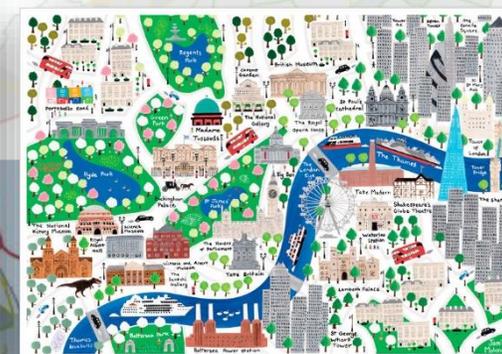


# Challenges for Accessibility Planning and Research

in the context of Sustainable Mobility

*Cecília Silva and Anders Larsson*



# Challenges

## Lack of Implementation

## Conceptual Ambiguity

What Accessibility?

How much Accessibility?

Usability limitations

Ill conception

Accessibility needs

Usefulness limitations

Lack of appropriation

Sufficient Accessibility

Insubstantial role

Low adherence  
to real-life concerns

Standardization

Partial Implementation

Loss of meaning of  
Accessibility

Appropriateness to  
context of use

## Lack of Implementation

Usability limitations

Usefulness limitations

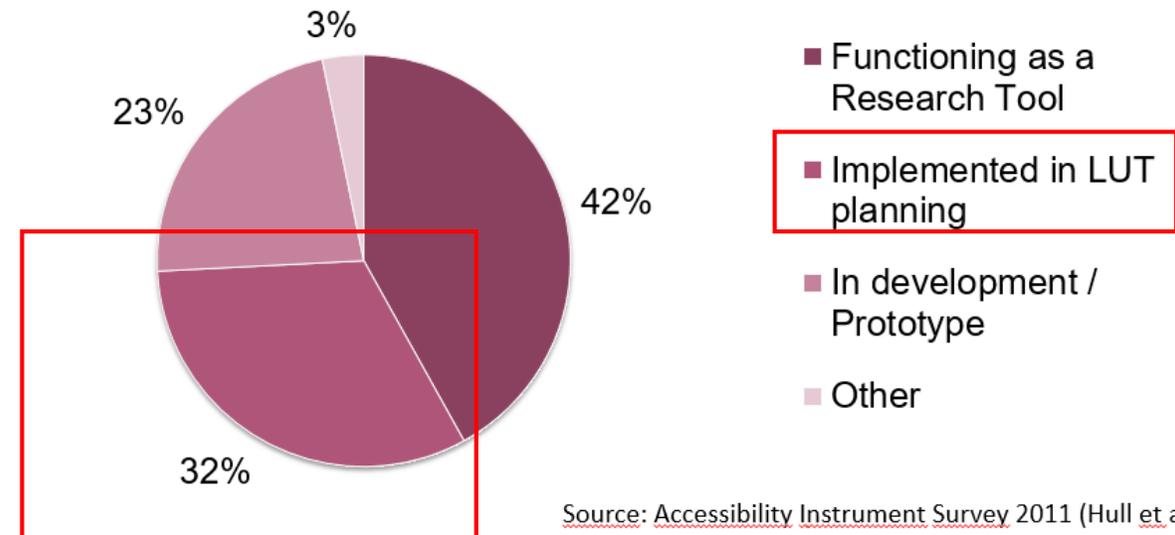
Insubstantial role

### The implementation Gap (1)



- Research has produced numerous PSS
- However, these are scarcely used in practice

#### Instrument Status



Source: [Accessibility Instrument Survey 2011](#) (Hull et al., 2012)

