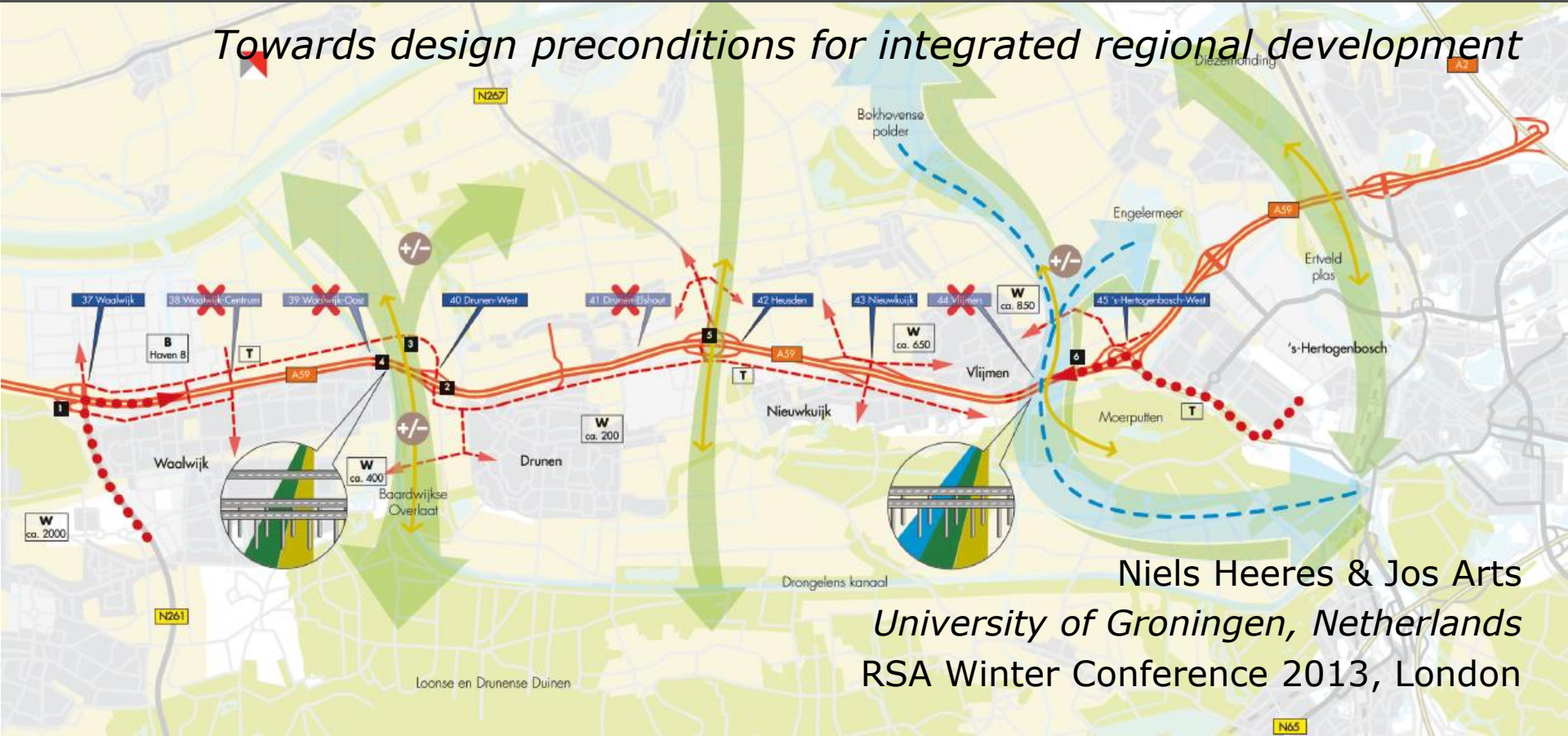




Overcoming Complexities on the Interface of Infrastructure and Land Use

Towards design preconditions for integrated regional development



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RSA Winter Conference 2013, London



