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Participatory governance in megaprojects: the Lyon–Turin high-speed railway among structure, agency, and democratic participation

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Abstract

Megaprojects are increasingly common across countries and attract substantial political attention from a variety of actors. Recent studies have highlighted the need to move from an understanding of megaprojects as linear and rational processes towards a more nuanced approach that accounts for non-linear and conflictual aspects. Participatory governance is often proposed as a valuable resource in this regard. In this paper, we investigate the setting and design of two participatory venues operating in the context of the implementation of the Lyon-Turin high-speed railway megaproject: the Italian Observatory for the Turin-Lyon Railway and the French Public Inquiry. Empirical evidence shows that the Italian case featured substantial structural barriers to effective democratic participation. As for the French case, while better designed and implanted in its context, it featured important agentic limitations that undermined its democratic potential. On the basis of our case study, we therefore argue that both the Observatory for the Turin-Lyon Railway and Public Inquiry failed to promote democratic participation. We thus propose a deliberative approach to (the study of) of megaprojects. Whereas deliberative democratic ideas command growing interest across disciplines, these have found only limited application in the study of megaprojects. We contend that a deliberative democratic approach holds promise to improve the democratic and epistemic qualities of decision making on megaprojects.

Keywords: megaprojects; participatory governance; deliberative governance; democracy; railway infrastructures

Traditional approaches to (the study of) megaprojects tend to focus on day-to-day managerial actions. They see the development of the megaproject life cycle as shaped by a techno-economic logic. That is, project managers organize and manage resources to get the project completed within an already defined program management framework. So conceived, megaprojects are marked by straightforward,

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linear, and rational decision-making processes. However, recent studies show the need to move toward a more nuanced approach that accounts for nonlinear and conflictual aspects (Esposito et al., 2022). Particularly, participatory governance is often proposed as a valuable resource to address complexity, uncertainty, and conflict in megaproject development.

Participatory governance initiatives have been advocated especially to confront wicked issues characterized by entrenched value and technical conflicts, as well as little agreement on problem definition and solution (Fung, 2006, 2015). Citizen participation in policy-making has spread in several policy fields including environmental (Fischer, 2017; Jens & Koontz, 2014), budgetary (Wampler, 2012), and welfare policy (Mariani & Cavenago, 2013). A few studies have also approached infrastructure megaproject governance through analytical lenses grounded in participatory governance literature (Groves et al., 2013; Leifsen et al., 2017; Sneddon & Fox, 2007).

This article not only builds on this debate, but it also frames it within the broader context of cuttingedge scholarship in democratic theory and democratic governance innovations (Elstub & Escobar, 2019; Hendriks, 2021). We investigate two participatory venues operating in the context of the implementation of the Lyon-Turin high-speed railway megaproject: the Italian Observatory for the Turin-Lyon Railway and the French Public Inquiry. We explore structural and agentic features of participatory governance in the two cases and shed light on the conditions that can either foster or hinder participatory decisionmaking. In doing so, we adopt a critical perspective and pay particular attention to how local citizens reported about their involvement in the Lyon-Turin decision-making process. Empirical evidence shows that the Italian case displayed substantial structural barriers to effective democratic participation. The French case, although better designed and implanted in its context, featured important agentic limitations that undermined its democratic potential. Having argued that both processes failed to promote democratic participation, we propose a deliberative approach to megaproject development. In fact, whereas deliberative democratic ideas command growing interest across disciplines, these have found only limited application in the megaproject literature. We contend that a deliberative democratic approach holds promise to improve the democratic and epistemic qualities of decision-making on megaprojects.

The article is organized as follows: The next section provides the theoretical framework to analyze participatory governance in the two cases. The "Research design and methods" section presents the research design and methods. The "Investigating participatory governance in the LT" section illustrates the empirical evidence, highlighting the weaknesses of participatory governance in both the Italian and French cases. Finally, the "Discussion: toward a deliberative approach to megaprojects" and "Conclusions" sections provide discussion and conclusions, respectively.

Theoretical framework: Participatory governance in megaprojects

Research on megaprojects has stressed the need to move the focus away from the purely technical and operational tasks that need to be fulfilled to deliver outcomes (Esposito & Terlizzi, 2023; Esposito, et al., 2021). In fact, infrastructure megaprojects are extremely complex, uncertain, and conflictual large-scale ventures populated by multiple public and private stakeholders and marked by the coexistence of different and competing sociotechnical imaginaries. There is no unique way to construct such sociotechnical imaginaries, which, indeed, can be supported by diverse and contested information, knowledge, and evidence about how the megaproject will contribute to the economy, the environment, and society. Whereas the logic upon which many megaprojects are based relies on benefits associated with the provision of services to citizens, numerous criticisms have been raised against them. These range from their top-down planning processes to the negative effects on local communities. Megaprojects thus offer extremely interesting cases to investigate participatory governance practices at the intersection among public management, public policy and administration, and democratic theory.

Practices of participatory governance consist of "intermediary spaces that readjust the boundaries between the state and its citizens, establishing new places in which the participants from both can engage each other in new ways" (Fischer, 2006: 21). More precisely, according to Newig et al. (2018: 273), the concept encompasses "all processes and structures of public decision making that engage actors from the private sector, civil society, and/or the public at large, with varying degrees of communication, collaboration, and delegation of decision power to participants." Through participatory governance, therefore, government/civil society interactions as well as forms of collaboration are institutionalized. However, unlike collaborative governance, which is more concerned with inter- and intra-organizational arrangements than with citizens' participation, participatory governance involves organized and non-organized actors "who are not normally charged with decision-making" (Newig et al., 2018: 272). Therefore, participatory governance is made of structures and processes involving a multiplicity of actors as well as a great variety of institutional settings for citizens' participation (Fung, 2006).