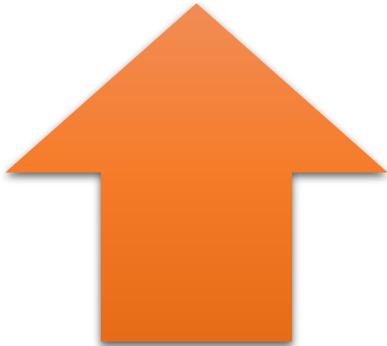
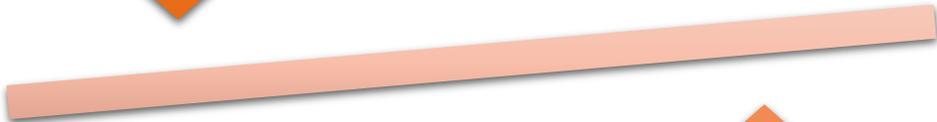
Lack of Implementation

Usability limitations

Usefulness limitations

Insubstantial role

Planning Practitioners



Rigour

Relevance



Supply

Researchers & Consultants

# Lack of Implementation

Usability limitations

Evidence on how to improve Usability

## GENERAL LITERATURE

te Brömmelstroet, (2017)

- simplification of the underlying models,
- increasing transparency,
- increasing flexibility

## LITERATURE ON ACCESSIBILITY INSTRUMENTS

Silva et al. (2017)

- real-time interaction capabilities
- communicative value

Papa et al., 2017

The importance of interaction with practitioners to improved developers' awareness

## Lack of Implementation

Usability limitations

Usefulness limitations

Insubstantial role

## LITERATURE ON ACCESSIBILITY INSTRUMENTS

Silva et al. (2017)

- usefulness was in general positively regarded by practitioners

## Lack of Implementation

Usability limitations

Usefulness limitations

Insubstantial role

## LITERATURE ON ACCESSIBILITY INSTRUMENTS

Silva et al. (2017)

16 local workshops with planning practitioners

- limited understanding of the accessibility concept
- limited evidence found of real accessibility-based policies
- limited evidence found of integrated approaches to land use and transport planning

accessibility is often misunderstood, poorly defined and measured (Geurs and Wee, 2004)

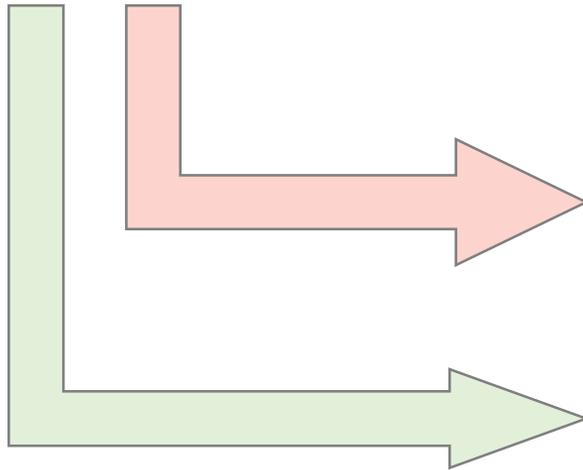
it is even more so in practice (te Brömmelstroet, 2016) where it has become fashion

## Lack of Implementation

Usability limitations

Usefulness limitations

Insubstantial role



- Lack of implementation
- Mis-implementation
- Disregarding accessibility concerns

