Encouraging Changes in Travel Behaviours Towards More Sustainable Mobility Patterns: The Role of Information

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Context

• Context of climate change and increasing concerns about damage caused by human lifestyles and particularly the individual use of the car
  → People still refrain from changing

• Exploring the link between mobility practices and environmental values

• Identifying potentials of changes
Methodology

• 2 sociological researches
  – Qualitative in-depth interviews
  – Carried out in Paris region (40 + 20 interviewees)
  – Wide diversity of situations and practices (age, family, professional and geographic, modes used)

• People interviewed several times
  – To better identify the process of change (contextual and temporal factors)
  – To explore the impact of the interview methods (delivering information and stimulating introspection)
Hypothesis and questioning

- Information can play a significant role in change
  - Providing mobility knowledge and tools
  - Increasing environmental awareness and individual responsibility
  - Promoting the acceptability of change

- What information is needed to build modal choice and routes?
- How and where getting the information?
- What is the place of environment in individuals’ decision and lifestyle?
- What is the role and the effects of information?
The role of information
constructing modal choice
What information is needed?

- Mobility practices have to be learnt
  - Transport supply must be known, integrated and monitored by users

- Force of the habits
  - Many people do not compare to the other options; They support the mode they usually use

→ Need of information to explore other alternatives
  - To know their existence and their functioning
  - To encourage their experimentation
How getting informed?

• Via social networks:
  – Diffusion depends on mechanism of interpersonal and societal influences (cf. theory of innovation diffusion)

"Talking with people, you learn a lot of things" (Rémy)
How getting informed?

- Peers transmit learning, knowledge, information and may influence one’s practices

"My parents always told me that the car pollutes and is costly. They were against the car. So that’s why I take public transportation at the maximum. I was brought up like that" (Martin)

"My mother took only the bus! So I took the bus with her a lot and she taught me everything" (Jerome)

“My friends brought me to a terminal, quickly explained me how it works and I went back by Vélib" (Martin)

"I like to encourage people to make a try and convince them that it is easy to take. Because often they do not realize how simple it is!” (Camille)
How getting informed?

• Other users

"The more I share it's still with other persons in the street, when we are at the Vélib terminals. People do not understand, don’t know how using it. Here, there is much talk, we help each other" (Camille)

"I think training is necessary to know how to take a bike and we helped each other at the terminals. Once I understood the system I helped many people to use it. Many people were lost, then I helped them explaining: you do that, then this, this..." (Martin)

• « Social web »: users share knowledge, experiences and advices through forums on the Internet

"I looked at the forums to see discussions and to know how they did with the empty stations and full terminals... I learnt tricks... what is the strategy when we can’t find a bicycle and worse when we can’t park it" (Corinne)

"I ask: I have to go to this place do you know how to get there fast?" (Anne)
How getting informed?

• The interview technique and the induced social interaction
  – Provides information mentioning the existence of certain modes or services of transportation the interviewee did not know (i.e. car sharing)

  "Car-sharing? No, I don't know. What is it?" (Jerome)

  "The day after our interview, I called them. I called the company and said, 'I just saw your car rental system - Is it possible to register in one day and get a car immediately? How does it work?' (Céline)

  – Stimulates reflection by making interviewees consider their own practices (introspection)
How getting informed?

• Material tools to know the existence of a mode or a service:
  – The newspapers
    "I have seen it in a newspaper, there was an article talking about the bikes, and they talked about the association Voiture & Co for car-sharing, and they also talked about bicycle training, so when I saw that, I thought: well wishes!" (Denise)
  – Advertising
    "I looked for that system before selling my car, I had a flyer on my car" (Aline)
  – Internet websites
    "I looked on the Internet, on the Vélib website before it started. I watched what they offered, fares, how to subscribe..." (Corinne)
How getting informed?

• Material tools to define routes:
  
  – Websites
  "Contrary to the car there are very few signboards for cycling in Paris, so it’s better to have identified the route by the Internet the day before, crossroads by crossroads" (Eric)

  – Maps
  "I have a very poor sense of direction; I have difficulties to get my bearings so I have always a map with me" (Corinne)

  – Mobile tools (GPS, WAP)
  "I search for the departure time of the bus on the WAP by my phone. You look at Orange World and there is an application for RATP schedule, it’s great and reliable. They say the next bus is passing in... from anywhere. I didn’t need to wait for the bus, I know when it arrives" (Jerome)
The role of information
increasing environmental concerns
and modifying modal choice
Place of the environment in modal choice

