

Extended Abstract:

Worldwide Geographies of Wealth and the ‘Valued Attribute’ Concept

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Introduction

The distribution of economic activities on the surface of the Earth is remarkably uneven. Even in Europe, a relatively small and densely populated continent, the location of the places that generate the most economic output is not continuous, but is represented by intermittent ‘peaks’ and ‘hollows’ that border each other in an irregular pattern (see Figure 1). *Is there any underlying logic in these patterns and what factors are at work here?*

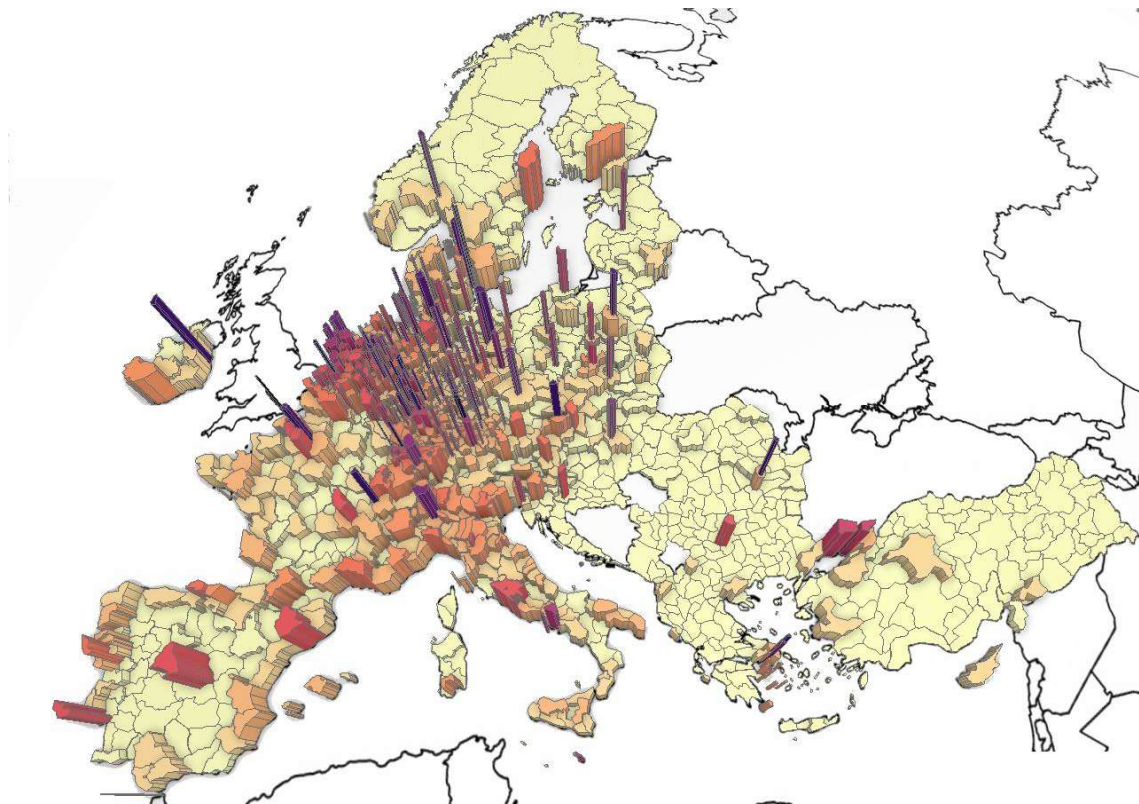


Figure 1: Spatial concentration of economic production generated in the EU, million euros per km².

Notes: Mapped by the author using Eurostat (2025) data; each pyramid represents a NUTS3 region, while its height is set proportional to the amount of gross domestic product (GDP), in millions of € generated per km² of land area in 2021; the map features data for the EU member countries as well as associated countries with available data, including Turkey.

At first sight, the ‘spikes’ on this map *always* correspond to the *largest cities* on the continent, while the ‘depressions’ surrounding them are less populated semi-urban regions and rural areas, but this explanation is not always accurate. Oslo, Copenhagen, Stockholm, Dublin, Amsterdam and Paris, as well as other largest cities of nations and their capitals, indeed generate the highest national income in terms of GDP per km² and *per capita* and form the main ‘spikes’ on this

map. However, in a large number of cases, this general observation is not upheld. For example, in Italy, the leading region, according to these measures, is not Rome, the largest city in Italy and its capital (2.8 million residents at present), but the city of Milan with 1.4 million residents and an industrial centre in the north of the country.

