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Working paper

Whither port geography?

A reflection both backward and forward

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1 Do ports *play to the gallery* or is there more ongoing?

The idea of this commentary came from a letter¹ published on April 16, 2024, by the Dutch Port of Rotterdam, the Belgian Port of Antwerp-Bruges, the German Port of Duisburg, and the Belgian-Dutch North Sea Port, addressed to the European Commission. In response to the current geopolitical turmoil, the letter called that their port region, in particular their petrochemical and steel industry constituting these, is increasingly in need of a unified European strategy to support it, emphasizing the need for investment in energy transitions, such as hydrogen, to maintain competitiveness, secure employment, and achieve climate goals.

This letter is notable for several reasons. Firstly, it is rare for these port authorities to present a unified front, especially given the historical competition between the Port of Rotterdam and the Port of Antwerp, Europe's largest ports defined by throughput, particularly container logistics. Secondly, and more strikingly, the letter downplays the traditional focus on throughput — a key metric in port competition defining who is a 'large' and who is a 'small' port (Hesse, 2006) — and instead emphasizes the ports' roles in fostering a collaborative economic system.

At first glance, one might interpret these statements as ports 'playing to the gallery,' strategically emphasizing their relevance to align with European industrial policy. Indeed, for instance, on February 16, 2024, the Port of Rotterdam issued another open letter, this time to the soon-to-beformed Dutch government, underscoring its economic importance through traditional metrics like throughput (Port Authority Rotterdam, 2024).

 $^{^{1}\,}https://newsroom.portofantwerpbruges.com/german-belgian-and-dutch-ports-europe-join-forces-to-preserve-the-industry$

With the above, my intention is to show that there are two 'realities' of what a port is constituted by, and that port authorities highlight them, or even downplay them, in different contexts. Empirically, both are 'correct'. The latter is well-known, especially through the lens of container throughput, whereby ports compete for market share (e.g. Notteboom & Rodrigue, 2005), and rankings of world to medium to small ports are defined by (e.g. Fleming, 1997; Yap et al., 2006). The former has recently been empirically visualized by Van den Berghe, Peris, et al. (2022) and showed that the Belgian-Dutch ARA (Antwerp-Rotterdam-Amsterdam, and all other ports within) is a complementary polycentric port region, whereby the existence of one would not be similar if the other would not exist.

This commentary has three aims. First, by referring to (hyper)globalisation, I will explain that the polycentric port region 'reality' exists *despite of*, and the other logistical 'reality' *because of* public policy. Second, related to this, port geography emerged as a distinct academic field; and that, thirdly, the current turmoil and the overall call for a normative (COM, 2024) turn within human geography, poses a chance to renew the field's relevance.

2 Globalisation, ports, and port geography: from could be to should be

2.1 Globalisation

Globalisation can be explained in numerous ways, among those the change of the relative value of trade in percent of the global primary productivity (GPP) (Van Bergeijk, 2022). Figure 1 shows how significant in modern times, this has changed. Especially when the monetary management Bretton Woods system of national organised economies gradually comes to an end during the beginning of the 1970s, an enormous increase occurred of the added value of trade activities. While interrupted by the oil crises of the mid 1970s and early 1980s, the increase continued until the 2008 financial and economic crises. In particular, it is noticeable that a so-called 'hyperglobalisation' occurred from the 1990s onwards till 2008. From 2008 onwards, things changed. First, following the financial and economic crises, a 'slowbalisation' occurred (Brakman & van Marrewijk, 2022). More recently, this slowbalisation is moving towards deglobalisation. The latter is, however, still debated in literature, and some argue that there is a big chance, like with Brexit or Covid, that it partially bumps back up. However, as argued by Van Bergeijk (2022), the effect of the ongoing political deglobalisation and the related protectionist programs on the economy (e.g. 'Make America Great

Again', 'Made in China 2025', 'EU's Strategic Autonomy') cannot be ignored. Or in other words, let's start to acknowledge we are in a deglobalisation (see also Latour, 2022). Summarizing, there are arguably two fundamental shifts: the shift from the Bretton Woods' national organised global economy to what we now appoint as (hyper)globalisation, and second – although thus still debated –, the shift from this (hyper)global to a re- or even de-globalising global economy.

