Not so fast!

Slowing down for a healthier, wealthier and more sustainable city

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Presentation outline

- The supposed advantages of speed
- How did cities become obsessed with speed and time saving?
- Does speed actually save us time?
- The health impacts of the 'slower' modes
- Practical interventions and cultural shifts
- Based on Paul Tranter and Rodney Tolley: *Slowing city transportation for a healthier, wealthier and more sustainable city*, Elsevier, late 2019: feedback welcome!

The supposed advantages of speed

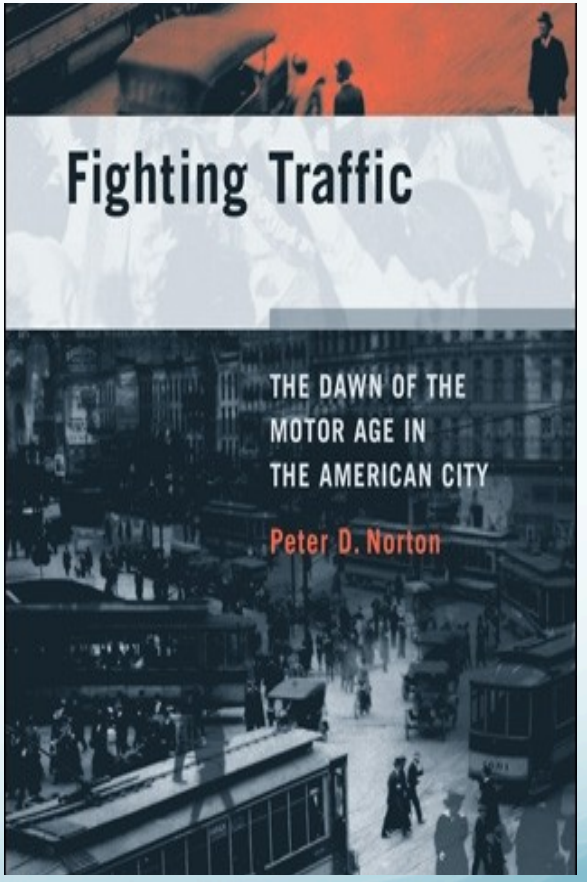
- Speed as ‘progress’:
  - ‘Higher speeds will save time for everyone’
  - ‘Higher speed boosts economic growth’
  - ‘Faster is always better’

How did our society develop an obsession with speed and time saving?

- Initial hostility to street invasion by cars
- Established social values
  - Streets used for games, socialising, trade
- Very real safety hazard
  - US crash fatalities doubled to 26,000 p.a. 1920-28, mainly cars killing people on foot
- Outcry against speed: public, police, judges and media

Motoring lobby: how to market speed ‘advantage’ of cars?

- Organise:
  - “Motordom”
- Fund:
  - Gasoline taxes
- Strategise:
  - Ruthless dismissal of negative views on speed
- “One of the biggest shifts in the status quo …in history” (Norton, 2015)



Motordom: changing the culture

- The dominant story we have of the early 20th Century?
  - We built cities for cars because that was what we preferred
- Motordom had to change the stories about the past and the visions of the future
  - A 'new age', the 'motor age' i.e. the way we have been doing things is outdated and open to question
  - Change the beliefs from the past that streets are for people
  - Persuade city residents that speed was a positive change

Motordom: Re-framing the discourse

- Shift:
  - 'Safety' from a speed problem to an engineering problem
    - Cars have 'right to speed': 'the road is too slow for the car'
  - Blame for crashes from cars to 'reckless' people
    - Parallels: "guns don't kill people, people do"
    - Lobby for driver licencing: reckless drivers could be fined
  - School safety responsibility to AAA
    - Streets re-defined in teaching as 'places for autos'
    - AAA took over all school safety patrols
      - Past: stopped cars so that children could cross
      - New: stopped children until road was clear

Motordom: regulate ‘reckless’ pedestrians’!

