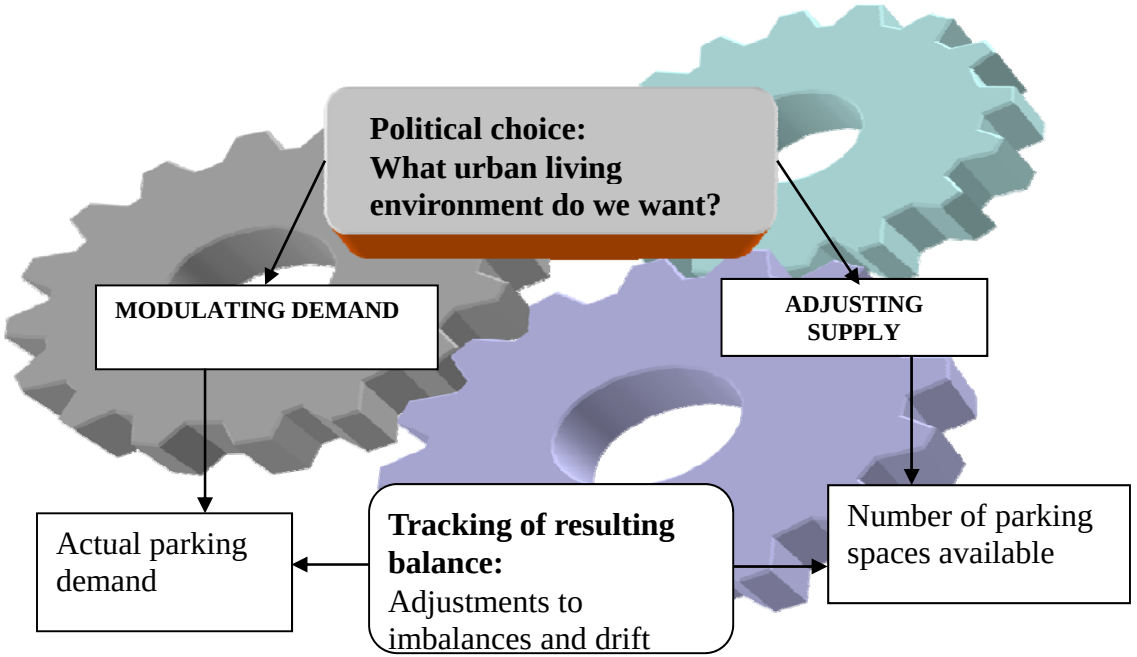
Parking for private vehicles in the city

The problem of parking in urban areas

Demand generators	Actual parking supply



User categories

Car users can be divided into homogeneous categories in terms of their behaviour in response to the parking conditions they encounter

- **Residents**: These users leave their car near their home:
  - They may be at home,
  - They may be away from home: on foot, in buses, on the subway,...
- **Commuters:** Car users who drive to work
- **Visitors**: Car users who are neither commuters nor residents.
  - A range of purposes: shopping, personal business, leisure,....

Residents

- **Why own a car?**
  - For the freedom it provides,
  - For the status

- **Stable situation in France:** 0.5 vehicles per household in Paris and 2 vehicles per household in the outskirts

- **Walking**: up to 500 m in Paris

- **Built stock**: readily accepted: A numbered space or lock-up acts as an agreed vehicle location

- **Parking fees**: readily accepted but depends on the rate: dividing the charge by two just for résident quadrupled the number of subscribers.

Commuters

- **Why commute by car?**
  - perception of working hours: Car perceived as extension of home
  - Speed of journey (only for small cities (200,000 population))

- **Flexible behaviour:** Fact: 5% - 95% of car-using employees.

  Employer support is decisive: 50% increase if parking space provided by employer

- **Walking**: Max: 700m – 1000m (driving to a public transport station) around Paris

- **Built stock**: unallocated space readily accepted

- **Parking charges**: **Price sensitive above a certain threshold**

Visitors

- **Why travel by car:** Objectively more efficient

  Transporting packages, flexible route that can be altered in real time

- **Stable situation? "No Parking, No business"** ....?

  It is possible to change destination...

  But easy parking is not the first choice criteria for a destinationS

- **Walking**: essentially low (less than 300 m) but changing
  - Quality of walking conditions
  - Width of parking spaces...
  - Knock-on effect: walks from 300 m to 1000 m

- **Built stock**: Rejection: fear, walking, charges often higher

- **Parking charges**: **Price sensitive above a threshold**

Modulating demand

- **Substitutes for the car**: Walking, public transport, bikes, taxis, car-sharing...The purpose is to make them more attractive than the car
- **Privileges**: prices, reservations,...
- **Parking charges in the center:**
- **Nonintervention**
- **Commitment of the stakeholders**
  - What stakeholders: decision-makers, locals, shopkeepers, users
  - Levels of commitment: know, understand, **commit**

Parking supply

Main categories

- Roadside parking: regulated or unregulated
- Off-road public car parks: surface, multi-storey, underground
- Private car parks for buildings

