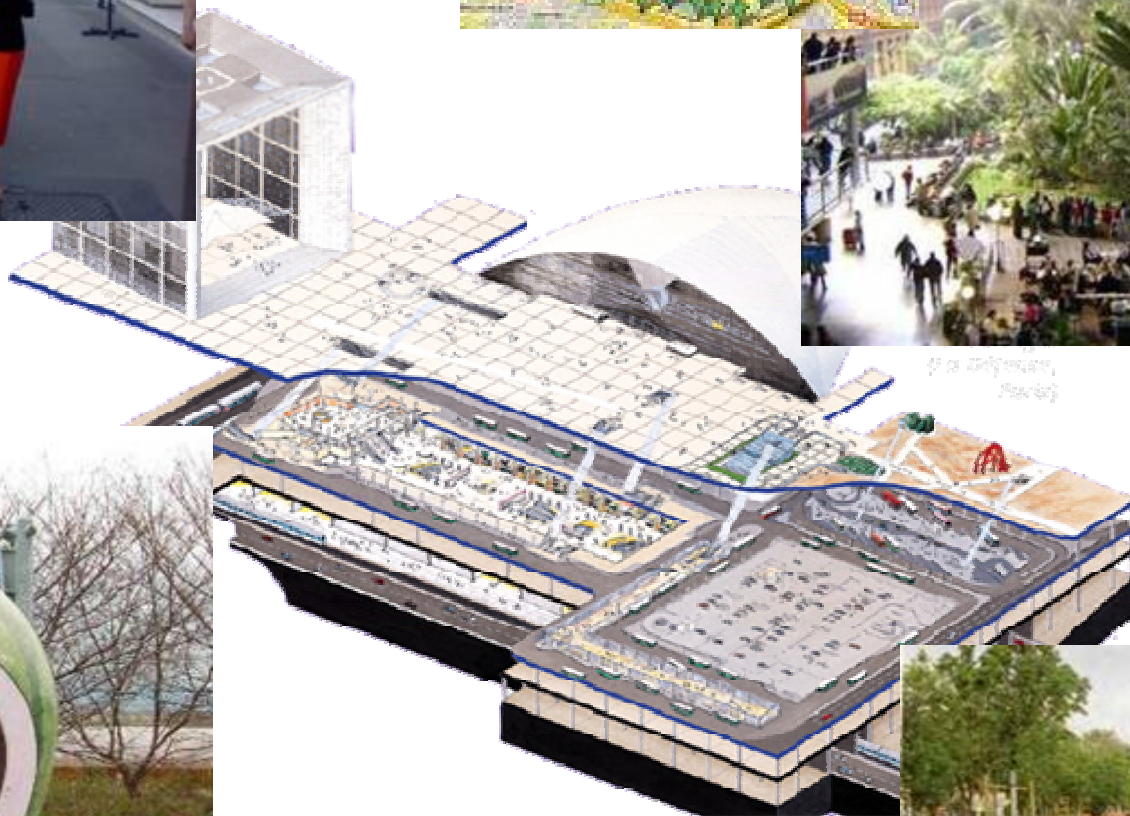
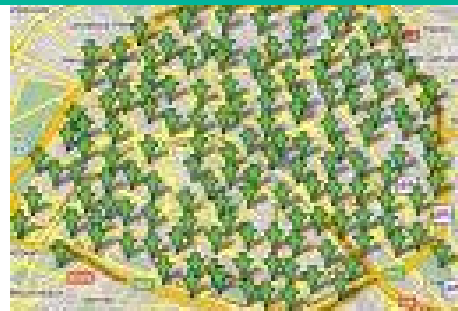


## La station « bi-face »



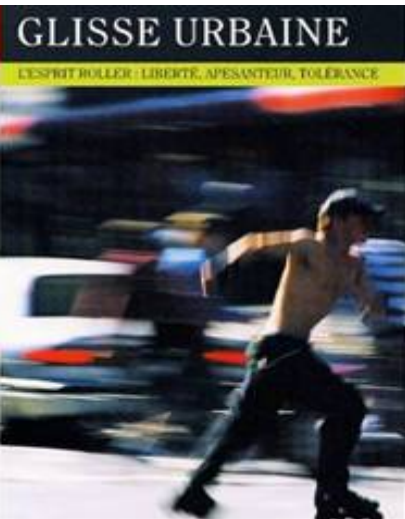
Curitiba (Lerner)

# Non mobile, a challenge for urban mobility



Why other actors are interested?

