

# World Heritage and Human Settlements

## 世界遗产和人类聚集地

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MENG WANG

# An Exception to the Rule







## What is your SUSTAINABLE DEVELOPMENT GOAL?



The Sustainable Development Goals (SDGs) are a collection of 17 global goals set by 193 United Nations member states in 2015 with the objective to guide sustainable development in the next 15 years.

The SDGs cover a broad range of social and economic development issues and are part of the 'Transforming our World: the 2030 Agenda for Sustainable Development', or 2030 Agenda in short.

The 17 goals are interconnected, though each has its own targets to achieve. The total number of targets is 169. Although the SDGs might sound a lot like broad, each target must be measurable through indicators and statistical data. The UN has a specific service that seeks to provide measurable indicators for each target.

<https://sdgs.un.org/goals>

The World Council on City Data (WCCD) is also working hard to produce standardized city data through a network of innovative cities committed to improving services and quality of life with open city data. It provides a consistent and comprehensive platform for standardized urban metrics. <http://www.dataforcities.org/wccd/>. The WCCD has developed the first SDG 11.1.2 certification system and the Global Cities Registry.

The SDGs have a huge impact on the political discourse and are shaping European policy, such as the Horizon 2020 programme. It helps shape the research agendas of research and educational institutions.

More recently, a specific document focusing on sustainable urban development was released. The New Urban Agenda is a binding document created at Habitat III in Quito in 2016, and aims to provide a framework for sustainable, inclusive and fair urban development.

The New Urban Agenda seeks to create a mutually reinforcing relationship between urbanization and development, with the idea that by prioritizing SDG 11 Sustainable Cities and Communities, we are able to provide many of the other SDGs.

Bouwkunde works to promote SDGs and the New Urban Agenda among its community of academics, practitioners, researchers and students.

Bouwkunde is often on contributing to SDG 11 everywhere, but our focus now is on digital urbanization, through one of the World As I See It. Although, it is not SDG 11, it is a very strong theme across many other SDGs, especially SDG 4 QUALITY EDUCATION, SDG 13 CLIMATE ACTION and many more. We want to improve the link between SDG 11 SUSTAINABLE CITIES AND COMMUNITIES and many other SDGs, but in order to do that, we need your help.

Our question to you is: WHAT'S YOUR GOAL? Tell us who you are, what is the focus of your work, and what SDGs you are addressing.

Please, visit our website to read more on how Bouwkunde is collaborating with stakeholders to achieve sustainable, fair and inclusive urban development.

<https://bouwkunde.nl>



**Goal 11:** Make cities inclusive, safe, resilient and sustainable

**Target 4:** Strengthen efforts to protect and safeguard the world's cultural and natural heritage

Indicator:

Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed, World Heritage Centre designation), level of government (national, regional, and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector, sponsorship).

(UIS, 2016)



## Target 11.4

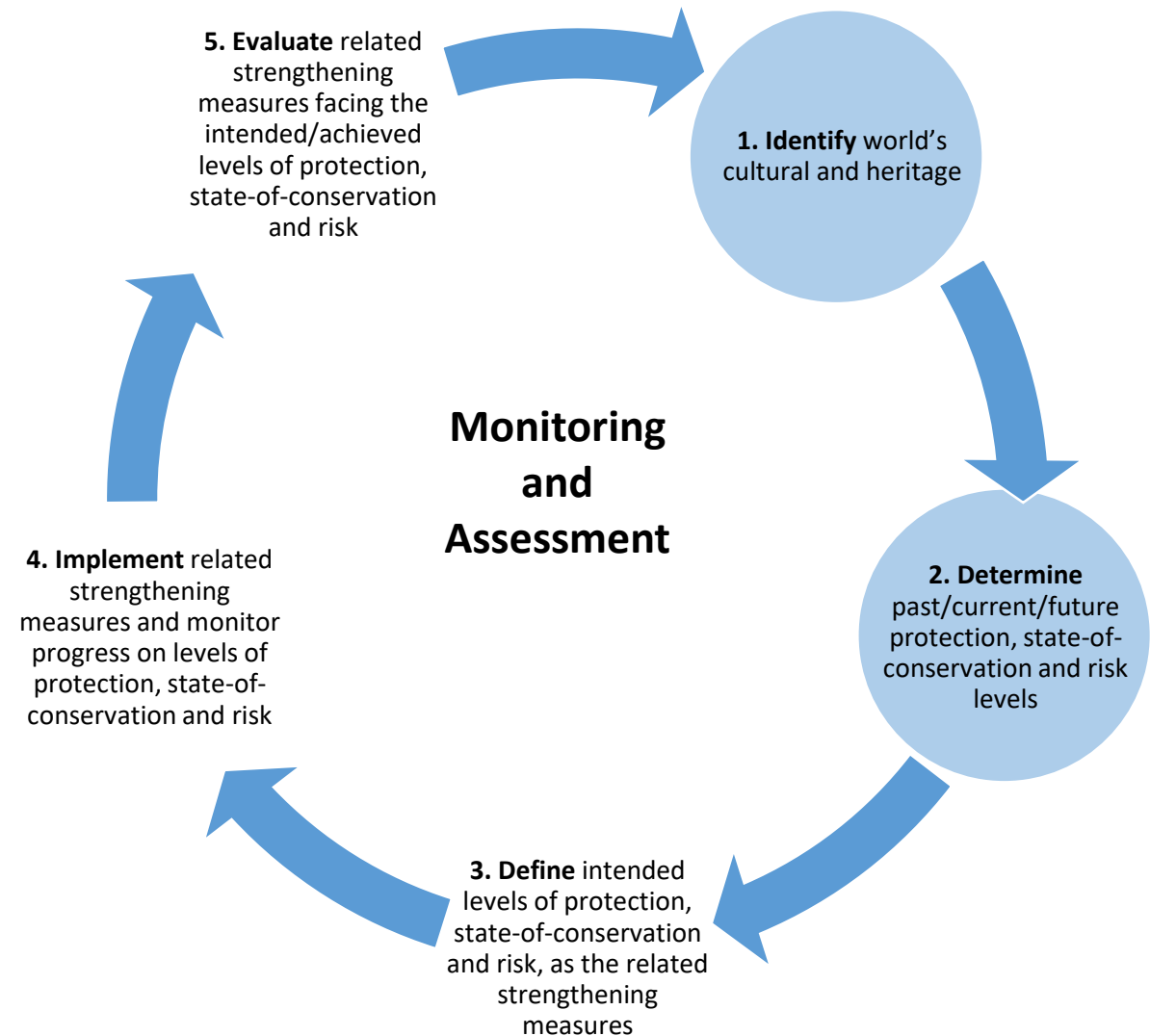
Strengthen efforts to protect and safeguard the world's cultural and natural heritage

### Main variable:

Total expenditure (public and private) per capita spent on the **preservation, protection and conservation** of all cultural and natural heritage

### Sub-variables:

type of heritage  
level of government  
**type of expenditure**  
type of funding



## Problem Field (1/2)

### World Heritage and Human Settlements

Protected areas are increasing in number/size, including World Heritage properties.

包括世界遗产地在内的各种保护区的数量与规模都在增加。

(POUZOLS ET AL., 2014; PEREIRA RODERS, 2010; TURNER ET AL, 2015)

The state-of-conservation of the protected areas is not rising; but lower than ever.

保护区的保护状况不但没有上升;反而比以往任何时候都低。

(WWF, 2006; BARR ET AL, 2011;)

Such resource loss on protected areas is noted in reserves and their biodiversity.

保护区内的资源减少影响了区域的生物多样性

(RODRIGUES ET AL.; 2004; HOEKSTRA ET AL., 2005; FULLER ET AL., 2010)

Such resource loss on protected areas is noted in historic towns and their cultural identity, as in monuments and their integrity.

保护区内的资源减少还影响了历史城镇的文化属性, 以及古迹的完整性

(ZUKIN, 2012; DAMEN ET AL.,2013; AGAPIOU ET AL, 2015)

## Problem Field (2/2)

### World Heritage and Human Settlements

Urbanization is one of the major challenges of protected areas, and its effects are widely debated for natural resources, as for cultural resources.

城市化是保护区面临的主要挑战之一，它对自然资源、文化资源的影响也存在很大的争议。

(BOLUND AND HUNHAMMAR, 1999; MCGRANAHAN ET AL., 2006; FORMAN, 2008)  
(BANDARIN AND VAN OERS, 2012, BANDARIN AND VAN OERS, 2014)

The direct effects through the expansion of urban areas, and, the indirect effects through changes in consumption and pollution as people migrate into cities.