Aims and outline

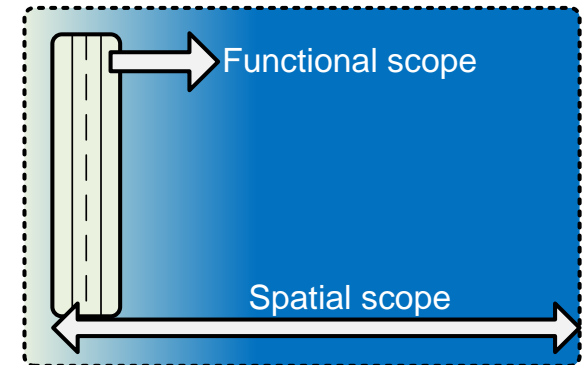
1. Understanding the role of regional design in integrated infrastructure development
 - a) Complexity issues on the interface of road infrastructure and other land use functions
 - b) Perceptions of regional development: 'territorial' vs. 'relational' spatial understandings
 - c) Role of regional designs and designing

2. Testing in practice
 - a) Examples (preliminary findings)
 - b) Fieldwork proposal



Differentiation in planning infra

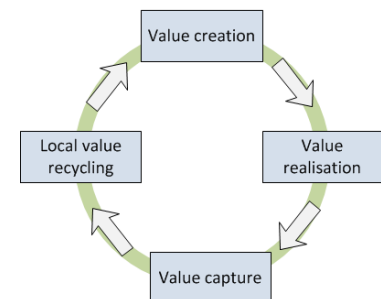
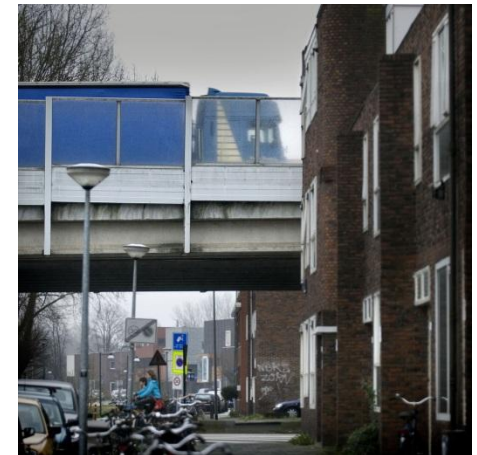
- > Differentiation of interests
 - Political dynamics
 - Decentralization, deregulation, etc.
 - Increasing amount of actors and interests involved
 - Variations in functional/spatial scopes
 - Narrow vs broad
- > Different frames of reference
 - Technically and socially informed perspectives on planning issues co-exist
 - Planning for infrastructure/planning for regions and places





Interdependence in planning infra

- > Interdependence of infrastructure networks and other land use interests
 - Negative and positive effects
- > Contradicting interests: “co-costs”
 - Proximity: Scarcity of space
 - Nuisance and barriers
 - (environmental) regulation
- > Complementary interests: “co-benefits”
 - Synergies and faster projects
 - Smart combinations of realization, exploitation, maintenance and operation
 - Value creation, capture, recycling





Alternative strategies infra development

- > Traditional planning strategies lead to unsatisfactory outcomes
 - Overruns in cost, time, lacking quality in infra developments
 - Simple and dynamic/complex situations
 - Expansion of range of planning strategies

- > Scope (range)
 - Single-fixed goals (simple)
 - Multiple composite goals (dynamic)

- > Governance (range)
 - Hierarchical coordination (simple)
 - Participative interaction (dynamic)



Inclusive strategies for regional development

- › Integration of infrastructure and other land use functions into coherent strategies
 - Dual complexity
 - High differentiation
 - High interdependence

- › Addressing scope & governance of planning
 - Multiple-composite goals
 - Governance based on interaction and participation