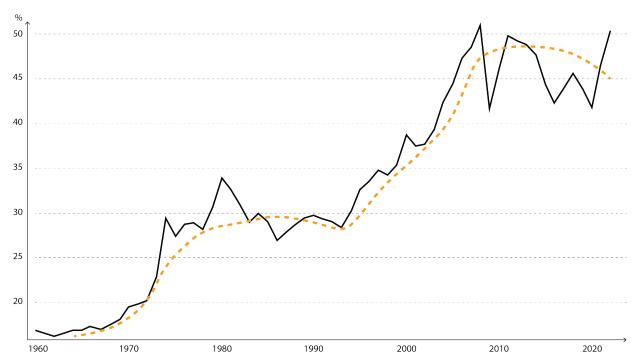


Figure 1: World merchandise trade in percent of GPP (the dotted line is the six-year moving average) (adapted from Van Bergeijk, 2022)

2.2 The port

To explain how this first shift had an impact on 'the port', arguably the perspective paper of Brian Slack (1993) titled 'Pawns in the Game: Ports in a Global Transportation System' is an excellent source. Slack gives an interesting reflection on the at that moment quickly, but still ongoing changing role of (the governance of) ports. Without mentioning literally Bretton Woods nor globalisation, he explains that ports before were of national importance and within that nation were secured of cargo generated in their hinterland. Using the container sector, he continues to explain that this is no longer the case because of two related phenomena. First, hinterlands started to grow because of multimodality and the disappearance of borders and as such started to overlap, initiating a competition between ports across national borders. Second, the logistical sector – as many others - experienced vertical and horizontal consolidation, leading to the emergence of a

limited number of multinational companies (Ducruet & Notteboom, 2021). As explained by Slack (1993), the consequences were significant. Where before ports were a vital node of a national economy, planning, and investments, now they became 'pawns' in the global game of logistics and were subject to the will of international companies if their port remained or became relevant.

During hyperglobalisation, the port arguably became a reality. As Slack (1993) explains, the observation around the (Western) world was that 'traditional' economic maritime activities, and especially industrial manufacturing activities, were decreasing. Following the opening of borders (e.g. the European market, China joining WTO), complex global production networks emerged (cf. Henderson et al., 2002). Consequently, labour and resource intensive activities, like industrial activities, relocated from for example Western Europe first to Eastern Europe and later to other parts of the world. These global production networks needed increasingly dedicated support to make them possible. This is a nutshell explains the increased need for the service sector, like logistics and advanced producer services (APS) (e.g. consultancy, legal affairs, or insurance). The latter's geography has been studied widely in urban geography (but also maritime APS received attention, e.g. Hall et al., 2011). Briefly, APS clustered in a small number of cities, which became known as global cities that to a large extent steer the global economy (Friedmann, 1986; Sassen, 1991), and gradually formed hierarchies, creating world city networks (Beaverstock et al., 2000). Similarly to APS, dedicated logistics clustered and port hierarchies emerged, with notably the decrease of London and the increase of Rotterdam (Ducruet et al., 2018).

This all didn't come 'out of nowhere'. As explained by Slack (1993, p. 582), "The only guarantee [ports] have is that unless there is a container handling facility available, there will be little or no container traffic. This is somewhat analogous to a lottery, where only those who purchase tickets have a chance of winning". Being able to 'buy this ticket to the lottery' had a significant aspect on the governance of ports. Briefly, the former governance of ports, which was in many cases a municipal department, became too slow to react fast enough on the changing demands of logistical companies, leading to a competitive disadvantage. Therefore, - in a context wherein deregulation was dominant among many countries, also mentioned by Slack (1993) -, increasingly ports became managed by a port authority, a dedicated governance body with the intent to quickly react on changing demands. There are different forms of what ports authorities are according to the balance between private and public interests and stakes (Jacobs, 2007; van der Lugt et al., 2013;

Verhoeven, 2010). Though, what is relevant here, is the question what was used to define what should become governed by the new-to-be-created port authority. Indeed, quite logically, if a new governance body is created, for many practical reasons (e.g. financial, legal) it needs to be clear what they must govern and what is not within their responsibility. There are differences, but in general the spatial economic or topographical understanding of port activities became the dominant way to define what is a port and what is not. Sometimes this was made very clear (e.g. in the Belgian constitution it is described between which locations the port is located), sometimes it was based on 'industrial areas with water bound logistical access or activities', like in The Netherlands.

