

Decoding the Port-City Interface

Mapping the spatio-functional relationship of port cities

Glasgow, United Kingdom

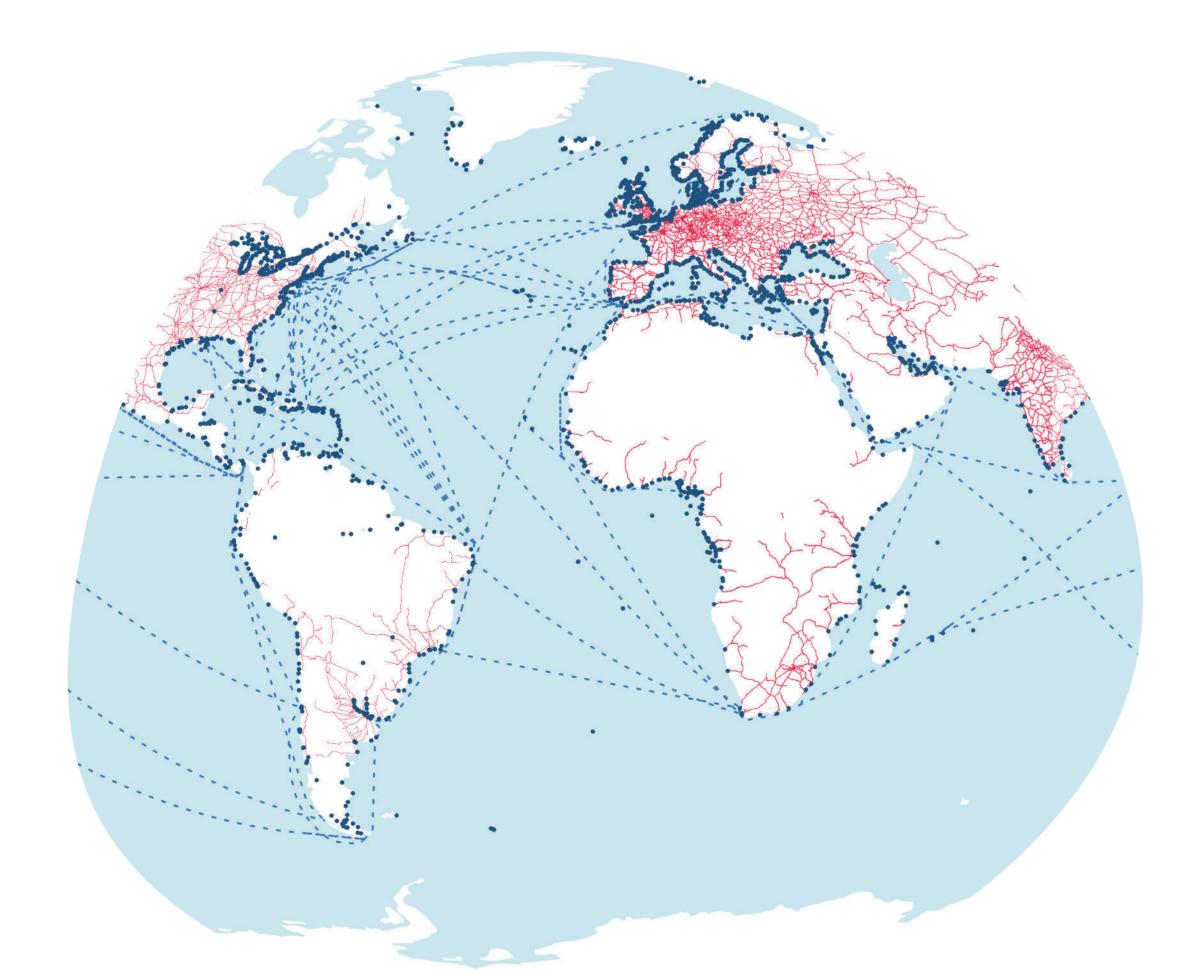
Regionalisation

As globalisation reshapes freight flows, ports increasingly extend their influence beyond the shoreline. Inland logistics hubs and distribution corridors now form regional port systems that integrate maritime functions with hinterland operations. This regionalisation intensifies the spatial and functional interdependencies between urban form, mobility infrastructure, and economic flows. It also raises urgent questions about coordination and sustainability at the regional scale, where planning frameworks often lag behind infrastructural change.

Interface

The **port-city interface** has long been a site of both synergy and tension. Expanding terminals and modern logistics infrastructure often **clash with adjacent urban neighbourhoods**, particularly where ports have outgrown their original footprints. Despite its centrality in **port governance discourse**, the interface remains poorly defined in spatial terms.

This project proposes a methodology-led approach to **interface mapping**, relying on open-source building footprint and street network data.

