

Ports of the Future: identifying the separate objectives of ports and cities, and the alignments, tensions and legislation demands

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Introduction

- Aim: Developing sustainable development guidance for port-cities.
- Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Commission on environment and development 1987).
- Sustainable development can be further defined as development that achieves the best possible balance between economic, environmental and social factors.



Overview

What is a port-city?

- An urban settlement that contains port and maritime activities (Ducruet 2011)
- An integration of port and urban systems (Chen and Lam 2018)
- A city in which the port is the main economic activity (Armen 1972)
- A city with container traffic (Ducruet and Lee 2006)

Why do they matter?

- Ports play a key role in international trade and provide essential services
- Port-cities experience higher levels of economic growth (Adomaitis 2014)
- Rapid urbanization and population growth has fueled the growth of cities, with port-cities experience even higher levels of growth (Adomaitis 2014)
- Port-cities are at the forefront of many of the key issues of our times (urbanisation, globalisation, sustainability, climate action etc.)

Potential local negative impacts of ports



Pollution



Traffic congestion



Security threats



Land use pressure

Potential local positive impacts of ports



Employment



Circular economy



Renewable energy



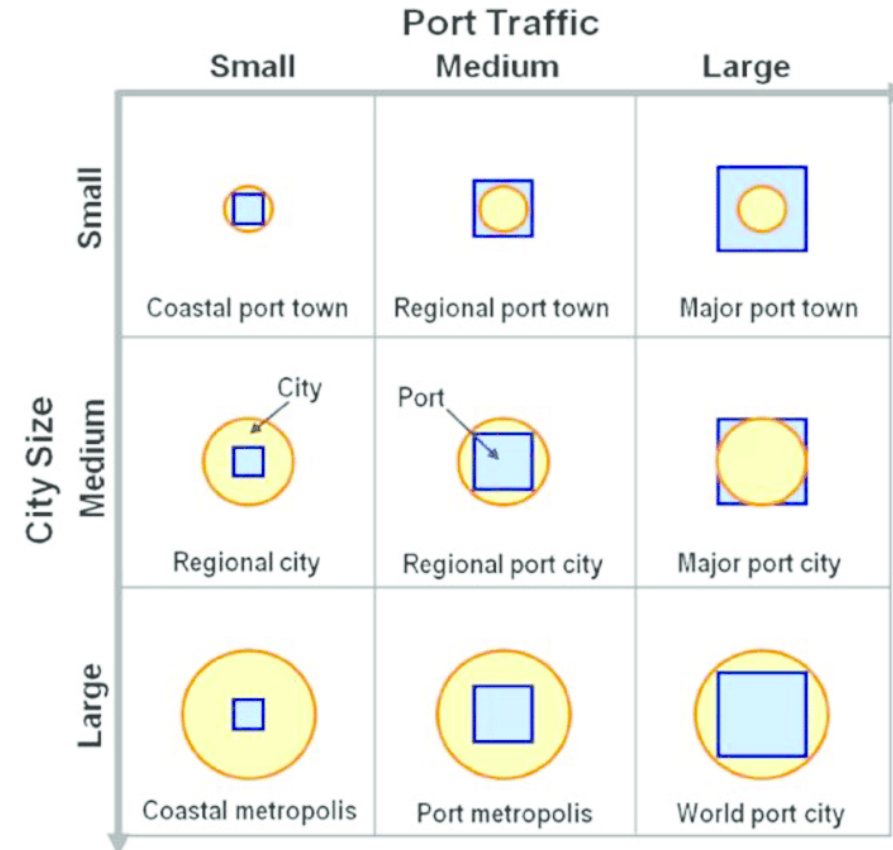
Culture and identity

Sustainable development goals



Classifying port-cities

- Existing systems to classify port-cities have key weaknesses
- This limits the usefulness of current research
- A new system was needed as a basis for future research if all port-cities are to be included

