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Witz, Petr; Stingl, Verena; Wied, Morten; Oehmen, Josef

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Asymmetric legitimacy perception across megaproject stakeholders: The case of the Fehmarnbelt Fixed Link

Petr Witz a,b,1, Verena Stingl a,c, Morten Wied a, Josef Oehmen a

a Department of Technology, Management and Economics, Technical University of Denmark, Denmark
b Department of Public and Social Policy, Faculty of Social Sciences, Charles University, Prague, Czechia
c Department of Materials and Production, Faculty of Engineering and Science, Aalborg University, Denmark

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ABSTRACT

With further emancipation of once subdued or marginalized stakeholders, a growing number of megaprojects face increasingly significant social resistance. Asymmetries of support for the projects emerge, rooted in different perceptions of legitimacy across different stakeholder groups. In this paper, we ask how these diverging perceptions of legitimacy develop across stakeholders of cross-border megaprojects. We conduct a multi-site ethnography at one of the biggest contemporary cross-border transport megaprojects in the world – the Danish/German Fehmarnbelt Fixed Link. Tying together three streams of the legitimacy literature in a new analytical approach, we suggest three dimensions of project legitimacy perception: trust, majority, and morality. In doing so, we provide a new integrative model of legitimacy perception in megaprojects. We illustrate how these legitimacy dimensions dynamically interact. We thus provide new insights on how project legitimacy is continuously renegotiated in megaprojects with implications for future developments of project governance.

1. Introduction

Public governance has seen a trend toward further emancipation of disadvantaged stakeholders, and an erosion of traditional decision-making hierarchies or dedicated power clusters (Osborne, 2010; Pollitt and Bouckaert, 2017; Torfing et al., 2020). This trend also affects expectations toward governance of projects in the public sphere (Ahola et al., 2014; Brunet and Aubry, 2016). Individual public managers – once having a firm grip on relatively isolated problems and projects – are now required to share more power and often face intense scrutiny from a diverse spectrum of actors (Ninan et al., 2019; Teo and Loosemore, 2017). New emphasis on trust and transparency, and greater attention to bottom-up initiatives (Pollitt and Bouckaert, 2017) have run in parallel to open-system thinking about projects (Dimitriou et al., 2013; Engwall, 2003; Witz and Oehmen, 2018).

This recent rise of networks and preference for horizontally shared control questions legitimacy of megaprojects initiated and pursued by once dominant stakeholders – typically central governments or large corporations. Assuring and managing legitimacy thus has become an imperative in general public governance (Osborne, 2010; Pollitt and Bouckaert, 2017; Torfing et al., 2020). Recent evidence suggests that project governance – at least when large public megaprojects are concerned – has followed suit (Aaltonen, 2013; Melé and Armengou, 2016).

Brunet and Aubry (2016) identified legitimacy as one of the three dimensions of project governance, arguing that securing project legitimacy represents a key mission of a project governance framework. Similarly, van den Ende and van Marrewijk state that megaprojects are in “constant struggle for legitimacy” (2019, p. 343). Despite acknowledging legitimacy as a central resource for megaprojects (Flyvbjerg et al., 2003; Scott et al., 2011; Scott and Levitt, 2017), the project literature has long been scant on meaningful legitimacy research (Aaltonen, 2013). Most attention has been placed on how project teams actively shape and influence stakeholders’ project legitimacy perception through e.g. institutional work (van den Ende & van Marrewijk, 2019), governance (Brunet, 2019; Brunet and Aubry, 2016), rhetoric (Gil, 2010; Yitmen, 2015), or stakeholder management (Aaltonen, 2013; Valentin et al., 2017). At the same time, interpretation of project legitimacy tends to be strongly associated with and sometimes reduced to social acceptance (Gehman et al., 2017; Melé and Armengou, 2016). Successive authors have thus called for stronger local embeddedness of projects to increase their legitimacy (McAdam, 2011; Scott et al., 2011; Scott and Levitt, 2017).

Yet, this prior research – legitimacy as a property or a (managed) process – retains stakeholders as a passive and monolithic audience (Suddaby et al., 2017), disregarding the question how legitimacy perception is formed at the level of the stakeholder and influenced through
their behaviour. Suddaby et al. (2017) suggest that viewing legitimacy as a stakeholder perception that dynamically interacts with legitimacy management strategies is essential for understanding the complex, multi-layered phenomenon of legitimacy. Our research follows their call, studying the idiosyncratic perceptions of legitimacy by various stakeholders and their formation at different locations. Specifically, we investigate: How do diverging perceptions of legitimacy develop across megaproject stakeholders?

To research this question, we turn to a type of megaprojects where stakeholder heterogeneity – and in consequence differences in legitimacy perception – is particularly strongly expressed: cross-border megaprojects. The purpose of cross-border megaprojects is to create connections across boundaries of cultural, administrative, or economic regions (Rietveld, 2012). Yet, this crossing of political and mental borders amplifies a fundamental challenge of megaprojects and their governance: managing a multitude of diverse stakeholder groups to secure and maintain support for the project (Mok et al., 2015; Olander, 2003; Vuorinen and Martinsson, 2018).

In consequence, cross-border projects need embeddedness in multiple loci with diverging cultural and social norms, institutions, and relations, which renders them a particularly interesting field for studying the formation of legitimacy perceptions. As project legitimacy draws from the adherence to 'socially constructed systems of norms, values, beliefs and definitions' (Suchman, 1995, p. 574), we expect that different national contexts enhance the effect of differing social reference-frames from which legitimacy perception can draw. Thus, project legitimacy perception can diverge substantially across the border, resulting in asymmetries of local social support for the project. To understand these asymmetries and thus create true local embeddedness, we need to comprehend the modes in which legitimacy as social perception, emerges and is shaped by the project and its institutional context.

We thus study the formation of diverging legitimacy perceptions in megaprojects through an inductive single-case study of one of Europe's largest cross-border infrastructure megaprojects: the Danish/German Fehmarnbelt Fixed Link. Since 2008, the Danish-driven and financed construction has been repeatedly stalled by German opposition. Thus, it is a revelatory and prototypical case of asymmetric perceptions of legitimacy across different stakeholders and cultures. Building on Suddaby et al.'s (2017) model of legitimacy thinking – legitimacy-as-property, legitimacy-as-process, and legitimacy-as-perception – we offer a novel analytical framework of seven types of recurring 'legitimacy tests' that shape legitimacy perception at the level of individual stakeholders.

In the next section, we explore the wider context of social acceptance/resistance in megaprojects, linking the emerging controversies to a lack of project legitimacy. We follow with a review of the literature on project legitimacy. Subsequently, we describe our methodological approach before turning to the findings of our case. We then discuss those findings in detail, tying them together into a new dynamic model of legitimacy perception in projects. We conclude with reflections on the implications for project practice and megaproject legitimacy theory.

2. Literature review

2.1. Social resistance in megaprojects

Megaprojects rarely go uncontested, due to their high costs – often in taxpayer money - and potential impact on local communities (van den Ende and Marrewijk, 2019; van den Ende et al., 2015). Inevitably, megaprojects will create negative impacts for some stakeholders, who we treat in accordance with Freeman's (1984) definition as any group or individual who is affected by or can affect a project. Stakeholders can form stakeholder groups based on 'shared norms, values, and goals in the context of a socioeconomic issue' (Schneider and Sachs, 2017, p. 42). Those stakeholder groups may perceive megaprojects as intruders causing disruption, lasting damage, or misery, and may in consequence take active measures to oppose the project. This is how social resistance – understood here as groups of people aligned in response to a particular social or environmental issue, albeit with varying degrees of organization (Moyer in: Luke, 2017) – is set in motion.