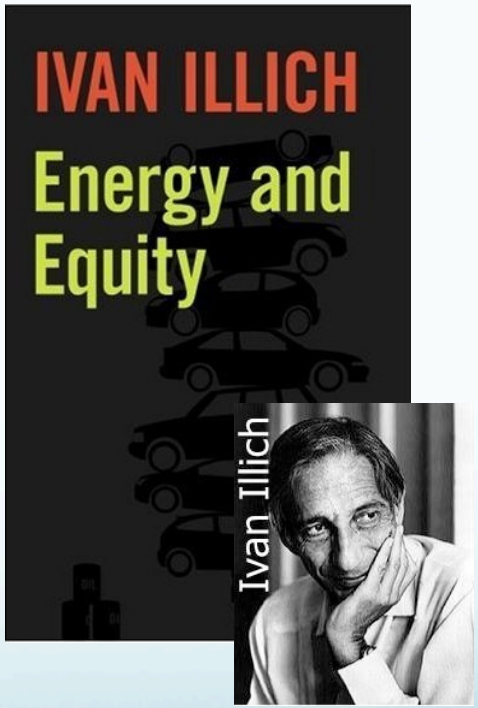
- Crosswalks appeared
- Relentless propaganda and shaming campaigns
  - New term of ridicule: ‘jaywalkers’
    - Signs banning jaywalking in LA paid for by Auto Club
    - Boy Scouts recruited to hand out cards to jaywalkers
- Radical shift in public, media and legal attitudes to street use
  - 1930s “Majority of fatal accidents caused by pedestrians”

Why is the story of motordom important?

- Concerted attempt to change views of speed in the city
  - Culture of speed not due to:
    - Inexorable logic
    - Innate advantages for cities or society
- Lessons?
  - A cultural change in the speed/safety paradigm is feasible

A culture of speed

- Does speed actually help us to save time?
  - Destinations
  - Effective speed and the work of Ivan Illich, 1974



Time ‘savings’ create isolated destinations

- Time savings from faster travel consumed by travelling further
  - Lewis Mumford, *The City in History, 1961:*
    - (Speed) “*denies the possibility of easy meetings and encounters by scattering the fragments of a city at random over a whole region”*
  - Ivan Illich, *Energy and equity*, 1974:
    - *“Beyond a certain speed motorised vehicles create remoteness which only they can shrink. They create distances for all and shrink them for only a few”*
  - The trap of longer travel distances, **required,** for everyone

Time spent travelling per day, by mode

- Car dominated North American cities:
  - Faster travel
  - More time spent each day travelling
- Western European cities (more ‘active travel’)
  - Slower travel
  - Less time spent each day travelling

(Joly,2004)

Gathering resources for speed

- An example: this machine ‘saves you time’ e.g. by fetching a bucket of water and saving you time walking)
- The catch: it takes an hour per day to wind up the spring to power it
- When we calculate the ‘time saved’ by using this machine, should we consider the time spent winding up the spring?

Steampunk Machine by Barney Moss
https://www.flickr.com/photos/barneymoss/6160570510

Increasing the time we must spend on travel

- Winding up the spring: earning money to pay for time-saving devices
- Illich: “The typical American male devotes more than 1,600 hours a year to his car
- And travels 7,500 miles: **less than five miles per hour’’**
- This is “effective speed”, which considers:
  - time driving
  - time spent earning money to pay costs of travel, such as purchase and service costs, fuel, parking, fines, insurance, taxes

Summary: the ‘speed paradox’

- Destinations
  - Increased speed is used to cover more distance
  - Car-dominated cities pay for their speed with longer travel times
- Effective speeds
  - Include time we need to gather resources for travel
- The speed paradox
  - Increasing speed does NOT save us time
  - ‘Slower’ modes can SAVE us time: no need to ‘wind up the spring’

If we used 'slower' modes more, would our cities be healthier?

- A holistic view of 'health'
- Personal and community health
  - Physical health
  - Mental health
  - Frequency and severity of crashes
  - Social capital
- Environmental health
  - Air pollution levels
  - Greenhouse gas emissions
- Economic health for families, business and city administrations

Physical health
Active travel is vital

- "From the health promotion point of view, walking is the most important form of physical activity that should be encouraged to improve public health"

  (Hillsdon and Thorogood, 1995)

- Many and varied mental health benefits too

Environmental health impacts of speed

Air pollution and GHG emissions

- Air pollution
  - 4m deaths p.a. from outdoor pollution (3 times the crash toll)
  - Higher speed produces less emissions per km per vehicle but:
    - Benefits overwhelmed by more travel and total of emissions
    - Sprawl effects: reduced use of other less polluting modes
- GHG emissions
  - Cars in Australia responsible for 50% of GHGs from transport
    - More fuel-efficient vehicles but more of them, bigger and faster
    - Sprawl: loss of forests, more food miles and more consumerism in suburbs
    - Overall, GHGs the most damaging environmental health impact of high speed city transport

Economic health
The impact of slowing on individuals and families

- Reduced costs of living car-free or car-light
- Long-term equity gains of the slow neighbourhood
  - 'High car-needs/ low housing cost' (suburbs)
  - 'High housing cost/ low car-need' (inner city/TOD)
  - Factors:
    - Vehicles depreciate, housing appreciates
    - TOD/inner city: higher initial value and land value growth
  - Consequences (Litman, 2017)
    - *"After one decade the TOD home gains an additional $63,789 in equity, and nearly $450k after 25 years...*