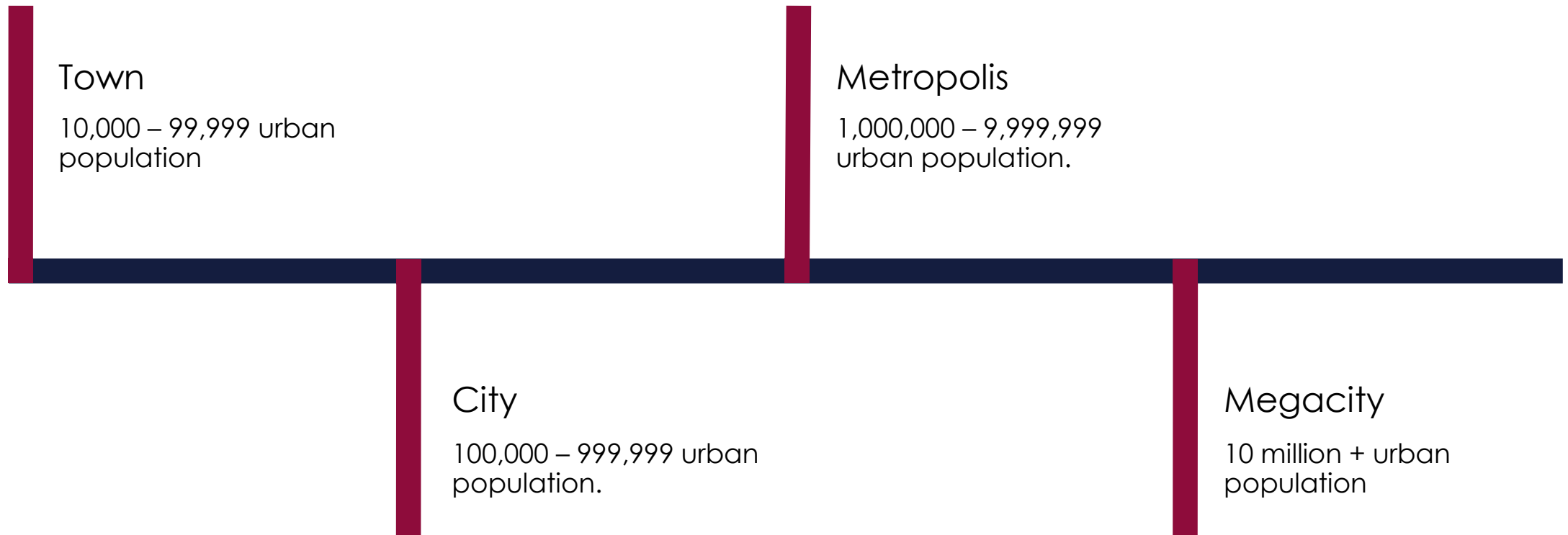


Ducruet and Lee (2006)