Both the perception of megaprojects as intrusion and subsequent social resistance have been studied from various angles, including isolationism and protest (Turner and Johnson, 2017), environmentalism (Hoffman, 1999), or not-in-my-backyard mentality (NIMBYism; Esaioso, 2014). From the governance side, rise of such social resistance has been attributed to poor planning or politicising (Acerete et al., 2016; Flyvbjerg et al., 2003; Watkins, 2017).

Social resistance and the resulting conflicts with stakeholders shape megaproject outcomes (Flyvbjerg et al., 2003; Miller and Lessard, 2000). This realization has led to an increased interest in stakeholders, their attributes (Bonke & Winch, 2002; Mitchell et al., 1997) and how to manage them based on those attributes. However, research on behaviour and attitudes of stakeholders is relatively scant in the literature (Frooman and Murrell, 2005; Laplume et al., 2008). Nevertheless, attitudes such as stakeholders' perception of, for example, the fairness of a firm or project, work as motivators for stakeholder action (Hayibor and Collins, 2016). Thus, we require deeper knowledge about how disparate stakeholder groups develop or change attitudes towards project, to inform new approaches of project governance in challenging multi-stakeholder environments.

A particularly suitable context to investigate diverging stakeholder attitudes are cross-border projects that see challenges of social resistance amplified. First, these projects must build support across disparate political, economic and cultural regions with diverging norms and expectations. Second, these projects are challenging borders which still constitute important institutions in people's mind (Rietveld, 2012), as is vividly illustrated by recent border protection measures in the wake of the Covid-19 pandemic. Third, these projects are often embedded in two distinct national infrastructure programmes, increasing the number of external stakeholders on which the project outcome is dependent.

Yet, not all cross-border infrastructure projects face the same level of social resistance and controversy. Some projects such as the French/Italian Turin-Lyon tunnel (Messaggero, 2019), or the Nordstream II pipeline in the Baltic Sea have seen violent protests on at least one side of the borders. Other projects such as the Danish/Swedish Øresund Bridge (Knolwes and Matthiessen, 2009), or the British/French Channel Fixed Link, did not meet substantial levels of stakeholder criticism or open resistance (Redford, 2014). Why we observe these differences cannot readily be explained through more balanced promised or realized outcomes. Typically, new cross-border links – including those with limited social resistance – have highly asymmetric benefits, favouring larger centres of economic activity while often not meeting expectations of economic development in the cross-border regions (Thomas and O'Donoghue, 2013). Thus, to explain social resistance against cross-border project, we need to look beyond utilitarian discussions of expected and realized benefits. We therefore now turn to exploring the attitudes and perceptions of different project stakeholder groups, in particular their perception of project legitimacy.

2.2. Legitimacy in projects

In the project literature, legitimacy is acknowledged as an important determinant for project outcomes (Di Maddaloni and Davis, 2018; Flyvbjerg et al., 2003; Orr and Scott, 2008; Scott et al., 2011; Scott and Levitt, 2017). Crucially, authors have claimed that project risks increase when the issue of legitimacy gets neglected by failing to address stakeholders' legitimate concerns (Alarcón et al., 2011; Chinosky et al., 2008; Valentín et al., 2017). Yet, despite this concession, Aaltonen (2013) has found research on project legitimacy wanting. The influx since has remained scarce, and the concept of legitimacy ambiguous or even elusive – ranging from assessing factual legitimacy...
of stakeholder claims (Neville et al., 2011), to legitimacy as perceptual outcome of institutional work (van der Ende & van Marrewijk, 2019).

To gain conceptual clarity, we therefore follow Suddaby et al.’s (2017) framework of different streams in legitimacy research in organizational studies. As project legitimacy research draws mainly from the wider organizational literature and stakeholder theory (Deephouse & Suchman, 2012; Suchman, 1995; Tost, 2011; Turner and Johnson, 2017; Tyler, 2006), Suddaby et al.’s framework provides a useful structure to organize knowledge on project legitimacy.

Most organizational legitimacy research builds on Suchmann’s definition of legitimacy as a ‘perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions’ (1995, p. 574). Yet, Suddaby et al. (2017) found that organizational scholars had approached questions of legitimacy following three distinct streams or views: legitimacy-as-property (to be possessed, gained, or lost), legitimacy-as-process (to be built from the ground and managed), and legitimacy-as-perception (in the eye of the beholder). They argue that while these streams may provide complementary insights to study the complex and multi-dimensional concept of legitimacy, their ontological separation has led to a tendency to ‘talk past each other’. Mapping the literature on project legitimacy against these distinct streams, we can observe the same conceptual separations, with a strong lean toward the legitimacy-as-property view. In the following, we will provide a brief overview of the three streams in the project literature. Thereafter, we will follow Suddaby et al.’s (2017) recommendation to integrate the views for novel, multi-leveled research on megaproject legitimacy.

The legitimacy-as-property stream conceptualized legitimacy as an asset or characteristic of an organization, entity, or project possesses, can gain, or lose. Legitimacy here is understood through a contingency view, where legitimacy emerges from a fit of the organization’s features with expectations of its environment. Aiming to differentiate distinct types of legitimacy, this view grants that an organization may be on some levels (e.g. legally) legitimate, while it might be on others (e.g. morally) illegitimate. Moreover, this view conceives that different stakeholder groups with diverging expectations may result in different ‘fit’, thus legitimacy may or may not be generated equally across all stakeholders. In a search for fit, organizations therefore adapt their behaviour or external appearance to the expectations from the environment.

As stated before, most of the project legitimacy literature follows this stream, researching legitimacy as a property that a project actor or the project possesses. Questions of this stream relate to the relative or absolute legitimacy ‘possessed’ by stakeholders (Bahadorostani et al., 2019; Mitchell et al., 1997). Neville et al. (2011) note that it is the legitimacy of stakeholders’ claims rather than stakeholders themselves that play the primary role. Other works investigate legitimacy types (Lobo and Abid, 2020), how legitimacy is contingent for project success (Sillars and Kangari, 2004) or project support (Hooge and Dalmaso, 2015; Melé and Armengou, 2016), or practices chosen to increase the project’s fit with external expectations increase (Brunet and Aubry, 2016; Meissonier et al., 2015).

Moreover, Aaltonen (Aaltonen, 2013) and Aaltonen et al. (2008) investigated the strategies through which project stakeholders increased their own legitimacy. While the publication from 2008 still was firmly set in the legitimacy-as-property view, looking for strategies that increase contingent fit, Aaltonen’s (2013) work introduced strategies that acknowledge legitimacy as social construction.

Suddaby et al. (2017) categorize such research on agentic social construction of legitimacy as the legitimacy-as-process view. This view assumes that legitimacy is ‘built from the ground’ through a change agent, who influences the evaluation of the organization’s legitimacy by others through persuasion, rhetoric, or framing to shift the audience’s perception. In this view, both the object (the organization) and the evaluator (audience/stakeholders) are relatively passive. The legitimacy-as-process view thus places strong emphasis on the actions of a ‘hypermus-}

cular’ actor (Suddaby, 2010) that shapes the perceptions of the monolithic audience.

Besides Aaltonen’s (2013) research on narrative strategies of stakeholders to shape their own legitimacy, a few other project authors adopted the agentic legitimacy-as-process view. For example, van den Ende and van Marrewijk (2019) adopted a neo-institutional view to analyse the ‘institutional work’ done to create legitimacy for Amsterdam subway projects. Similarly, Lindkvist and Hjort (2015) analysed the role and actions of a cultural entrepreneur in shaping legitimacy for a cultural project in Sweden. On a more detailed level, Gil (2010) took a linguistic turn, studying how project managers use language in their stakeholder communication to establish project legitimacy.

