

Wind of change: shifting narratives on China's Belt and Road Initiative in Duisburg and Germany

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Global networks of megaprojects like China's Belt and Road Initiative (BRI) face growing geopolitical challenges that shape their success or failure. This paper investigates how the BRI's symbolic value has transitioned from economic hope to strategic concern, driven by evolving geoeconomic and geopolitical narratives. Focusing on Duisburg and Germany the study employs the frameworks of symbolic economy and symbolic policy to unravel the complex, multi-scalar interactions within these intertwined *netscapes*. The findings reveal that traditional success and failure metrics, typically centred on economic and operational outcomes, are insufficient. Instead, the study underscores the importance of symbolic factors (e.g. image creation, the alignment with broader political/economic agendas) in determining the long-term viability and perception of megaprojects in an evolving geopolitical landscape.

Keywords: BRI, megaprojects, narratives, symbolic value, geopolitics

JEL classifications: P, R

Introduction

A decade ago, China's Belt and Road Initiative (BRI) introduced a novel form of global connectivity, and heralded a new era of megaprojects. Unlike individual megaprojects, the BRI is a global network of highly intertwined megaprojects, unified under a cohesive vision. This Sino-centric network comprises the Silk Road Economic Belt and the 21st Century Maritime Silk Road, connecting China to the world via land and sea routes. These routes are officially intended to promote trade, investments, and infrastructure modernization at the national and subnational scales (Chen et al., 2021; NDRC, 2017).

In this work, we conceptualize the BRI as a *netscape*, emphasizing the globally networked nature of the initiative

which accords it a significant political relevance that goes beyond mere economic objectives (IISS, 2022). As exemplified by Italy's withdrawal from the initiative (Tondo, 2023), a series of events, including trade wars between East and West and Russia's invasion of Ukraine, have complicated the political context of the initiative as well as stakeholders' perceptions and engagement with the BRI (The Washington Post, 2023).

While the BRI has been widely studied for its economic and geopolitical impacts, there is a significant gap in understanding how the symbolic value of megaprojects like the BRI influences their successful implementation. Most existing research on megaprojects focuses on operational and project management aspects, such as cost, time, and scope (Flyvbjerg, 2014). However, the symbolic value and narratives that emerge around such projects,

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particularly in the context of evolving geopolitical dynamics, have not been adequately explored.

Due to the interdependence of *netscape projects*, the narratives and symbolism of the overarching BRI and those of constituent megaprojects are closely intertwined. This interdependence means that the success or failure of individual local megaprojects, as understood by Flyvbjerg (2014), can significantly impact the broader initiative. To achieve a clearer analysis of the distinct influences of geographic and economic factors on global power dynamics (Oliveira et al., 2020), the geo-economic and geopolitical narratives are separated as done by Lin et al., (2021). The geo-economic narrative emphasizes the promotion of a China-led globalization in order to promote regional development (Chen et al., 2021) and sustain China's economy and social-political stability (Ye, 2020). In contrast, the geopolitical narrative perceives the BRI as a strategic move to challenge the global order and expand China's influence, by potentially weaponising infrastructure investments (Flint and Zhu, 2019). These competing narratives highlight the complex interplay between economic and political factors in determining the success or failure of megaprojects.

This study aims to fill the identified research gap by analysing how the BRI's symbolic value and narratives evolve over time and how these changes impact the perceived success and failure of megaprojects within the BRI framework. By focusing on the case of Duisburg, Germany—a pioneering European logistics hub of the BRI and a focal point of early Sino-German collaboration—this research seeks to understand how the symbolic value is created across scale and influences the broader outcomes of the BRI.

To address this research gap, this study joins the concepts of symbolic economy (Zukin, 1996) and symbolic policy (Edelman, 1985) to create a conceptual framework for analysing the symbolic dimensions of megaproject success and failure within the BRI. This approach facilitates an examination of how narratives and symbolic value surrounding megaprojects contribute to the creation and transformation of subnational (regional and local) as well as national identities and perceptions. Drawing on the national case of Germany and the specific subnational case of Duisburg offers the opportunity to analyse how the evolving narratives and multi-scalar symbolic values of the BRI impact its success and failure.

This article is structured in the following order: First, a literature review of the symbolic dimensions of megaproject successes and failures is presented. Next, the concepts of symbolic economy and symbolic policy are established as the analytical framework for assessing the success and failure of the BRI at different scales. This provides the analytical lens for discussing the BRI's symbolism in the context of its geo-economic and geopolitical narratives. The third section outlines the methodology and empirical data used. We then present empirical in-

sights into how sentiment in Duisburg and Germany towards the BRI has changed from geo-economic optimism to geopolitical caution, influenced by major paradigm changes in international relations between East and West. This paper reflects on broader geopolitical events, such as the Russian attack on Ukraine, and Chinese domestic political events, like the 20th National Congress of the Chinese Communist Party (CCP). These events shifted the German Federal Government's sentiment from a geo-economic focus to a more geo-strategic one, marking China a systemic rival and ultimately impacting the symbolic value assigned to BRI cooperation across scales. The conclusion discusses how the BRI's multi-scalar symbolism highlights a newfound fragility in determining the success and failure of megaprojects. These insights demonstrate that the symbolic success and failure of a specific megaproject ultimately results from the multi-scalar relationships of the project, which occur locally but are embedded in a national and global context.

Unpacking a megaproject's symbolic dimension

Symbolic value and narratives in megaprojects

The symbolic dimension of megaprojects that just recently gained scholarly attention (for example, Rego et al., 2017; Söderlund et al., 2017; Syn and Ramaprasad, 2019), serves as an analytic lens for the interpretation of the perceptions and hopes, and hence the narratives surrounding megaprojects like the BRI. In classic megaproject literature megaprojects are defined as 'large-scale, complex ventures that typically (...), take many years to develop and build, involve multiple public and private stakeholders, are transformational, and impact millions of people' (Flyvbjerg, 2014, 6). The symbolic dimension adds to this by emphasizing the megaprojects' power, wielded through perception and narrative, to become a promising motive that encourages people to envision a future world and their place in it (Schindler et al. 2019). Especially in terms of future development politics, megaprojects have a symbolic value in serving as symbols of vision and hope for regional and national economic development opportunities in the longer term (Müller-Mahn et al., 2021; Söderlund et al., 2017).

Megaprojects are often shaped by relational dynamics, with non-state actors playing a crucial role in their realization even when the projects themselves are envisioned by states (Schindler et al., 2024). The BRI consists of diverse entities (for example, Asian Infrastructure Investment Bank; state-owned enterprises, like COSCO Shipping) with different strategies, interests and agency.

Thus, it is crucial to emphasize the variance of stakeholders' interests since they drive megaproject

development. Flyvbjerg (2014) and Frey (2017) emphasize how the sublime manifests in various domains, including technology, politics, economics, and aesthetics, alongside the significance of community pride. Stakeholders, such as politicians, planners, private businesses and members of civil societies, can actively shape the perception and value of megaprojects via symbolism and narratives from their early development stages to post-completion (Bakker et al., 2016). Watkins (2015) points especially to the media as a crucial actor in shaping the perception of megaprojects by actively disseminating and constructing the social and spatial stories surrounding it. As megaprojects arise at the intersection of diverse actors and scales, this further amplifies the complexity and multiplicity of actors and interests at each scale (Chaban et al., 2019; Müller-Mahn et al., 2021).

Germany's federal system divides powers between the German Federal Government, regional states and municipalities, with the Federal Government holding primary authority over foreign relations¹. Hence, municipalities and the federal government largely act independently. This decentralization ensures a unified national foreign policy, but it also limits municipalities' roles in international matters. While municipalities focus on local governance, such as urban planning and economic development, they sometimes pursue international partnerships and critical infrastructure projects—like energy, healthcare, and industry—that may conflict with the Federal Government's foreign and security policy priorities. The federal system creates a resource and expertise gap, as municipalities lack the specialized personnel needed for foreign policy, leading to potential misalignments between subnational and national interests as well as challenges in addressing international risks (Kirch et al., 2021).

The paper defines symbolic value as the meaning attributed to a megaproject from a societal perspective. This meaning often includes a projection of technological or economic superiority that goes beyond the project's practical use. This adds to the material value assumed with megaprojects, such as jobs and increased economic activity (for example, Flyvbjerg, 2014). As megaprojects are based on visions and have a long lifecycle, their symbolic value evolves in response to changing political contexts and societal values (Syn and Ramaprasad, 2019). Narratives are also context-dependent and are variable versions of reality. They are not stable but rather evolve in an ever-changing political and economic landscape. This evolution is continuous, from project initiation to completion of construction and beyond (Abbott, 2020; Van Der Westhuizen, 2007). Narratives, defined as a shared symbolic understanding (Czarniawska, 2004), exert influence on the construction of shared meanings and interpretations of megaprojects. Narratives frame these projects either as symbols of progress, transformation, economic development, and national pride, or as potential sources of risks and failures (Roselle et al., 2014). Van Der Westhuizen

(2007) emphasizes that perceptions of a megaproject can lie anywhere on a symbolic spectrum from strongly favourable to wasteful and megalomaniacal. Economic and political impacts can therefore be interwoven into a single narrative.