城市扩张的直接影响，以及随着人们迁移到城市后发生的消耗和污染而产生的间接影响。

(MCKINNEY, 2002; LIU ET AL., 2003; MCGRANAHAN AND SATTERTHWAITE, 2003)

As cities expand, protected areas are becoming increasingly urban.

随着城市扩张，保护区日益成为城市。

(MCDONALD ET AL, 2008)

## Research Question

World Heritage and Human Settlements

# How urban are protected areas?

# 城市是如何成为保护地的？

Unveiling the urbanization of protected areas as a whole, over time and space.

随着时间和空间的推移，揭开保护区的整体城市化进程。



# State-of-the-art

## World Heritage and Human Settlements

Recent research unveiled our planet is urbanizing faster than the population is growing.

最近使用开放数据和创新地球观测技术的研究揭示，我们的星球城市化的速度比人口增长快。

(POTERE ET AL., 2009; ANGEL ET AL., 2016; PESARESI ET AL., 2016; ESCH, 2014)

Global studies to map urbanization in relation to biodiversity hotspots and eco-regions.

针对生物多样性热点及生态区域进行城镇化地图绘制的全球研究

(MYERS ET AL, 2000; OLSON ET AL, 2001)

IUCN WH Outlook 2 identified urban areas/housing as potential/eminent threat (5/20).

自然保护联盟世界遗产展望2将城市地区作为严重威胁（住房为潜在）（5/20 参考）。

(YANG, 2003; VAN OERS, 2009)

Urban Heritage on the World Heritage List included in 2003, 345/730 WH properties (47%) and in 2009, 344/890 WH properties (39%).

在2003年的世界遗产名录上，城市遗产占比47%（345/730）；2009年，城市遗产占比39%（344/890）。

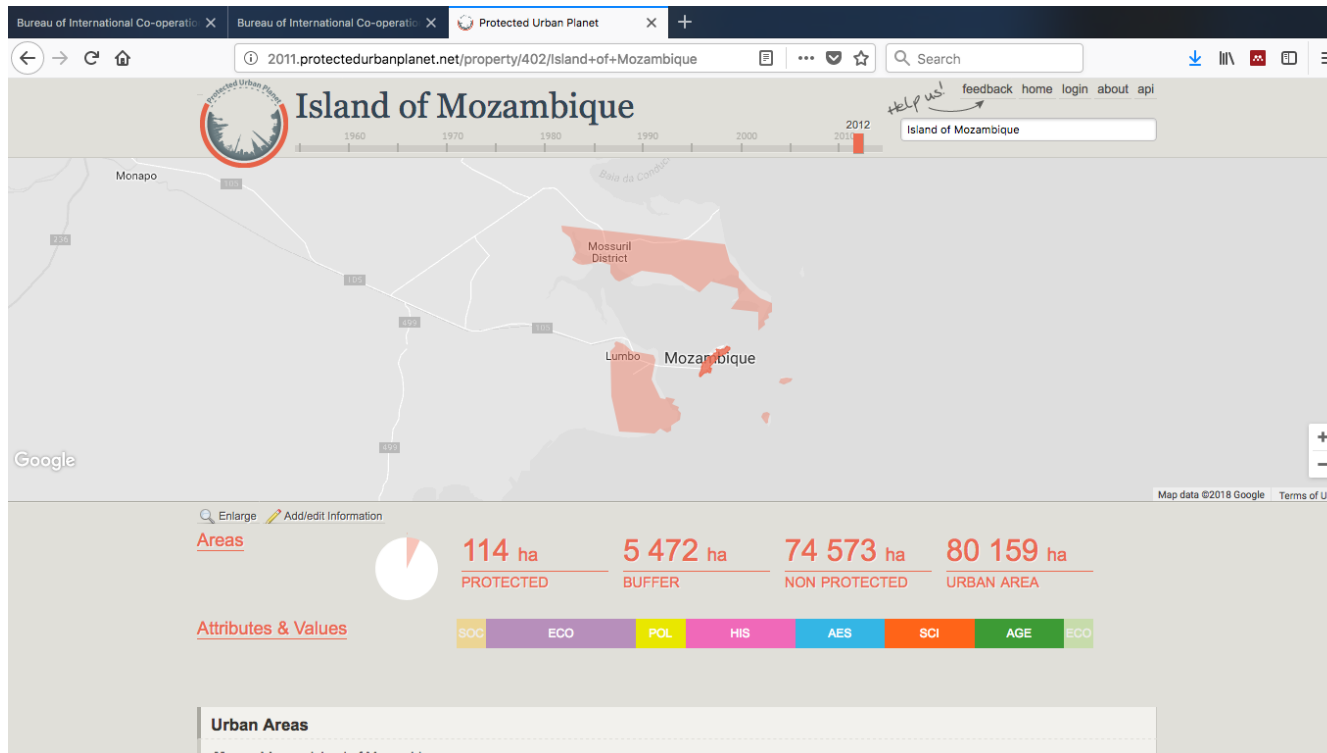
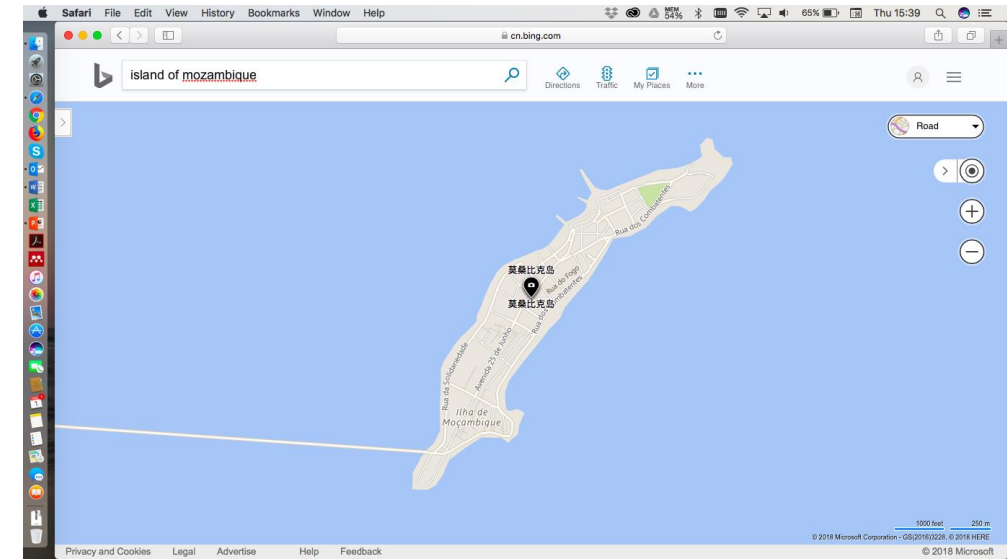
(YANG, 2003; VAN OERS, 2009)

# Methodology

Method: Content analysis (satellite imaging/digital maps)