As another example, in Switzerland, the area that generates the largest income at present, both in terms of GDP per capita and GDP per km², is around Basel (165,000 residents), not around the national capital of Bern or its largest city, Zürich (340,000 residents). In Austria also, the region that generates the largest volume of domestic income is Salzburg, the city with about 150,000 residents located in the highlands of the country, and not Vienna, the largest city of the country with nearly 1.7 million inhabitants and the national capital. In Germany, the region that generates the largest share of national wealth today surrounds the city of Munich (1.45 million residents) and not its largest city and its capital Berlin, with more than 3.5 million residents. In Spain, the highest density of national wealth is also currently generated in Melilla, a small north African enclave of Spain with 85,000 residents, and not around its largest city and national capital, Madrid, with 3.3 million inhabitants.

Latitude is another feature that could potentially determine the geographical concentrations of wealth. However, longitudinally, the location of the places that generate the most economic output does not seem to show a common denominator either. In some cases, the places that generate the greatest wealth of nations are located in the northern and cooler areas of a country, such as in Italy, Turkey, and Switzerland, but in other cases such ‘peaks’ of wealth are located in the warmer south, such as Sweden, Norway, and Denmark. As Peter Kropotkin remarked back in 1892,

‘Climate is no longer an obstacle. When the sun fails, man replaces it with artificial heat; and we see the coming of a time when artificial light will also be used to stimulate’ (Kropotkin, 2007: 7).

Other attributes of location, at least taken alone, are also *not* always meaningful in explaining geographic patterns of wealth distribution either: while in some countries, the places that generate the highest levels of national production are on the coast, such as Denmark, Norway and Turkey, in other countries, the places that lead in economic density, such as Paris in France, Milan in Italy, London in the UK, and Moscow in Russia, are inland.

There seems to be also little consistency in terms of proximity to international borders either: at times, such main wealth-generating areas are located close to international borders (e.g., Stockholm, Oslo, Copenhagen, Munich, Basel, and Milan); sometimes they are fairly remote from such borders, such as in the case of Paris, Moscow, Praha, and Warsaw.

The history of development and path dependence can, of course, offer an explanation, since wealth in places accumulates slowly. However, this slow accumulation of wealth cannot explain all the cases, because the places that are wealthiest today are not necessarily those of the past. For example, historically, Rome and Venice previously concentrated most of Italy’s wealth, but not today, as the focus of national wealth in terms of economic density moved to the north of the country, as previously noted.

Why should we care about where the wealth of nations is geographically concentrated and what attributes are associated with it? The reason is simple: If we understand the factors behind wealth concentration in geographic space, this knowledge can assist in devising informed development policies that help to create conditions for recreating such concentrations of wealth elsewhere, beyond existing locations.

Several recent studies investigated factors and forces that affect national wealth in general (cf., *inter alia*, Acemoglu et al., 2014; Landes, 2015 and others). However, *fewer studies examined*

the geographic concentrations of the foci of national wealth, focussing mainly on individual countries and regions (see, e.g., Gutiérrez et al., 2023; Nordhaus, 2001; Storper, 2013; World Bank, 2009 and others).

This presentation aims to fill this gap, attempting to explain why wealth generated in different countries tends to accumulate in certain places and not in others, by looking at the location of foci that concentrated wealth of different nations around the world, both contemporary and in the past.

Background studies

There are *three* main approaches that aim to explain the geographic patterns of wealth distribution – enviro-deterministic, institutional, and regional economics, – while critical geography and related disciplines offer some additional explanations.



