CROSS-BORDER LANDSCAPE CHARACTER ASSESSMENT: WEST-FLANDERS (BELGIUM) AND NORD-PAS-DE-CALAIS (FRANCE)

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16th Council of Europe meeting of the Workshop for the Implementation of the European Landscape Convention, Andorra, 1-2 October 2015
INTRODUCTION

- **Landscape characterisation** – increased attention since ELC ->
  National and Regional examples across Europe
- Landscape classification and characterisation in Flanders and Belgium
- How to apply this in a transborder context?
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Transborder context:

- Different policy and legislation
- Different visions and approaches to landscape
- Data collection and usage are different
- Data coverage for the regions is not coherent
CHALLENGES AND ISSUES

- Integration of data sources at **different scale levels** and with **different data quality**

- Development of a **common language of understanding**
  - Across regions (Flanders, France, ...)
  - Across disciplines (Geography, Archaeology, Planning, ...)

- **Visualisation** of the characterisation (maps, interactive viewers, ...)

- Towards strategic and **policy supportive** products

- Recognisable and **readable for lay people**
METHODOLOGICAL BACKGROUND

Holistic vs **Parametric** approach:

- From details to a synthesis (bottom-up)
- Overlay of **poly-thematic** layers
- Grouping of spatial units
- Quantitative and digital spatial data is required
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- Data sources with synoptic view
  - Based on the ‘Gestalt‘-principles
  - Using different additional thematic data
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Interpretation

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Interpretation

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## HIERARCHICAL SCALES IN CLASSIFICATION

<table>
<thead>
<tr>
<th>Land Unit</th>
<th>Characteristics</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>site, geotoop</td>
<td>smallest tract of land allowing an description</td>
<td>1/10.000</td>
</tr>
<tr>
<td>land facet</td>
<td>unique combination of slope, substrate (soil) and land cover/land use</td>
<td>1/10.000-</td>
</tr>
<tr>
<td>land catena</td>
<td>toposequence of land facets</td>
<td>1/50.000</td>
</tr>
<tr>
<td>land system</td>
<td>spatial and functional associations of land facet and/or -catenas</td>
<td>1/50.000-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/100.000</td>
</tr>
<tr>
<td>land region</td>
<td>unique spatial and geographical association of land systems</td>
<td>1/100.000</td>
</tr>
<tr>
<td>land provincie</td>
<td>contiguous land regions with a common genesis or history</td>
<td>1/1.000.000</td>
</tr>
<tr>
<td>land division</td>
<td>large geographical units based on landform and geology</td>
<td>&lt; 1/1.000.000</td>
</tr>
<tr>
<td>land zone</td>
<td>climatic and vegetation zones</td>
<td></td>
</tr>
</tbody>
</table>

CASE STUDY PROJECT

**Project:**
- **Landscape characterisation** of the cross border area between West-Flanders and the northern part of the Nord-pas-de-Calais Region
- Creating a common understanding in both disciplines and regions
- Development of similar names for specific regions, comprehensible across the borders

**Partners:**
- Province of West-Flanders,
- Conseil d’architecture, d’urbanisme et de l’environnement du Nord (CAUE)
- Ghent University
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CASE STUDY APPROACH

- **Holistic approach** and manual interpretation
- Defining **hierarchical scales** to define landscape units
- **Subdividing** the large units into smaller units
- Describing and analysing landscape units in a **GEO-database**
- Besides a desktop study a **more detailed field study** to verify the previous steps
- Adding **characterising pictures** to the different units within the database
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HIERARCHICAL SCALES AND THEIR ATTRIBUTES

◮ First Scale: Landscape Region -> Geology, soils, (topography)

◮ Second Scale: Landscape ‘Systems’ -> Land cover, land use, cultural history,…

◮ Third Scale: Landscape Units -> Field structure, visual characteristics
HOLISTIC INTERPRETATION OF THE LANDSCAPE

- Interpretation of different maps and Web Viewers:
  - Geological Maps
  - DTM
  - Soil Maps
  - Historical Maps
  - Aerial Pictures
  - Written sources
  - …
LANDCOVER, DEFINING A SECOND SCALE

From different legends in both regions to one legend for a project
CADASTRAL MAP, DEFINING A THIRD SCALE
(WATER)WAYS, DEFINING A THIRD SCALE
Afbakening Grensoverschrijdende Landschapseenheden
Délimitation des Unités de Paysage à la Frontière
Niveau 1: Landschappelijke Streken/Grands Paysages
Versie: juni 2015
SECOND SCALE: LANDSCAPE SYSTEMS

Afbakening Grensoverschrijdende Landschapseenheden
Délimitation des Unités de Paysage à la Frontière
Niveau 2: Landschappelijke Systemen/ Entités Paysagères
Versie: augustus 2015

Legende
Landschappelijke Systemen/Entités Paysagères
- Dunkerque
- Bray-Dunes
- Gravelines
- Loon-Plage
- Bergues
- Béthune
- Péronne
- Ieper
- Armentières
- Saint-Omer
- Bailleul
- Haezebrug
- Estaires
- Komen-Wervik
- Calais
- Béthune-Bruay
- Dunkerque
- Roubaix
- Tourcoing
- Hirson
- Bailleul
- Menin
- Villeneuve-d'Ascq
- Leers
- Lannoy
- Coudekerque-Branche
- Zeebrugge
- Damme
- Deinze
- Gent-Bruisdonck
- Antwerp
- Hasselt
- Vilvoorde
- Bruges
- Aalst
- Zaventem
- Oostende
- Blankenberge
- De Haan
- De Haave

Opdrachtgever:
Provincie West-Vlaanderen
CAUE: Conseil d'Architecture, d'Urbanisme et d’ Environnement du Nord

Opdrachthouder:
Universiteit Gent, Vakgroep Geografie
Niels Dabaut, Veere Van Eetvelde

Niels Dabaut
THIRD SCALE: LANDSCAPE UNITS

Afbakening Grensoverschrijdende Landschapseenheden
Délimitation des Unités de Paysage à la Frontière
Niveau 3: Landschappelijke Entiteiten/Unités Paysagères
Versie: juni 2015
SYNTHESIS MAP

Afbakening Grensoverschrijdende Landschapseenheden
Délimitation des Unités de Paysage à la Frontière
Synthesekaart
Versie: augustus 2015
SYNTHESIS MAP
SYNTHESIS MAP

- Description of all units in a GEO database
- Information can be added or adapted anytime and by anyone
- Pictures can be added to the database
- Link with Observatoire Paysagère of the CAUE
RECOMMENDATIONS FOR IMPLEMENTATION

- Base to formulate future transborder landscape visions
- Start to create a **Landscape observatory**
- Source of knowledge to increase **public awareness**
- Input for the development of an **open source application**
- Landscape characterisation as a start for detailed analyses and description (landscape biographies)
CHeriScape V - Newcastle (UK)
14-15-16 June 2016
‘LANDSCAPE IN IMAGINATION AND THE VIRTUAL FUTURE’

Information at www.cheriscape.eu
Thank You!

Contact: niels.dabaut@ugent.be  Website: geoweb.ugent.be