The third legitimacy research stream identified by Suddaby et al. (2017) relates to legitimacy-as-perception. This view concedes that legitimacy ‘resides in the eye of the beholder’ (Ashforth and Gibbs, 1990, p. 177), where legitimacy is the result of an individual or collective sensemaking process, evaluating or judging an object or organization. Thus, other than in the legitimacy-as-process view, the audience or evaluator is not a monolithic and passive entity, but assumes an active role in shaping its own judgement or evaluation of the object’s legitimacy.

In the project literature, only one recent publication by Derakhshan et al. (2019) has explicitly taken this stance, investigating the formation of legitimacy perception in local communities in response to oil extraction projects. Besides this, Teo and Loosemore (2017) have explored the social dynamics of stakeholder perception in contested projects, however did not connect their findings back to the legitimacy literature or to questions of social construction.

Overall, in line with Suddaby et al.’s (2017) observations on research on organizational legitimacy, we see that research on project legitimacy is fragmented and provides only spotlights on a complex and dynamic phenomenon. In particular, while project research conceives the importance of projects to have and acquire legitimacy, these works do not go into details of where legitimacy comes from and how it works. In addition, while the project literature is preoccupied with the need to secure legitimacy for the project, it mostly fails to emphasise that the project opposition similarly requires legitimacy to succeed. In our view, legitimacy of projects and legitimacy of opposition work as communicating vessels and therefore should be analysed in parallel. Such an approach helps to bridge boundaries between the different legitimacy approaches merging the analytical standpoints and, at the same time, enables practitioners to objectively assess legitimacy of megaprojects and devise appropriate measures and governance approaches to prevent legitimacy controversies or lapses.

Thus, our question is: How do diverging perceptions of legitimacy develop across megaproject stakeholders? Specifically, we want to investigate the dynamics through which the perception of a project or its opposition as legitimate or illegitimate gain traction within specific stakeholder communities.

3. Method

Our research investigates the formation of legitimacy perceptions of stakeholders in cross-border megaprojects, following the case of the Danish-German Fehmarnbelt Fixed Link project. The research follows an embedded single case study approach (Eisenhardt and Graebner, 2007; Yin, 2009), with the project in its institutional and social context as the single case, and the actors and stakeholder groups considered as embedded units of analysis. The Fehmarnbelt project is a prototypical ‘extreme case’ (Siggelkow, 2007), as one of the most capital intensive and technologically challenging megaprojects in Europe affecting directly and indirectly citizens and political and economic entities in Denmark, Germany and beyond. Moreover, the apparent asymmetry in levels of opposition across the border indicate substantially different perceptions of the project – and, as we will discuss, the project’s legitimacy – in the two national contexts. Through this rich and heterogeneous stakeholder
environment, the case thus allows us to investigate the development of different perceptions of legitimacy within the same factual and governance context and make comparisons across stakeholders, a setting described by Suddaby et al. (2017) as ‘multi-site ethnography’.

3.1. Data collection

We collected data on the case through three staggered phases: First, a four-month ethnography-inspired (Fetterman, 2020) research at Femern A/S, the Danish state-owned enterprise responsible for both planning and implementation of the tunnel (November 2018–February 2019). During that phase, one of the authors conducted interviews with key project employees (8 interviews, conducted in English) including the top management team, risk managers, PR, and employees liaising with authorities in Germany and Denmark. Through observations, interviews, access to internal materials such as contracts, plans, statements from the approval process, codes and manuals and the company’s own media archive, we identified the main stakeholder groups that raised issues questioning or undermining the project legitimacy throughout the process of planning and implementation.

Second, building on this comprehensive stakeholder overview of the first phase, we conducted a review of Danish and German media to identify the stakeholders’ main positions and justifications thereof toward the project. To do so, we leaned on press clippings provided by Femern A/S’s media archive, and conducted our own media review. For the latter, we searched the online archives of selected Danish and German national and local newspapers across the political spectrum for articles mentioning the Fehmarnbelt project. The aim was not to conduct a systematic and comprehensive press review, but to identify additional stakeholders, relationships between stakeholders, and stakeholder positions not previously identified during the ethnography. Additionally, we reviewed publicly available documents and press statements from groups opposing the project, and from the German ‘Dialogforum’, a platform initiated by Schleswig-Holstein for stakeholder dialogue. This approach also led us to identify further social media engagement of opposing groups, for example online petitions or Facebook groups that further revealed specific positions of the oppositions and relationships between those groups. We realized that the organized project opposition was exclusively concentrated on the German side. While there are scattered critical voices on the Danish side, active resistance has come exclusively from German associations and a multinational ferry operator serving the Fehmarn route.

Third, we contacted the identified organized project opponents and other active stakeholders on the Danish and German side. Between March and April 2019, we conducted semi-structured interviews with representatives of major internal (2 interviews) and external stakeholder groups (4 interviews) from Germany and Denmark to gain in-depth understanding of their legitimacy perception. The interviews were semi-structured, based on our foreknowledge gained during the preceding two phases of data collection. In the interviews, we explored the personal story of the interviewee in the project, probing in particular into events or developments of disagreements and his or her relation to other stakeholders. The interviews with the three Danish actors were conducted in Danish, the interviews with the three German actors in German. All interviewed actors had been involved as active stakeholder in the process for at least two years (and up to 15 years), as representatives of either authorities, or affected parties, specifically the ferry company serving the Fehmarnbelt route, the local community of Fehmarn, and environmental NGOs. The interviews lasted between 60 and 120 min, were recorded, transcribed, and where needed translated into English.

Our primary data source for subsequent analysis were interviews with project developers and stakeholders, with media data and internal documents serving as secondary data to triangulate statements, findings and observations. The annex provides an overview of the interview data. In the process of analysing the primary data we also returned to previously accessed news outlets and other types of digital media, where necessary adding documents to our secondary data collection.

3.2. Data analysis

To analyse the data, we followed an abductive approach (Alvesson and Sköldberg, 2017), with the legitimacy-as-perception view (Suddaby et al., 2017) as our starting point.

After we had familiarized ourselves with the content of the 15 interviews, we started coding (using the Atlas.ti software), embarking from the empirical interest of our paper: perceptions of legitimacy. First, we identified statements related to perceptions of injustice and dissatisfaction with actions by other project stakeholders. We then coded these statements based on whether they supported or contested the legitimacy of the actions of other stakeholders, and subsequently grouped them by whether they supported/tested the legitimacy of the project, or of actors opposing the project. Concordantly, we coded these statements for factors mentioned by our informants as relevant to their perception of legitimacy or illegitimacy. Through iteration between the informant-centric codes with the literature on legitimacy and social resistance, we then grouped those first-order codes into seven theory-centric second order themes, that we aggregated into three dimensions: Trust, Majority, and Morality (Fig. 1). To validate coding within these themes and dimensions, we developed a coding scheme (see Table 3 in the Annex) that was independently applied by the first and second author with differences being discussed and resolved to ensure high inter-coder alignment.

We used those findings to analyse for differences in legitimacy perception and roots of legitimacy perception across the different stakeholders. To do so, we summarized commonalities and differences between the stakeholders’ legitimacy perceptions and used cross-tabulation to identify thematic patterns within and across stakeholders. Throughout several iterations, we discussed the intermediate findings within the research team, and contrasted them with relevant literature on legitimacy, trust, and morality in projects and other domains of organizing and institutions. These iterations lead to the refined findings presented in Section 6.

4. Case background

The idea of a connection between the Danish island of Lolland, and the German island of Fehmarn has been floating at least since the 1930s. The 18 km-long stretch of sea across the Fehmarnbelt, currently connected by ferry, seemed to be the ideal location for a fixed link to connect Scandinavia with mainland Europe.

