The rural-urban fringe in the Netherlands: 
a morphological analysis of recent urban developments

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Research

- Verstedelijking in de stadsrandzone

Scope

- Focus on urban developments (incl. recreational functions)
- Quantitative and qualitative spatial analysis
- Developments 1990-2010
Rural-urban fringe: hybrid landscape
Clearly defined city edges
Soft edges, spatial and functional heterogeneity
Dutch context

1950

1970

1990

2010

1 miljoen inwoners

25,000 hectare stad

1 miljoen auto's
Dutch context
National spatial planning policy -> urban concentration

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1901</td>
<td>the <strong>Housing Act</strong> is passed to improve housing conditions for the working class</td>
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<td>1956</td>
<td>the <strong>First National Planning Document</strong> is published, dealing with the growth of the Randstad Holland</td>
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<td>1966</td>
<td>the <strong>Second National Planning Document</strong> -&gt; <strong>clustered dispersal</strong>, growth centres and new towns</td>
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<td>1979</td>
<td>the <strong>Third National Planning Document</strong></td>
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<td>1988-1992</td>
<td>the <strong>Fourth National Planning Document</strong>, followed-up by <strong>Vinex</strong>, plans to accelerate the building of affordable houses -&gt; <strong>compact city</strong></td>
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<td>2004</td>
<td>Planning Document <strong>Nota Ruimte</strong> continues <strong>VINEX</strong></td>
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<tr>
<td>2012</td>
<td>Planning Document <strong>SVIR</strong>: -&gt; <strong>national concentration policy abolished</strong></td>
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The Randstad

1950
The Randstad

2010
NL / Belgium: morphology visible in Corine
Bron: CBS-Bodemstatistiek, bewerking PBL
Bron: CBS-Bodemstatistiek, bewerking PBL
Bron: CBS-Bodemstatistiek, Nieuwe Kaart van Nederland, bewerking PBL.
Research questions

- What is the **scale** of recent urban developments at the rural-urban fringe in the Netherlands?
- What **types** of urban developments can be distinguished?
- What are the morphological structures at the **regional scale**?
- How do the urban developments relate to **policy ambitions** to keep urban areas compact?
- And finally, what are **future challenges** for policy makers, urban planners and designers concerning urban developments at the rural-urban fringe?
Method

- Quantitative analysis (land-use statistics)
- Qualitative morphological analysis (typologies, functions, patterns, characteristics): looser spatial definition of the rural-urban fringe
Definition of the rural-urban fringe

- The rural-urban fringe is an area between the city and the countryside. This area is like a shell around the existing urban area and follows its irregular contours.
Quantitative analysis: most urban developments at the rural-urban fringe

Source: CBS, edited by PBL
Qualitative analysis: 7 types of urban developments at the rural-urban fringe

1. Large-scale residential areas (Vinex-locations)
2. Small-scale residential areas
3. Retail centres
4. Recreational areas
5. Commercial areas
6. Office parks
7. Shadowland (in-between areas)
1. Large-scale residential areas (VINEX-locations)
1. Large-scale residential areas (VINEX-locations)

- Locations medium density; lower than cities, higher than countryside
- Locations mainly adjoining existing cities (not sprawl)
- Single use zoning; few facilities
- Locations are car dependent in practice, near motorways (sprawl); but car use less than in non-vinex suburbs
1. Large-scale residential areas (VINEX-locations)

Ypenburg suburb, The Hague

Central The Hague

6 kms

A12 access

A4 access

A13 access

Ypenburg suburb
2. Small-scale residential areas (1/2)
2. Small-scale residential areas (2/2)
3. Commercial areas
3. Commercial areas

- Growth of office and industrial parks mainly along highways
- Especially on sites visible from highway and near exit
4. Office parks
5. Retail-centers
6. Recreational areas (outdoor)
6. Recreational areas (indoor)
7. Shadowland
7. Shadowland
Regional comparison: urban patterns

1. Groningen region
2. Amsterdam region
3. Arnhem-Nijmegen region
4. Rotterdam-The Hague region
Ruimtelijke ontwikkelingen 1989-2003

1. Groningen region
Ruimtelijke ontwikkelingen
1989-2003

1. Groningen region > compact extensions
Ruimtelijke ontwikkelingen 1989-2003

2. Amsterdam region > shift to smaller cities
2. Amsterdam region > shift to smaller cities
Ruimtelijke ontwikkelingen
1989-2003

3. Arnhem-Nijmegen region
3. Arnhem-Nijmegen region > peri-urban developments
4. Rotterdam-The Hague region

Source: CBS, edited by PBL
4. Rotterdam-The Hague region > peri-urban developments

Source: CBS, edited by PBL
Future patterns

**Pattern**
- P7: developments along the ragged edge of cities
- P8: developments in the zones between urban area and infrastructure

**Example area**
- V7: De Volgerlanden, Usselmonde
- V8: Veenendaal-Ede

**TA-factor**
- T7
- T8
Future patterns
Main findings

- **Strong increase** of urban functions at the rural-urban fringe, leading to increasingly **dispersed patterns of urbanization**
- New **residential areas** are rather **compact**, whereas new commercial and recreational areas show a more **fragmented** pattern
- **Significant** regional differences
- At the local level, urban compaction policy seems quite **successful**, whereas at the regional level, in some regions local developments add up to traditionally unwanted urban development patterns.
- **Function separation** and single functionality, in many cases these entities are separated by infrastructural bundles
General conclusions

- The **rural-urban fringe** has become much more than just a peripheral zone.
- Planning at the rural-urban fringe **requires special attention** from policy makers, urban planners, landscape architects and architects.
Conclusions (landscape/architects)

- **At the local level**, planners and designers should develop strategies to (1) **create multi-functional areas** with shared facilities, (2) **improve connections** between separated functions and (3) **upgrade the identity** of places at the fringe.

- **Shift** from planning new areas towards **redesigning existing areas**.
Conclusions (policy makers and planners)

- Different regions show different urbanisation patterns: the resulting spatial planning task differs.
- At the regional and national level, sector-based policy for housing, employment, infrastructure, recreation and nature will remain necessary, but an integral spatial policy is also required where the possibilities and limitations are viewed in relation to each other, transcending the boundaries between national policy dossiers.
Thank you!

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