As demonstrated, the symbolic dimension of megaprojects arises from both economic and political contexts and concurrently exerts an influence on these contexts (e.g., Syn and Ramaprasad, 2019). Hence, the lenses of symbolic economy (Zukin, 1996) and symbolic policy (Edelman, 1985) provide criteria that facilitate a deeper understanding of success and failure through the symbolic dimension of megaprojects. This adds to the operational project management perspective that focuses on the iron triangle's measurable components such as costs, time to completion, and performance in terms of benefits (for example, Flyvbjerg, 2014). From this more material perspective, success in megaprojects relies on a clear project scope and strong top management support (Ika et al., 2012). However, failure often results from poor management, excessive bureaucracy, strategic misrepresentation, and optimism bias, where costs, timelines, and risks are underestimated, and benefits are overestimated (Flyvbjerg, 2011).

Zukin's concept of the symbolic economy (1996) delves into the convergence of symbols and space in the economic context, with a particular emphasis on deploying symbols, images, and narratives to actively shape a city's identity and image. From a symbolic economy perspective, megaprojects primarily emphasise the importance of the concept of place, encompassing both physical infrastructure and symbolic meaning. In this regard, the relevance of the concept of *imaginaries*, particularly *spatial imaginaries*, is acknowledged. However, as these are two adjacent discussions the focus of this work is on narratives. The national government, transnational companies are key actors, who influence the strategic direction and funding of the projects. Meanwhile the local government as well as locally based companies are assumed to play a major role on the local scale, directly involved in the on-the-ground implementation and the immediate socio-economic impacts of the projects. Hence, the BRI can transform physical infrastructure projects into symbols of China's global influence (for example, Schindler and Kanai, 2021).

At the same time, Edelman's (1985) perspective on symbolic policy adds another layer of understanding, referring to the relevant political sphere megaprojects are embedded in. Edelman's (1985) concept of symbolic policy suggests that policies convey symbolic messages beyond practical outcomes. From this perspective, megaprojects serve as symbols of national pride. Policymakers may use symbols and narratives to shape a megaproject's perception and garner support even when tangible impacts are limited. Key actors to be emphasized are national and regional-local governments, along with political allies, who shape the political narratives, regulatory frameworks,

and ideological underpinnings that support or oppose the megaprojects. While the overarching themes of success and failure in megaprojects remain consistent across national and subnational levels, the specific impacts and perceptions can vary. In the BRI context, symbolic policy can refer to the initiative's initial framing as a symbol of global cooperation and development (for example, [Chen et al., 2021](#)).

From the perspective of symbolic economy ([Zukin, 1996](#)), successful megaprojects enhance national identity and global image by symbolizing economic growth and innovation ([Table 1](#)). For example, the Burj Khalifa in Dubai stands as a testament to architectural and engineering advancements, elevating the nation's global prestige ([Flyvbjerg, 2014](#)). Such projects are celebrated as symbols of national progress and technological prowess, reinforcing the country's economic achievements and fostering a positive international image.

Locally, successful megaprojects boost community pride and local image, contributing to economic revitalization goals, such as job creation and local development. Projects like the High Line in New York City illustrate how

urban revitalization can enhance local pride and stimulate economic activity, aligning with community aspirations ([Gospodini, 2004](#); [Watkins, 2015](#)).

In terms of symbolic policy, based on [Edelman \(1985\)](#) successful projects align with broader political goals and reflect economic benefits consistent with national strategies. This alignment is crucial for garnering support and demonstrating the project's contribution to national interests. At the local scale success is determined by the project's ability to address community concerns and deliver realistic economic benefits. For example, public transportation initiatives that alleviate local traffic congestion demonstrate effective political representation and alignment with local needs, reflecting a commitment to addressing specific community issues ([Miller and Lessard, 2001](#)).

From a symbolic economy perspective, megaproject failure can manifest as a symbol of mismanagement or economic decline on the national scale and be exacerbated by negative media coverage. High-profile failures, such as the Boston Big Dig, often symbolize inefficiency and mismanagement, damaging national prestige and

Table 1. Success and failure of megaprojects from a perspective of symbolic economy and symbolic policy

Megaproject (MP)	Symbolic economy (Zukin, 1996)	Symbolic policy (Edelman, 1985)
Success	National scale - MP boosts national identity and global image - MP symbolizes economic growth and innovation - Positive media coverage: Reinforces economic value and aligns with previous project vision Local scale - MP boosts local image and community pride - MP aligns with local aspirations of boosting local economy (e.g., creating jobs) - Positive media coverage: Local media reinforces economic value and project vision	National scale - MP aligns with broader political goals - MP symbolizes economic benefits aligned with national strategy - Positive media coverage: Supports political representation Local scale - MP addresses local concerns and values, and offers solutions for local issues - MP's economic promises seen as realistic and beneficial - Positive media coverage: Supports political representation
Failure	National scale - MP symbolizes mismanagement (of resources) or decline - MP seems to fail on delivering economic benefits, harming its value - Negative media coverage amplifies failures and criticism Local scale - MP harms local image and fails economic expectations - MP seen as illegitimate or a misuse of resources - Negative media coverage highlights shortcomings, fueling dissatisfaction	National scale • MP presentation causes national criticism and diminishing support for the project • MP does not fulfill the previous promised economic benefits • Negative media coverage that challenges the narrative Local scale - MP symbolizes ignorance of local concerns, causing criticism - MP's political promises are unfulfilled, causing local disillusionment - Negative media coverage that challenges the narrative

Source: Own elaboration based on [Zukin \(1996\)](#) and [Edelmann \(1985\)](#).

diminishing perceived economic progress. Such failures undermine national reputation and erode public trust in such large-scale projects (Flyvbjerg, 2014).

Locally, a failed megaproject can damage the community's image and fail to meet economic expectations. Projects that do not deliver on promised job creation or economic benefits may be viewed as a misuse of resources, with negative media coverage highlighting these issues and exacerbating local dissatisfaction (Pinto and Mantel, 1990). Such failures can undermine the project's intended positive impact and erode community support.

In terms of symbolic policy, the failure of a megaproject at the national level can invite widespread criticism and significantly reduce public and political support, especially when projects do not bring promised benefits. For example, when megaprojects fail to deliver anticipated economic returns, they face significant political backlash and media scrutiny, challenging their alignment with national strategies and goals. This can lead to a decline in public and political support (Miller and Lessard, 2001).

Failure at the local level means failure to address community needs and fulfil political promises. When a project disregards local concerns or fails to meet political commitments, it can lead to significant local criticism and disillusionment. Negative media coverage often reinforces these issues by challenging the project's alignment with local values and needs (Ika et al., 2012).

Nationally, success and failure are linked to broader identity and political goals, while locally, they are more closely tied to community pride, immediate economic benefits, and alignment with local concerns.

The BRI's emplotted narratives

This section introduces the BRI as a novel form of megaprojects that encompasses highly intertwined *netscapes* of large-scale infrastructure projects across Asia, Europe, and Africa. The complexity is underscored by the interdependence between the BRI's grand vision and its many constituent projects, which are deeply intertwined in their narratives and symbolism. This interdependence means that the success and failure of individual projects, as understood by Flyvbjerg (2014), significantly affects the overarching initiative and vice versa.

The BRI, with its emphasis on extensive connectivity and infrastructural development, is inherently political in nature (Sielker and Kaufmann, 2020). The BRI consists of diverse entities (for example, Asian Infrastructure Investment Bank (AIIB), the Silk Road Fund and state-owned enterprises, like COSCO Shipping), with different strategies, objectives, interests and agency. This also accounts for the regions where BRI megaprojects are developed on the ground.

However, the BRI has undergone a transformative evolution over the past decade, with project characteristics evolving over time. The initiative transitioned from a focus

on physical infrastructure megaprojects to include digital and green megaprojects, often referred to as BRI 2.0 (for example, Woon, 2021).