- institutionalization
- Engagement between research and practice

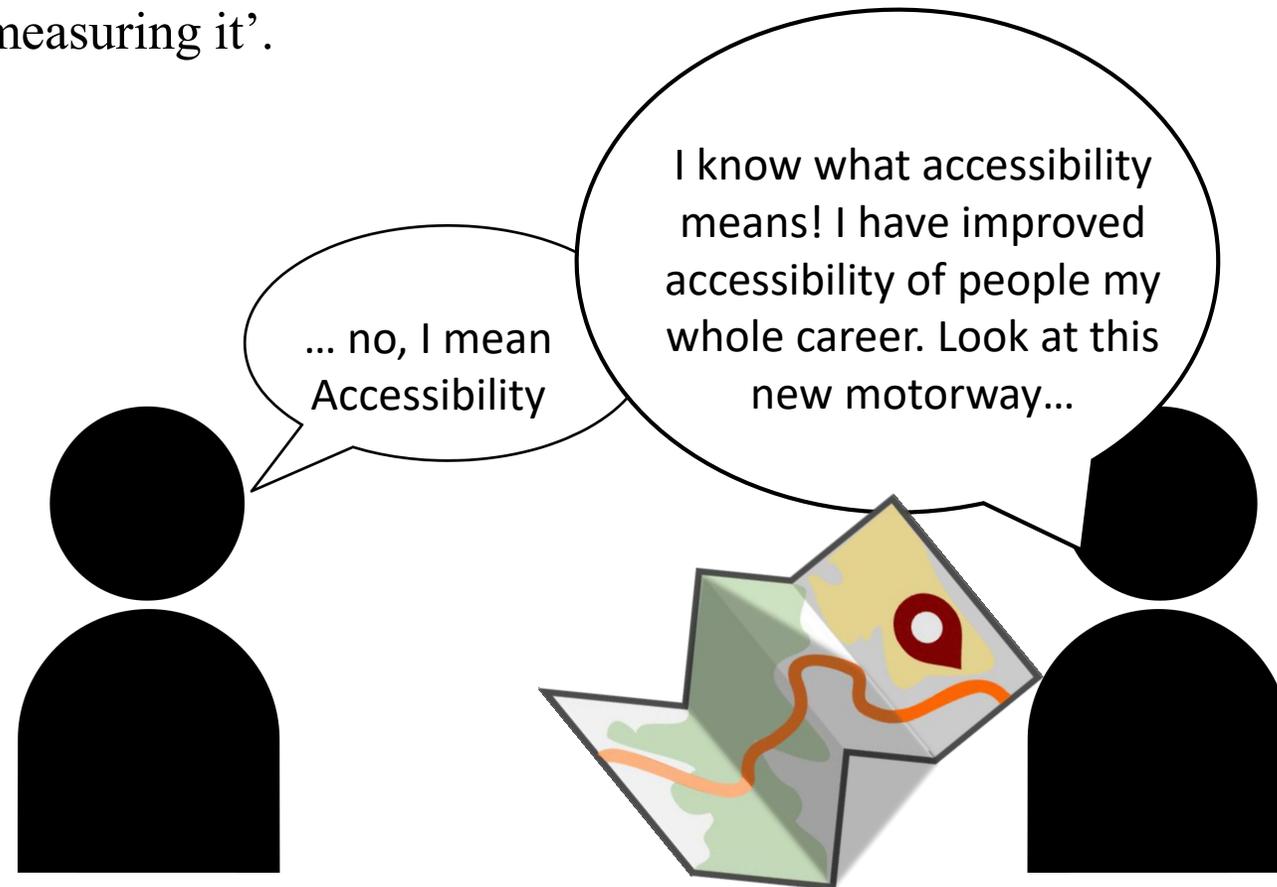
# Conceptual Ambiguity

## What Accessibility?

Ill conception

Gould (1969; 64)

Accessibility is ‘a slippery notion [...] one of those common terms that everyone uses until faced with the problem of defining and measuring it’.



# Conceptual Ambiguity

What Accessibility?