The project had gained momentum with the start of the new millennium after the positive outcome of several feasibility studies. Following the completion of the Øresund bridge connecting Sweden with the Danish island of Zealand in 2000 (Knowles & Matthesien, 2009), finishing the shortest possible route to Central Europe via a Lolland–Fehmarn fixed link, as an alternative to the Jutland route via the Storbaelt bridge (finished in 1998), seemed to be a logical next step (Fig. 2).

The idea of the project and its setting might have looked perfect to engineers who envisaged cutting travel time between Copenhagen, Denmark and Hamburg, Germany by one hour for motorists and two hours for trains. Yet, support was not universal. While Denmark steadily and consensually worked on extending its inland and cross-border infrastructure, Germany had less momentum. Specifically, Deutsche Bahn, the German train service provider and co-owner of the Fehmarn ferry raised concerns, as did local inhabitants on the island of Fehmarn, a popular German summer holiday destination. Against the backdrop of a massive deficit in the German infrastructure maintenance budget, Germany thus did not rush to make any firm commitments regarding the project.

1 Femern A/S media archive encompasses printed, online published, and broadcasted content from Danish and German news media and the publications of relevant interest groups.
Fig. 1. Data structure of the analysis, illustrating the three aggregated legitimacy themes (visualization of data structure following (Gioia, Corley, & Hamilton, 2013)).

Fig. 2. Map of the planned Fehmarn route (blue) and the existing Jutland route (green), connecting Scandinavia with mainland Europe (adapted from image provided by Femern A/S). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Hence, the Fehmarnbelt Fixed Link faced rather bleak prospects at the beginning of the 2000s, which were only overcome, once the Danish side offered to finance the entire project. This commitment convinced the German government to sign (2008) and ratify (2009) the international treaty on the construction of the Fehmarnbelt Fixed Link, setting its completion date to 2018. With both governments now in agreement and with blessings from the EU who listed the project as a priority in its TEN-T infrastructure programme, nothing seemed to stand in the way of the project, apart from opposition through minor local groups and environmental activists on the German side.

Following these developments, the ferry company operating the Fehmarn route and its port infrastructure (co-owned by the Danish state and Deutsche Bahn), was put on the market in an attempt to raise additional funds. Eventually a consortium of private investors bought the company for 1.5b EUR in 2008, thus ending the Danish-German partnership that had faced difficulties for some time.

Moving forward in planning, Denmark established the state-owned company Femern A/S to oversee the project execution. Femern A/S is a subsidiary of the Sund og Bælt Holding A/S, who was responsible for the relatively frictionless completion of earlier Danish infrastructure megaprojects, amongst other the inner-Danish Storbelt bridge (1998), and the Danish-Swedish Øresund bridge (2000).

The situation in Germany was entirely different (Fig. 3). Germany did not have a similar track-record of successfully completed infrastructure projects. As the Fehmarnbelt project proceeded, Germany moreover experienced a string of major megaprojects’ failures and controversies, such as massive social resistance against the urban development project Stuttgart 21 between 2007 and 2010, or the disastrous Berlin Brandenburg Airport project (Geraldi & Stingl, 2016). Germany also encountered significant delays in infrastructure projects connecting to other neighbouring countries (Betuwe line to the Netherlands, Dresden-Wrocław to Poland, Munich-Prague to the Czech Republic).

In 2011, the project developer selected the submerged tunnel solution – over a drilled tunnel, or a bridge – kicking off the public consultation process on both sides of the border. Wary from the public backlash to the Stuttgart 21 project, which gathered more than 100,000 protesters in October 2010, authorities in Schleswig-Holstein established the ‘Dialogforum’ for public discourse. All relevant associations or organizations representing stakeholder groups were invited to participate. However, some groups, such as national environmental organizations, decided not to participate in this forum. Other local interest groups later ceased to participate, out of frustration with the process.

Also in 2011, another stakeholder joined the opposing voices: the now privately owned ferry operator. Following this development, the previously scattered and uncoordinated camp of vehement opponents started very soon to pose a real threat to the project on several levels. Litigations in national and European courts, complaints, demonstrations, media campaigns, new pieces of expertise contradicting the project foundations: all being part of the opposition strategy to stop or significantly alter the Fehmarnbelt Fixed Link. Table 1 provides an overview of the main stakeholders involved in the debate around the Fehmarnbelt project.

Thus, while the Danish authorization process moved forward smoothly, the German process was stalled by numerous back-and-forths. Over the two consultation rounds (2014–2015 and 2016–2017), German civil society filed more than 15,000 submissions of complaints or inquiries. Moreover, the German federal court placed new methodology requirements for the already submitted planning application interpreting the new EU directives in 2014. As a result, the application had to be significantly updated and re-submitted due to the German regulations that make implementation of changes obligatory. Contrarily, the Danish legal system did not foresee such an automatism on planning approvals related to altered EU regulation. However, the resulting sluggish pace of the German process is commonplace in their approval for infrastructure projects, which generally face substantial delays through lengthy planning processes and frequent litigation2.

Frustrated with the slow pace – which had not been accounted for in the original planning – the Danish side wished to spur and speed up the process by running an early tender looking for contractors. They awarded tenders in 2016 – long before any final design was approved. However, necessary conditional clauses incurred potential compensations to contractors for delay- or cancellation-related costs. Additionally, project developer’s running costs for each year of delay and expenses spent on lawyers and consultants contributed to budget overruns.

After years of disputes and delays, the project finally seemed to be on track when Schleswig-Holstein issued the planning approval in 2019 and the European Commission reaffirmed support. However, six German stakeholder groups filed cases against the approval with German courts. Despite this, confident Danish politicians gave their formal go-ahead for the construction to start on the Danish side. Eventually, the German federal court indeed ruled in the tunnel’s favour in late 2020, but the Covid-19 pandemic has delayed commencement of works to January 2021.

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2021. As the project opposition has not fizzled out with the court ruling, the finalization of the tunnel projected for 2029 will still depend on future actions of the project stakeholders.

5. Findings

Exploring how legitimacy perception developed, we found that stakeholders draw from different interacting sources to form their perception of the legitimacy of a project or its opposition. Specifically, we found that stakeholders test the legitimacy of the project/opposition against three dimensions: first, trust in the acting organisations or institutions; second, support for the project/opposition through the social or political environment (majority); third adherence of the project/opposition and its execution to norms and expectations (morality).

The idea that legitimacy is subjected to ‘tests’ in which stakeholders subjectively assess the legitimacy of a project, an organization, or an idea has been argued previously in political sciences, international relations but also management studies. According to Ashforth and Gibbs (1990) or Patriotta, Gond, & Schultz, (2011) legitimacy tests often take the form of public controversies in which multiple stakeholder groups scrutinize the focal organization.

These legitimacy tests result in either a success, legitimising the project or its opposition, or a failure, thus delegitimising it. While there are significant overlaps between the statements delegitimizing the project and legitimizing the opposition (and vice versa), this overlap is nevertheless not absolute: not all the claims delegitimizing opposition automatically legitimise the project and vice versa. Table 2 provides an overview of the observed frequencies of the tests and their outcomes per stakeholder group.

5.1. Trust in institutions or organisation

We observed that legitimacy perception follows pre-existing trust or distrust in other actors or contextual elements. We differentiate here between trust in the institutional context, such as the legal or political system in which the project takes place, and trust in the acting organizations, such as the executing project company, authorities involved in planning and approval, or organized opposition.