This evolution has given rise to a complex literary landscape, featuring diverse interpretations surrounding the BRI. Lin et al. (2021) identified four overarching narratives: *Chinese Exceptionalism*, *Silk Road Imaginary*, *Goeconomic Narrative* and *Geopolitical Narrative*. Our research, situated at the intersection of economic and political spheres, will focus on the goeconomic and geopolitical narratives. This approach differs from the *goeconomic turn* that emerged as part of the interdisciplinary debate linked to international relations (see Herranz-Surrallés et al., 2024). It does not encompass the regional development perspective or the potential weaponization of infrastructure.

The goeconomic narrative recasts the BRI as a *spatial fix* (Carmody et al., 2022) to sustain China's high-growth economy and social-political stability (Ye, 2020) during periods of political and economic crises after 2010. By portraying the BRI as a rising development paradigm with the objective of forming and assimilating dynamic subnational urban systems into transnational territories via interconnected megaprojects (Schindler and Kanai, 2021), the narrative stays in the economic realm.

Chen and colleagues (2021) go along with Ye's (2020) description of the BRI as a state-mobilized globalization, portraying the initiative as a new model for regional development through China-led globalization. They particularly focus on the novel character of the initiative, as the BRI reshapes globalization, urbanisation, and development patterns across scales. However, Demiryol (2019) critiques this narrative by highlighting the potential for new forms of asymmetric dependencies, and controversies such as China's debt trap diplomacy (Brautigam, 2020).

In parallel, the geopolitical narrative frames the BRI as a strategic offensive extending beyond the economic realm and aimed instead at challenging the global political order. This narrative assumes that China increases its political power and influence through infrastructure investments, with the potential to weaponise these assets or project military power (Blanchart and Flint, 2017). Scholars differ on China's ambitions, with some seeing it as a move towards a multi-polar global order (for example, Flint and Zhu, 2019). In this regard, Sidaway and Woon (2017) argue that deeper EU-China integration under the BRI enhances China's legitimacy internationally, while Schindler et al. (2024) depict the BRI as competition for network centrality.

The BRI is not a singularly economic or political project but of transformative nature, with the potential to operate differently at different geographic scales. As the BRI shows a high potential for global cooperation and conflict, we see the need for a nuanced analyses of the BRI's goeconomic and geopolitical narratives over time and in relation to major global and local events.

Case and methodology

To analyse success and failure through the symbolic dimension of megaprojects, we follow the shift in narratives in Duisburg and Germany. In doing so, we answer the following questions: (1) What were originally the main narratives and symbolic value associated with the BRI? How have these narratives and the BRI's symbolic value changed over time across the scales? (3) Which key events led to changes in symbolism in the case of Duisburg, Germany and (4) how do the specific characteristics of the BRI in Duisburg and Germany contribute to a deeper understanding of success and failure under the current dynamics in international megaprojects?

Case: access through subnational narratives

Located in Germany's Ruhr area along the rivers of Ruhr and Rhine, Duisburg, with a population of 500,000 inhabitants (City of Duisburg, 2020a) underwent an extended period of economic transformation. Historically known for its coal and steel industries, Duisburg's port, *duisport*², has, since the early 2000s, emerged as one of the world's largest inland ports. It employs around 52,000 individuals (duisport, 2022), and presents a crucial hinterland hub for major western European seaports (Jakóbowski et al., 2018).

The Duisburg case is suitable for illustrating the changes in narratives and symbolism associated with the BRI for three reasons. First, as a key trimodal connectivity point in Europe (road, rail and water) Duisburg functions as a gateway to China and an entrance to the BRI. The train connection from Chongqing to Duisburg is a manifestation of Duisburg's pivotal role within the BRI (GOV, CN, 2022). Additionally, Duisburg is close to Düsseldorf, which hosts major Chinese headquarters such as Huawei³. Secondly, Duisburg is a microcosm for German-Sino cooperation due to its early and robust ties with the BRI, which were prominently celebrated during Xi Jinping's visit in the city in 2014. Duisburg positioned itself prominently as Germany's China City by leveraging the principles of federalism and subsidiarity (Oltermann, 2018). This was despite Germany not being an official partner country of the BRI with a signed Memorandum of Understanding. Thirdly, Duisburg functions as a pivotal hub in Sino-German friendship, highlighted since 1982 by its historic partnership with Wuhan (City of Duisburg, 2021), and the University of Duisburg-Essen's distinction as Europe's leading institution in Chinese student enrollment.

Methodology

This research adopts a mixed-method approach, utilizing a combination of qualitative interviews and a systematic content analysis of a variety of documents, following Mayring (2014). In 2023, 17 semi-structured, in-depth qualitative interviews of 30 to 60 minutes were conducted

with political and private stakeholders and scientific experts (including two Chinese stakeholders). In alignment with Abbott's (2020) perspective on narratives as dynamic entities shaped by the sociopolitical context over time, this methodological approach seeks to comprehensively capture the evolving nature of these narratives. To articulate a multiscale perspective and assess the wider case study context (Yin, 2014), 16 official government documents from 2016 to 2023 were analysed using MAXQDA software (Mayring, 2014). These documents covered speeches by German chancellors and subnational press releases. To ensure comparability in terms of factors like context and audience, we selected publications from recurring events like the World Economic Forum in Davos and the German-Sino Forum for Economic and Technological Cooperation as well as reports on subnational political collaboration and economic development, due to limited availability of published speeches by subnational politicians. Coding of key words to either geopolitical or geoeconomic narrative was based on the conceptual framework narratives, employing both open and deductive coding methods (Yin, 2014). From this we derived a quantitative indication of the relative share of narratives (see Figure 1). Further, newspaper articles, policy papers, and *duisport*'s financial reports were used to detect the major events impacting perception of the BRI. Consistently mentioned key events in interviews, in line with findings from the document analysis, included the Hong Kong Protests, the Russian war in Ukraine, and the 20th National Congress of the CCP. Expressive statements from interviews were quoted in the empirical section to illustrate the findings, following Mayring (2014).

The BRI in Duisburg and Germany: dynamics of hype and disillusion

This chapter chronicles the evolution of narratives and symbolism surrounding the BRI in Duisburg and Germany since its inception. It examines initial conditions at the national and subnational scale through a structured analysis based on the symbolic economy and politics of the BRI. This is followed by a decade-long analysis of the shifts and interactions with the geopolitical dynamics surrounding the *netscapes*. Lastly, it delves into the drivers of narrative and symbolic changes, offering broader implications for understanding megaprojects.

The initiation of the BRI in Duisburg: narratives and symbolisms of hype and euphoria

In Germany, the BRI activities involved the reevaluation, rebranding and expansion of pre-existing and new rail connections, to close bottlenecks in the envisioned BRI railway network. In the course of these, the rail connection between the ports of Duisburg and Chongqing was