Adjusting available capacity

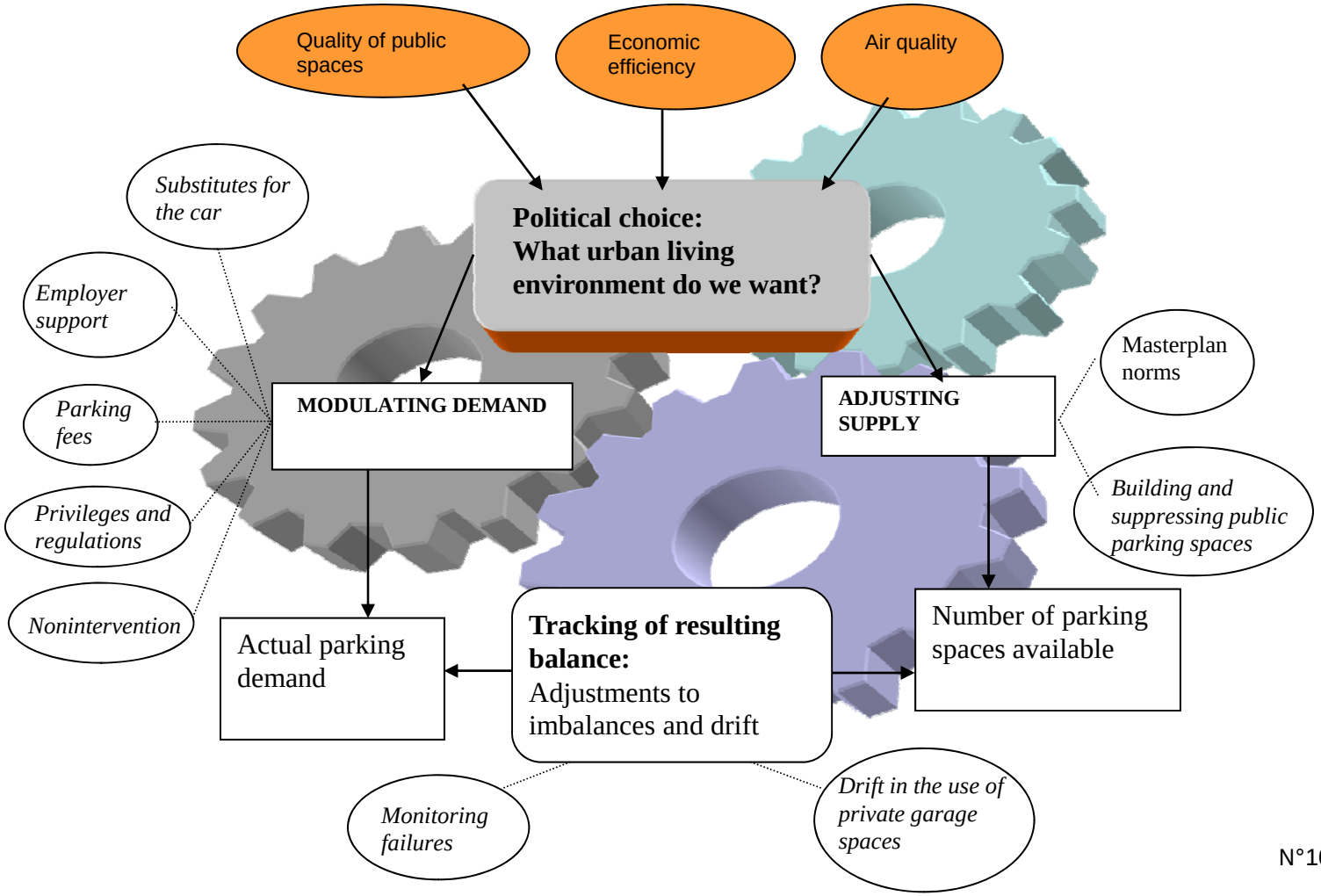
- Urban master plan: norms, **linked solutions**
- Construction of car parks
- Suppression of parking spaces: primarily roadside

Initial Conclusions

- Parking tariffs are a **very effective** way to restrict car traffic:
  - Charges in excess of the sensitivity thresholds of visitors and commuters automatically reduce traffic demand
  - Developing alternative modes is essential alongside high parking charges
  - These charges have no effect on households without car,

- Making visitors and commuters pay for parking does not directly reduce household desire for car ownership

Summary Diagram



Application:
A possible policy for Shanghai

- **Parking: Policy focusing on hubs of activity**
  - High charges for Commuters and Visitors, no free parking
  - Lower charges for Residents
  - Close monitoring of capacity in private garages (mostly restrictive approach)

- **Development of alternative modes:**
  - Objective: Cover most of the growth in travel
  - Methods: Public transport (rail and bus), cycles, car sharing,...

- **Communication campaigns aimed at drivers**
  - Inform, explain, get people on board

Advantages of such a policy

- **Very significant reduction in Investment (billions of euros)**

  Handling peak flows through public transport costs 5 to 10 times less in investment terms than building urban expressways and car parks

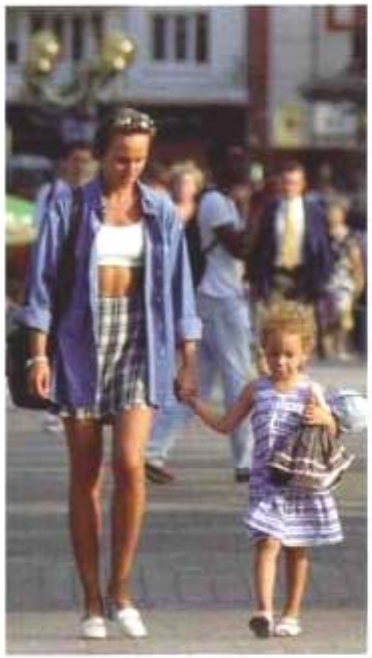
- **Car ownership is not demonised**

  It is car use, not ownership, which is penalised; given the low level of car ownership, price pressure will affect fewer people and not affect at all households who have no car.

- **High profitability of charging for roadside parking**

- **Damage avoidance: greenhouse effect, dust, accidents, time lost..**

- **Job creation: Possibility of traffic wardens to monitor parking**



Thank you for listening

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