The above-described shift meant that a port was no longer considered in terms of 'what it could be' but rather 'what it should be. First, in one way or another, the spatial economic understanding of a port was (implicitly) chosen above other ideas of what a port is. That doesn't mean that other ideas of what a port is, like a relational understanding of port (-city) (e.g. Hall & Hesse, 2012; Hall & Jacobs, 2012; Hesse, 2017; Van den Berghe et al., 2018), disappeared or stopped being explored and researched. The difference between these ideas of a port and the spatial economic idea of a port is that these didn't become institutionalised. Therefore, understanding what was defined as how this institutionalisation would be seen as successful, is important. Though differences exist, and this commentary is based within a Western context with its subsequent limitations, in general a successful port authority became perceived as a port, via thus in most cases a port authority, that made sure port land and infrastructure was used. And hence, it is by linking back to globalisation to understand what demand was the highest: the service logistics.

I would argue that here the port became a reality. Using a critical realist ontology (Archer et al., 2013; Bhaskar, 2008 [1975]; Bryant et al., 2011; Sayer, 2000, 2010 [1984]), being advocated for in geography a few decades ago (Bathelt & Glückler, 2003; Sunley, 2008; Yeung, 2005) but also more recently (Gong & Hassink, 2020; Yeung, 2019; Yeung, 2023), the port's dominant form became a reality out of different processes like explained above (cf. water bound logistical activities), and from the moment the port became this reality, it started to condition future processes (paraphrasing Paasi, 2010, p. 2297 "regions condition and are conditioned by politics, culture, economics, governance, and power relations"). In other words, this is a sort of chicken-or-egg of how to define success (similar to Massey (1979) questioning the economic success of London): do

we observe successful ports if they play a vital role within the global economy (e.g. 90% of world trade goes via water (UNCTAD, 2023)), or is this success because of dedicated investments and choices made towards this pre-defined success (cf. Brenner & Schmid, 2014)? This to some extent explains why, until now, the 'other' ARA petrochemical (industrial) reality was not seen as important or successful (until now?), because it didn't fit the success of a global port. Like explained in detail by Van den Berghe, Peris, et al. (2022) and Boon (2014), the petrochemical and industrial ARA region that today exists has its origin in the Bretton-Woods organised world, during which it was of national importance (cf. success?) to attract these industrial petrochemical activities (Hein, 2021; Van den Berghe, 2018). Path-dependently these national organised and planned systems became a polycentric port region, but this despite of (semi-) public policy makers, that blocked or slowed down cross-border infrastructures, especially if industry and logistics competed for the same locations, like in the port of Amsterdam (Van den Berghe, 2018; Van den Berghe, Louw, et al., 2022). To summarize, arguably: the port (or better: how the port's perceived success became institutionalised) is truly a 'child of hyperglobalisation.

2.3 Port geography as a field

From this moment, one could argue that the port as a research object became a reality too. Before hyperglobalisation, the port was in fact no different than many other (spatial) objects that are used within human geography or spatial planning to respectively understand or steer upon reality. Following from the second half of last century, the port indeed was an interesting object to explain rapid ongoing changes, it is no surprise the research object 'port' had a central place within human geography and within their respective journals and books, as shown by Ng and Ducruet (2014). Their extended analysis of the evolution of 399 port papers between 1960 and 2012 shows a shift from the 1990s onwards between the 'classical' and 'contemporary' age (Ng, 2013; Pallis et al., 2010), thus fitting well with the start of hyperglobalisation. Using cross-references, it is clear that a group of researchers emerged and formed a community from that moment. Although not dedicated specifically to port research, the Journal of Transport Geography founded in 1993, became clearly the leader in volume of port related research publications. Content wise, Ng and Ducruet (2014) show a shift towards applied research, which also fits within a broader move within geography (Bathelt & Glückler, 2003; Paasi, 2010), and researchers focus on topics like port efficiency and management. Or in other words, from the moment the port became a reality and it was defined its

success depends on attracting services, port geography emerged and adapted well to the need to better understand, analyse, and develop/plan ports.