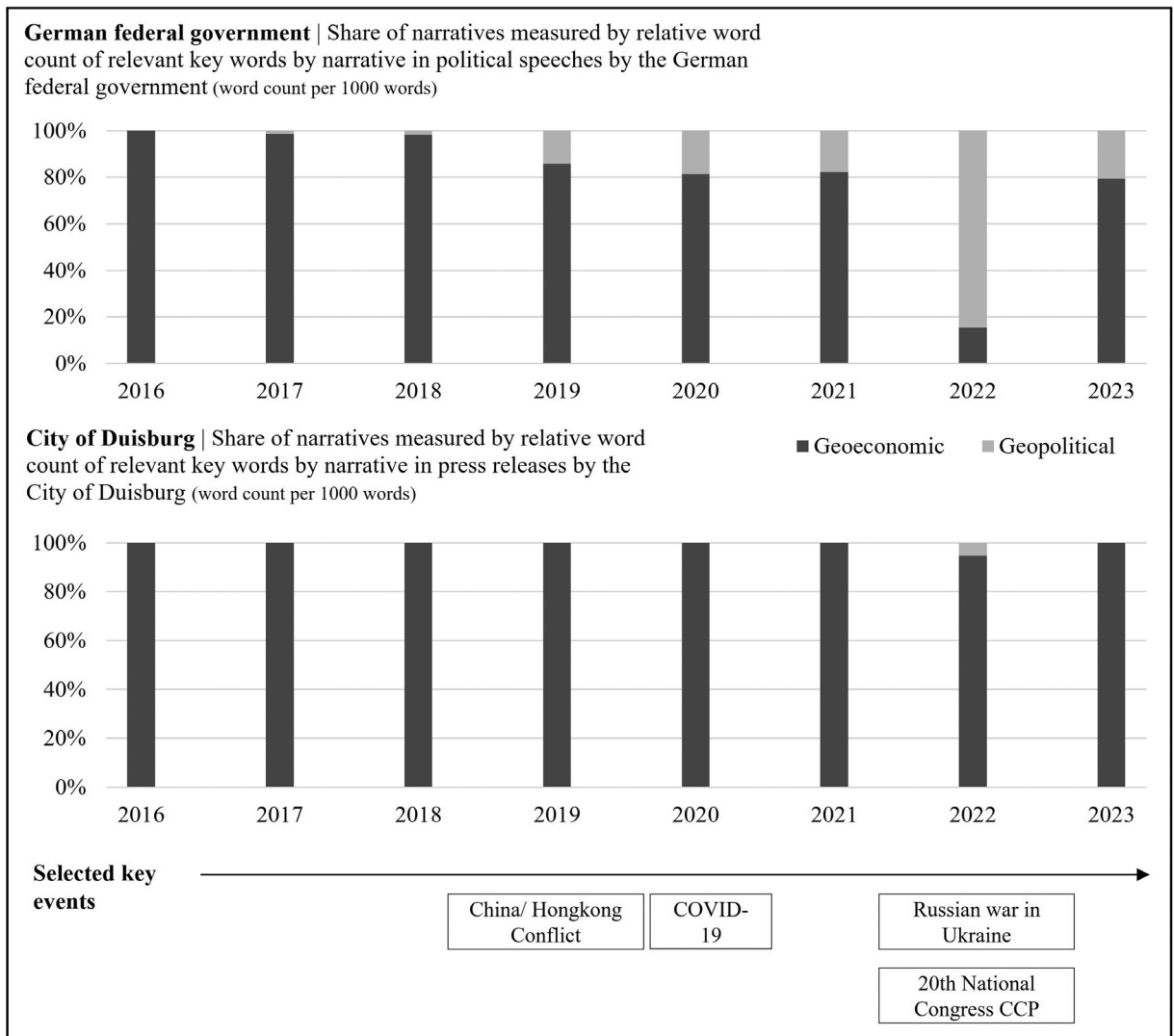


Figure 1. Share of geo-economic and geopolitical narratives on national and subnational levels from 2016 to 2023, with selected key events based on conducted interviews. Sources: Merkel (2016, 2017, 2018, 2019, 2020, 2021), Scholz (2022, 2023), City of Duisburg (2016, 2017, 2018, 2019, 2020b, 2021, 2022, 2023).

established in 2011. With the initiative's initiation in 2013, Duisburg was globally recognized as a strategic location for the BRI (Oltermann, 2018). The key stakeholders on the German side were the German Federal Government at the national scale and the regional government of North Rhine-Westphalia (NRW), the Duisburg municipality, and the state-owned port (duisport) at the subnational level. On the Chinese side, state-owned enterprises such as China Railway, COSCO Shipping, and China Merchants Group were also involved (Interview duisport; Oltermann, 2018).

The alignment of Duisburg with the BRI was initially supported by the German Federal Government and all

subnational stakeholders. This joint BRI euphoria was mainly driven by the assumed political symbolic value on the national scale and the BRI's economic symbolic value on the subnational scale. Beyond scales this established a geo-economic narrative (Figure 1).

In line with expectations for a successful megaproject as outlined in Table 1, the German Federal Government favoured the early alignment of Duisburg with the BRI as it aligned with national political and economic strategies. The value of the initiative was understood to be its symbolic significance for collaboration and normative convergence in support of a rules-based multilateral global order. Based on Chancellor Merkel's statements (Merkel, 2015,

2016), and insights gleaned from interviews, it becomes evident that the BRI aligned with the German Federal Government's foreign policy goals. The *Ostpolitik* approach towards Russia, emphasizing change through rapprochement, diplomacy, and economic cooperation, also shaped foreign policy towards China. The prevailing mantra, known as *Rapprochement through Interweaving* or *Change through Trade*, was grounded in the belief that the strategies of rapprochement utilized in European relations with Russia could be effectively applied in other geopolitical contexts (Fulda, 2024). This belief in the BRI's success and its symbolic economic value was prominently celebrated in 2014 when Xi Jinping visited Duisport, an event that received positive media coverage both nationally and globally, highlighting Germany's innovation and strategic role in international trade (City of Duisburg, 2016; Oltermann, 2018).

Also, the BRI's economic symbolism as a relevant tool for future economic growth (Table 1) played a role for the German Federal Government. As emphasized by Merkel (2015, 2016, 2017, 2018), the Federal Government, as export economy, embraced the initiative as a symbol of the creation of a level playing field and shared benefits in terms of market access and competition among Chinese, German, and European companies. Since the early 2000s, Germany has capitalized on globalization through its export-driven economy. The country transitioned to become Europe's economic powerhouse, while politicians and industrialists have actively intertwined Germany with China since 1993 (Fulda, 2024).

On the subnational scale, the desire to align Duisburg with the BRI emerged from a symbolic economy perspective that assumed future economic value. The openness of the regional government to integrate Duisburg into the BRI aligned with NRW's symbolic economy motives, given the significance of Chinese investments and trade for both Germany and NRW (City of Duisburg, 2022; Merkel, 2018). NRW, being a centre of German-Sino economic relations, houses the headquarters of prominent Chinese state-owned enterprises such as Huawei in Düsseldorf [Interview NRW Global Invest].

For the city of Duisburg, the BRI represented a critical opportunity for an economic revival and identity transformation of the rust belt city. The city's long history of economic decline made the BRI a symbol of vision and hope for regional and national development (City of Duisburg, 2016, 2017), consistent with, for example, Söderlund et al. (2017). For the local government, in line with van der Westhuizen (2007), being part of the BRI meant achieving something big and being a BRI pioneer beyond the national border [Interview City of Duisburg; Interview Duisport; Interview CBND]. As highlighted by Frey (2017) in discussions of community pride this sense of achievement can extend beyond tangible economic benefits to encompass a broader symbolic value. The city of Duisburg capitalized on this symbolism by promoting

itself as Germany's China City [Interview City of Duisburg], an image reinforced by national and international media (for example, Oltermann, 2018):

"Duisburg's location on the BRI is useful for the city marketing, [the] Chinese directly connect it with logistics." [Interview Economic Development Agency]

Duisport, in particular, was seen as a catalyst for economic revival with local politicians anticipating value creation through new jobs and increased competitiveness in the logistics sector [Interview City of Duisburg; Interview Economic Development Agency]. Hence, NRW and the city of Duisburg both saw an opportunity to enhance the location's competitiveness and generate further Chinese investment in the region (City of Duisburg, 2016, 2019). Derived from the interviews, this economic optimism was reflected in local aspirations to boost the economy and create jobs across sectors [Interview Economic Development Agency; Interview IHK; Interview PKF]. This growth expectation, fueled by the prospect of investment in infrastructure projects at the subnational scale, is a well-known phenomenon (Flyvbjerg, 2014) that further shaped the perception of the BRI as a geoeconomic initiative (Figure 1).

Beyond its economic value, the BRI also had political value for subnational stakeholders. Regional and local political actors significantly reinforced economic relations through high-profile delegation visits and summits, which served to cement Duisport's strategic ambitions as a key node within the BRI's expansive *netscapes* (City of Duisburg, 2018). These symbolic acts underscored the importance of symbolic policy, where such high-profile visits and initiatives bolstered the city's position as Germany's China City [Interview Confucius Institute; Interview China Business Network Duisburg; Interview Economic Development Agency].

To further strengthen the impetus of the BRI, Duisburg's city government initiated additional strategic projects, such as the 2017 plan to transform Duisburg into a Smart City in cooperation with Huawei [Interview Economic Development Agency]. This collaboration, along with the creation of a position for a political representative to serve as a China representative in partnership with the Confucius Institute, highlighted the close cooperation between the city and regional government in aligning with the BRI (City of Duisburg, 2021). Strategic collaborations with major Chinese transportation and logistics enterprises like COSCO Shipping and China Merchants Group, as well as port-partnerships with BRI countries like the Port of Trieste and Belarus, further solidified Duisport's role in international logistics. The planned development of the largest container terminal in the European hinterland in 2019, in collaboration with COSCO Shipping, symbolized Duisburg's transformation and strategic aspirations (Duisport, 2019).

Initially, Duisburg's incorporation into the BRI's *netscapes*, which offered a new form of global connectivity, allowed

a powerful geoeconomic narrative to unfold across scales (Figure 1). Interviews with representatives from the city of Duisburg, the port and local companies revealed a shared favourable stance towards the initiative's offered connectivity, in line with Chen et al. (2021) or Ye (2021). In line with Roselle et al. (2014), a collective interpretation of the BRI as a symbol of progress, transformation, economic development, and national superiority was established. Hence, the BRI as a *netscape* embodies the inherent capacity of megaprojects to evolve over time (Flyvbjerg, 2014). The following section is dedicated to analysing the temporal development of the perception of the initiative.