• Some people try to adopt environmentally-friendly choices
  – Choosing low emission vehicle
  – Paying attention to their driving style (more flexible and flowing)
  – Reducing travelling by car or plane

• But generally, environment does not appear as a main criterion in individuals’ choice of mode of transportation
  – Gap between global phenomenon and individual daily life

• Some people adopt those practices without an ecological motivation
  – Personal interest (economic reasons, simplicity, health advantages, pleasure, etc.)
  – Education/citizenship
The role of information increasing environmental concerns

• People incriminate the lack of information for not changing their practices

→ need to understand better the climate change phenomenon, the individual contribution and the practices to adopt

"I hear about it, but not enough to realize its importance nor what I can do" (Aline)
Effects of the information

• Positive effects:
  – The more a person is informed, the more (s)he becomes aware of the environmental issues

    “Continuing to hear some facts we try to pay attention to certain things, and the TV broadcast we have seen, refrained us a lot!” (Céline)

  – But positive effects on attitude does not necessarily modify behaviours: being informed and concerned is not sufficient → need integration and assimilation

    "Now I think people are globally well informed and aware of the consequences. Then, they need time to integrate it" (Anne)
Effects of the information

• Perverse effects:
  – Can be redundant and wearying people
  "The environment I do not care! It is politically incorrect, but we are fed up with the environmental message in France!" (Michel)
  – May be distorted: you see the information you want to see
  "I think that with all the sources of information we have, when you want information you can find it, but you find the information you are looking for. Some information is not necessarily right and doesn’t go in a good sense, it’s dangerous" (Camille)
  – May be contradictory and deceptive
  "There are those who predict a catastrophic future... and others who say it is perhaps not so bad" (Michel)
  – May discourage: efforts appear useless
  "We watched this TV report which was terrifying! They said that over 90% of the sorted wastes cannot be recycled. They said that sorting the card-board boxes was useless because there was always someone who was not doing it in the right way" (Celine)
Sources of information

- The media:
  - Information quite alarmist and sensationalist
    → paralyses more than encourages
  - Not personalised (probably not affects sufficiently)
    → need to be interested first to search it
  "It provides a range of things and then each one can go further if he/she really wants to know, to understand" (Anne)
  - But accessible for everyone (TV, free newspapers…)
    → the press popularized scientific research, film or specific report make people more aware…

- Associations (debates, independent magazines)
  "I receive lots of stuff by mail, letters from various associations. The AMAP sends me things; my daughter and I are part of the Humanist association so we receive the newspaper. We go to a BIOCOP for long time and here there is the journal “Contact”. There are lots of associations and independent magazines that inform you about the planet, agriculture and all the silly things we do!"
  (Ondine)
Sources of information

- Impact of information while transmitted by social networks
  "I receive information by e-mail and I give it to my friends, colleagues... Then it is spread. (...) I’m not useful at a big scale, but if everyone would inform their networks, it will widen" (Ondine)

- Influences of peers
  "I got my friend to watch the Al Gore’s film and I’ve recommended it to many people. The demonstration is really strong and well done" (Martin)
  "They made me read many things on that subject [environment], they talked to me all the time about that, all this was current topics of conversation!" (Martin)

- « Web social » (thinking)
  "Keeping discussing on the forum, questioning have come up" (Eric)

- Interview technique (introspection)
  "I bought a motor scooter, maybe I shouldn't have…" "Why?" "It's not going in the right direction! They install bicycles so that we use them and then what do I do, I buy a scooter and I give up my bicycle!" (Yan)
  "Do you always go so far in the interviews? That makes me think about my own behaviour. It can appear to be saving energy and in fact it isn't at all!" (Rémy)
Conclusion

• Information appears to have an important role in changing behaviours process

• Importance of providing users with material and cognitive tools to help changing
  – Information on the existence of alternative modes of transportation and how they operate contributes to multimodal practices adoption
  – Less obvious on climate change issue: information not always sufficient to change behaviour (confusing, contradictory, gap individual/global); but contributes to raise awareness and to favour the acceptability of change
Conclusion

• Information appears more efficient when delivered by social networks or charismatic and trustworthy person
  – Transmitted by social interaction
  – Prone to social pressure
  – Impact of social influence (through advices, education, experiments, values shared, etc.)

• It appears that the source of information and its mediator have perhaps a more significant impact than its content or quantity

• Change better accepted, effectively realized and lasting if done voluntarily (→ personalised information)
Thank you!

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