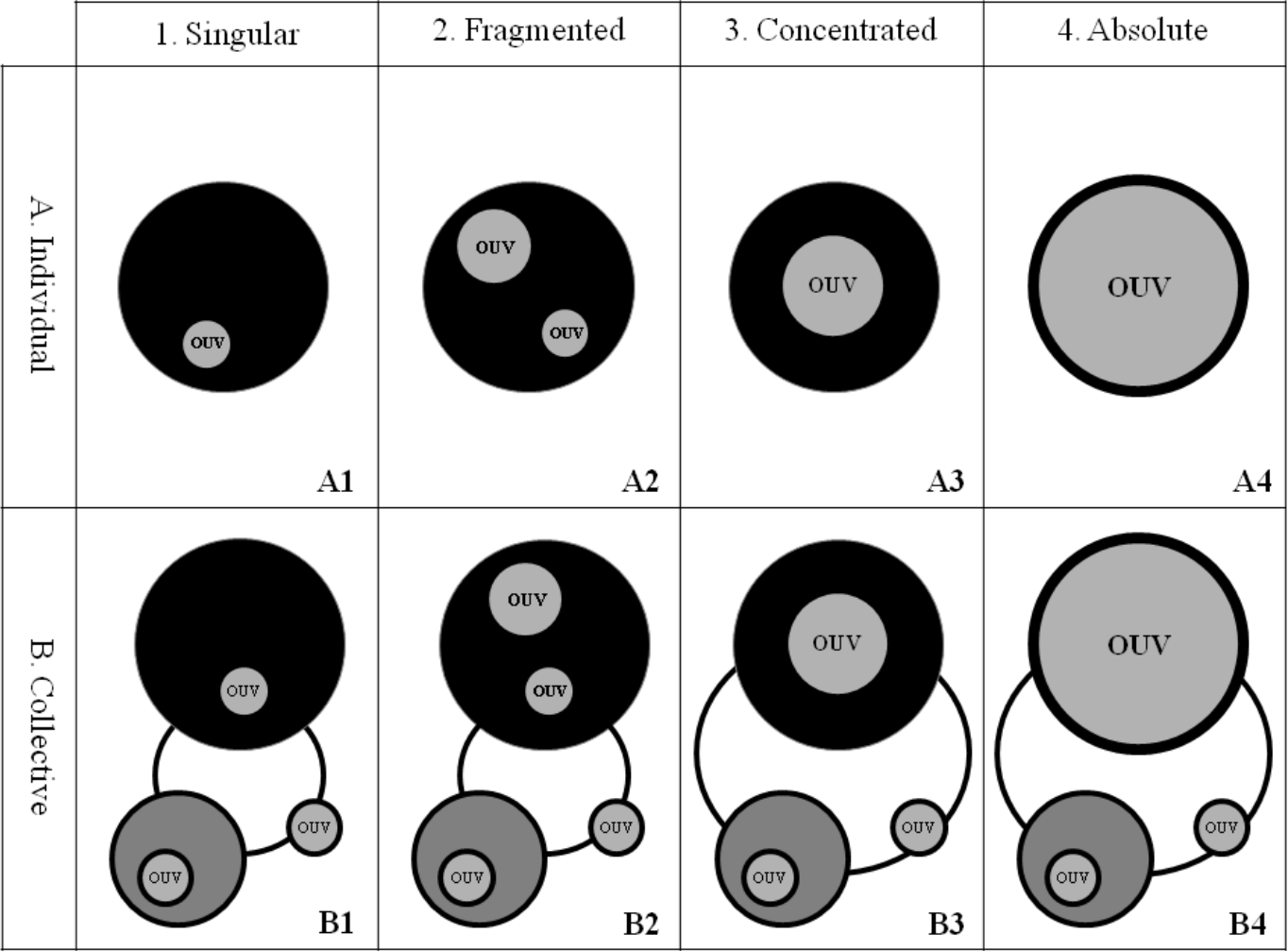
Tools: Google maps; Excel database; Mapinfo (2011); Protected Urban Planet

Limitations: Available maps UNESCO WHC online; Cultural Heritage only; Satellite imaging / quality; Map vs Google maps



# World Heritage and Human Settlements - Typology

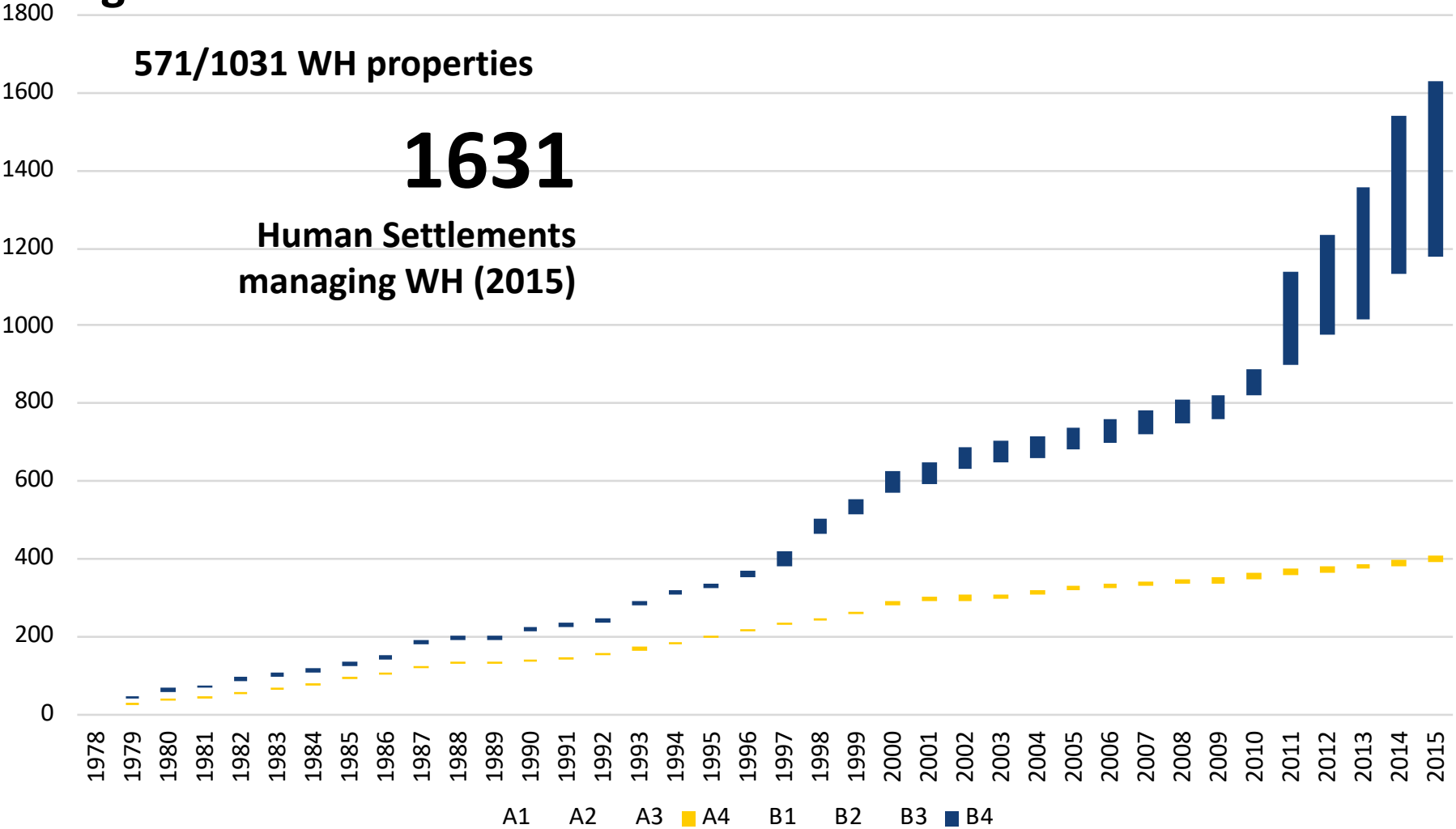
2010-2015



Pereira Roders (2010)