If the institutional context is trusted, stakeholders extended this trust to the project resulting in perceived higher legitimacy. We found indication for this extended trust mainly on the Danish side, where a representative of an environmental NGO stated that they have ‘trust that government decisions in Denmark are usually objective’ and it is furthermore ‘tough to oppose fixed links that have benefitted Denmark so much.’ [Dan. NGO]

We saw contrasting remarks on the German side, where central and state-level institutions seem to suffer from chronically low levels of trust, especially in remote rural areas like the island of Fehmarn. However, the lack of trust concerns mainly the German institutions, not the German-Danish cooperation, as the following statement from a German opposition representative illustrates:

‘I trust the Danes that they get their tunnel done. But I do still not trust the Germans that they manage the rest [the national connections of railway and roads].' [Ger. NGO]

Internal stakeholders also acknowledged the asymmetry in institutional trust as a key challenge for the project, as a representative of German authorities mentioned: ‘I can understand our Danish friends when they say “Look, our people understand [the project], because we have built Øresund and the Great Belt and all of that is wonderful”, [...] So there is a lot of trust [in Denmark], that does not exist here.’ [Ger. AUT]

However, while trust in Danish actors is no relevant factor for German stakeholders, we saw the impact of EU-scepticism on the perception of the project legitimacy. Relating to the contested EU financing scheme, a German opponent stated ‘the European Commission is quite flexible with twisting the regulations. They have a bit of disregard for rules.’ [Ger. NGO]

Yet, while Danish society has a notoriously high scepticism toward the European Union (Olesen, 2020), we did not observe any effect from this distrust to the perception of the project legitimacy. This may indicate that the project is predominantly perceived as a Danish endeavour, in which the EU is not a relevant actor, despite its substantial financial contributions.

On the level of organizational trust, we observed similar cross-border asymmetries. For example, the project developer enjoyed high levels of trust in Denmark thanks to its direct connection to previous fixed link megaprojects that became part of the Danish national identity, even occupying the front sides of Danish banknotes. Thus, Danish civil and environmental organizations trusted the project developer as an organization. In sharp contrast, this track-record was largely irrelevant among the German opponents.

This national divide also showed in the legitimizing impact of environmental NGOs. Around the Fehmarnbelt project, only nationally acting NGOs from Germany and Denmark assumed a vocal role. With these national NGOs enjoying a substantial level of trust in their home-countries, their diametric positions – supportive in Denmark, opposing in Germany – shaped the legitimacy perception of other stakeholders in their own country. However, their respective positions had little relevance across the border.

Only one single organization achieved cross-border outreach in terms of trust: the ferry operator, as the only established organization with a significant presence and relevance on both sides of the border. However, their perceived relevance in the legitimacy debate again had been asymmetric. On the island Fehmarn, ‘the ferry operator provides for whole families [and is] the most important employer besides tourism’ [Ger. NGO], and is thus an important voice in the German opposition. On the Danish side, where the local economic importance of the ferry
operator is negligent, the company has not been able to gather allies in their joint opposition to the project.

5.2. Majority: social and political approval

The second dimension that stakeholders drew from for testing the legitimacy of a project or its opposition is the existing social or political approval. While the broad political alliance behind the Fehmarnbelt project might point toward a strong overall approval, we found that the stakeholder perception of both social and political approval was much more ambiguous.

We identified legitimacy perception rooted in political approval when stakeholders referred to political decisions and project support from elected politicians. On the Danish side, we saw that the political legitimation of the project typically represented a sufficient condition for perceived project legitimacy. As the representative of a Danish NGO stated: ‘That argument weighed quite heavily with us, that it was such a large part of what we thought we should build it.’ [Dan. NGO]

Internal stakeholders on the German side mirrored this stance, with an authority representative emphasizing: ‘there was a massive majority behind it in parliament. Then we go from an “if” to a “how.”’ [Ger. AUT]

However, German opposition representatives argue that politicians have been misled, or are following opportunistic motives, such as local politicians that, as one of the opposition representatives allured, are ‘already preparing for a comfortable posting in the ministry’ [Ger. NGO]. In consequence, opposition groups have aimed to discredit the political majority, or influence the political stance on the project through protests signalling strong social opposition. Moreover, they are employing delaying tactics as a means to induce political re-thinking – even across the border. A German opposition representative stated: ‘This is [an] aspect of our lawsuit [...] to delay the project further. Each delay also means respite for Denmark.’ [Ger. NGO]

While political approval, despite being contested as biased, is relatively visible, the question of social approval is more vague. Representative surveys in Schleswig-Holstein have repeatedly indicated that the opposition is the relative minority (e.g. April 2016: 51% for, 36% against [MEDIA-1]; May 2017: 43% for, 19% against [MEDIA-2]).

Yet, to signal and lend weight to social opposition, local associations have created a symbol for their protest in the form of blue X-signs that are placed in many front yards on the island of Fehmarn and around the German port of the ferry operator. Other approaches to increase the visibility of the opposition are regular protests, information booths at local markets, and social media campaigns. Yet, the attendance rate at the public meetings and protests has dropped over the years. More drastically, one of the most vocal opponent groups gained negative attention in July 2019 when they hired around 30 young actors for a performance-protest [MEDIA-3].

However, while leaders of the opposition admit that the number of active protesters has declined over time, they argue that this is not following a changed mind, but a general resignation within society. As an opposition representative muses: ‘[The people we talk to during protest actions] like that we are continuing, but there is also always a bit of spite: “You will not persevere against politics!”’ [Ger. NGO]

5.3. Moral legitimacy

The third source for the formation of legitimacy perception relates to the adherence of the project or its opposition to moral norms. Specifically, we found three aspects that stakeholders scrutinized for their morality: the relevance of the problem the project aims to address, the morality of the process with which the project (or its opposition) is executed, and the expected fairness or balance of the project’s outcomes.

The German opposition group contests that the Fehmarnbelt project is based on any relevant and pressing problem, thus delegitimizing the project by questioning its purpose. Most notably, they question traffic prognoses that form the foundation of the economic case for the tunnel, thus exploiting the uncertainty inherent in any such prognoses. For

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3 [MEDIA-#] refers to selected media documented specified in the Annex
example, an opposition representative states: ‘We realized that all the traffic prognoses were not very convincing. […] The need for the project did not even exist, it was just sugar coated.’ [Ger. NGO]

Additionally, the opposition repeatedly highlighted the existing Jutland route, underlining that there is already a fixed link between Scandinavia and mainland Europe, thus rendering the Fehmarnbelt connection redundant, and in consequence illegitimate. Accordingly, the aim of these groups is not to find a consensually acceptable solution, but to stop the project altogether.

Conversely, supporters accept the premises under which the project has been initiated, legitimizing the project by accepting that it addresses valid current and future issues of connectivity within Northern Europe. As a representative of German authorities says: ‘[opponents say] we should use this money for other projects that are much more important. Okay. But tell me then which project is more important than our project. […] None!’ [Ger. AUT] Overall, we saw that questioning the ‘problem’ is only present in the discourse of the German opposition.

The most prevalent group of legitimacy statements in our research related to process morality, i.e. the question of fair process. Although the numbers of statements are no unequivocal indication of the weight or validity of the arguments, they point to the central controversy of the project, related to the means through which the project has been implemented, and the means taken by its opposition. This controversy has attracted a large amount of delegitimizing arguments with relatively few legitimizing arguments in contrast.