Geopolitical shifts impacting narratives and symbolism of the BRI caught between the local and the national

Our findings reveal substantial shifts in the perception of the multi-scalar symbolic value of the BRI and its associated narratives over the course of the past decade. Drawing from the data in Figure 1, it is evident that, on a national scale, there has been a pronounced shift from a geoeconomic to a geopolitical narrative, beginning in 2019 and culminating in 2022. At the same time, the dynamics at the subnational level appear to be significantly more moderate.

Since the inception of the BRI in 2013, the initial euphoria surrounding its developmental potential has progressively been overshadowed by the geopoliticisation of BRI projects at the national scale (Figure 1). This shift in perspective can be understood within the context of the significant economic and political developments that have taken place between Germany and China over the past decade. Under the BRI, politicians and industrialists have set the foreign policy objectives and continued to successfully intertwine Germany with China (Fulda, 2024). Based on the mantra *Rapprochement through interweaving*, China became Germany's largest single trading partner (Federal Government, 2023). This implied a causal relationship between economic engagement and China's political reform process into a nation committed to a rules-based multilateral global order (Merkel, 2015). This has positioned the BRI at the core of the German Federal Government's symbolic policy framework.

As illustrated in Figure 1, the narrative surrounding the BRI evolved over time, shifting towards a dominant geopolitical narrative since 2019. This also points to a shift in the symbolic value of the BRI, indicating a transition from initial optimism to growing doubts about beneficial integration into the initiative and the future realization of economic and political goals (Merkel, 2019, 2020, 2021). From the Federal Government's perspective, the BRI and Duisburg's integration into it can be deemed desirable and thus successful if it aligns with the geoeconomic narrative, functioning either as an economic symbol for future profits or being leveraged as a political symbol,

as discussed in the previous chapter (4.1). Under former Chancellor Angela Merkel, the German export economy cultivated strong links with China, especially in the automotive and technology sectors. Over the years, expanding economic interlinkages gave rise to increasing dependence, despite the European trend, as reflected in Germany's widening trade deficit with China (Federal Government, 2023). Within these national political and economic strategies, the growing connectivity of the BRI and Duisburg as a centre of action aligned with the desired symbolic self-portrayal on the political stage (Merkel, 2018). However, since 2019 the German Federal Government narrates the BRI more and more as a strategic geopolitical offensive (Merkel, 2019), extending China's political power and influence (Flint and Zhu, 2019).

The German government's stance towards China evolved significantly, culminating in the recent German Strategy on China, which officially adopts the EU's 2019 characterization of China as a "partner, competitor, and systemic rival" (Federal Government, 2023, 8). This reflects the broader European dimension of Germany's relations with China. The resurgence of the geopolitical narrative is further evidenced by Germany's formulation, for the first time, of a comprehensive national security strategy. This strategy asserts that China, through economic initiatives like the BRI, seeks to reshape the rules-based international order according to its own vision, assert its regional dominance more aggressively, and consistently act in ways that are at odds with German values and interests (Federal Ministry of Defence, 2023).

The interviews indicate that the shift in value perception is closely linked to political changes within Germany, further accelerating the overall transformation [Interview NRW Global Invest; Interview IHK]. In 2022, the Merkel era ended and the Scholz-government, with the China-critical Green Party, came to power. This led to a broader geopoliticisation of the initiative that has permeated national discourse, negatively affecting the BRI's political value at the national scale.

With increasing negative media coverage of the potential adverse dimensions of the BRI (for example, debt-trap diplomacy), the symbolic value of the initiative is being challenged from both a symbolic economy and a symbolic policy perspective. Furthermore, the federal government clearly states that the BRI complicates its own political agenda regarding international bilateral relations with BRI partner countries: "Numerous countries are pivoting ever more towards China – and thereby impacting the effectiveness of our policies" (Federal Government, 2023, 47). Hence, the political value (Table 1) is significantly affected, which further undermines the federal government's approach of a "liberal democratic order and the social market economy" (Federal Government, 2023, 11).

The geopoliticisation of the BRI at the national level directly influenced the subnational scale. Although the shift manifests with some temporal delay, it is likewise evident

that the perception of the BRI as primarily a geoeconomic initiative declined in 2022 (Figure 1). This is also evident from the interviews, as one interviewee from the Economic Development Agency noted:

"The Federal German government is quite sceptical with Chinese investments in Duisburg – e.g., Smart City. There are no developments since Covid." [Interview Economic Development Agency]

Drawing further on the interviews it becomes evident that Duisburg's ambitious goal of becoming a China City has been significantly affected by geopolitical shifts, leading to a critical reassessment of the City's and port's BRI engagement. Furthermore, a shifting symbolic economy of the BRI in Duisburg is apparent, in which the initial *Silk Road euphoria* has given way to a more cautious and strategically restrained approach. This can be interpreted as a form of symbolic optimism bias that extends beyond Flyvbjerg's (2011) focus on costs and benefits, centered instead on unfulfilled visions of an (economic) future within these *netscapes*.

"The Silk Road euphoria is a little bit over. In the beginning the expectations to have [the] Belt and Road Initiative was a really important driver of development, this is not the case anymore." [Interview IHK]

Additionally, a diversification in investment strategies is favoured that signify alternative visions for Duisburg and reflect Western values [Interview Economic Development Agency; Interview NRW Global Invest; Interview duisport]. duisport for example reports that it favours a wider internationalization strategy, and is focusing less on BRI partner countries (for example, Italy, Belarus). Exemplary for new political agendas that signify new visions of the future for the city, was the planned set up of a (green) hydrogen industry as a new key sector (City of Duisburg, 2020b, 2023), supported by the federal and regional government [Interview duisport]. The diminishing symbolic value of the BRI for subnational actors is further exemplified by the deliberate reduction in media representation of the BRI engagement. Initially, the initiative was actively utilized within the symbolic economy. However, the state government of NRW, co-governed by the China-critical Green Party since 2021, now consciously refrains from engaging in public and media-visible delegation meetings or other forms of political interactions with Chinese officials [Interview NRW Global Invest]. This reassessment aligns with Abbott's (2020) notion of variable versions of reality over time, highlighting how perceptions of megaprojects evolve in response to changing political and economic contexts.

However, despite these shifts a form of double standard in the external perception of the BRI becomes apparent. Duisburg's policymakers continue to promote the city of Duisburg as Germany's China City, while simultaneously distance the city from its former BRI engagement in the face of national discourse (The Washington Post, 2023). It appears that the interest in economic cooperation remains largely unaffected by prevailing geopolitical tensions, as

long as it remains low profile [Interview NRW Global Invest; Interview China Railway Container Transport Europe]. The city's efforts to maintain its recognition as an attractive investment destination for Chinese companies are strategically limited to a selected group of stakeholders in order to mitigate potential public criticism (Table 1).

"We do not put Chinese cooperation aside. We just went there with a delegation to promote Duisburg. From the governmental side it has changed since 2019. The politicians think about their career and are more careful in China-positive-actions." [Interview Economic Development Agency]

This sentiment reflects a broader strategic calculus where Duisburg's authorities seek to maintain their attractiveness as an investment location for Chinese companies while avoiding public scrutiny and potential criticism. The discreet utilization aligns with Edelman's (1985) conceptualization, as presented in Table 1.

Overall, the evolution of the BRI's symbolic value from a symbol of opportunity to one of potential risk and failure, as illustrated by Roselle et al. (2014), highlights the pivotal role of the symbolic dimension in shaping megaproject narratives. To fully grasp these dynamics, it is crucial to identify and analyse the specific drivers behind these shifts, as they reveal the complex interplay between the scales.

Drivers of disillusion and further implications for international megaprojects

Given Germany's federal system, decision-making authority for the described infrastructural projects principally resides at the regional and local scale. This authority is further amplified in this instance by the joint ownership of the duisport by both the state NRW and the city of Duisburg. However, such projects may also engage the German Federal Government when they impinge upon national security or foreign policy interests (Kirch et al., 2021), as is the case with the BRI (see Chapter 4.2). Consequently, it is essential to first analyse the events that have intensified national security imperatives, as they serve as guidelines for NRW and the city of Duisburg.

These events can be classified into domestic and international occurrences that have significantly impacted the symbolic representation of China and, by extension, the BRI. Through a document analysis and interviews, specific key events were identified. These offer a valuable opportunity to explore the complex dynamics of symbolic economy and symbolic policy, particularly concerning perceived success and failure across different spatial scales.