# World Heritage and Human Settlements

2010-2015

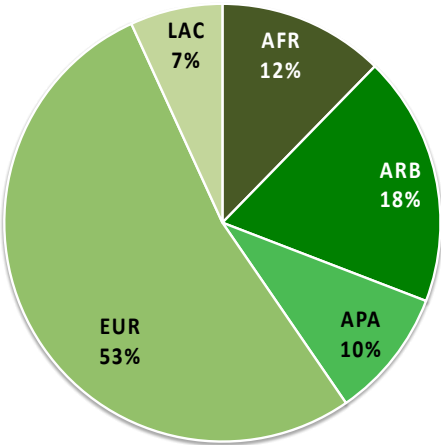


Turner et al. (2016)  
Categories, evolution

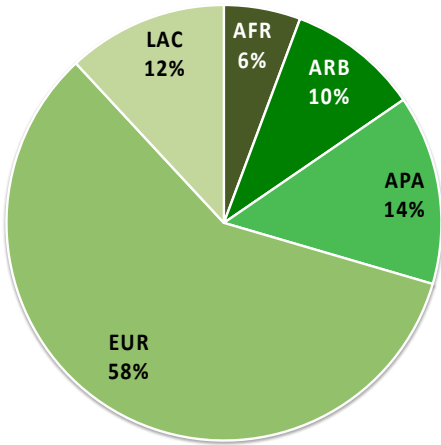


# World Heritage and Human Settlements

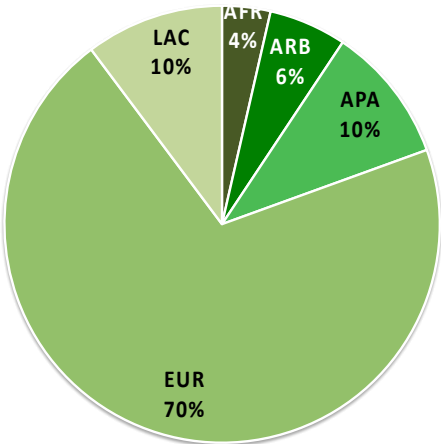
2010-2015



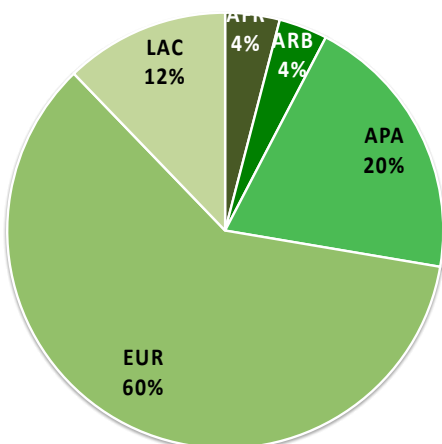
1985



1995



2005

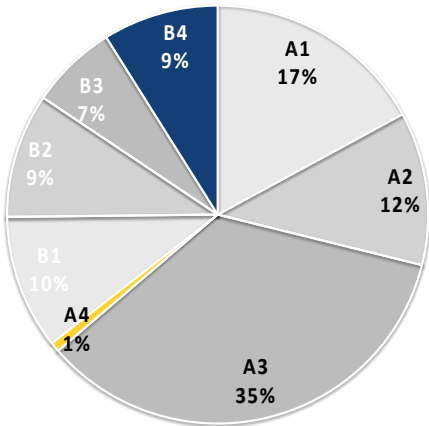


2015

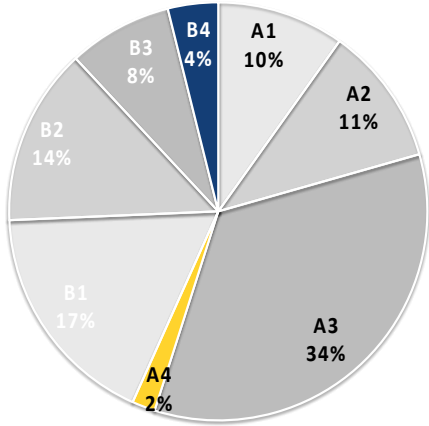
Turner et al. (2016)  
Regions, evolution, total