A first line of argument from the opposition related to perceived manipulative or unjust approaches in decision-making. Particularly for one opposition group, the notion of deceiving forces was central: ‘We are being lied to. It is about lorries, it is about cars that pay toll. And it is about freight trains. But it is not about the people [like you pretend]. That is not what it is about. Quite the opposite!’ [Ger. NGO]

Beyond perceived deliberate deception, project opponents criticise decisions and actions of authorities as biased, opportunistic, or simply appeasing. Opponents complain that they were presented with fait accompli, got their say far too late, and could only influence small details. They criticise in particular the Dialogforum, intended for open debate, as a failure in this regard: ‘[It] is just window dressing in our view. […] It was created because they had seen with Stuttgart 21 that much has gone wrong and they wanted to do everything better. But actually, we don’t have any influence there.’ [Ger. NGO]

Several groups actively decided to withdraw their participation in the Dialogforum, following events that they experienced as unfair. For example, when the German planning authority stated in a meeting of the Dialogforum, that there were no funds for a previously promised reassessment of the project, an opponent recalled: ‘This is when I and my allies […] said “Folks, now is the time for tabula rasa, we should leave the Dialogforum!”’ [Ger. NGO]

However, other stakeholders have perceived this withdrawal from the Dialogforum as an unfair act of the opposition, reducing thus the opposition’s legitimacy. The Danish project developer criticises the uncooperativeness of the opposition as having ‘not submitted a single constructive demand’ [PRO]. The German authorities moreover perceive the non-participation of German environmental NGOs in the Dialogforum as an unconstructive tactical move to withhold arguments from debate only to use them later in litigation.

Other perceptions of unfair practices were reported from the ferry operator. Specifically, they complained about disrespectful behaviour by the project developer including an aggressive information campaign using various tools including a board game for children emphasising ferry disadvantages. Moreover, they claimed that the project developer designed new access routes to both ports in ways that would create congestion in the neighbouring municipalities, thus creating disadvantages for the ferries. Specifically, they stated: ‘We are worried that they will abuse their unique advantages to push us out of the market.’ [PER]

Moreover, the ferry operators argued against unfair practices in the financing scheme of the project: ‘We believe the EU Commission has given Fehmarn a “blank check”, in that they have been given 55 years of subsidies [through the loans], which is far beyond the normal payback time.’ [FER] Following this perception, they have also repeatedly filed lawsuits with the EU court contesting the financing model.

In turn, project supporters in both countries condemn the ferry company for coordinating and sponsoring a ‘coalition of convenience’ consisting of German environmental NGOs and local activists. The project developer claims that local protest organizations only receive member fees of around 6,000 EUR, while their total budget amounts to 206,000 EUR. ‘They have two sponsors [for] another 200,000 euros. They are anonymous because they can do that but I have a pretty good hunch about where this money comes from.’ [PRO]

Finally, stakeholders across the border diverge in their projections of the outcome morality created through the undertaken project, often also in comparison with alternative solutions to their respectively perceived central problem. Specifically, opposition groups claim the selected submerged rail/road-tunnel will not create the desired benefits, or that the project proponents ignore expectable environmental and societal costs.

The high uncertainty inherent in long-term effects of any megaproject provides room for highly diverging projections, fitted to varying legitimacy framings. For example, Danish and German environmental NGOs cannot agree whether the tunnel construction represents harm for the environment. The Danish environmentalists accuse their German counterparts of hypocrisy and acting on behalf of the ferry operator claiming: ‘There’s not any very valuable sea floor where the tunnel is to be entrenched’ [Dan. NGO]. Contrary to this, German environmental NGOs regularly bring forward new arguments or findings regarding negative effects on the maritime ecosystem.

We observed similar ambiguity regarding perceptions on future traffic volume. On the German side, one of the most dreaded effects of the project is a potential increase in freight rail traffic and, consequently, noise. Paradoxically, the same groups fearing too much traffic also contest the economic projections and their underlying traffic forecasts as vastly overstated.

These disputes on future traffic also relate to delegitimizing evaluations of the tunnel’s economic viability, particularly in comparison to alternatives. A representative of the German opposition explains: ‘If you properly expand [the Jutland route], this will cost only a fraction of [the Fehmarn] project. Even accounting for the higher operating costs […] they would be significantly lower than the Fehmarnbelt.’ [Ger. NGO]

As another element of uncertainty, stakeholders disagree on the physical impact of construction works and long-term effect of the fixed link on local connectivity. Protesters among local businesses and citizens on the German side often evoke the following image: ‘The route […] cuts cities, villages, communities in half. Leaves touristic areas behind […] That is madness! To create an artificial freight route and destroy everything that grew there. To drive away the people instead of improving the existing route.’ [Ger. NGO]

On the other hand, supporters such as the Danish project developer, but also German authorities and other supporting organizations counter with images of positive effects of the tunnel aiming to create an alternative story. For example, in 2017 the local tourism association, in collaboration with the project developer and economic associations, commissioned an assessment on touristic effects of the tunnel [MEDIA-4], concluding on a net positive effect despite regional and temporal negative effects.

Overall, the uncertainty related to what the project will become provides ample room for developing legitimizing and de-legitimizing narratives of the project outcome, which can exist in parallel, even within one stakeholder group.

In summary, while only the German opposition has contested the ‘problem’ morality, we found that process- and outcome-related critique is spread across all stakeholder groups. The means and processes of the Fehmarnbelt Fixed Link project have been the central topic of the le-
Legitimacy debate around the project. This debate has mainly arisen on the German side of the border, scrutinizing in particular the question of openness of the process to public debate, and the legitimacy of the financing model. Other arguments included allegedly illicit practices by either side used in their respective campaigns.

Having established megaproject stakeholders’ legitimacy perceptions expressed in their statements fall under three broad legitimacy dimensions, we now aim to identify and highlight functionality and dynamic interrelationship between the three domains.

6. Discussion

Stakeholders as evaluators of legitimacy take centre stage in our study. Starting off with the assumption that stakeholders are the measure of all things in megaprojects, our findings indicate that their perception of legitimacy is formed along three largely intertwined legitimacy dimensions forming a legitimacy cycle of trust, majority, and morality. This dynamic view transcends Suddaby et al.’s (2017) division of legitimacy-as-property, legitimacy-as-process or legitimacy-as-perception.

6.1. A dynamic model of legitimacy perception

To represent these intertwined and interdependent legitimacy dimensions, we therefore propose a dynamic model of legitimacy perception (Fig. 4), through which we can explore and explain asymmetric legitimacy perceptions across stakeholders.

Based on our findings we suggest that trust accumulated in the past within a certain institutional environment, or with organizations or other stakeholders, serves as an initial orientation point for the individual stakeholder. Such legitimacy perception drawing from previous experience with particular organizations has previously been described as legitimacy spill-over (Derakhshan et al., 2019; Gross, 2007).

In projects with highly heterogeneous stakeholders, such as cross-border projects, low levels of trust in one of the institutional environments by at least one key stakeholder can thus form the lowest common denominator for the project’s prospects of a smooth implementation. In the Fehmarnbelt case, we saw that the stigma of recently failed megaprojects and bad reputation of the central government in the German periphery led to a critically low initial trust capital on the German side. The intra-national framing of trust meant that the high trust capital on the Danish side could not outweigh the German distrust. This should serve as a warning to stakeholders who may approach projects with legitimacy delusions based on the trust capital accumulated from a single institutional environment.

Yet, initial trust is just one contributor to project legitimacy perception. If we consider megaprojects as temporary organizations in their own right (Aaltomaa, 2013; Lundin and Söderholm, 1995; van Marrewijk et al., 2016), then the importance of contextual institutional and organizational trust is likely to decline as the project progresses. The temporary organization will build (or lose) its own trust capital with different stakeholders according to its support from majorities relevant to these stakeholders, and its adherence to morality expectations of the particular group.

In consequence, trust (or lack thereof) does not merely produce static legitimacy resources in different stakeholder camps, but is a changing dimension of legitimacy perception that affects stakeholder behaviour. Following their initial trust level, we saw that stakeholders may seek out or aim to influence other sources of legitimacy by questioning or claiming project morality, or by shaping majority opinion through lobbying (creating majority) or enhancing the visibility of minority positions (pretending majority).

Turning to the majority dimension, we have seen that majority constitutes no absolute value, but is strongly coloured through deliberate framing and ongoing social construction within stakeholder groups. On the one hand, political approval is usually the only majority clearly achievable and demonstrable, as referenda are difficult to facilitate in the cross-border context. Yet, it is not a safe source for legitimacy. We saw that prior lack of trust in institutions can lead to a perception of political majority as willfully biased, thereby reducing legitimacy perception further.