# New relations to body



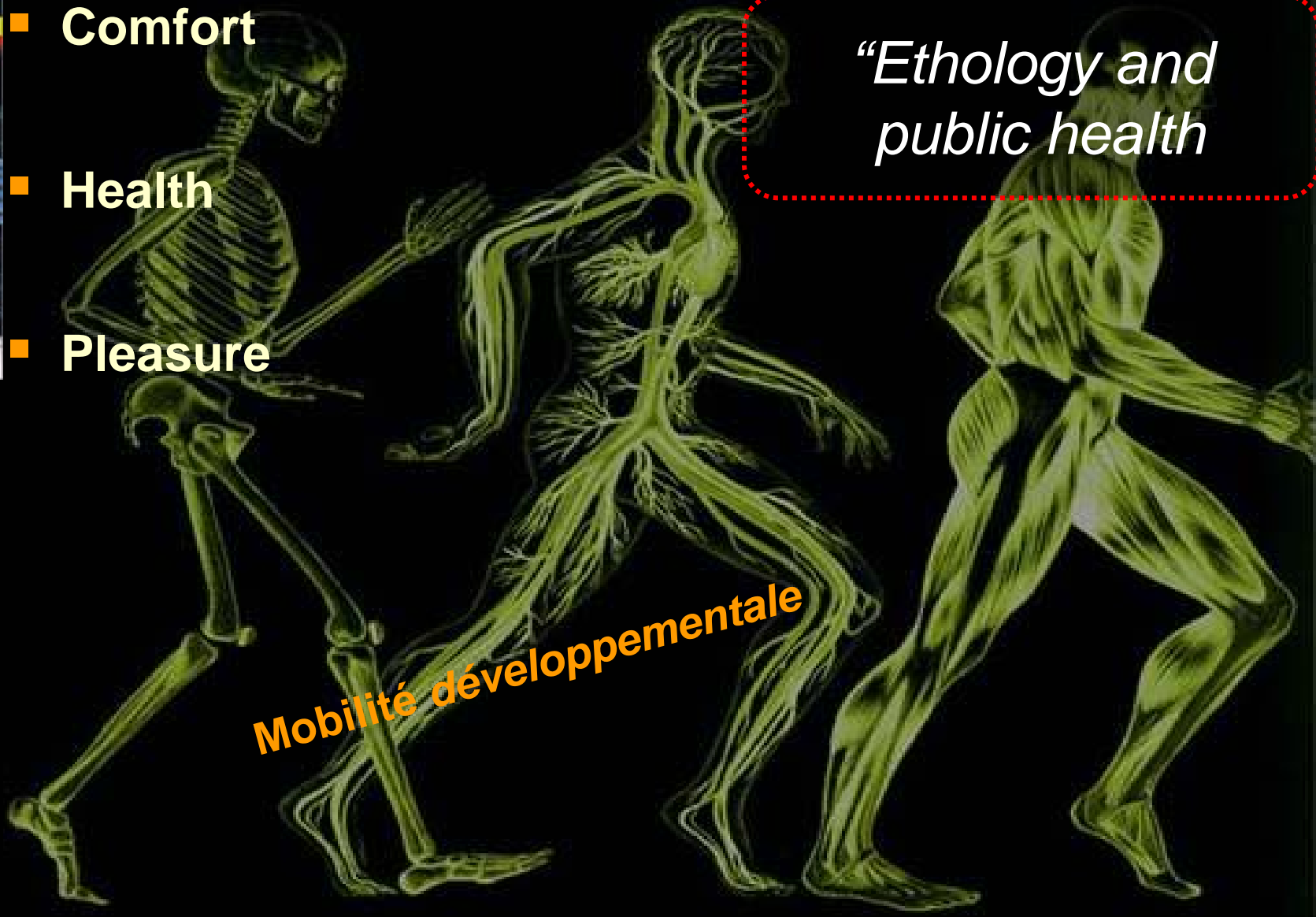
■ **Comfort**

■ **Health**

■ **Pleasure**

*“Ethology and public health”*

*Mobilité développementale*



## ■ TAPAS

- « Transportation, Air, Pollution and physical ActivitieS, an integrated health risk assessment programme of climate change and urban policies »
- Pr JF Toussaint (Hôtel Dieu/IRMES, CNS)



- Cognition & Mobilité (Collège de France)
  - Navigation in complex spaces
  - Locomotion, visual guiding & fear of falling
  - Individual differences
    - Cognitive ageing
    - Genre
    - Handicaps