# World Heritage and Human Settlements

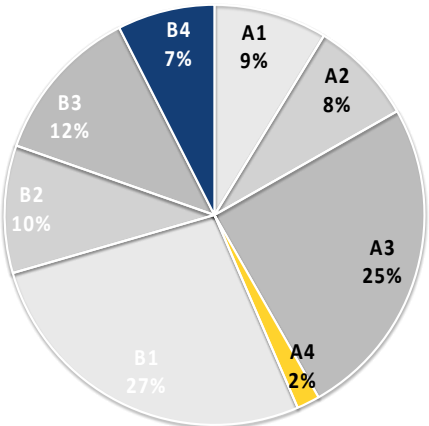
2010-2015



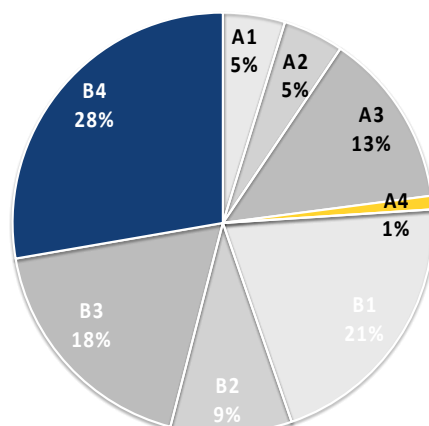
1985



1995



2005

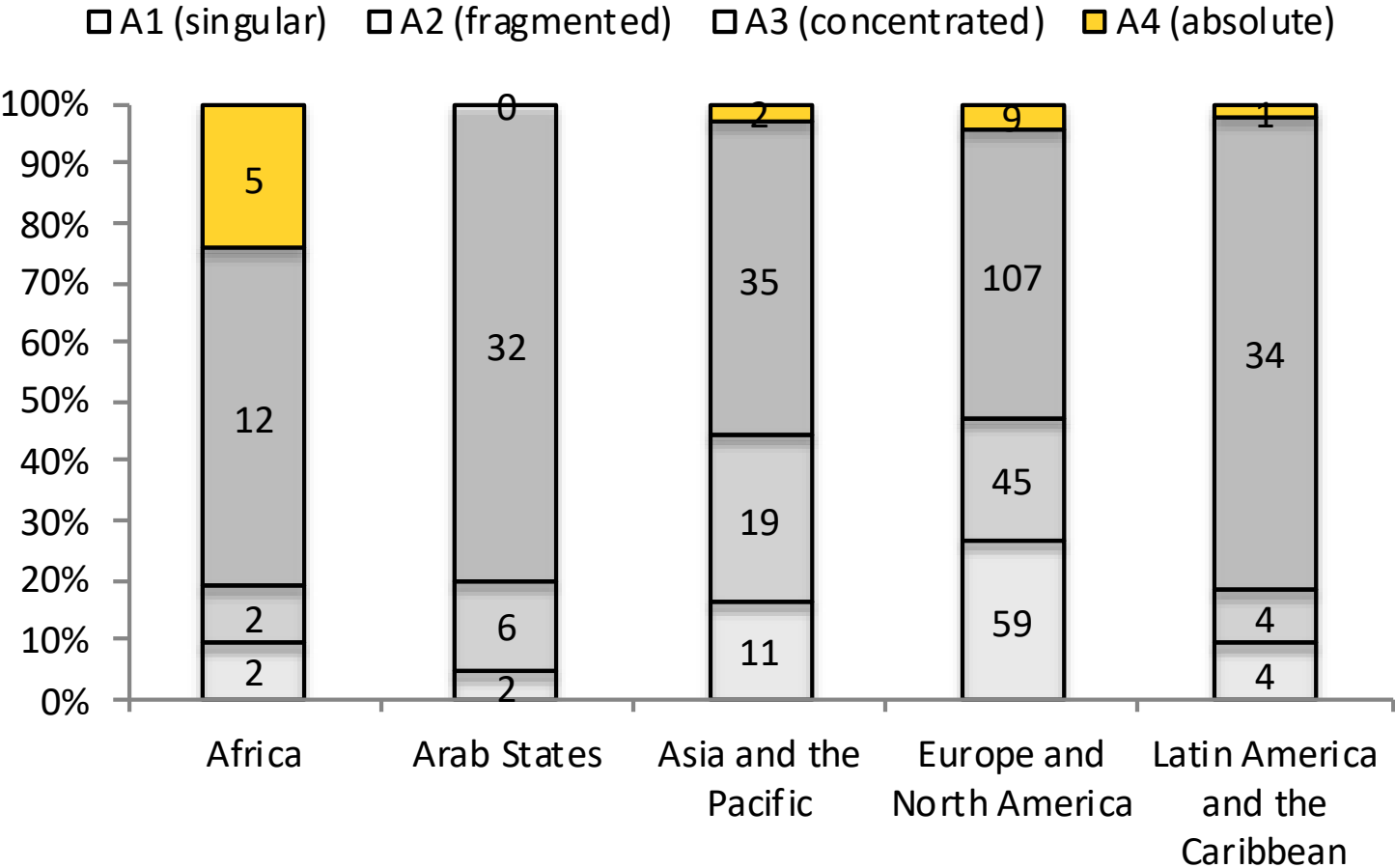


2015

Turner et al. (2016)  
Categories, evolution, total

# World Heritage and Human Settlements

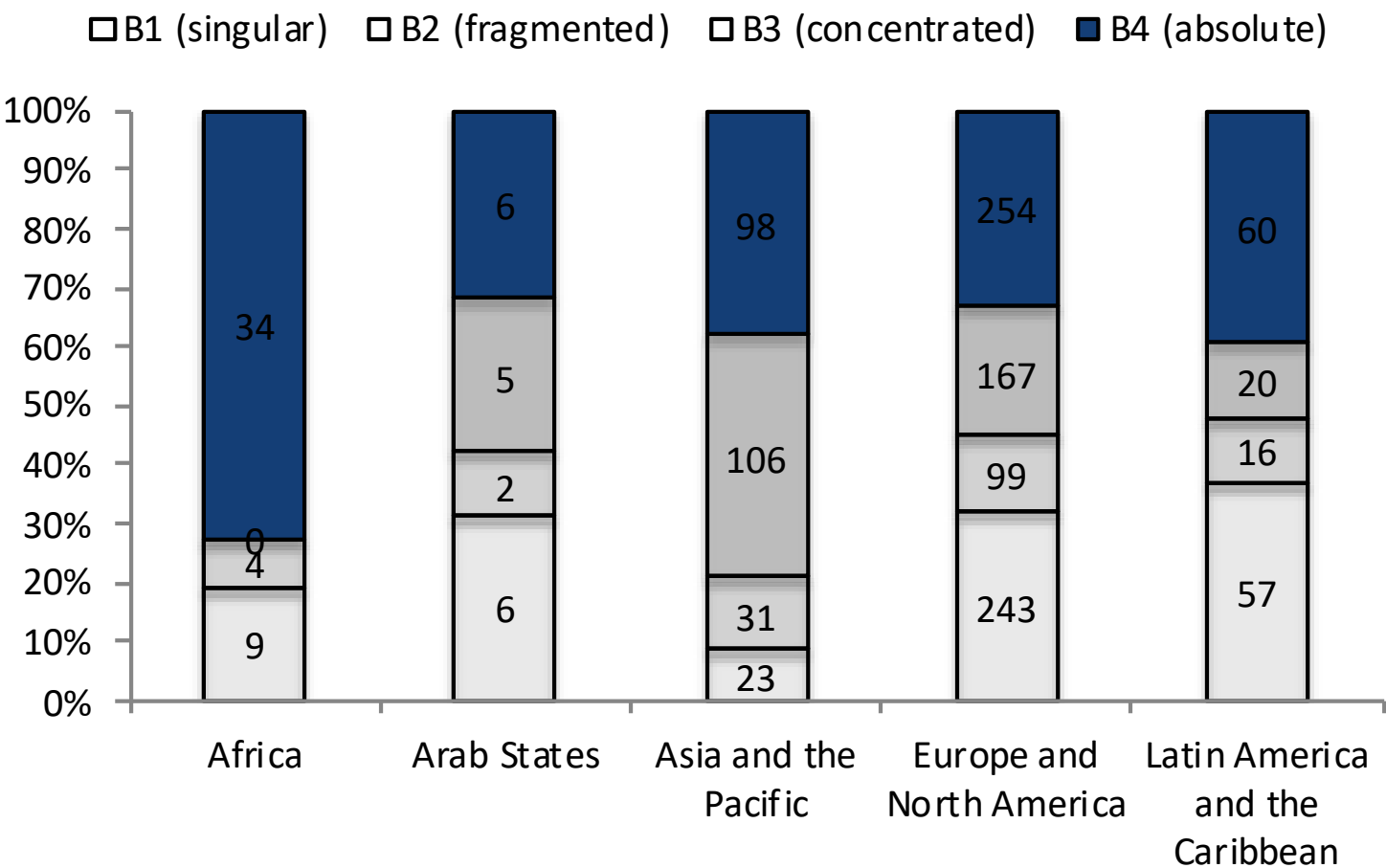