On the other hand, a social majority is much harder to recognize by individual stakeholders, thus resourceful and well-organized minorities
can magnify their voice, thereby shifting the public opinion or attention in one direction or another. This points to the important role of opinion leaders who through interaction among each other and with their audiences help to form collective judgements of project legitimacy (Derakhshian et al., 2019). While project actors have several persuasion strategies at their disposal, we saw that they are in constant struggle with opposing actors – often with low levels of trust in the project institutions – aiming to reframe perceptions. Thus, their success in creating legitimacy perception depends on the extent in which they appeal to undecided or even opposing stakeholders, often through evoking the morality dimension.

Trust and majority together create a powerful axis enabling swift project implementation. Yet, they can never fully replace formal and informal processes of project scrutiny regarding the morality dimension of legitimacy. We saw arguments of morality being raised particularly by opponents of the project (or those aiming to de-legitimize the opposition) with a generally low level of trust in the opposed institution. Thus, where Jasper and Flyvbjerg claim that rationality is the only remaining argument of the powerless (Jasper and Flyvbjerg, 1999), we propose that morality is the argument of the distracting, whereas morality draws in parts from the context dependency of rationality. We saw this manifest in two regards.

First, when it comes to morality perception, supporters and opposition expressed idiosyncratic – though not entirely disparaged – values and norms. These norms served as the yardstick against which perceptions and expectations of the project were measured in establishing whether the project and its actions are the morally and rationally right thing to do. Even more so, stakeholders used facts or fact-like representations of the future to illustrate that their opponents did not live up to certain norms and values – even if the opponents claimed these norms and values for themselves. This was especially pronounced in relation to shared ‘rational’ values such as economic viability and lawfulness. While we found those as shared values across all groups, different stakeholders turned towards different facts, frames, interpretations, or prognoses to make their point regarding the morality or amorality of their own or their opponents’ actions. Thus, rationality and morality collapses into a single argument testing both the legitimacy of the project, and the trust in the other project stakeholders.

Second, we saw an imminent role of different interpretations of what is happening in the present, and what will be in the future, for moral legitimacy tests. Deliberate exploitation of uncertainty and information asymmetry provided grounds for entirely different conclusions regarding the morality of specific actions, actors, or the project as a whole. Thus, simple adherence to what is believed to be stakeholders’ values and following a rationalistic approach can become a pitfall when opposing stakeholders set out to re-frame the narrative. The German Dialog-forum is a prime example of how best intent can be turned into proof of illegitimacy, when the initial trust capital is low or the project purpose is seen as illegitimate.

Thus, morality perception transcends a mere fit with monolithic societal norms and expectations. Instead, it is a dynamic notion following continuously updated stakeholders’ attention, and perception of present and future uncertainty. In turn, morality arguments become a lever to influence other individual’s trust in institutions and can shape real or perceived majority opinions regarding both the trustworthiness of other stakeholders, and the legitimacy of their actions and interests.

6.2. Implications for theory

Our proposed model of dynamically interacting legitimacy dimensions is an answer to Suddaby et al.’s (2017) call for legitimacy research that transcends previously isolated views on legitimacy as property, process, or perception. Departing from the legitimacy-as-perception view, we identified three tightly coupled and interactive legitimacy dimensions – trust, majority, and morality – that contribute to individual perceptions of legitimacy. Following notions of the legitimacy-as-process view, we demonstrated that stakeholders from within and outside the project take active measures to alter perception of these three elements. By acknowledging and elucidating the interrelations of legitimacy dimensions for individual legitimacy perception, we have proposed a new view on project legitimacy as evolving stakeholder perceptions that are in constant negotiations, rather than a mere property that can be acquired and managed.

This dynamic view allows to theorize about why explanations grounded in a legitimacy-as-property view fail to provide robust advice for project governance. For example, authors have identified trust as an asset which cross-border megaprojects as emergent temporary organizations do not have (Aldrich and Fiol, 1994; Henisz and Zelner, 2005; Zimmerman and Zeitz, 2002) unless they are based in an environment with an intensive and traditional cross-cultural exchange or can draw from comparable reservoirs of institutional trust on both sides of the border. In theory, the trust foundations may be strong enough or the desire of the decisive majority of the population so obvious that they spare project stakeholders from complicated moral legitimation. That, however, as our and previous studies show, is rarely the case.

Trust-based legitimacy can be seen to a large extent as a result of people’s appreciation of the good governance record of a given organization or society as a whole. It is thus largely external to (preceding) the current project in question, while earning majority or moral supremacy represent a governance-intensive task very much internal to the specific project (Ahola et al., 2014). Absence of the initial trust capital on the input leaves legitimacy dependent on securing support across different communities and levels of government which is not readily available. While morality is not necessarily the main factor forming the majority legitimacy perception of the project content (Melé and Armengou, 2016), it seems to be decisive in shaping perception of the implementation procedure feeding back (as an output) to a longer term stakeholders’ trust in institutions.

Our analysis indicates legitimacy does not follow from a mere contingent fit with stakeholders’ expectations or interests. Instead, it is continuously re-assessed by interacting stakeholders. Nevertheless, we showed that contrary to the legitimacy-as-process view, there is no dichotomy of active change-agents and passive audiences, but an interacting and responding network of actors constantly re-negotiating their perception of legitimacy.

Our framework thus allows studying legitimacy from three angles connecting the literature on organizations, public and project management while integrating trust aspects (Cerić, 2017, 2015; Jijelava and Vanclay, 2017), moral criteria (Melé & Armengou, 2016) and public interest considerations behind social acceptance of megaprojects in what can be described as a holistic project governance approach (Brunet, 2019).

6.3. Implications for practice

We believe our contribution brings several lessons for the governance of megaprojects to assure and leverage trust and create legitimacy. While we argued that institutional and organizational trust are lowest-common-denominator dependent, multi-stakeholder projects anchored in ad hoc institutional structures typically suffer from initial trust deficits. In the resulting quest to build up trust and legitimacy, it may be tempting for project managers to circumvent processes aimed at increasing the project’s moral legitimacy, and instead focus on securing political majority. Yet, our case illustrates that political legitimacy may be insufficient to avoid major controversies and social resistance – particularly when the initial trust level is low. Indeed, a strong opposition may even reframe political support as proof of the project’s illegitimacy.

Ignoring the moral dimension by exploiting pre-existing trust may work once or twice, but in the long term, it only contributes to erosion of trust, social upheaval, and eventually even greater difficulties for future megaprojects. Thus, while trust and majority are certainly major sources
in the struggle for legitimacy of both the project and its opposition, morality should be the means.

Yet, what is perceived as moral does not only lie in the eye of the beholder but is moreover actively shaped by stakeholders across the project landscape. This implies that local embeddedness does not only mean to understand the idiosyncratic values and norms on two sides of the border, but to take an active role in the construction of the morality tale of a project across a multitude of communities. Here, cross-border project teams face a particular challenge. While the opposition typically roots their morality tale in only one national context, addressing only one audience, the project team needs to provide a consistent image that addresses two highly different contexts. Yet, as we have seen that stakeholders with higher initial trust scrutinize questions of moral legitimacy with less rigor, project teams are well advised to tell their morality tale towards those communities with the lowest initial trust.