      "The owners could retire at age 65, with around $1m dollars more than the owners of the urban fringe house"

Economic health
Impacts of slowing on retailing

- People on foot spend more than drivers
  - Visit local centres more often than drivers and spend more money
  - Disproportionately add to vibrancy: the turbocharger effect
  - Re-allocating parking space attracts more shoppers and people
- Better quality of slow travel environments increases how far shoppers (and public transport users) will walk/bike

Economic health

Impacts of slowing on city productivity

- Foot Traffic Ahead: Leinburger and Rodriguez, 2016
  - The 3 most walkable places in the US have GDP 52% higher than 3 least walkable
  - *"For perhaps the first time in 60 years, walkable urban places in all 30 of the largest metros in the USA are gaining market share over their drivable suburban competition"*
- Auckland CBD studies 2017
  - Strong relationship between productivity and connectivity on foot
  - Walkable streets: a platform for business and the spread of knowledge

Practical action for slowing the city: some examples

- Reducing the speed of motorised traffic
  - e.g. area-wide low speed zones
- Traffic management approaches
  - e.g. promoting the slower modes
- Reallocating road capacity
  - e.g. prioritising slow and sustainable choices
- Land-use and planning changes
  - e.g. zoning and codes

Practical action example
Reducing the speed of motorised traffic

- Growing acceptance of lower urban speed limits
- Spread of area-wide 30km/h zones in Europe
  - '20's Plenty for Us', UK: 13 million people live in cities with a default 20 mph limit
  - Munich, Berlin, Vienna: traffic calmed about 80% of their road networks
- Graz (1992) as pioneer for 30 km/h default across entire city
  - Paris (2016) now enacting this
  - Spain country-wide 30 km/h limits on most city streets
- Global spread of default low speeds
  - Boston; Portland; Central Christchurch 30 km/h (2016)

Practical action example
Traffic management: promoting 'slow' modes

- How many of you live in a place with a cycling strategy?
- How many of you live in a place with a walking strategy?
- *"Until you solve that problem, the position of the walker will not improve'*

(Ole Thorsson, International Federation of Pedestrians, 2015)

Practical action example: Reallocating road capacity

- Global Street Design Guide, NACTO, 2016
  - Sets a new global baseline for designing urban streets
  - The first worldwide standard for redesigning city streets to prioritise slow travel and sustainable mobility

http://nacto.org/global-street-design-guide

Cultural shifts
What do we want from the city?

- The goal: accessibility or mobility?
- The difference between the two concepts is simple:
  - **Mobility is** *how far you can go* **in a given amount of time**.
  - **Accessibility is** *how much you can get to* **in that time.**
- Accessibility matters most – to jobs, friends and daily needs
- Almost universally, the most accessibility-rich locations are places where you don't move very fast
- Minneapolis city planner Paul Mogush:

  "Put the stuff closer together so it's easier to get to the stuff."

Cultural shifts
The world wide renaissance of 'slow' travel

- Rediscovering the importance of SLOW
  - Health, physical and mental
  - Reducing road danger
  - Cleaner air, less GHGs
  - Economic benefits
  - Social and community: connection and resilience
- Learning how to deliver
  - Professional skills
    - Measuring: Walkscore, GIS, Int. Walking Data Standard
    - Infrastructure: density, healthy design, placemaking, networks
  - Political leadership
  - Public awareness
    - Advocacy movements
    - Community engagement
  - Partnerships, especially with health

Motordom?

- Cities throughout the world are learning that speed is not the magic solution that motordom promised

- Motordom claimed: "*It's a new age*"
  - *"The ways we have been doing things in city transport for the last 100 years are now outdated and open to question"*
- Proponents of slower, healthier, wealthier cities can claim the same thing: "*It's a new age*"
  - *"The ways we have been doing things in city transport for the last 100 years are now outdated and open to question"*

The healthier, wealthier and more sustainable city

- Successful cities are re-discovering ‘slower’ transport

“The 20th Century was about getting around. The 21st Century will be about staying in a place worth staying in”

(James Howard Kunstler)

So get on with it!

- *”We are realising that if you have people walk and bicycle more, you have a more lively, more liveable, more attractive, more safe, more sustainable and more healthy city. And what are you waiting for?”*

Jan Gehl

Ask your children…What kind of place do you want to live in?

Walkers and cyclists are the indicator species for quality of life in our cities

Thank you!

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