Focussing on relevant changes in Chinese domestic politics, the increasingly centralized and hierarchical system, along with growing concerns over human rights issues, are the primary concern for the German Federal Government (Merkel, 2018, 2019). Hence, the German Federal Government states that: "China's conduct and decisions have caused the elements of rivalry and competition in our relations to increase in recent years." (Federal

Government, 2023:11). Key events, exemplified in Figure 1, that need to be mentioned are the protests in Hong Kong in 2019 and Xi Jinping's re-election during the 20th National Congress of the CCP in 2022 (Figure 1). As outlined in the *Strategy on China* the federal government interprets China's global claim to leadership as a clear indication that the aspirations initially supporting the integration into the BRI have been significantly curtailed. This shift played a significant role in narrative transformation, as this interpretation stands in marked contrast to the previously designated strategic political objectives of Germany to forge collaboration and normative convergence with China (Federal Government, 2023; Scholz 2023).

Moreover, the German Federal Government has observed a pronounced shift in China's foreign policy, characterized by greater assertiveness, which poses an increased risk and challenges to German-Sino cooperation (Scholz, 2023). China's economic strategies, including the BRI, are increasingly interpreted as tools to achieve political interests through economic dependencies. The *Federal Government's 2023* strategy document emphasizes this concern:

"In terms of foreign policy, China is pursuing its own interests far more assertively and is attempting in various ways to reshape the existing rules-based international order. This is having an impact on European and global security." (Federal Government, 2023, 8)

This perspective marks a further departure from earlier expectations of mutual economic benefit and highlights the risks of increased dependency on China, particularly in light of asymmetries in the partnership (Von der Leyen, 2023). In this regard, the attack on Ukraine was a pivotal moment of disillusionment, exposing Germany's vulnerabilities due to dependencies and energy supplies (Figure 1), specifically dependency on Russian gas and raw materials sourced from China for global supply chains (Scholz, 2022). The weaponization of the until then accepted mutual beneficial economic dependencies or interdependencies, such as with Russian gas, ushered in a *Zeitenwende*, a historic turning point of German foreign policy, and hence symbolic policy (Scholz, 2022).

China's alignment with Russia in a joint declaration in 2022, signaled a deepening of socialist entanglements, further exacerbating concerns in Germany and the EU. This has led to a shift from a conciliatory to a confrontational stance towards China, driven by a political sentiment focused on diversification and reducing dependencies, largely in response to the war in Ukraine (Federal Government, 2023). Furthermore, this shift has implied "direct security implications for Germany" (Federal Government, 2023, 10).

Even though, as outlined in the previous chapter, a double standard emerges in the assessment of the symbolic value of the BRI, the federal government's anti-China sentiment is becoming increasingly evident at the subnational level. This highlights the growing extent of the geopoliticisation of the BRI networks. Projects linked to the BRI, such as the Smart City initiatives with Huawei and

the construction of the container terminal with COSCO Shipping, were prematurely terminated due to the sudden intensification of anti-China sentiment, serving as part of the federal government's symbolic policy. Consequently, ports and infrastructure have emerged as central themes in geopolitical competition, with heightened concerns about China's investments in critical European infrastructure, such as the port of Piraeus in Greece and the port of Hamburg in Germany (Bundestag, 2022). As Blanchart and Flint (2017) suggest, the case of Duisburg exemplifies how increased geopolitical tension at the global scale can shift narratives and perceptions surrounding ports, impacting their symbolic and economic value.

The degree to which geopoliticisation can influence the success or failure of the BRI is particularly evident within the context of Germany's federal system. Although regional governments and municipalities wield considerable decision-making authority compared to their European counterparts, this authority is frequently overridden by the foreign policy prerogatives of the nation-state, especially in terms of official external representation (symbolic policy). As outlined in the interviews:

"Politically, there is no desire from above for us to actively engage with China. Therefore, we refrain from doing so." [Interview NRW Global Invest]

The shift in narratives and symbolic value surrounding the BRI in Duisburg is not driven by classic project failures but by a significantly relevant symbolic policy on the national level. The symbolic policy value of the BRI on the federal scale directly affects the subnational scale, due to the evolving geopolitical context. This demonstrates the power of multi-scalar symbolic value. This shift underscores the fragility of success and failure in megaprojects, as exemplified by the BRI's transformation from a symbol of economic growth and prosperity to one associated with negative media reports, criticism, and potential reputational damage.

The continued, albeit low-profile, expansion of Duisburg's integration into the BRI can be attributed to the original motivations for the city's involvement in 2013. Since then, the symbolic value of the BRI locally has been primarily perceived in economic terms, in contrast to the national federal level, where symbolic policy has been more predominant. One of the city's strategic objectives was to reshape its image, particularly within the framework of the symbolic economy. As highlighted in the interviews, Duisburg experienced a successful initial phase in altering its city image through its engagement with the BRI, thereby addressing local concerns. Cementing Duisburg's status as a strategic logistics hub within China's global networks has been a key ambition associated with the BRI, aligning with the symbolic economy strategies of NRW, the city and disport. The belief that Duisburg can realistically achieve this objective through the BRI remains strong:

"Duisburg is for [the] Chinese in the middle of Germany and is something big. In China Duisburg is very important for the BRI as a big hub." [Interview China Business Network Duisburg]

The BRI as a *netscape* highlights the interconnectedness of individual projects like Duisburg's with the overarching initiative, emphasizing the need for a nuanced understanding of the symbolic dimensions of megaprojects. Literature on megaprojects, drawing on Bakker et al. (2016) and Van Der Westhuizen's (2007) insights into stakeholders' roles in shaping perceptions and values through symbolism, provides a framework for understanding the specificities of these new forms of initiatives. This work expands on the understanding of symbolism across scales, emphasizing the importance of a changing global geopolitical context as a central factor in potential shifts in symbolism and narratives, contributing to a new mode of geopolitical fragility.

Conclusions

To sum up, the BRI in Duisburg, Germany offers a nuanced case study of how international megaprojects evolve, particularly regarding their symbolic value and narratives. This conclusion synthesizes key findings, addressing the initial optimism surrounding the BRI, the shifts in multi-scalar perception over time, and how these insights deepen our understanding of success and failure in megaprojects, especially under current geopolitical dynamics.

In the case of Duisburg, the BRI has shifted from being a symbol of economic transformation to a subject of national concern. When the BRI was first introduced, it was met with shared optimism at both the national and subnational scale in Germany. The German Federal Government viewed the BRI as an opportunity to align with its broader political agenda, particularly under the *Change through Trade* approach. This was based on the mantra that fostering mutual economic dependencies could lead to political reforms. Symbolically, the BRI represented a means to strengthen multilateral collaboration. Success in this context was initially understood in terms of the BRI's potential to advance Germany's strategic economic and political interests.

At the subnational scale, engagement with the BRI was driven primarily by economic motivations. For the regional government of NRW, the city of Duisburg, and the state-owned port (duisport), the BRI was seen as a critical opportunity for economic revitalization. Duisburg, with its history of industrial decline, sought to rebrand itself as Germany's *China City* and a strategic logistics hub within the BRI's *netscapes*. The initiative's symbolic value at this scale was tied to its potential to attract Chinese investment, create jobs and stimulate economic growth.

Over the past decade, however, the symbolic value and narratives associated with the BRI have undergone significant shifts, particularly as geopolitical tensions between China and the West intensified. As shown by prominent literature on megaprojects (see for example, Flyvbjerg, 2014), it is not surprising that the initial eu-

phoria is often replaced by a more critical reflection when megaprojects move onto bumpier roads. What is specific about the narrative of the BRI as an international megaproject is that the success of the project is not necessarily judged by the material outcomes, like project costs for example. Instead, its value (and hence success) is judged by its political significance, as it is highly intertwined with geopolitical factors. In the case at hand, the duisport did not experience traditional challenges such as cost-overruns or debt increases. Rather, the German Federal Government's sentiment shifted as key geopolitical events unfolded, such as China's alignment with Russia during the war against Ukraine. This shifted the previous geoeconomic focus to a more geostrategic one, marking China a systemic rival (Federal Government, 2023). This change is reflected in the subnational government's evolving perception of the BRI, where initial optimism has given way to a more cautious and diverse subnational view. This evolving caution was reflected in more restrained public engagement with the initiative and a strategic shift towards diversifying investments in alignment with Western values. Megaprojects often yield the rewards only in the long-term, making the euphoria and symbolic economy difficult to maintain for most megaprojects. As Flyvbjerg's work on megaprojects suggests, optimism bias often plays a role, leading stakeholders to overestimate positive outcomes (Flyvbjerg, 2014). In the case of Duisburg, this optimism extended beyond economic expectations to include geopolitical alignment. However the hope of becoming the *China City* has not materialised, and greater economic interdependence between Germany and China has not necessarily lead to systemic alignments.