Port traffic



City Size



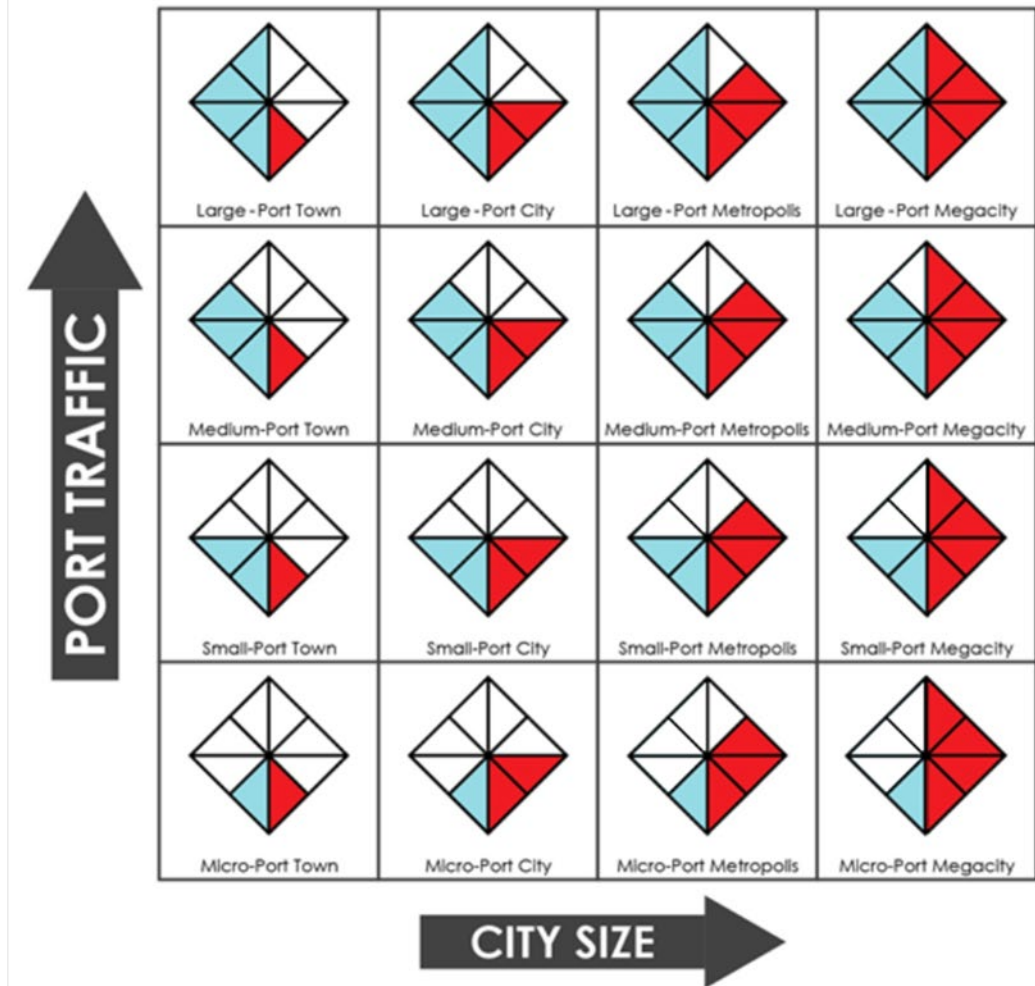
Classification



THE SOUTHAMPTON
SYSTEM

New system

- Combines cargo traffic with passenger traffic
- Includes a greater variety of port-cities
- Is easy to use



Examples

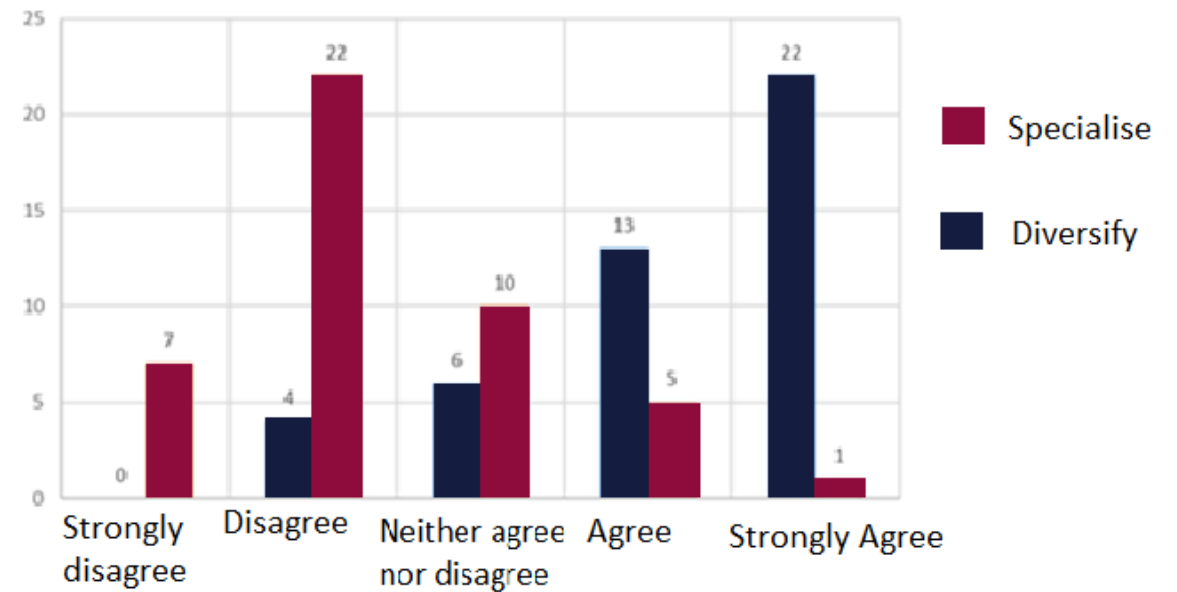
Calais Dover	Helsinki Antwerp	Busan Rotterdam	Shanghai Guangzhou
Felixstowe Galveston	Southampton Lisbon	London Brisbane	Tokyo Lagos
Newport Port Talbot	Plymouth Bristol	Adelaide Copenhagen	-
Falmouth Penzance	Swansea Sunderland	-	-

Using this system

Port strategy

- There is a strong preference for diversifying port activity among ports included in this research
- This may enable them to expand into new sectors such as renewable energy or circular economy
- This may be a potential area of cooperation with cities

Attitudes towards specialisation and diversification



Results

Business priorities

- Slight decrease in positive attitudes towards diversification as port size increases
- Slight increase in positive attitudes towards specialization as port size increases

Grouping	Mode	Median	Mode	Median
Micro-port	5	5	1.5	1
Small-port	5	5	2	2
Medium-port	5	5	2	2
Large-port	4	4	2	2
Sample size (N)	33		33	
Significance	0.029		0.047	

Next steps



Data collection

- Questionnaires covering Political, Economic, Social, Technological, Environmental and Legal aspects
- Further more focused questionnaires based on the previous results
- Stakeholder involvement

Output



- Universal Sustainable development guidance for port-cities
 - Targeted at specific types of port-cities
 - Includes as many port-cities as possible



Thank you

References

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Questions ?