Ill conception

**Real Demand**

Accessibility

**Derived Demand**

Mobility

Proximity

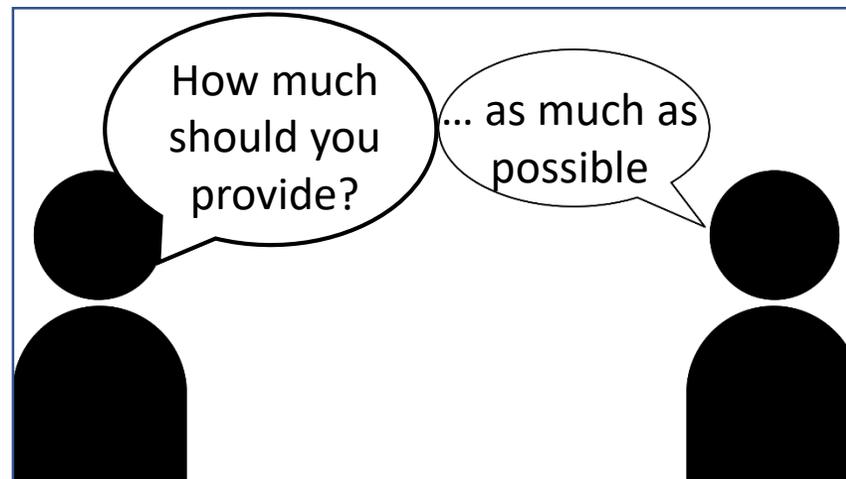
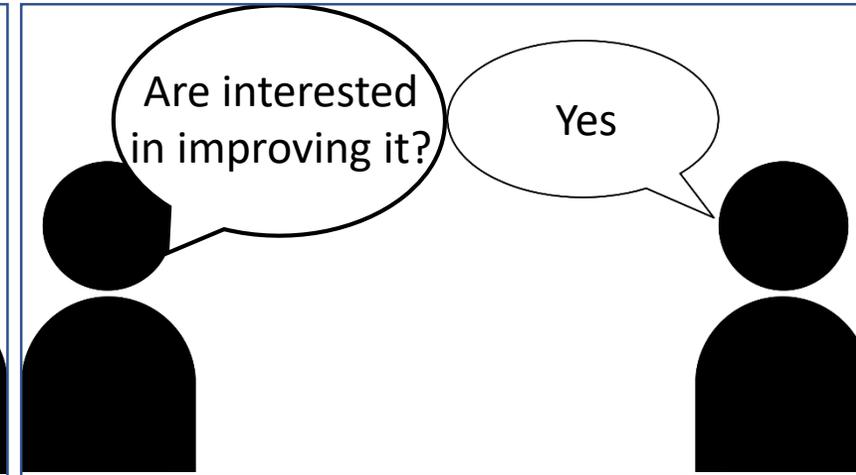
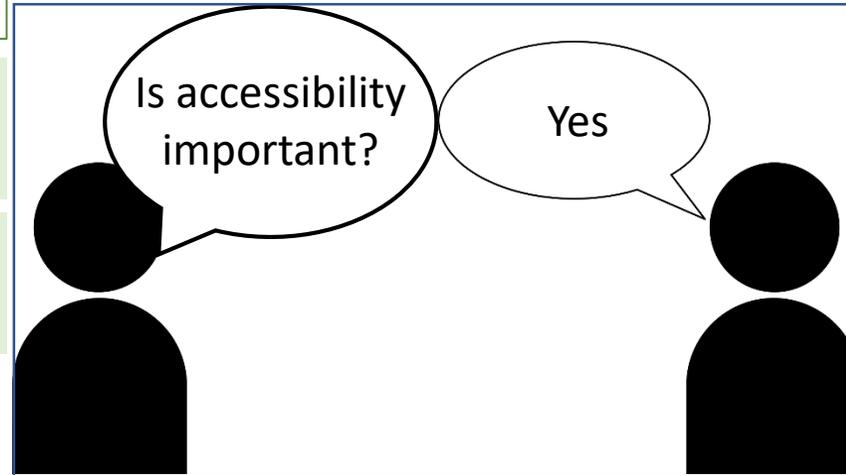
ends  
means