Combining Zukin's (1996) and Edelman's (1985) approaches, we conclude that traditional megaprojects often start off with a positive success story related to the symbolic policy, but in many cases are perceived as failures based on their symbolic economy (for example, as often discussed in short-term events such as the Olympics or world cups or for cultural or infrastructure developments). The exploration of the narratives around the BRI has shown that what differentiates *netscape* megaprojects is that they often start from hopes related to the symbolic economy, but are perceived as failures based on the symbolic policy related to the project.

In the case of Duisburg, evolving symbolic policy, particularly at the national level, demonstrates how symbolic value is not static but subject to shifting geopolitical winds. The BRI in Duisburg underscores the complexity of *netscape* megaprojects, where individual project outcomes are often overshadowed by the overarching geopolitical narrative.

In sum, the case highlights how international megaprojects go beyond traditional physical infrastructure. Their complexity lies in the interaction of economic, cultural, and political elements requiring a nuanced multi-scalar understanding, as demonstrated by the

dynamic interplay between symbolic economy and symbolic policy.

Endnotes

- 1 Defined by Article 32 of the Basic Law Companies.
- 2 The Federal Republic of Germany, pursuant to Article 89 of the Basic Law, holds ownership of the federal waterways. These waterways are administered by the Federal Government through its agencies and ministries. Decisions regarding modifications to these waterways are typically made by the Federal Ministry of Transport and Digital Infrastructure in consultation with the regional government, municipalities, and relevant stakeholders. However, when proposed changes conflict with national interests or involve significant infrastructure, approval from the German Bundestag and, potentially, the Bundesrat is required.
- 3 Companies located in Germany are obligated to pay a municipal trade tax, which is imposed by the local municipality where they conduct their operations. This municipal trade tax, in conjunction with property tax, serves as the main source of revenue for municipalities in Germany.

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References

- Abbott, H.P., 2020. *The Cambridge introduction to narrative*. Cambridge, UK: Cambridge University Press.
- Bakker, R. M., DeFillippi, R. J., Schwab, A., Sydow, J. (2016) Temporary organizing: promises, processes, problems, *Organization studies*, 37: 1703-1719.
- Blanchard, J. M. F., Flint, C. (2017) The geopolitics of China's maritime silk road initiative, *Geopolitics*, 22: 223-245.
- Brautigam, D. (2020) A critical look at Chinese 'debt-trap diplomacy': the rise of a meme, *Area Development and Policy*, 5: 1-14.
- Bundestag, 2022. *Investitionsbeziehungen mit China, insbesondere Beteiligung des chinesischen Staatsunternehmens COSCO an dem Hamburger Hafenterminal Tollerort*. Available online at: <https://dserver.bundestag.de/btd/20/051/2005110.pdf> [Accessed 07 March 2025].
- Carmody, P., Taylor, I., Zajontz, T. (2022) China's spatial fix and 'debt diplomacy' in Africa: constraining belt or road to economic transformation? *Canadian Journal of African Studies/Revue canadienne des études africaines*, 56: 57-77.
- Chaban, N., Miskimmon, A., O'loughlin, B. (2019) Understanding EU crisis diplomacy in the European neighbourhood: strategic narratives and perceptions of the EU in Ukraine, Israel and Palestine., *European Security*, 28: 235-250.
- Chen, X., Miao, J.T., Li, X., 2021. *The Belt and Road Initiative as Epochal Regionalisation*. London: Routledge.
- City of Duisburg, 2019. *Annual Conference of the Association of German China Societies in Duisburg*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000090698.php [Accessed 07 March 2025].
- City of Duisburg, 2016. *Delegation Trip to China*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000530062.php [Accessed 07 March 2025].
- City of Duisburg, 2021. *Department for China Affairs Begins Work*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000128905.php [Accessed 07 March 2025].
- City of Duisburg, 2017. *Duisburg Remains on Course for China Last Large Plot in the Niederrhein Business Park Sold to Chinese Investor*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000545162.php [Accessed 07 March 2025].
- City of Duisburg, 2023. *Expert Forum on Sustainable Logistics*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000198327.php [Accessed 07 March 2025].
- City of Duisburg, 2022. *Master Plan Strengthens Cooperation Between the City and Business in the Long Term*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000153047.php [Accessed 05 March 2025].
- City of Duisburg, 2020a. *Numbers, Data, facts*. Available online at: https://www.duisburg.de/wohnenleben/zahlen_daten_fakten/zahlen-daten-fakten.php [Accessed 07 March 2025].

- City of Duisburg, 2018. *Visit by the Chinese Delegation*. Available online at: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000065237.php [Accessed 07 March 2025].
- City of Duisburg, 2020b. *Wertschöpfung Kompetenzregion Wasserstoff*. Available online: https://www.duisburg.de/guiapplications/newsdesk/publications/Stadt_Duisburg/102010100000108805.php [Accessed 07 March 2025].
- Czarniawska, B., 2004. *Narratives in Social Science Research*. London: SAGE.
- de LT Oliveira, G., Murton, G., Rippa, A., Harlan, T., Yang, Y. (2020) China's belt and road initiative: views from the ground, *Political Geography*, 82: 102225.
- Demiryol, T., 2019, June. Political economy of connectivity: China's Belt and Road Initiative. In *Proceedings of the 13th international RAIS conference on social sciences and humanities* (pp. 168-180). Scientia Moraltas Research Institute.
- duisport, 2019. *Geschäftsbericht 2019*. Available online at: https://www.duisport.de/wp-content/uploads/2020/09/2019_DE_duisport_Geschaeftsbericht_web.pdf [Accessed 07 March 2025]
- duisport, 2022. *Geschäftsbericht 2022*. Available online at: https://www.duisport.de/wp-content/uploads/2023/10/duisport_Geschaeftsbericht_2022_DE_Web.pdf [Accessed 07 March 2025]
- Edelman, M.J., 1985. *The Symbolic Uses of Politics*. Chicago: University of Illinois Press.
- Federal Government, 2023. *Strategy on China*. Available online at: <https://www.auswaertiges-amt.de/blob/2608580/49d50fecc479304c3da2e2079c55e106/china-strategie-en-data.pdf> [Accessed 07 March 2025].
- Federal Ministry of Defence (2023) *Verteidigungspolitische Richtlinien 2023*. Available at: <https://www.bmvg.de/resource/blob/5701724/5ba8d8c460d931164c7b00f49994d41d/verteidigungspolitische-richtlinien-2023-data.pdf> [Accessed 07 March 2025].
- Flint, C., and Zhu, C. (2019) The geopolitics of connectivity, cooperation, and hegemonic competition: The Belt and Road Initiative, *Geoforum*, 99: 95-101.
- Flyvbjerg, B. (2011) Over budget, over time, over and over again: Managing the major projects. In P.W.G. Morris, J.K. Pinto, J. Söderlund (eds.) *The Oxford Handbook of Project Management*, pp. 321-344. Oxford: Oxford University Press.
- Flyvbjerg, B. (2014) What you should know about megaprojects and why: an overview, *Project management journal*, 45: 6-19.
- Frey, T., 2017. Megaprojects set to explode to 24% of global GDP within a decade. Available online at: <https://futuristspeaker.com/business-trends/megaprojects-set-to-explode-to-24-of-global-gdp-within-a-decade/> [Accessed 07 March 2025].
- Fulda, A., 2024. *Germany and China: How Entanglement Undermines Freedom, Prosperity and Security*. London: Bloomsbury Publishing.
- Gospodini, A. (2004) Urban morphology and place identity in European cities: built heritage and innovative design, *Journal of Urban design*, 9: 225-248.
- GOV.CN, 2022. *China-Europe Railway Express (Chongqing)'s 10,000th trip arrives in Germany*. Available online at: https://english.www.gov.cn/news/interationalexchanges/202207/12/content_WS62cce1fcc6d02e533532d9ee.html [Accessed 07 March 2025]
- Herranz-Surrallés, A., Damro, C., Eckert, S. (2024) The geoeconomic turn of the Single European Market? Conceptual challenges and empirical trends, *JCMS: Journal of Common Market Studies*, 62: 919-937.
- Ika, L. A., Diallo, A., Thuillier, D. (2012) Critical success factors for World Bank projects: an empirical investigation, *International Journal of Project Management*, 30: 105-116.
- The International Institute for Strategic Studies (IISS), 2022. *China's Belt and Road Initiative: A Geopolitical and Geo-Economic Assessment*. Milton: Taylor & Francis Group.
- Jakóbowski, J., Popławski, K., Kaczmarski, M., 2018. *The Silk Railroad: The EU-China rail connections: background, actors, interests*. Warsaw: Centre for Eastern Studies.
- Kirch, A.-L., Dinkel, S., Kabisch, F., 2021. Municipal foreign policy: Resilient cities foster Germany's capacity to act (DGAP Memo No. 16). German Council on Foreign Relations. Available online at: <https://dgap.org/en/research/publications/municipal-foreign-policy> [Accessed 07 March 2025].
- Lin, S., Shimazu, N., Sidaway, J. D. (2021) Theorising from the belt and road initiative, *Asia Pacific Viewpoint*, 62: 261-269.
- Mayring, P., 2014. *Qualitative content analysis: theoretical foundation, basic procedures and software solution*. Klagenfurt.
- Merkel, A., 2018. 9. *Deutsch-Chinesischen Forum für wirtschaftliche und technologische Zusammenarbeit*. Available online at: <https://www.bundeskanzler.de/bk-de/aktuelles/rede-von-bundeskanzlerin-merkel-beim-9-deutsch-chinesischen-forum-fuer-wirtschaftliche-und-technologische-zusammenarbeit-am-9-juli-2018-in-berlin-1512632> [Accessed 07 March 2025].
- Merkel, A., 2020. 50. *Jahrestreffen des Weltwirtschaftsforums*. Available online at: <https://www.bundeskanzler.de/bk-de/aktuelles/rede-von-bundeskanzlerin-merkel-beim-50-jahrestreffen-des-weltwirtschaftsforums-am-23-januar-2020-in-davos-1715534> [Accessed 07 March 2025].
- Merkel, A., 2015. *Bergedorfer Gesprächskreis*. Available online at: <https://www.bundeskanzler.de/bk-de/aktuelles/rede-von-bundeskanzlerin-merkel-beim-bergedorfer-gespraechskreis-am-29-oktober-2015-787664> [Accessed 07 March 2025].
- Merkel, A., 2021. *Davos-Dialogs des World Economic Forum*. Available online at: <https://www.bundesregierung.de/breg-de/service/archiv/rede-von-bundeskanzlerin-merkel-anlaesslich-des->