2010-2015



Turner et al. (2016)  
Individual (A), per regions

# World Heritage and Human Settlements

2010-2015



Turner et al. (2016)  
Collective (B), per regions

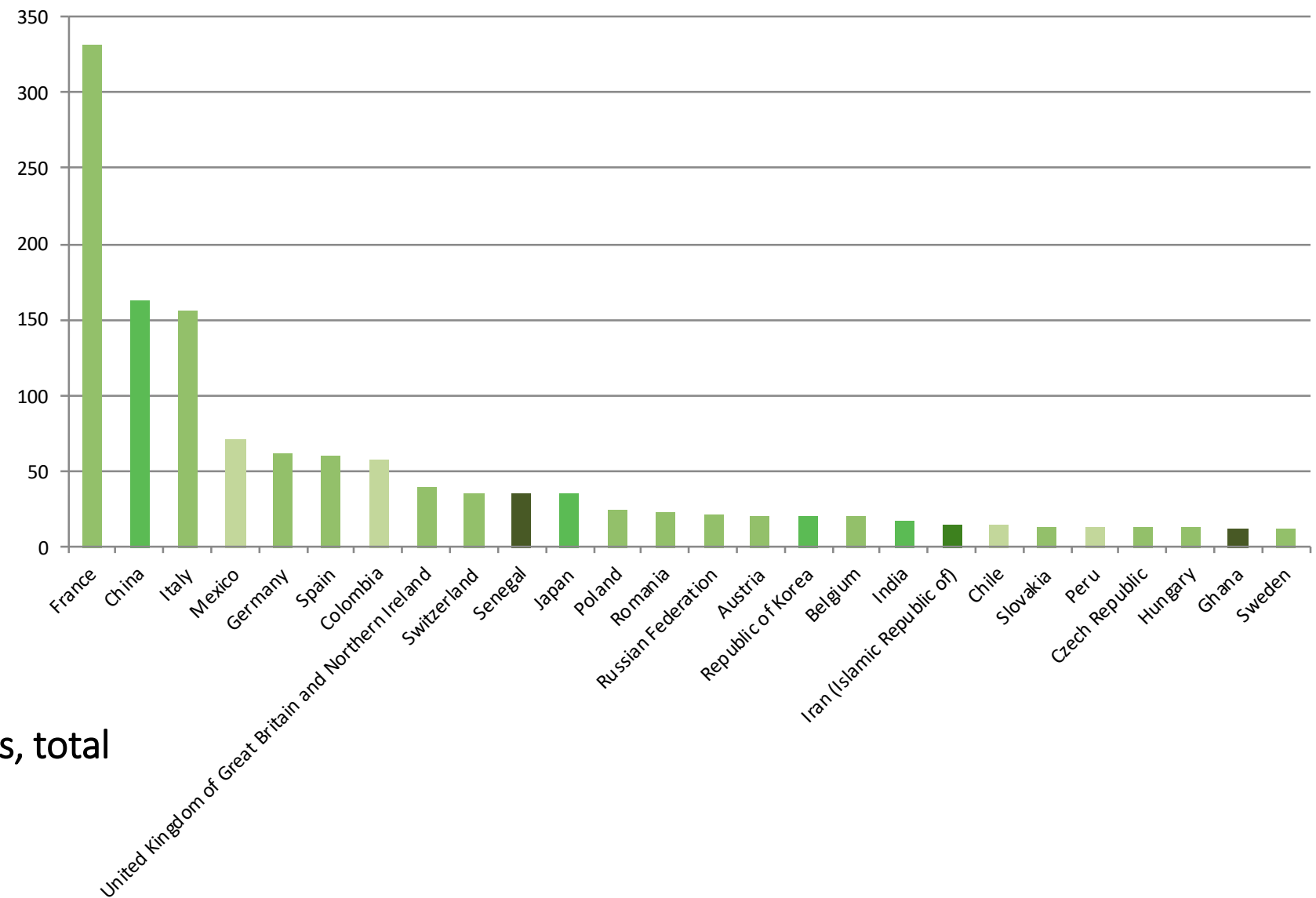


# World Heritage and Human Settlements

2010-2015

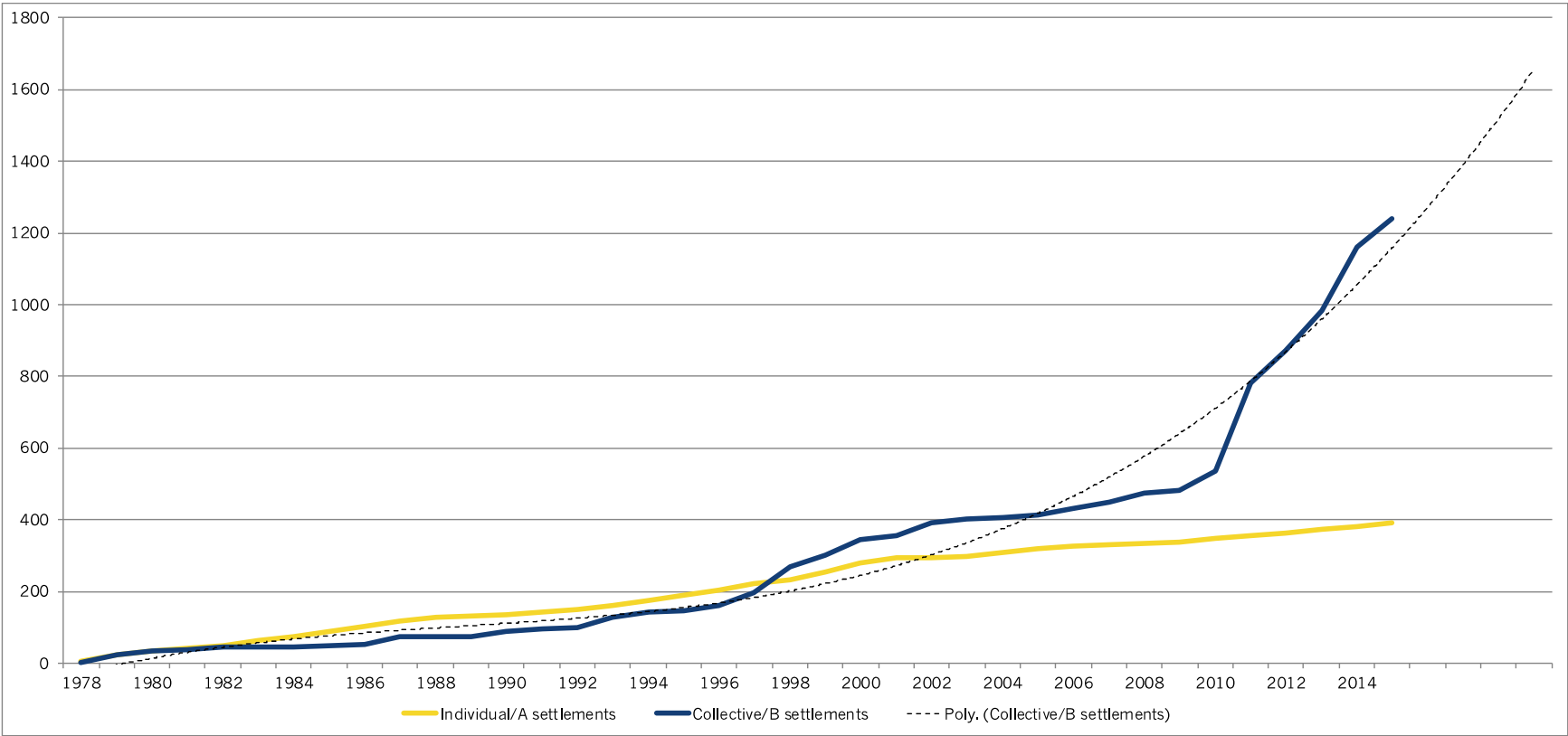
Turner et al. (2016)