# Conceptual Ambiguity

## What Accessibility?

Ill conception

Lack of appropriation



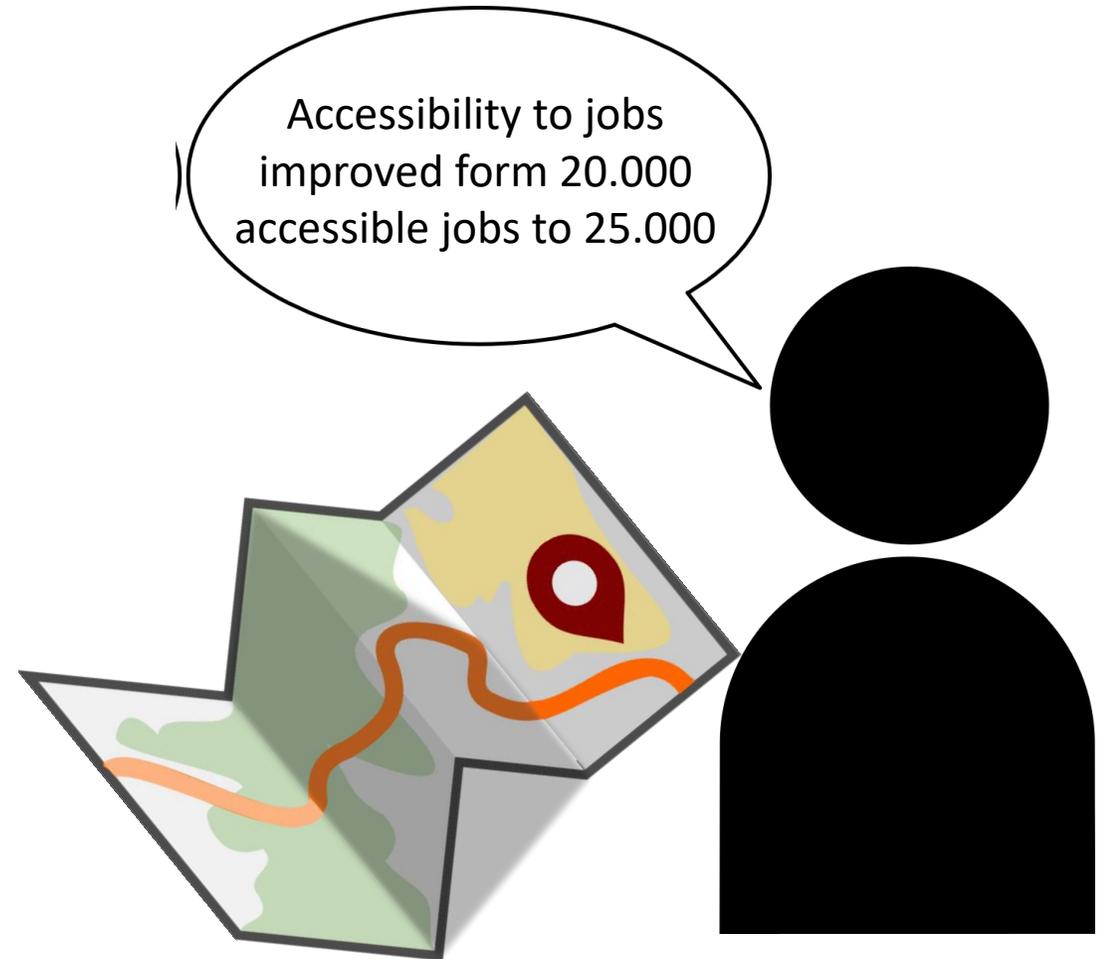
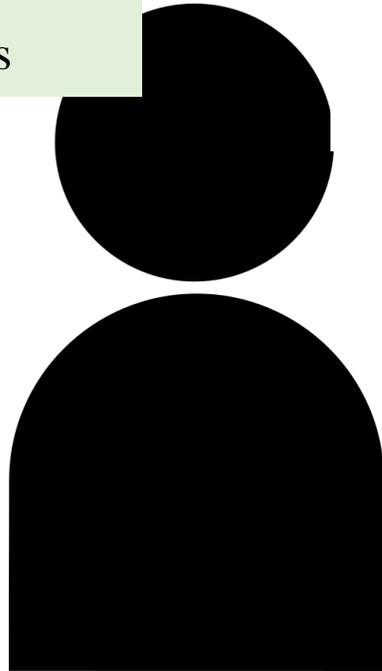
# Conceptual Ambiguity

What Accessibility?