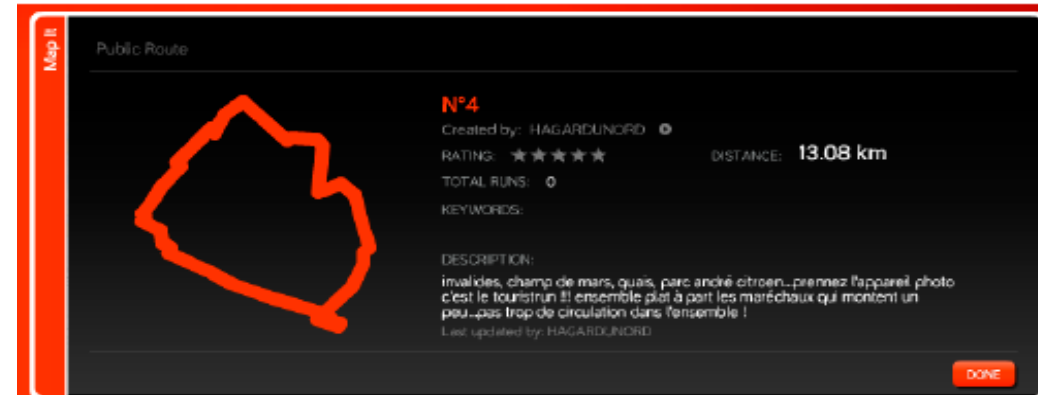
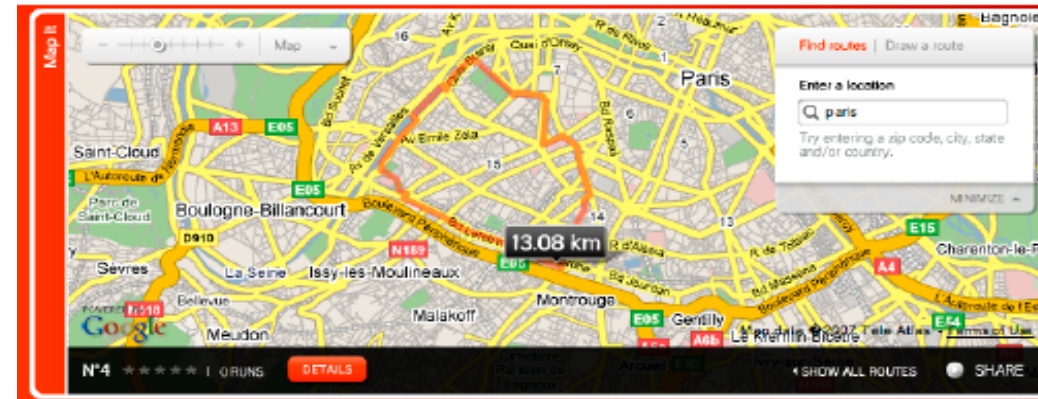
« La RATP aime la marche parce qu'elle aime la ville qui va avec... »



- New partnerships ?
- New actors ?

Nike : city as a sport place →

Cisco, IBM, ...



# Urban collaborative treks

- Induce use of PT
  - Re-discover pleasure of trip
- Behavioral design
  - Availability (*affordance*)
  - Opportunity (choix)
  - Economy (symbolic compensation)



The screenshot shows the website 'MUSE TREK Paris, ville'. The navigation bar includes 'ACCUEIL', 'OBJETS', 'TREKS', and 'LIEUX'. The main content area is titled 'VOIR LES TREKS' and shows 4 elements on page 1 of 1. The treks listed are:

- Parcours des modernités**: 5 stars. Description: 'La modernité se décline au fil du temps. Elle constitue, et a toujours constitué, une des valeurs...'. Genre: Historique. Action: sauvegarder.
- Parcours d'Humanités**: 5 stars. Description: 'Le métro, qui accueille tous les publics et toutes les cultures, est un lieu de rencontre de la...'. Genre: Historique. Action: sauvegarder.
- Parcours des sciences**: 5 stars. Description: 'Reflet des grandes découvertes de son époque, le métro a toujours rendu hommage aux illustres...'. Genre: Historique. Action: sauvegarder.
- Parcours d'art**: 5 stars. Description: 'Faire découvrir un métro d'art et l'art dans le métro.'. Genre: Historique. Action: sauvegarder.

At the bottom of the page, there is a URL: <http://www.musetrek.com/>



Thank you