- davos-dialogs-des-world-economic-forum-am-26-januar-2021-videokonferenz--1844594 [Accessed 07 March 2025].
- Merkel, A., 2017. *Deutsch-Chinesischen Forum "Innovation Gemeinsam Gestalten"*. Available online at: <https://www.bundesregierung.de/breg-de/service/bulletin/rede-von-bundestkanzlerin-dr-angela-merkel-798504> [Accessed 07 March 2025].
- Merkel, A., 2016. *Deutsch-Chinesischen Forum für wirtschaftliche und technologische Zusammenarbeit*. Available online at: <https://www.bundeskanzler.de/bk-de/aktuelles/rede-von-bundestkanzlerin-merkel-beim-deutsch-chinesischen-forum-fuer-wirtschaftliche-und-technologische-zusammenarbeit-am-13-juni-2016-605982> [Accessed 07 March 2025].
- Merkel, A., 2019. *Rede von Bundeskanzlerin Merkel an der Huazhong University of Science and Technology am 7. September 2019 in Wuhan*. Available online at: <https://www.bundesregierung.de/breg-de/aktuelles/rede-von-bundestkanzlerin-merkel-an-der-huazhong-university-of-science-and-technology-am-7-september-2019-in-wuhan-1668736> [Accessed 07 March 2025].
- Miller, R. and Lessard, D., 2001. *The Strategic Management of Large Engineering Projects: shaping Institution*. USA: Risk and Governance, Massachusetts Institute of Technology.
- Müller-Mahn, D., Mkutu, K., Kioko, E. (2021) Megaprojects—mega failures? The politics of aspiration and the transformation of rural Kenya, *The European Journal of Development Research*, 33: 1069-1090.
- NDRC, 2017. *Vision for Maritime Cooperation under the Belt and Road Initiative*. Available online at: https://english.www.gov.cn/archive/publications/2017/06/20/content_281475691873460.htm [Accessed 07 March 2025].
- Oltermann, P. (2018) Germany's 'China City': how Duisburg became Xi Jinping's gateway to Europe, *The Guardian*. Available online at: <https://www.theguardian.com/cities/2018/aug/01/germanys-china-city-duisburg-became-xi-jinping-gateway-europe> [Accessed 07 March 2025].
- Pinto, J. K., and Mantel, S. J. (1990) The causes of project failure, *IEEE Transactions on Engineering Management*, 37: 269-276.
- Rego, M. L., Reis Irigaray, H. A., Chaves, R. L. P. (2017) Symbolic megaprojects: historical evidence of a forgotten dimension, *Project Management Journal*, 48: 17-28.
- Roselle, L., Miskimmon, A., O'loughlin, B. (2014) Strategic narrative: a new means to understand soft power, *Media, War & Conflict*, 7: 70-84.
- Schindler, S., Alami, I., DiCarlo, J., Jepson, N., Rolf, S., Bayırbağ, M. K., Cyuzuzo, L., DeBoom, M., Farahani, A. F., Liu, I. T., McNicol, H. (2024) The second cold war: US-China competition for centrality in infrastructure, digital, production, and finance networks, *Geopolitics*, 29: 1083-1120.
- Schindler, S., Fadaee, S., Brockington, D. (2019) Contemporary megaprojects: an introduction, *Environment and Society*, 10: 1-8.
- Schindler, S. and Kanai, J.M., 2021. Getting the territory right: infrastructure-led development and the re-emergence of spatial planning strategies. *Regional Studies*, 55: 40-51.
- Scholz, O., 2023. *Jahrestreffen des World Economic Forum*. Available online at: <https://www.bundesregierung.de/breg-de/aktuelles/rede-von-bundestkanzler-scholz-anlaesslich-des-jahrestreffens-des-world-economic-forum-am-26-mai-2022-in-davos-2044026> [Accessed 07 March 2025].
- Scholz, O., 2022. *Regierungserklärung von Bundeskanzler Olaf Scholz*. Available online at: <https://www.bundesregierung.de/breg-de/aktuelles/regierungserklaerung-von-bundestkanzler-olaf-scholz-am-27-februar-2022-2008356> [Accessed 07 March 2025].
- Sidaway, J. D., and Woon, C. Y. (2017) Chinese narratives on "One Belt, One Road" in geopolitical and imperial contexts, *The Professional Geographer*, 69: 591-603.
- Sielker, F., and Kaufmann, E. (2020) The influence of the Belt and Road Initiative in Europe, *Regional Studies, Regional Science*, 7: 288-291.
- Söderlund, J., Sankaran, S., Biesenthal, C. (2017) The past and present of megaprojects, *Project Management Journal*, 48: 5-16.
- Syn, T., and Ramaprasad, A. (2019) Megaprojects—symbolic and sublime: an ontological review, *International Journal of Managing Projects in Business*, 12: 377-399.
- Tondo, L. (2023) Italy to withdraw from China's belt and road initiative, say sources, *The Guardian* <https://www.theguardian.com/world/2023/dec/06/italy-to-withdraw-from-chinas-belt-and-road-initiative-say-sources> [Accessed 07 March 2025].
- Van Der Westhuizen, J. (2007) Glitz, glamour and the Gautrain: mega-projects as political symbols, *Politikon*, 34: 333-351.
- Von der Leyen, 2023. *Von der Leyen zu den Beziehungen EU/China: „Neuausrichtung in den wichtigsten Bereichen“*. Available online at: https://germany.representation.ec.europa.eu/news/von-der-leyen-zu-den-beziehungen-euchina-neuausrichtung-den-wichtigsten-bereichen-2023-03-30_de?prefLang=en [Accessed 07 March 2025].
- The Washington Post, 2023. *Germany's 'China City' doesn't want you to call it that anymore*. Available online at: <https://www.washingtonpost.com/world/2023/05/22/germany-china-city-duisburg/> [Accessed 07 March 2025].
- Watkins, J. (2015) Spatial imaginaries research in geography: synergies, tensions, and new directions, *Geography Compass*, 9: 508-522.

- Woon, C. Y. (2021) 'Provincialising' the belt and road initiative: theorising with Chinese narratives of the 'Digital Silk Road', *Asia Pacific Viewpoint*, 62: 286-290.
- Ye, M., 2020. *The Belt Road and Beyond: State-Mobilized Globalization in China: 1998–2018*. Cambridge: Cambridge University Press.
- Yin, R. K., 2014. *Case Study Research: Design and Methods (Applied Social Research Methods)*. Thousand Oaks, CA: Sage publications. pp. 312
- Zukin, S., 1996. Space and symbols in an age of decline. In A. King (ed.) *Re-Presenting the City: Ethnicity, Capital and Culture in the Twenty-First Century Metropolis*, pp. 43-59. New York: New York University Press.