Ill conception

Lack of appropriation

Low adherence  
to real-life concerns



# Conceptual Ambiguity

What Accessibility?

Ill conception

Lack of appropriation

Low adherence  
to real-life concerns

- Un-reflected use
- Mis-implementation
- Continue on the 'predict and provide' paradigm

- Develop understanding - institutionalization
- Regulators / Observers (ex.: EU, ITF, etc.) needed to ensure understanding is valued in institutionalization
- Meaningful measures

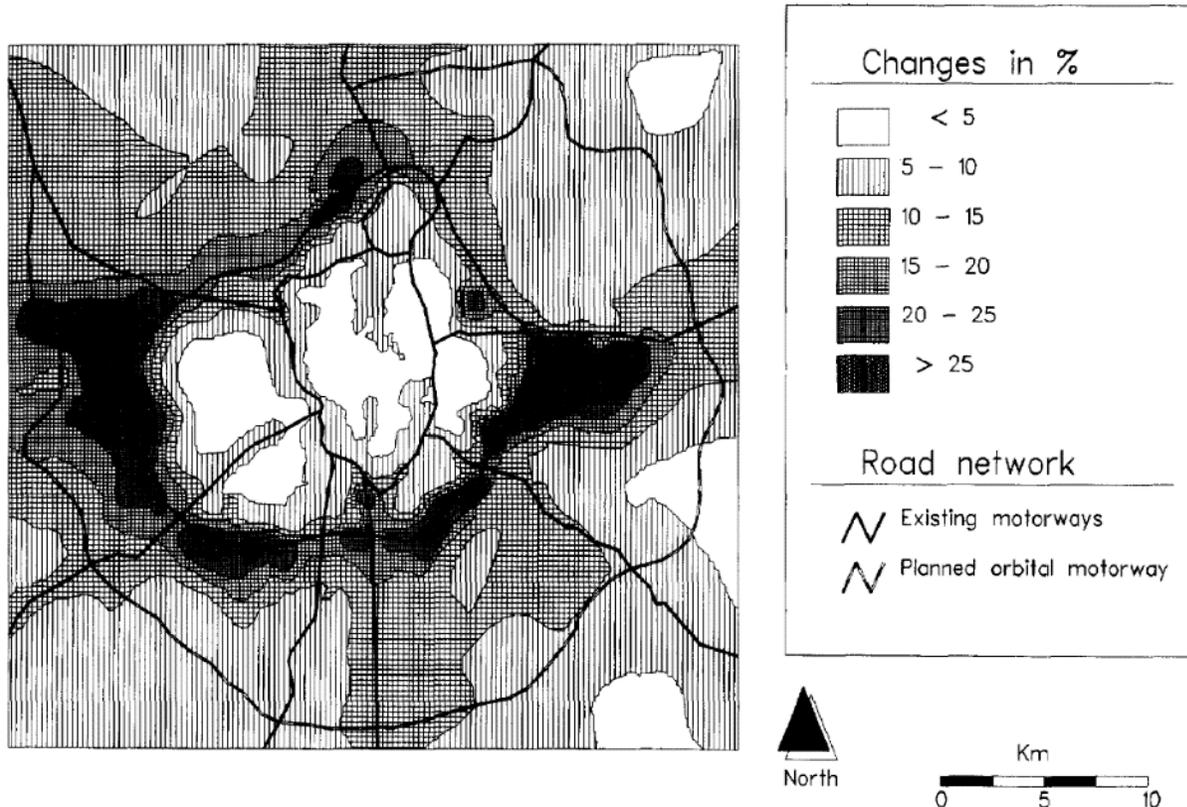
# Conceptual Ambiguity

What Accessibility?

Partial Implementation

**Accessibility assessment only by one single mode (absolute)**  
A problem if sustainable mobility is a concern

## CHANGES IN ACCESSIBILITY TO EMPLOYMENT



What will happen to the relative competitiveness of PT?  
What will happen to local accessibility (local activities)?  
...