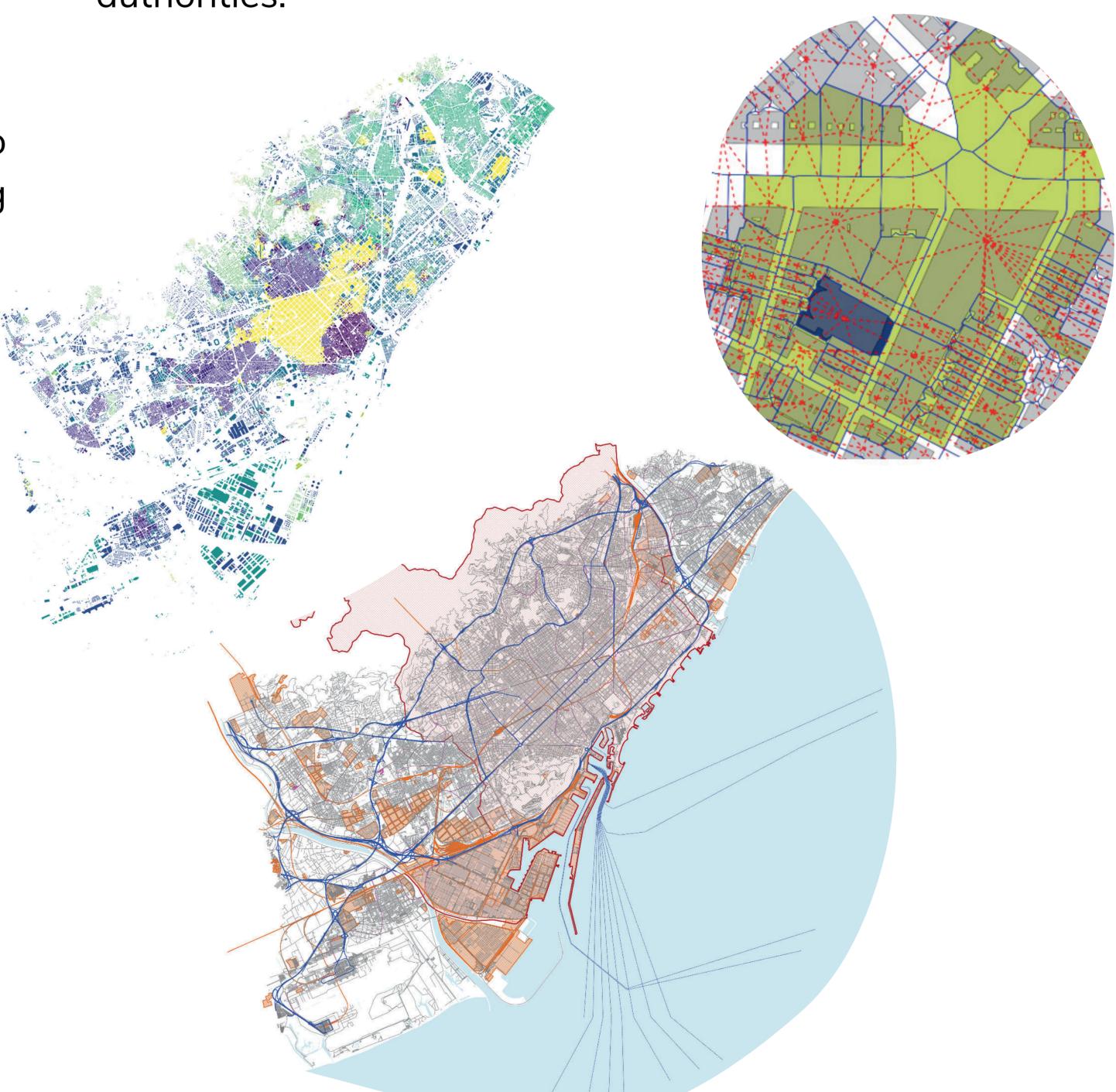


Threshold

At the fine urban scale, the threshold marks the tangible boundary between port and city. Often materialised through fences, highways, or shifting land-use gradients, this zone is where redevelopment, logistics, and residential or cultural functions collide.

While planning and port authority classifications vary widely across contexts, **built form data** reveals consistent **spatial signatures**. Urban **morphometrics** — measuring the dimension, shape, intensity, and connectivity of the built environment — can **expose patterns** invisible to traditional land-use maps. By **synthesising** these patterns through **clustering analysis**, this project seeks to **develop a spatio-functional taxonomy** of urban form specific to **port-city conditions**.

The outcome is a **replicable tool** for identifying and **comparing interface types**, designed to **support decision-making** for planners, researchers, and authorities.



More information & contact:



