MOBILITY, URBAN PLANNING AND DEVELOPMENT IN FRANCE: 1960-2003

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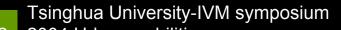
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ORGANISATION OF THE PAPER

HISTORY: VALUES, FACTS

LEARNINGS ON MODELLING

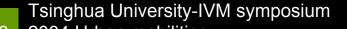
LEARNINGS ON MOBILITY



TRAFFIC FIGURES IN FRANCE 1960-2000

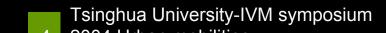
- ◆ AIR TRAFFIC: X24
- ◆ CAR TRAFFIC: X 9
- PUBLIC TRANSPORT: X1.6
- COMMUTING DISTANCE: X3.5
- SHARE OF 2 WHEELERS IN TRIPS:

/9



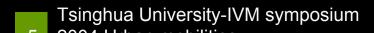
TREES DONT GROW UP TO THE SKY

	Period1: before 1973	Period 2: After 1973
Car traffic	+12 %/y	+2.5 % / y
Accidents	+4 % / y	- 4 %/y
PT Activity	<0	>0
Commuting distance	+6 %	+2 %



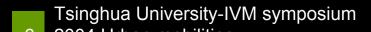
The sixties: 1958-1973 General beliefs

- The opinion: great confidence in the progress
- Happiness comes from consumption
- Decision makers use science for our well being
- Progress has a face: the USA
- Acceptance of the « damages of progress » (pollution, accidents, etc.)



The sixties City and mobility situation

- Population: migrations from rural to urban: high pressure on housing markets
- High levels of lodging and transport needs
- Congested cities
- Inherited city cannot meet the lodging needs and is not sufficiently flexible

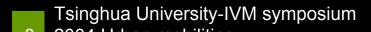


The sixties Urban transport

- PT and 2w out of favour, private car is our unique future
- Car demand is exogeneous
- The « science of towns » (Le Corbusier, functionalism) and long term traffic modelling allow decision makers who control the situation « optimal and rational planning »
- People will live and move in the way authorities think Tsinghua University-IVM symposium

The sixties Emblematic elements

- Big public housing developments
- Freeways and expressways in towns
- Decline of PT
- One car in each household is the horizon



After the sixties

- From trust to anguish (future)and to distrust (science, progress, policy makers)
- From holism to individualism, autonomy, « hypermodernity » (car, telecoms, private home, pill, divorce, private schools, etc.)

After the sixties

 « I » as a consumer and « I » as a citizen are 2 different persons

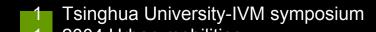
 New problems on the agenda: local pollution, congestion, accessibility for non car owners, financing urban transport, greenhouse gas emissions

After the sixties Consequences

 Mobility behaviour: sustainted trends, through autofed, systemic but unpredicted urban sprawl and female autonomy

Progressively:

- Low value to scientific planning, high value to consultation and dialogue
- Citizen values: urban car use as « bad », other modes as « good ».



After the sixties Consequences

- Urban and transport planning progressively evolves from consumer satisfaction to citizen satisfaction
- PT are redevelopped, with moderate patronage success and resulting financing problems
- « Soft modes » desired, but they can do a small part of the job only.

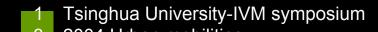
Tsinghua University-IVM symposium

What have we learnt: As regards modelling

 According to the periods, people can agree / disagree as regards long term predictability.

The ignorance of « systemic effects » is a source of concern / reject:

(PT patronage, parking needs, induced traffic, sprawl, etc.)

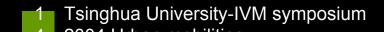


What have we learnt as regards mobility

- 1 Polysemy of the word « mobility »
- Common sense: trip nb, distance, travel time, etc: actual behaviour
- Norm, social requirement
- Personal ability

Stress: problems when:

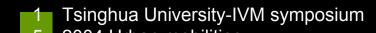
Ability < norm: disadvantaged people Norms > system capacity:congestion



What have we learnt as regards mobility

2 The « ability to move » is a key driver of urban transformation

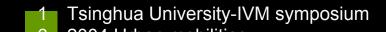
Private decision making for locations (homes, activities) takes into account the potential of movement. High quality infras not only « meet the needs », they create opportunities Mobility is endogeneous, land use evolutions are exogeneous



What have we learnt as regards mobility

Lots of irreversibility in real life

- Equilibrium models imply reversibility, but real life is different
- Psycho: car license changes the ways of thinking
- Monopoly: cars create problems to buses, 2w, etc.
- Radical monopoly: land use organised by cars, high costs to serve by PT



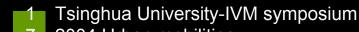
What have we learnt as regards mobility planning

Mobility policies, whatever they are, always produce winners and loosers

Disaggregate « surplus » analysis is needed

Silence is good for winners

Participation / opposition is important
for loosers



The « solution space » is always brooader than we think

Example: 10 solutions for suburban freeway congestion

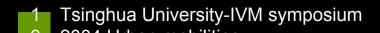
- 0 Build new freeways
- 1 Do nothing. Users change « mood », schedule, route, destination, locations
- 2 Manage uncertainity: real time info
- 3 Improve quality of service through dynamic management (AID, access control, dynamic lane management)

The « solution space » is always brooader than we think

4 Supply congestion free alternatives (rail)

5-6 HOV / HOT lanes, road pricing

7-8 Reduce the gap between the « normal speed » on the « primary network » and the « urban road network »



The « solution space » is always brooader than we think

9 Improve land use / transport coordination, urban renewal, high densities around PT nodes, etc.

10 Develop a « consistent city » vision