Figure 2: An example of a complex phenomenon and its partial explanations

The figure features monks, who examine different parts of the elephant, offer different descriptions of the animal depending on the part of the elephant they examine. *Source:* Woodblock print by Hanabusa Itchō (1652–1724)

The envirodeterministic approach, pioneered by Montesquieu [1748] (2023), (Reclus, [1883] 2017), Semple [1911] (2005), Huntington [1915] (1915), (Zimmermann, 1933) and upheld by several modern authors (e.g., Diamond, 1999; Landes, 1998; etc.), assumes that the physical environment (climate and natural resources, mainly stand behind geographical distribution of wealth. This approach is commonly defined as ‘geographical (or ‘neo-environmental’) determinism’ (Platt, 1948).

In contrast, the *institutional approach*, pioneered by Russian economists and politicians Kropotkin [1892] (2007) and Bukharin (1936), and promoted by several modern authors (e.g., Acemoglu et al., 2014; Landes, 2015; Glaeser et al., 2004; Lipset, 1960), assumes that political institutions, democracy (or lack thereof), and educational attainment of the local population mainly

stand behind the geographical accumulation of wealth.

Regional economics and related theories (e.g., new growth theory, NEG, neo-classical theory, etc.) integrate elements from envirodeterministic and institutional theories, while placing an emphasis on employment, technology, trade costs, and territorial policies and amenities (Colby & Foster, 1944; Krugman, 1995; Pike et al., 2020; Storper, 2013; Glaeser et al., 2000; McCann, 2015; Pike et al., 2020).

As the ‘institutionalists’ point out, the development of places with similar environmental attributes differs greatly under different institutional regimes. On the contrary, ‘environmental determinists’ point to persistent patterns of wealth concentration in particular geographical regions following the pattern of ‘Global North’ and ‘Global South’ (Landes, 1998), while regional scientists have a difficulty accepting that ‘geography and culture’ are ‘theories that don’t work’, as claimed by Acemoglu & Robinson, who argue that nations fail ‘because of extractive institutions’, while ‘geography and culture’ are largely irrelevant (ibid., 2013: 45).

Although representatives of these schools of thought rarely agree with each other, different explanations could actually be correct in explaining geographical patterns of wealth distribution, as in the ‘monk-elephant’ case in which different observers offer different explanations of the same phenomenon, depending on the part of the phenomenon they examine (see Figure 2).

The Study Concept

The conceptual model, termed the concept of ‘valued attributes’, is suggested here to explain the regularities of the geographical distribution of wealth. According to this concept, *wealth primarily concentrates in places in which multiple advantages considered particularly important are present in a given period of time.*

This concept thus emphasises *the co-occurrence of different attributes in the same place*, rather than on the presence (or absence) of individual attributes, either physical or institutional, as commonly assumed elsewhere.

In antiquity, such attributes included the availability of fresh water, a temperate climate, and fertile land for agriculture and the cultivation of life stock, possibilities of expansion and access to trade (‘agricultural settlement’). Elevated and naturally protected places and good roads gained importance later, due to defence considerations, while previously valued attributes (that is, soft climate, fertile land, and availability of fresh water) retained their importance (‘urban consolidation’). Next, the advantages associated with the size of the settlement gained prominence, helping to sustain crafts, services, and trade (‘craft cities’). With improving the welfare of the population and road development and increasing the availability of motor traffic, the quality of the environment and the availability of development space become the most valuable, while the importance of population size is somewhat diminished due to the improvement of infrastructure, suburbanisation, and decentralisation of production and services (‘suburbanisation’). As development progressed even further and population welfare increased, unique services and urban functions became prominent on the list of attributes especially valued (‘service cities’). More recently, the absence of environmental hazards, limited commutes, and a good climate have gained importance on the list of ‘valued attributes’ as essential factors related to human comfort and personal safety (‘comfort cities’).

This concept can, therefore, be termed the ‘CAKE’ model, because, like a cake recipe, it assumes *that several essential attributes must be present, each in sufficient quantities, and each attribute can lose its importance if other essential attributes are weak or missing.*

This is the concept of ‘valued attributes’, in a nutshell, which is central to this presentation, built around a book that is currently under preparation, to be published with Routledge in 2027.

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No.	Factor group	Attribute
1	Environment	Local availability of fresh water
2		Fertile land in vicinity
3		Altitude
4		Coastal location
5		Favourable climate
6	Economy	Proximity to an international border
7		Population size
8		Proximity to other localities
9		Unique functions
10	Society	Capital city status
11		Absence of environmental risks
12		Personal safety