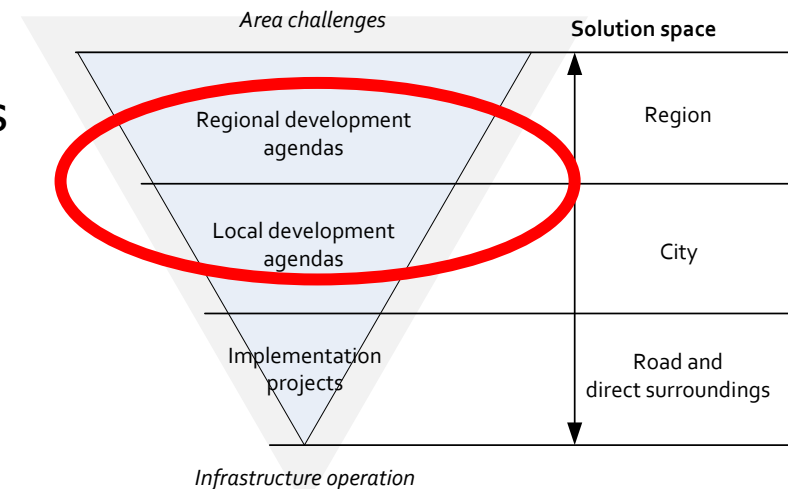
- › Addition to range of available planning strategies



Inclusive strategies (examples)

- > The Netherlands
 - More coherence infrastructure and other functions (policy)
- > International
 - Regional: West Swedish Package (Sweden)
 - Local: Infrastruktur in der Landschaft (Germany)

- > What does it lead to?
 - Variation across planning phases
 - Strategic agendas
 - Strategic projects
 - Planning for implementation
- > Coherent area-oriented strategies

