Challenges for Accessibility Planning and Research
in the context of Sustainable Mobility

Cecilia Silva and Anders Larsson
## Challenges

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<td>Appropriateness to context of use</td>
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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

- Functioning as a Research Tool
- Implemented in LUT planning
- In development / Prototype
- Other

Source: Accessibility Instrument Survey 2011 (Hull et al., 2012)
Lack of Implementation

- Usability limitations
- Usefulness limitations
- Insubstantial role

Planning Practitioners

Relevance

Rigour

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

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**LITERATURE ON ACCESSIBILITY INSTRUMENTS**

Silva et al. (2017)

- usefulness was in general positively regarded by practitioners
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) were 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’.

I know what accessibility means! I have improved accessibility of people my whole career. Look at this new motorway…

… no, I mean Accessibility
Conceptual Ambiguity

What Accessibility?

Ill conception

Accessibility

Real Demand

Derived Demand

Mobility

Proximity
Conceptual Ambiguity

What Accessibility?
- Ill conception
- Lack of appropriation

Is accessibility important? Yes
Are interested in improving it? Yes
How much should you provide? ...as much as possible
Conceptual Ambiguity

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Accessibility to jobs improved from 20,000 accessible jobs to 25,000
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?

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

Partial Implementation

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

How much should you provide? ... as much as possible
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).
Lack of Implementation

Conceptual Ambiguity

What Accessibility? | How much Accessibility?

Institutionalization

Challenges / Approaches

Define thresholds through collaborative process

Context sensitive by location, transport mode, scale, social groups, etc.
Suggestions for a Research and Policy Agenda

<table>
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<th>Research Agenda</th>
<th>Policy Agenda</th>
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<tr>
<td>On meaning of accessibility (several perspectives) including the underlying value chain and priorities.</td>
<td>Institutionalization of accessibility-based planning</td>
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<tr>
<td>On the definition and processes of identifying accessibility thresholds</td>
<td>Political and public debate of what accessibility we need and would be enough</td>
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