Top countries, total



# World Heritage and Human Settlements

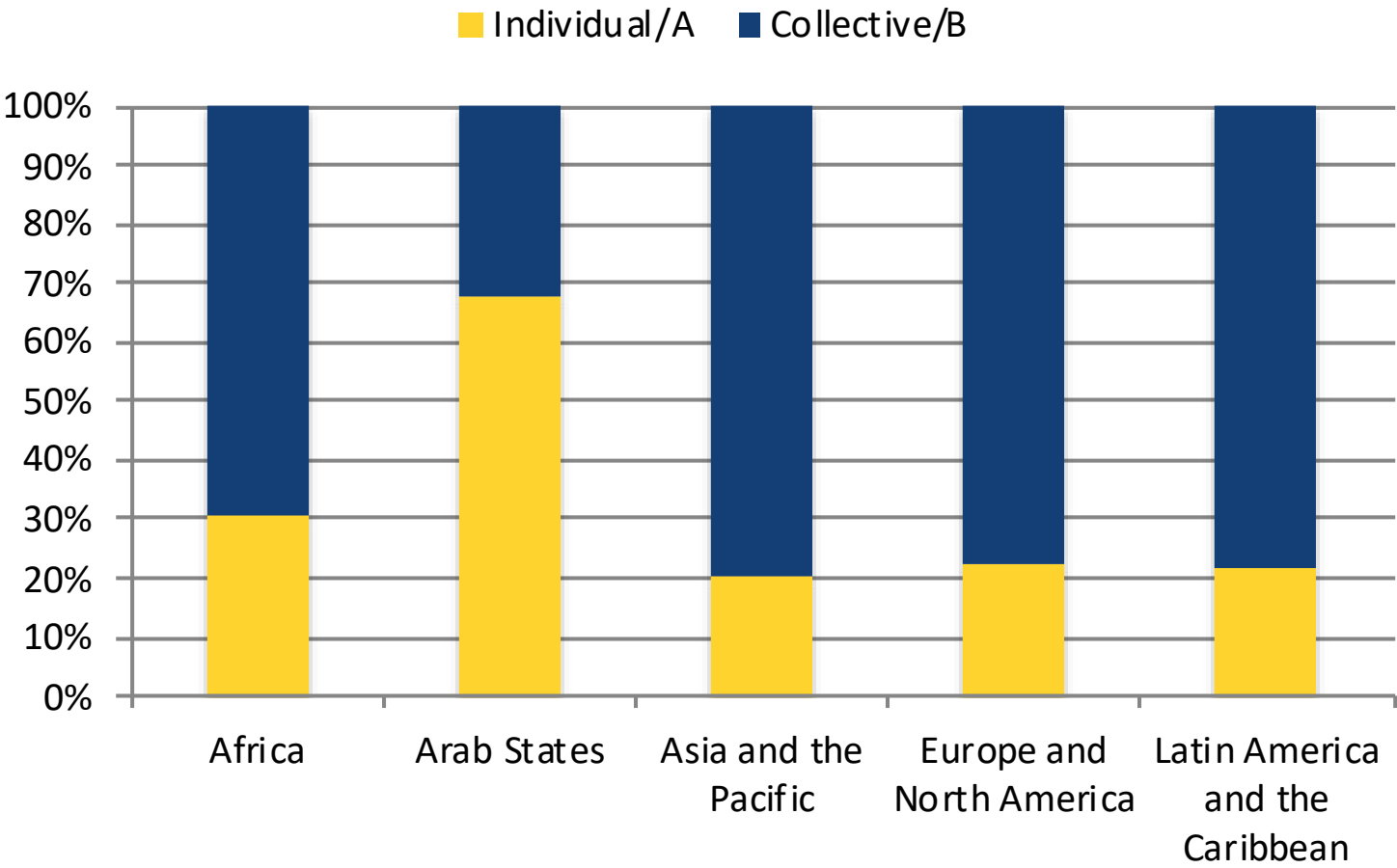
2010-2015



Turner et al. (2016)  
Individual (A) vs. Collective (B), evolution

# World Heritage and Human Settlements

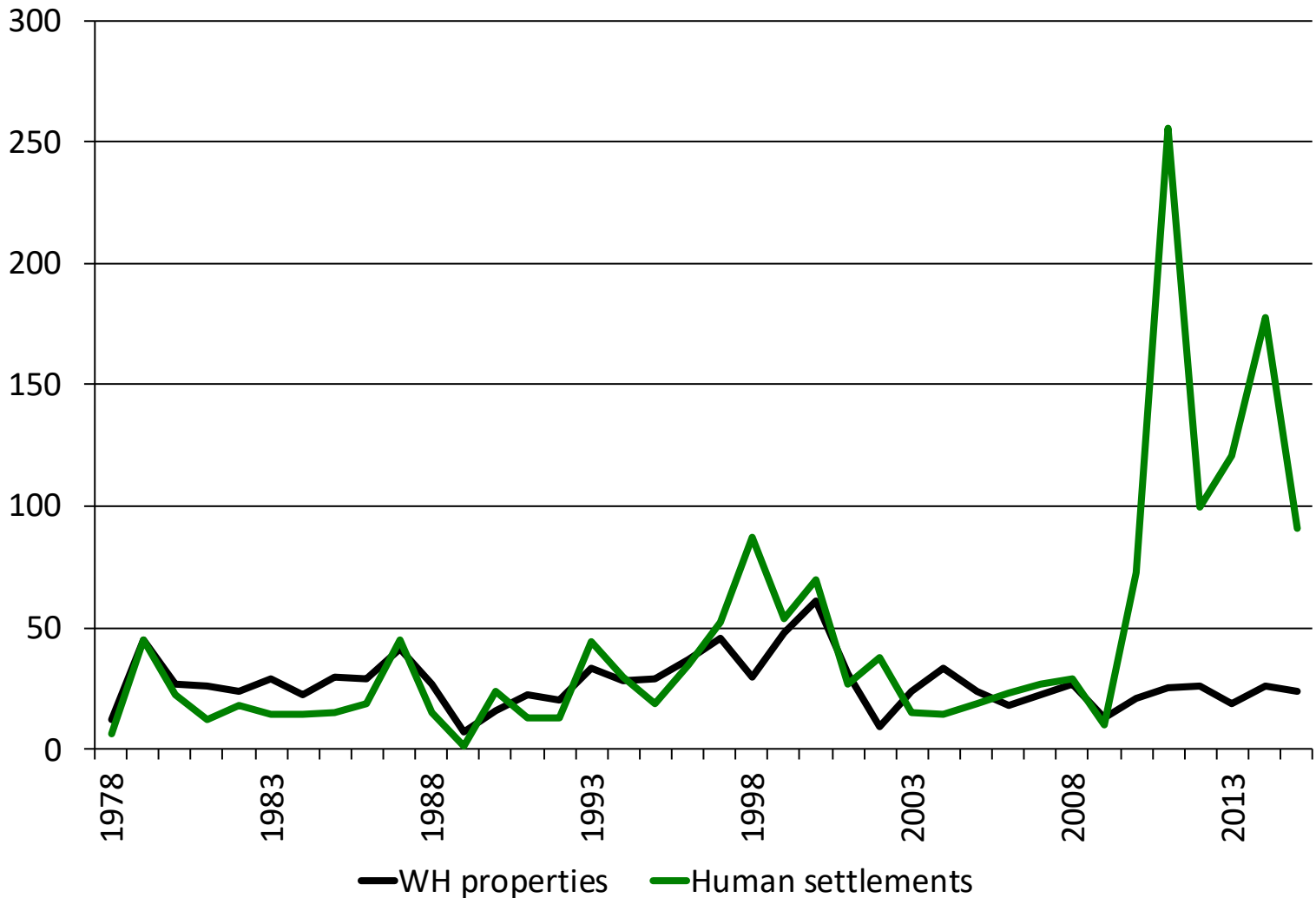
2010-2015



Turner et al. (2016)  
Individual (A) vs. Collective (B), per regions

# World Heritage and Human Settlements

2010-2015



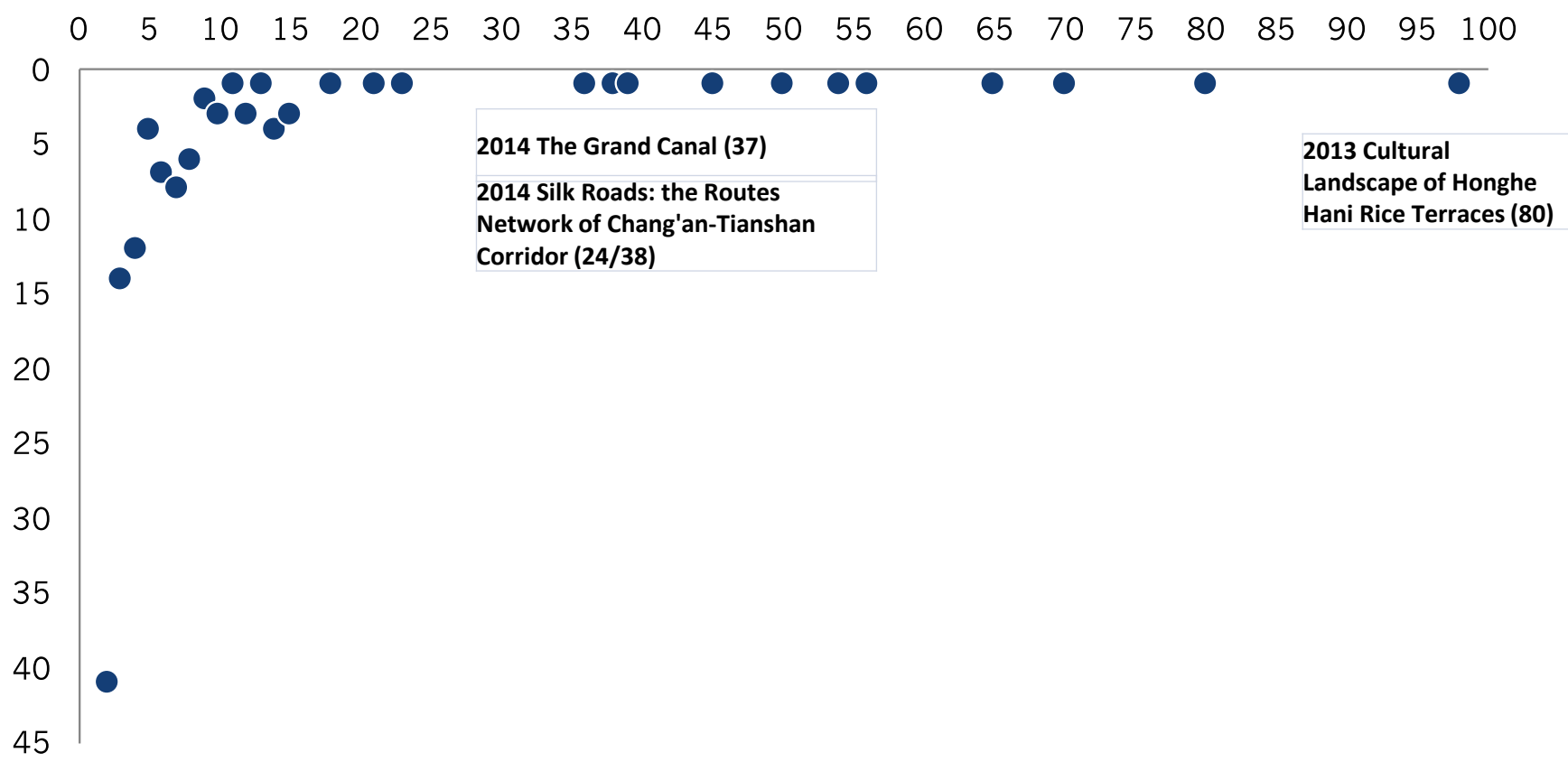
Turner et al. (2016)