This all together made arguably that port geography as a field emerged. While it is always difficult to appoint if and to what extent one can clearly define a research field or not, basically a research field can be appointed if it checks the following four aspects (Ehrenfeld, 2004): (i) a set of foundational beliefs and concepts that provide shared meaning, (ii) an authoritative structure that ensures quality and maintains conceptual consistency, (iii) a community of individuals engaged in these activities, and (iv) a community of individuals engaged in these activities. Respectively, first, hyperglobalisation led the port be conditioned and, following a wide-spread idea of what a port should be (while before geographers studied what a port and its evolution could be), started to condition future developments (for a critical reflection, see Hall et al., 2006); second, a group of researchers dedicated to the research object of a port emerged and their research and discussions centred in, thirdly, the Journal of Transport Geography. The fourth point is maybe less straightforward, but, on the one hand, in practice books like the Port Reform toolkit by the World Bank (2003) have spread the 'should be' of the port around the world, and, on the other hand, in academia we could appoint for sure important books (e.g. Notteboom et al., 2022).

3 A normative turn for ports *and* port geography?

Remarkable is that the emergence of the field of port geography and the consequence of losing its central positioning within human geography, is arguably perceived as negative (Ducruet et al., 2019; Ng, 2013; Ng & Ducruet, 2014; Ng et al., 2014; Shaw & Sidaway, 2011); while authors positively applaud the achievement of the emergence of the academic field for e.g. the circular economy (Kirchherr et al., 2023). But why not turning it around and we as port geographers find some proud in the 'achievement' of a distinct academic field. And maybe realise it is also of interests for other geographers to connect to port and port geography (see for example Harrison et al., 2022 arguing ports provide better insights in the role of companies in forming polycentric systems).

This is not the most important point of this commentary, though. My main point is that following the ongoing shift beyond (hyper)globalisation there is a danger of an 'endpoint' for port geography as a (relevant) academic field. Arguably: if the port as a reality, as a research object, and port

geography related to this, not only emerged within but may be regarded as children of hyperglobalisation, then, if the global economy goes into re- or even deglobalisation, does this all remain relevant?

Therefore, to conclude, I pose the question 'Whither Port Geography?' (respectfully inspired by Harrison et al., 2021). I argue that the field of port geography can renew itself and raise its importance more widely, not by positioning itself as a field that answers the question what a port could be, but also not by positioning itself as a field that answers the question what a port should be. I argue that the field of port geography should position itself exactly on the reciprocal relation between what could be and what should be. There are some benefits with this. First, it would enable the field to embrace methodological pluralism and heterogeneity (see also Shaw & Sidaway, 2011) and connect to other less-explored ways to perceive the port cross-sectoral and across levels, from the local (e.g. the port city interface), to the region, to the global (e.g. global production networks and value chains). The challenge then is to combine such pluralistic obtained observations with explanation that goes beyond 'anecdotes' or 'surface geography' (Yeung, 2023), but can help to understand context and contingency (cf. Monios & Wilmsmeier, 2016), causal mechanisms (Hesse, 2017; Jacobs & Lagendijk, 2014; Jacobs & Notteboom, 2011; Raimbault et al., 2014; Van den Berghe et al., 2018), and enable to decontextualise (Hassink, 2019). Second, the reciprocal relation between could be and should be forces us to remain linked to practice and the societal questions and challenges. Most likely, the way ports have been instrumental to achieve societal goals during (hyper)globalisation, will be different in the next era. For example, if we need to tackle climate change, a better competitive Europe, achieve SDGs, etc., is the current dominant institutionalised geography of ports the 'best fitting'? Do we need other 'ports'? Or does it differ across challenges, context, and across space (cf. Van den Berghe, 2018)? It is an open question what that port is and should be, but it implies that port geographers will need to embrace normativity, and make explicit 'what', 'who', and 'where' we take and take not into account in describing and futuring (Gong, 2024). The two examples given of existing (competing) realities of ports in the first section, show that depending on our understanding of the 'future' and what values underlying this, different 'ports' exist, conflict, or are formed. I belief that all this will enable port geography to retake a central role within human geography. If ports were 'frontline soldiers of globalisation' (Ducruet & Lee, 2006), then as 'frontline soldiers of deglobalisation' (Noorali et al., 2022), they are promising for key reflexive questions (Martin, 2021) and (re-) theorizing (Gong &

Hassink, 2020; Monios & Wilmsmeier, 2016; Shaw & Sidaway, 2011) within human geography. Maybe these ontological and epistemological endeavours will become our 'shared meaning' of ports reciprocally constituting a renewed field of port geography.

4 Acknowledgments

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