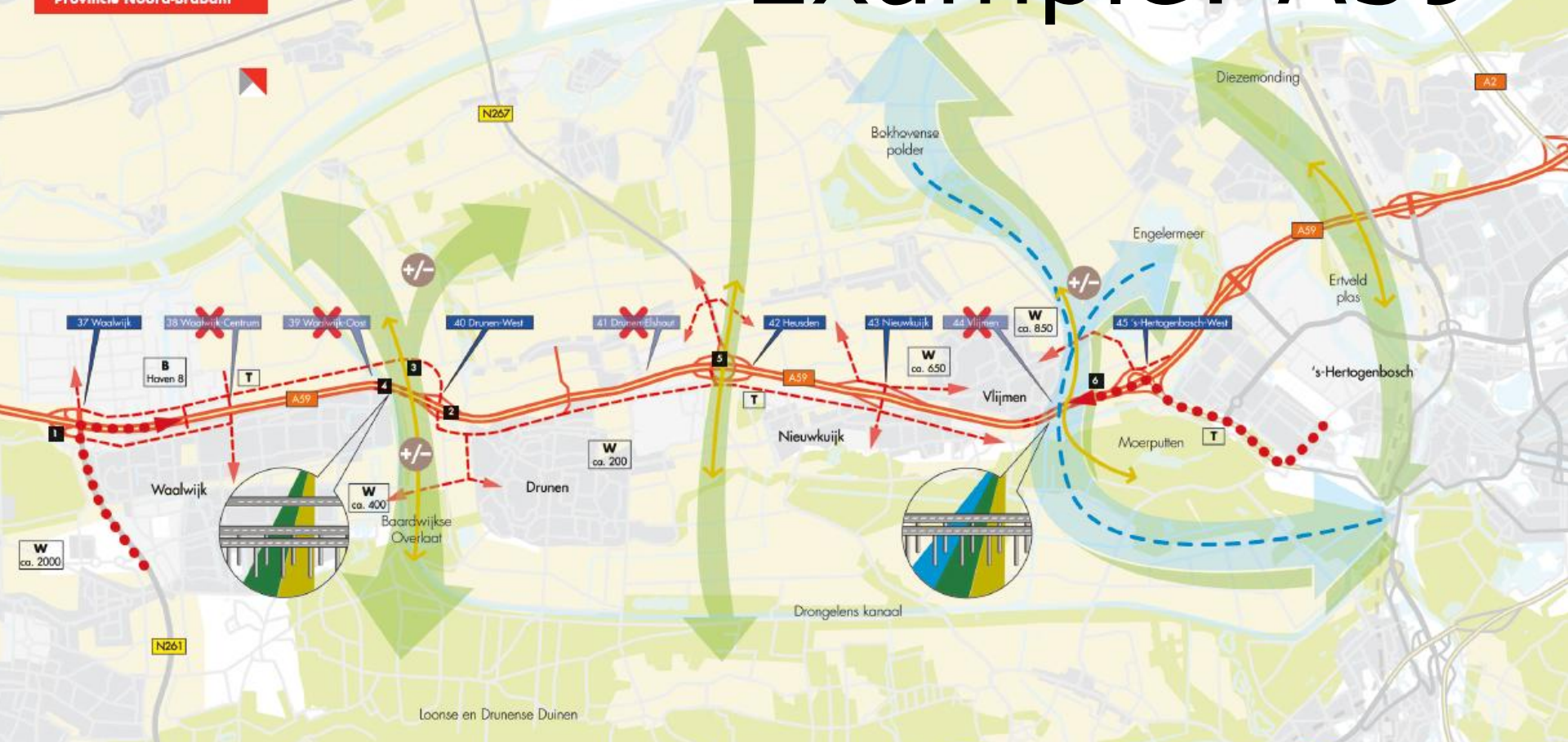


Businesscase gebiedsontwikkeling Oostelijke Langstraat

Van botsende naar verweven corridors

Provincie Noord-Brabant

Example: A59



N.B.: gestelde lijnen en vlakken zijn bedoeld om de principes van het project weer te geven en zijn niet indicatief van aard.

Onderzoeksthema's business case		Huidige situatie en autonome ontwikkeling	
	Verkeer		Ecologische hoofdruimte
	Hoogwaardig openbaar vervoer		Agarische hoofdruimte
	Landschaps ecologische zone		Woongebied
	Landbouw: compensatie oppervlakte		Industriegebied
	Recreatie		Wegen
	Hoogwaardige bescherming		Woningbouw oppervlakte
			Bekijkgebied
			Tandem



Example: Highway A59 and surroundings

- › Multiple challenges:
 - Accessibility: reconstruction of highway and underlying network
 - Safety: river floods
 - Economic viability
 - Housing projects
 - Recreation

- › Actor coalition
 - 21 public and private stakeholders
 - Province, municipalities, business community, NGO's
 - Joint plan-making and investment
 - Voluntary taxation → value recycling
 - Except national highways agency (unsolicited proposal)
 - Lack of funds remains



Different perceptions (a)

- > Geographical debate
 - What are space, place and scale?

- > Two major ideas

a) Territorial understanding of space

- Spaces as a mosaic or as geo-political containers

b) Relational understanding of space (Harvey, Massey, Thrift)

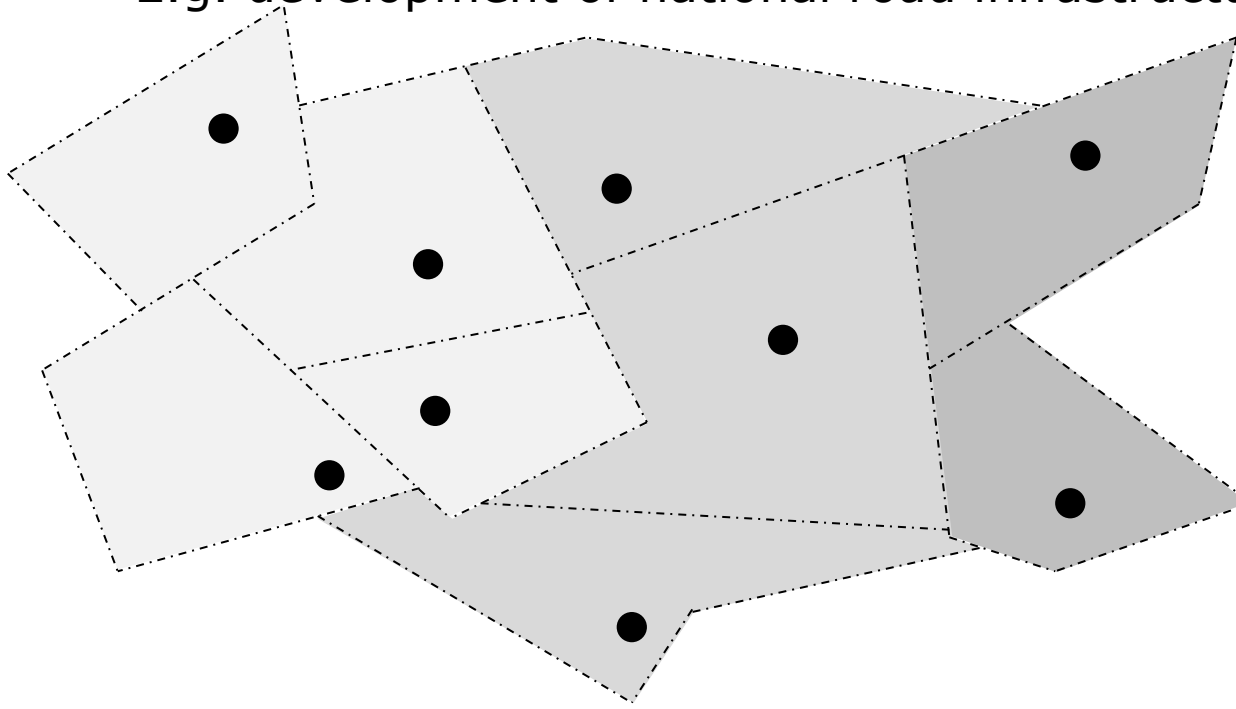
- Places as nodes in webs of relations
- Place derive meaning from relations
- Post-structuralism