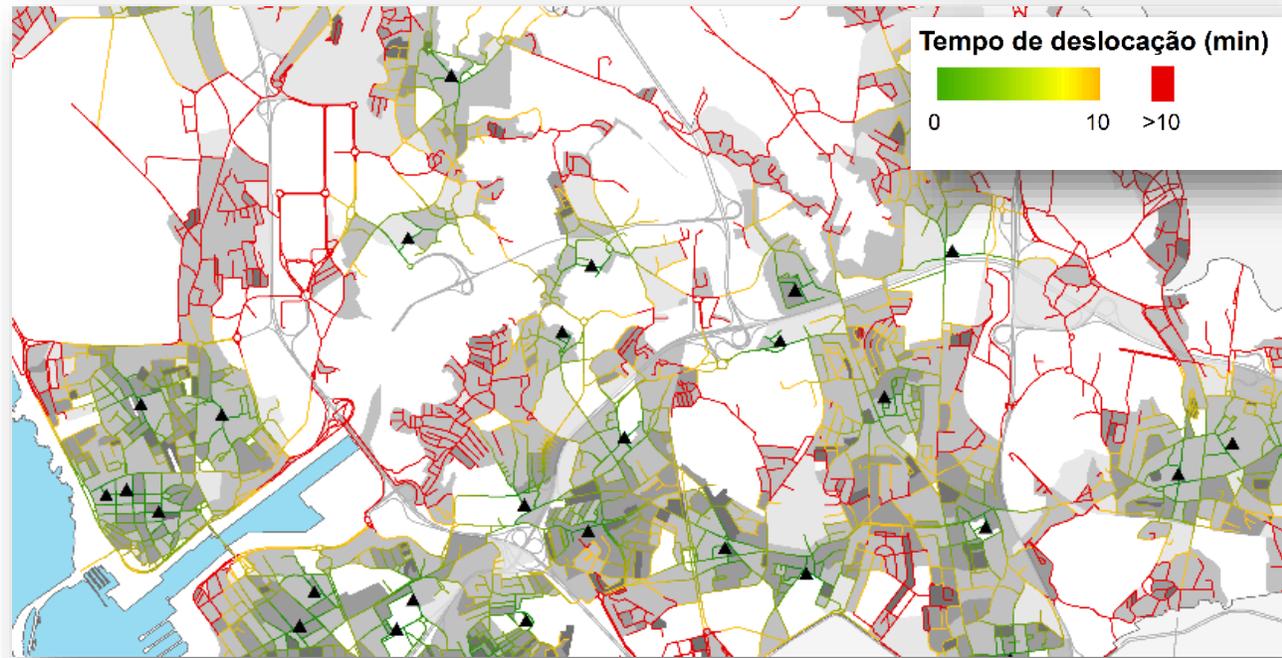
## Conceptual Ambiguity

What Accessibility?

Partial Implementation

**Accessibility assessment only at the regional level**

A problem if sustainable urban development and quality of urban living is a concern

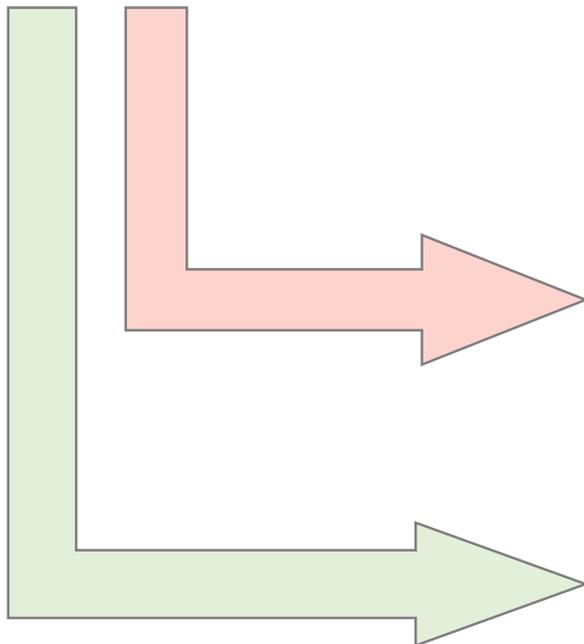


**This map led to the discussion of the location policy for primary schools**

# Conceptual Ambiguity

What Accessibility?

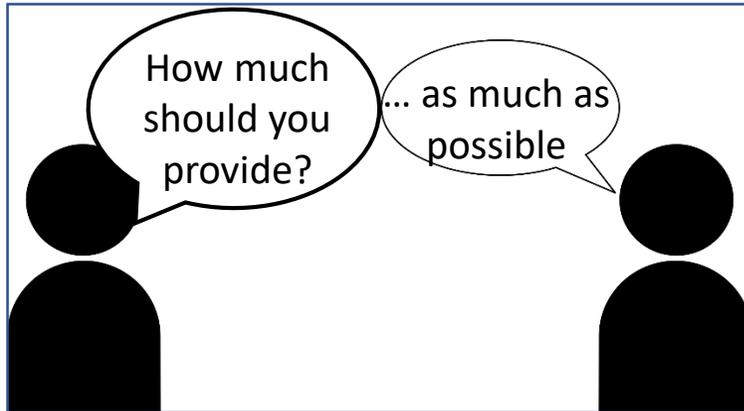
Partial Implementation



- Produce biased understandings of accessibility
- Continue on the ‘predict and provide’ paradigm (accessibility measures as the new 4 step-model)

- Relative accessibility assessment
- Local accessibility assessment in addition to regional ones
- Public discussion of what accessibility (regional and local)

# Conceptual Ambiguity

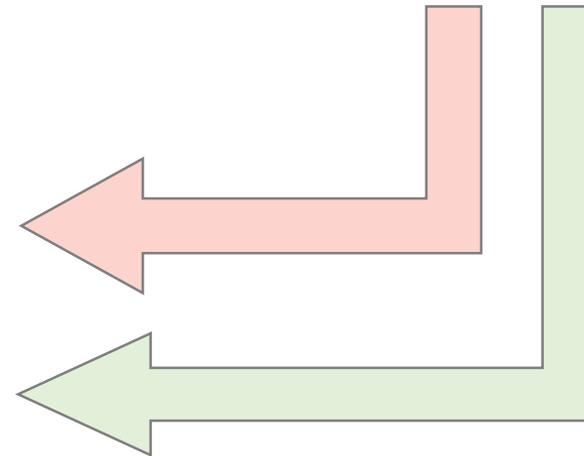


How much Accessibility?

Identifying Accessibility needs

Defining sufficient Accessibility

- Adopting a more-is-better logic (as with mobility)
- Continue on the 'predict and provide' paradigm
- Institutionalization
- Building standards



# Conceptual Ambiguity

How much Accessibility?

Standardization

Loss of meaning of  
Accessibility

- Number crunching practice
- Un-reflected uses

- Building standards => Focus on the **local meaning**
- Building standards => The **process** of standard building

- Standards should be defined for each location, transport mode, scale, social groups, etc. (Silva and Larson, forthcoming).

Appropriateness to  
context of use

Lack of Implementation

Conceptual Ambiguity

What Accessibility?

How much Accessibility?

## Challenges / Approaches

Institutionalization

Define thresholds through  
collaborative process

Context sensitive by location, transport mode, scale,  
social groups, etc.

## Suggestions for a Research and Policy Agenda

### Research Agenda

On meaning of accessibility (several perspectives) including the underlying value chain and priorities.

On the definition and processes of identifying accessibility thresholds

### Policy Agenda

Institutionalization of accessibility-based planning

Political and public debate of what accessibility we need and would be enough

# Challenges for Accessibility Planning and Research

in the context of Sustainable Mobility

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