WH properties vs. Human Settlements



# World Heritage and Human Settlements

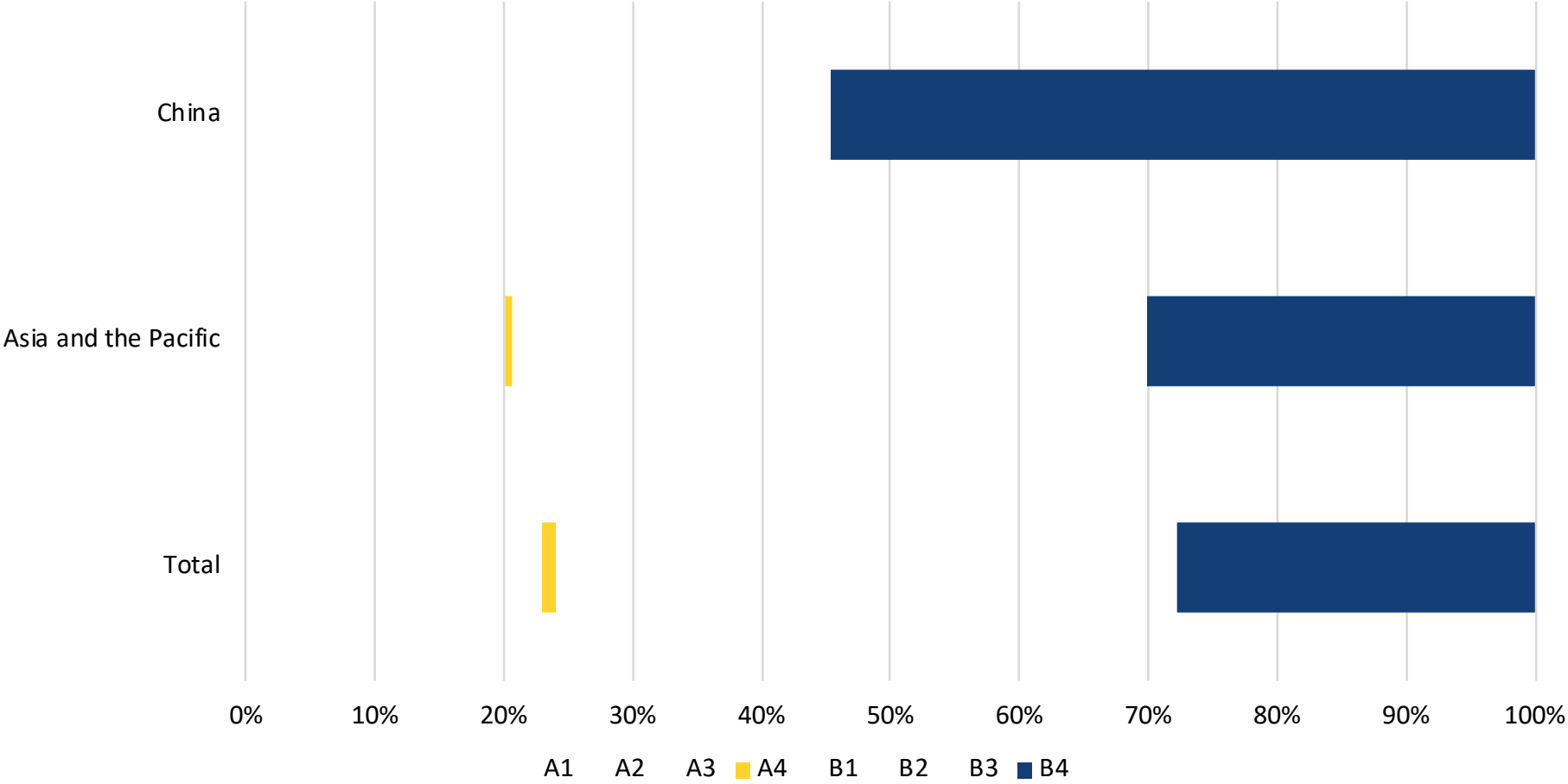
2010-2015



Turner et al. (2016)  
Human settlements per property, total

# World Heritage and Human Settlements

2010-2015



Turner et al. (2016)  
Comparative Analysis

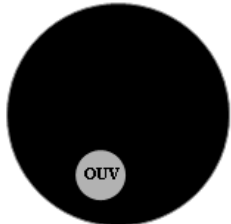
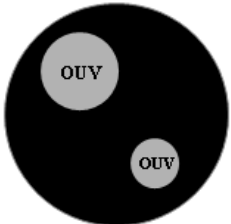
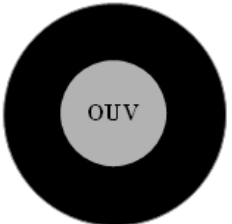
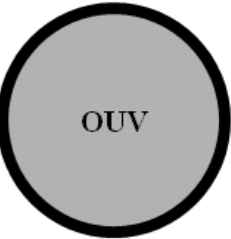
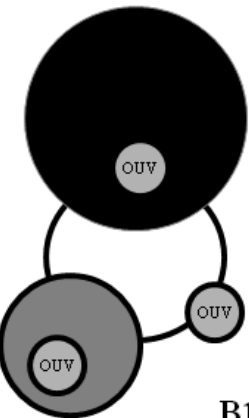
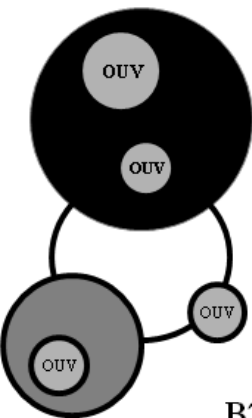
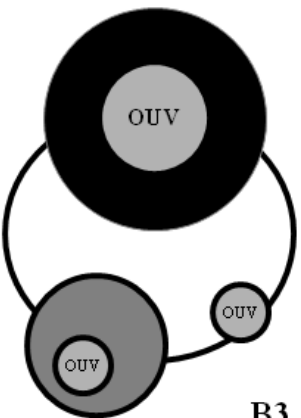
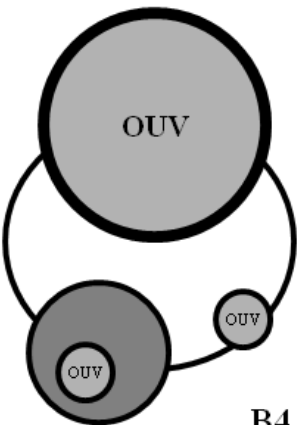
# World Heritage and Human Settlements

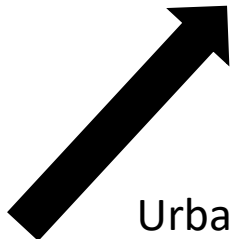
2019-2022

1-5



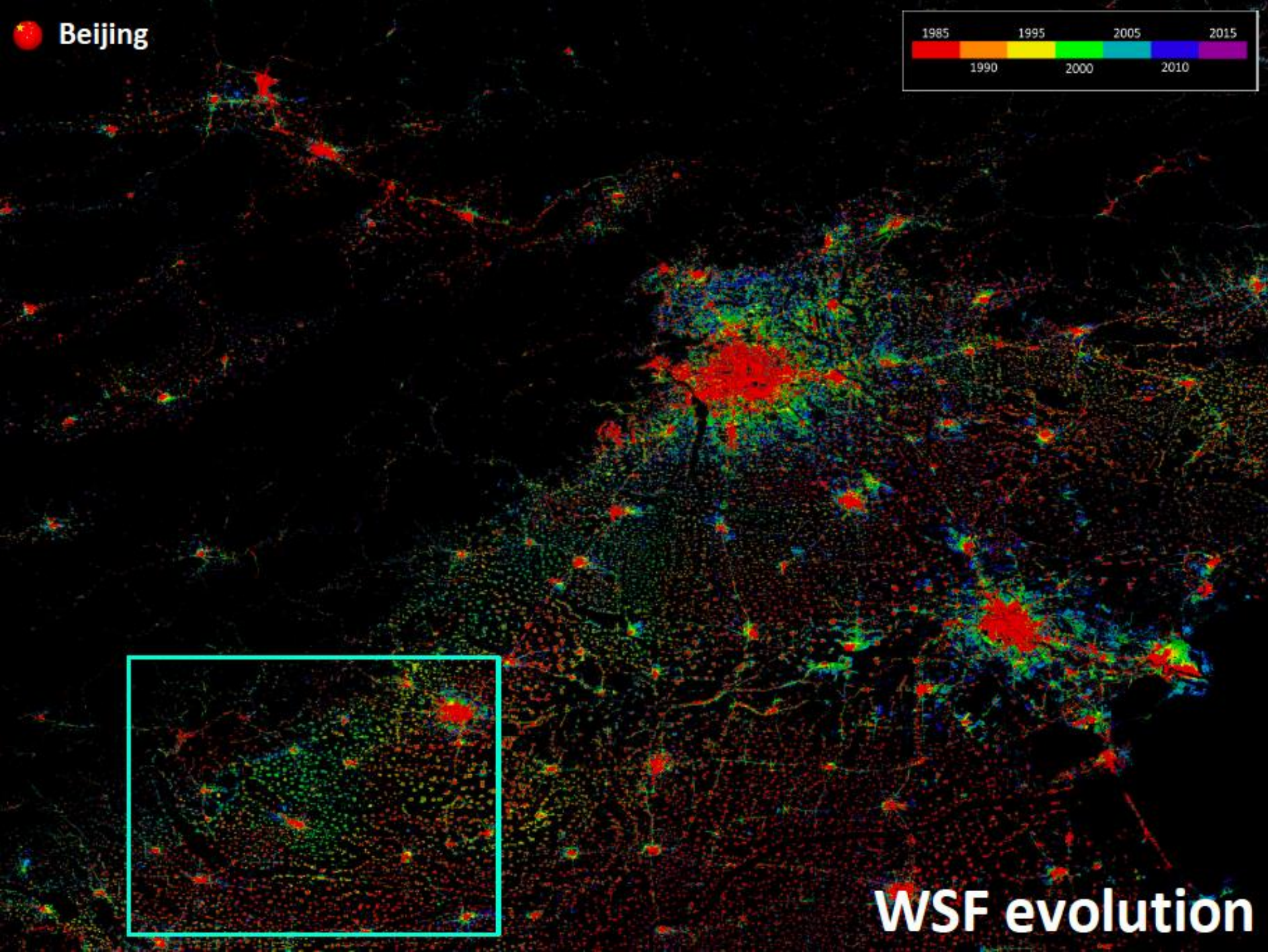
A-D  
↓

	1. Singular	2. Fragmented	3. Concentrated	4. Absolute
A. Individual	 A1	 A2	 A3	 A4
B. Collective	 B1	 B2	 B3	 B4



Urban growth

Pereira Roders (2010)



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国际自然与文化遗产空间技术中心



# HERILAND

HERILAND is a pan-European research and training network on cultural heritage in relation to:

- ▶ Spatial planning and design
- ▶ Smart cities
- ▶ Rural landscapes
- ▶ Sustainability
- ▶ Governance
- ▶ Migration

- 21 European partner institutions
- 15 PhD researchers
- > 20 senior researchers
- Budget: 4 MY euro

Info: [clue@vu.nl](mailto:clue@vu.nl)



Funded by Horizon2020  
Marie Curie ITN 1010

European countries have a long and successful history of conserving their rich heritage and landscape assets in town and country, and of capitalising on them culturally and economically. Throughout the 20th century, great progress was made in creating structures and promulgating principles to guide heritage and landscape conservation, but as the 21st century proceeds, society is challenged by new far-reaching changes. These include various forms of migration, greater digital connection, environmental degradation and climate change, shifts in the public/private balance in society at large, and a renewed pressure for growth. Confronted with such a fast-changing context, heritage management needs new ideas, tools and training to ensure that interdisciplinary, research-based heritage, landscape management and spatial planning are positively integrated with business activity, development and democratic decision making.



Through HERILAND, a consortium of 7 key academic and nonacademic organizations, with 21 partners in civil society and business, aims to empower a new generation of academics, policy makers, practitioners, professionals and entrepreneurs. Our research design positions heritage in the frame of five transformation processes which we identify as key challenges to the heritage management of the 21st century: The Spatial Turn, Democratisation, Digital Transformations, Shifting Demographics and Contested Identities, and Changing Environments. Using this framework, 15 PhD researchers will be provided with advanced training combining theoretical and instrumental knowledge in a series of research seminars, living labs and secondments with our public and private partners. By doing this, HERILAND will establish a new pan-European, transnational, interdisciplinary and cross-sectoral research and training standard, which will be codified in a HERILAND Handbook for Heritage Planning and instrumentalised through an ongoing HERILAND College for Heritage Planning.

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Want to join?  
想加入吗?

# Thank you!

# 谢谢

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