Different perceptions (b)

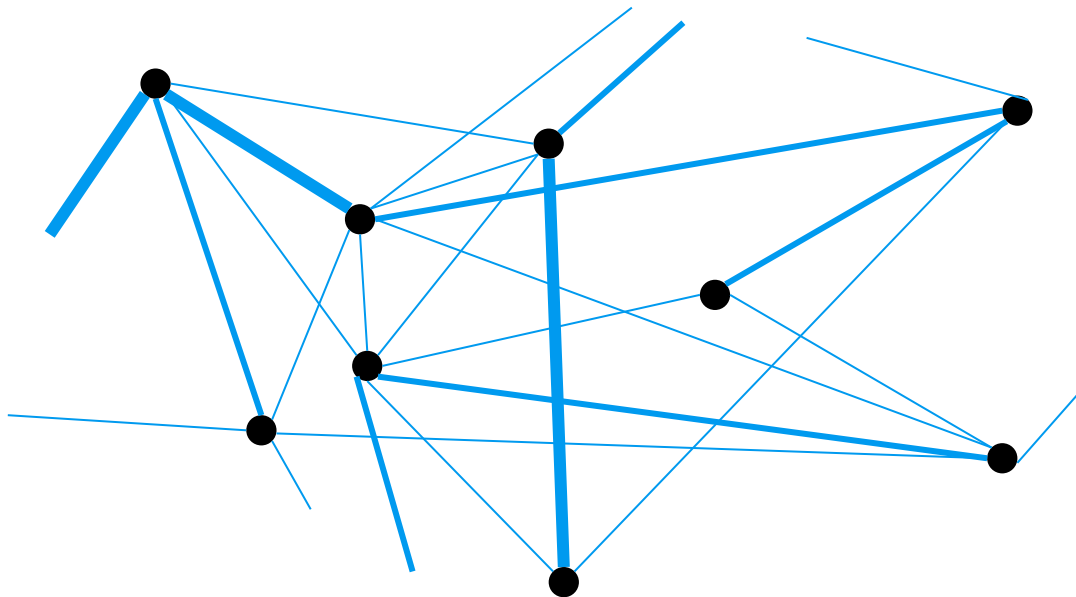
- › Territorial understanding
 - Space as organizational containers
 - Multiple governmental levels
 - E.g. development of national road infrastructure networks





Different perceptions (c)

- › Relational understanding
 - Places as nodes in webs of relations
 - Space as framework of nodes and connections