6.4. Limitations and outlook for future research

Our findings hold the same limitation of any qualitative single case study, confining its validity to the specific context of cross-border megaprojects with certain characteristics. Yet, we trust that the developed model provides a useful structure for further single case or comparative studies applying the model of trust-morality-majority to other multi-stakeholder contexts. Application in different contexts, outside the realm of cross-border or transport field can thus verify its applicability and comprehensiveness. As our case project is still at early stages of its realization, the analysis should be repeated at later stages and after the project completion to see how the legitimacy of the project, its perception and stakeholders’ actions and argumentation developed throughout the project lifecycle. Moreover, the theorized dynamic interactions between the three legitimacy dimensions could, in future research, be subjected to longitudinal studies following in more detail the twists and turns of legitimacy perceptions formation of individual stakeholders.

7. Conclusions

Our research set out to answer the question, how diverging perceptions of legitimacy develop across megaproject stakeholders. We saw that legitimacy of both project and project opposition is repeatedly tested, drawing from three sources: trust, majority, and morality. A network of stakeholders continuously and actively shapes these sources, thus creating a dynamic framework of legitimacy perceptions. Varying historical experience and social, political, economic or cultural differences between centre and periphery, between communities or indeed nations have profound effect on megaprojects’ legitimacy. Lower levels of trust (or a chronic lack of it) in one or several stakeholder groups cause asymmetries and place pressure on the legitimation process. That asymmetry and pressure increase when no clear majority can be established or when the majority is not respected by minority. Different perceptions of what is moral and what is not among stakeholders can exacerbate divisions and uneven perception of legitimacy even further and possibly lead to conflict escalations and further erosion of institutional trust.

Our findings thus show that megaproject legitimacy is more than a mere property, perception, or process. We have combined the three legitimacy streams coined by Suddaby et al. (2017) into an integrated dynamic model capturing seven legitimacy tests related to three dimensions informing stakeholders’ legitimacy perception. This model embraces the aspects of social construction of legitimacy perception, stakeholder actions taken to shape and gain legitimacy, and the effects on the legitimacy capital of a megaproject. Thus, it structures and classifies the formation of legitimacy perception at the stakeholder level, to identify legitimacy lapses by both project supporters and opponents, and to theorize on appropriate governance and response actions.

The triad of trust, majority, and morality, conceptualized as socially constructed legitimacy tests, offer guidance and a tool for project stakeholders to navigate the complicated issue of project legitimacy. It helps to understand sources and mechanisms for legitimacy development in megaprojects, and thus enables progress towards true local embeddedness.

The case of Fehmarnbelt Fixed Link illustrates how collaborations across substantially different institutional contexts can result in critical legitimacy and trust challenges for megaprojects. Where initial trust is missing, numerous stakeholders will struggle for the prerogative of interpretation regarding the project’s morality and social approval, leading to a fragmented landscape of legitimacy perception. Yet, only if a project passes the legitimacy tests in the view of all project stakeholders, it can be considered fully legitimate.
8. Annex

8.1. Coding scheme used for data analysis

<table>
<thead>
<tr>
<th>Source of legitimacy</th>
<th>Legitimacy test</th>
<th>Definition Success</th>
<th>Definition Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Institutional trust</td>
<td>&quot;I perceive the project/opposition as legitimate because...&quot;</td>
<td>&quot;I perceive the project/opposition as illegitimate because...&quot;</td>
</tr>
<tr>
<td></td>
<td>Organizational trust</td>
<td>...based on experience, I trust that the institutions (the system and processes as a whole) are fair and competent.</td>
<td>...based on experience, I do not trust that the institutions (the system and processes as a whole) are fair and competent.</td>
</tr>
<tr>
<td></td>
<td>Social approval</td>
<td>...a majority of [society/my peer group] approves of [the project/opposition].</td>
<td>...only a minority approves of [the project/opposition].</td>
</tr>
<tr>
<td>Majority</td>
<td>Political approval</td>
<td>...a majority of elected politicians approve of the [project/opposition].</td>
<td>...only a minority of elected politicians approve of the [project/opposition].</td>
</tr>
<tr>
<td>Morality</td>
<td>Problem</td>
<td>...I consider the problem addressed by the [project/opposition] as relevant.</td>
<td>...I consider the problem addressed by the [project/opposition] as irrelevant or non-existent.</td>
</tr>
<tr>
<td></td>
<td>morality</td>
<td>...I consider the processes used to find a solution to the problem as appropriate, fair, or fit to identify the best/a good solution.</td>
<td>...I believe that the [project/opposition] will create an unfair outcome with unbalanced benefits and costs/damages for the stakeholders.</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td>...I consider the processes used to find a solution to the problem as appropriate, fair, or fit to identify the best/a good solution.</td>
<td>...I believe that the [project/opposition] will create an unfair outcome with unbalanced benefits and costs/damages for the stakeholders.</td>
</tr>
</tbody>
</table>
|                      | Solution | ...I believe that the [project/opposition] will create a fair outcome that balances the benefits and costs/damages for all stakeholders. | ...

8.2. Selected media documents referenced in the manuscript


8.3. Overview of interviewees’ experience and interviews’ duration

<table>
<thead>
<tr>
<th>Association</th>
<th>Code</th>
<th>Involvement in project (opposition)</th>
<th>Duration of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project developer A</td>
<td>PRO A</td>
<td>&gt;10 years</td>
<td>40 min (total)</td>
</tr>
<tr>
<td>Project developer B</td>
<td>PRO B</td>
<td>&gt;5 years</td>
<td>60 min</td>
</tr>
<tr>
<td>Project developer C</td>
<td>PRO C</td>
<td>2 years</td>
<td>60 min</td>
</tr>
<tr>
<td>Project developer D</td>
<td>PRO D</td>
<td>&gt;10 years</td>
<td>120 min</td>
</tr>
<tr>
<td>Project developer E</td>
<td>PRO E</td>
<td>2 years</td>
<td>120 min</td>
</tr>
<tr>
<td>Project developer F</td>
<td>PRO F</td>
<td>2 years</td>
<td>60 min</td>
</tr>
<tr>
<td>Project developer G</td>
<td>PRO G</td>
<td>&gt;5 years</td>
<td>120 min</td>
</tr>
<tr>
<td>Project developer H</td>
<td>PRO H</td>
<td>&gt;10 years</td>
<td>120 min</td>
</tr>
<tr>
<td>Ferry operator</td>
<td>FER</td>
<td>&gt;5 years</td>
<td>60 min</td>
</tr>
<tr>
<td>Danish ministry</td>
<td>DAN AUT</td>
<td>&gt;10 years</td>
<td>60 min</td>
</tr>
<tr>
<td>Danish NGO</td>
<td>DAN NGO</td>
<td>&gt;10 years</td>
<td>60 min</td>
</tr>
<tr>
<td>German planning authority</td>
<td>GER AUT</td>
<td>&gt;10 years</td>
<td>70 min</td>
</tr>
<tr>
<td>Local environmental NGO</td>
<td>GER NGO A</td>
<td>&gt;5 years</td>
<td>120 min</td>
</tr>
<tr>
<td>Local citizens NGO</td>
<td>GER NGO B</td>
<td>2 years</td>
<td>70 min</td>
</tr>
</tbody>
</table>

8.4. Frequency count of individual legitimacy tests and outcome per interview

One member of the project developer team (PRO A) had been interviewed twice.
### Stakeholder Legitimacy Test

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>GER NGO B</th>
<th>GER AUT</th>
<th>NGO A</th>
<th>PRO A</th>
<th>PRO B</th>
<th>PRO C</th>
<th>PRO D</th>
<th>PRO E</th>
<th>PRO F</th>
<th>PRO G</th>
<th>FER</th>
<th>DAN AUT</th>
<th>DAN NGO</th>
<th>PRO H</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delegitimizing Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Declaration of Competing Interest

None.

Acknowledgement

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 713683.

This study was supported by the Charles University Research Programme 'Progress' Q18 – Social Sciences: From Multidisciplinarity to Interdisciplinarity. We would like to thank all our research and interview partners.

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