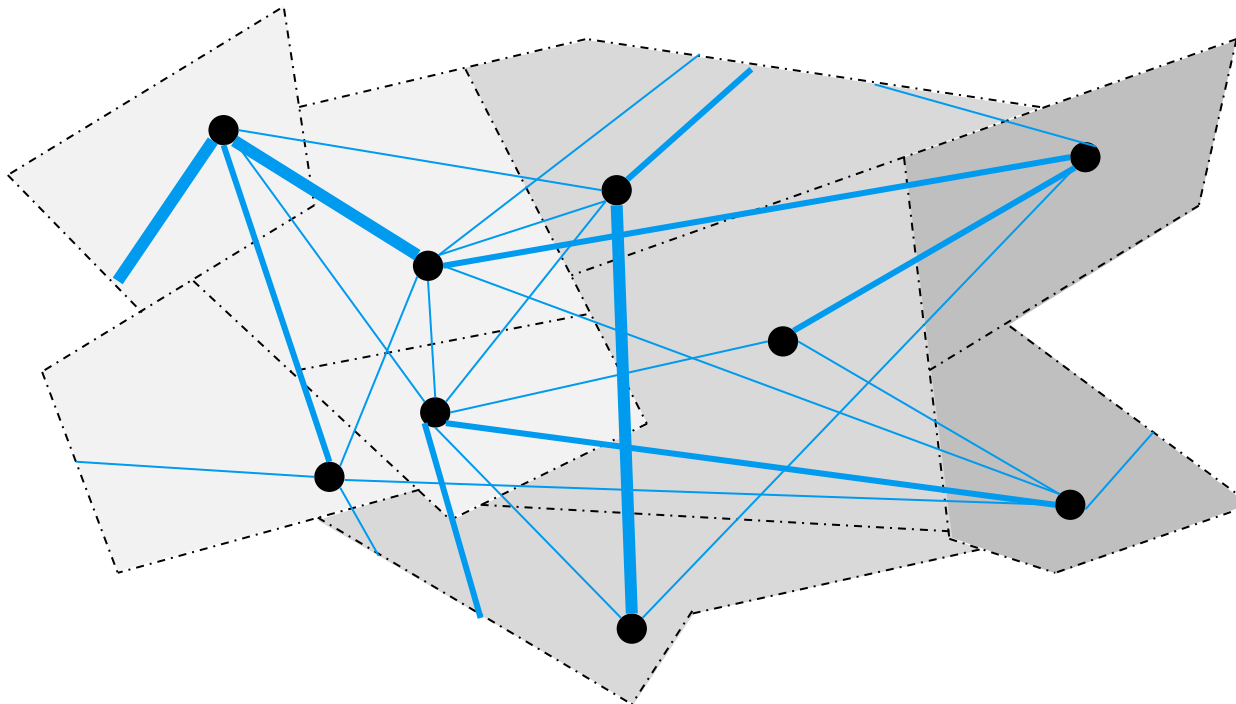
Different perceptions (d)

- > Relation to inclusive planning strategies and creation of synergies
 - Territorial view → differentiated institutions
 - Relational view → interdependent reality of planning issues
- > Involved actors involved embedded in territorial and/or relational spatial frames
 - Following from institutional framework and planning perspectives
 - Technically and socially informed referential frames on planning
 - Collaborative problem solving difficult



Different perceptions (e)

- › Combined territorial and relational understanding
 - Multiple levels (Bertolini)
 - Nodes, connections and boundaries (Oswald and Baccini)





Combined perspectives

- > Asks for a reframing of perceptions (Van den Brink)
 1. Understanding other frames
 2. Frame adjustment
 3. Creation of joint frames

- > Reframing through design
 - *Collaborative regional designs can be "facilitators that help make decisions in the complex systems that regional communities constitute"* (Van Dijk et al.)
 - *"Bridging the gap between contested visions"* (De Jonge)



Reframing through design

- > Designs and designing
 - A connecting activity
 - Leading to an integrative product

- > A means for reframing spatial understandings (Hajer et al.)
 1. Enhancing a shared sense of area quality
 2. Involving formal and informal actors
 3. Enlarging the capacity to learn about different perceptions

- > Institutional conditions for reframing in the Netherlands
 - Regional agendas/National advisor (architects)/Quality teams/Guidance and procedures



Research agenda

- › Reframing?
 - Design about what?
 - Who's designing?

- › Critical conditions for spatial design to facilitate the creation of shared added value in integrated approaches to infrastructure and land use issues

- › Exploring design on the interface of infrastructure and other land functions
 - What kind of understanding does it express?

- › Exploring interactive processes in design?
 - Has anything been reframed and to what extent?



Utrecht Ring Road (north)

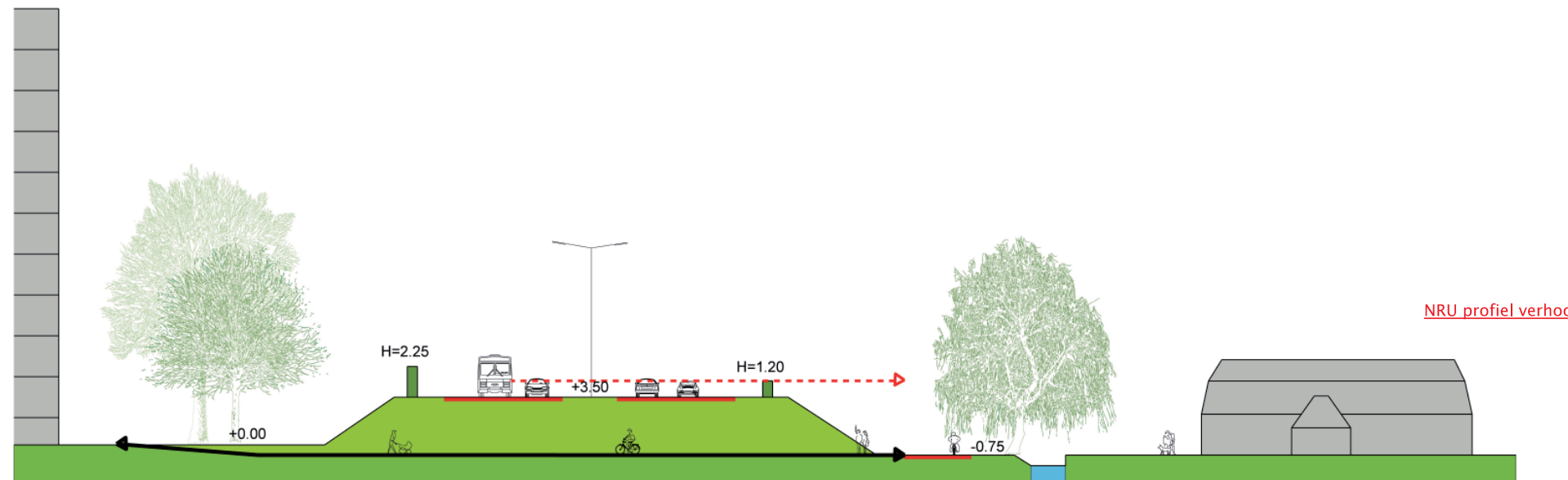
- › Northern ring road is a barrier between deprived neighbourhood and landscape amenities on city edge
 - Reconnection needed for revitalization
 - Accessibility problem of the ring road





Initial solution

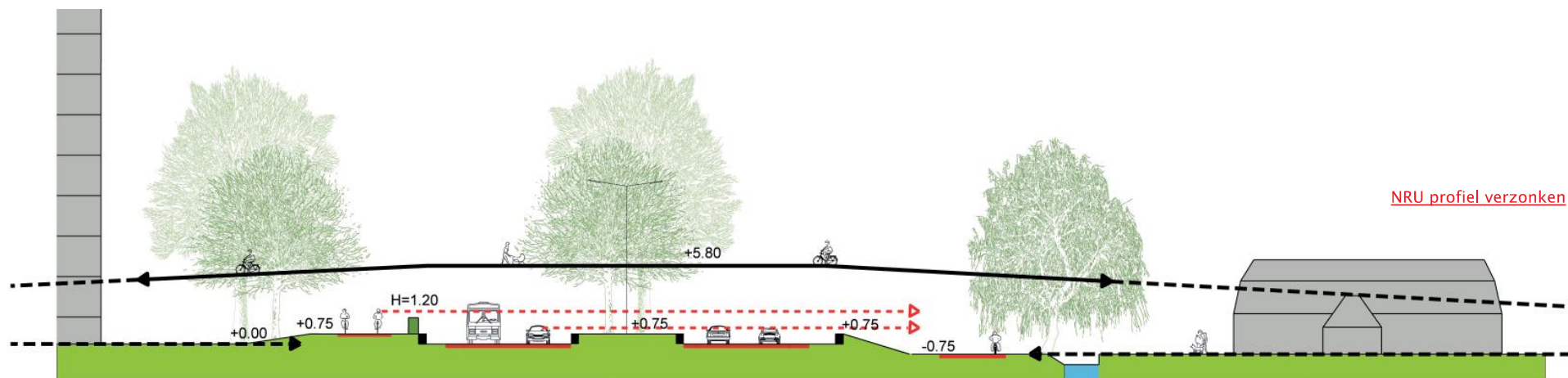
- > Technical optimization of infrastructure network
- > Visual barriers remains
- > Social safety issues





Preferred solution

- > Much more relational view
- > Physical and visual barrier reduced





Utrecht Ring Road (east)

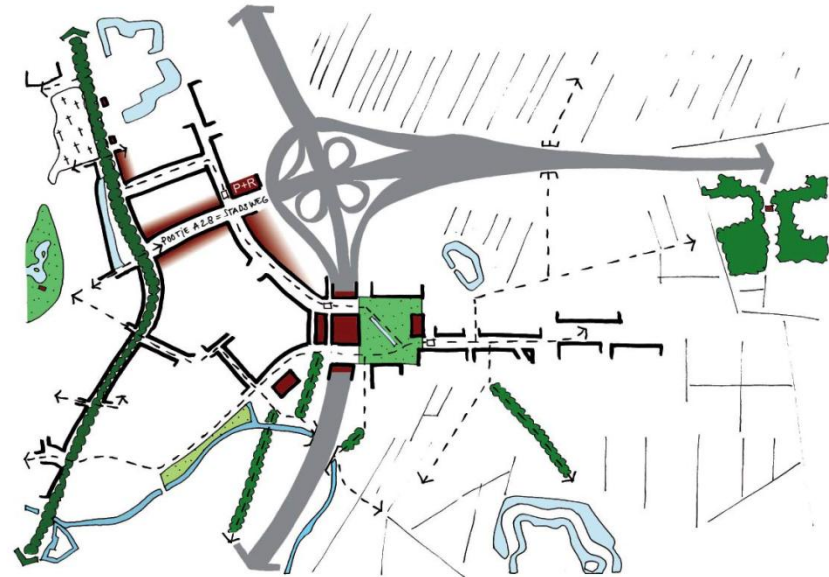
- › Part of national highway system
 - Traffic problems on the ring road (project since 1990's)
 - Territorial approach: isolated scope
 - Clash between accessibility and landscape amenities
 - Lack of understanding
- › Design driven approach
 - Scope expanded
 - Restoring the connection between city and landscape
 - National infrastructure advisor/architect and quality team





Utrecht Ring Road (east)

- > Changes
 - From short term specific development (project)
 - To long term consideration of coherent regional system
 - From territorial to relational understanding of issues
- > Role of collaborative design
 - Different discussion, reframing of issues
 - Inspiration from national architect
 - Support from quality team





Some lessons

- > Recognition of relational reality
 - Rearranging ingredients to a coherent whole
 - Instead of individual/specialist optimization
- > Design as a collaborative process
 - Spatial designers connecting specialist disciplines
- > Combining strategic and operational design
 - Switching back and forth to see practical implications of strategic choices





Thanks for your attention!

No conclusions yet → Discussion themes

- › Territorial vs. relational understanding of space
 - Relevance/implications for regional development
 - Recognizable?

- › Reframing the role of infrastructure in regional perspective
 - Need for reframing to facilitate more relationally informed planning
 - Role of collaborative regional design in facilitating reframing?

- › International experiences
 - Planning infrastructure from a relational spatial perspective
 - Role of collaborative design in planning



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 groningen

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planning

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Inclusive strategies for regional development

- > Integration of infrastructure and other land use functions
 - High differentiation & interdependence
 - Dual complexity
 - Scope & governance
- > Congruent configurations
 1. Line-oriented
 2. Area-oriented
- > Non-congruent strategies
 - Influence of institutional settings