In investigating the design of two participatory governance venues operating in the context of the implementation of the Lyon-Turin high-speed railway, this article explores some of the conditions that can either foster or hinder participatory decision-making. In particular, it focuses on structural and agentic features of participatory governance practices. This debate can be understood as part of a broader discussion about the performance of participatory governance, particularly lively in the field of environmental policy-making. Skeptics argue that both the policy effects and democratic credentials of these initiatives are problematic (e.g., Blühdorn & Deflorian, 2019). However, empirically ascertaining the performance of participatory governance remains challenging due to the level of abstraction usually applied to these investigations and the variance of participatory formats and policy domains (Newig et al., 2018).

In our analysis, structure refers specifically to the institutional design of the participatory venue, namely, a set of rules and procedures within which relationships between actors occur. We operationalize structure according to four dimensions: (a) setting up of the participatory venue, the formal procedure to establish participatory governance spaces; (b) representation and involvement, who participates (e.g., experts, representatives of movements/interest groups, and randomly selected citizens); (c) information flows, how interactions take place (e.g., sharing opinions and expressing preferences among alternatives); and (d) influence over decisions, what participants do within the participatory space (e.g., consultation and deliberation) (Ercan et al., 2017; Fung, 2006, 2015; Jens & Koontz, 2014; Newig et al.,

Agency, instead, refers to the actions different actors take within the participatory space. It is operationalized in terms of how actors collect and convey technical knowledge and evidence about the megaproject. Management research has underlined the importance of evidence quantification in project shaping (Nenonen et al., 2020). We look at the purposeful actions of agents aimed at quantifying the megaproject. Therefore, the article explores: (a) how information is collected (e.g., data gathering and methods for data analysis) and (b) how evidence is disseminated (e.g., arguments, claims, and justifications). In doing this, we keep in mind that megaprojects involve multiple stakeholders with conflicting interests, with the latter that are usually classified into either support for or resistance against the megaproject (Esposito & Terlizzi, 2023).

Materials and methods The case study

The development of the Lyon-Turin high-speed railway (hereafter, LT) is characterized by the presence of a complex web of stakeholders with divergent interests and logics of action who interact in an uncertain environment marked by conflict-ridden dynamics. Therefore, our case qualifies as a typical case (Gerring, 2007) of a wicked policy arena whose defining features are complexity, uncertainty, and conflict (Esposito & Terlizzi, 2023).

In 1992, the European Union (EU) established the Trans-European Transport Network (TEN-T), an infrastructure policy directed toward the development of a Europe-wide transport network aimed to eliminate barriers to the free movement of people and freight across EU member states. Among the planned infrastructures, there was a 270 km high-speed railway line connecting Lyon and Turin, requiring the construction of a 57 km tunnel piercing the Alps between Susa Valley in Italy and Maurienne in France. The actual work of building the tunnel was set under the responsibility of Lyon Turin Ferroviaire, itself an international joint venture of two firms: SNCF Réseau in France and Rete Ferroviaria Italiana in

Almost 30 years after the announcement of the project, the train line is still incomplete, the original forecast cost of 12€ billion has increased to 26€ billion (French Court of Audit, 2012), and the projected completion date has been postponed—with the most recent forecast predicting completion in 2030. To a large extent, delays of the megaproject are the result of construction stoppage brought about by the opposition of civil society groups in the Susa Valley. On the French side of the infrastructure project, the construction process was less conflictual, and no major stoppage was linked to citizen opposition.

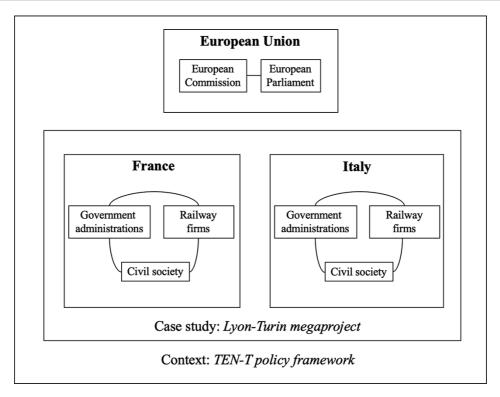


Figure 1. Case study design.

Case selection is made even more interesting by the fact that the project has been implemented in Italy and France based on two different participatory governance systems. In France, the governance has been framed within an ordinary administrative procedure called Public Inquiry which anticipated social conflict. This procedure demands that the national branch of the railway firm engages in public consultations with concerned local citizens and civil society organizations during the project decisionmaking. In Italy, instead, the participatory venue has followed social conflict. In fact, the original plan consisted in a fast-lane procedure allowing the national government to approve the project and related works without any obligation to consult local citizens. This approval was met with concern and opposition by several citizen groups in the Susa Valley (near Turin) including environmental activists, local railway experts, and university professors. They set up a protest campaign called NOTAV (No Treno ad Alta Velocità, No High-Speed Train). As a response to this opposition in 2006, the Italian government set up the Observatory for the Turin-Lyon Railway (hereafter "Observatory"). The Observatory's objective is to run public consultations with local opposition groups to move on with the project planned operations.

Data collection and analysis

The LT is a transnational megaproject embedded in different jurisdictional environments (France, Italy, and the EU) and organizational units (supra-national authorities, national government administrations, firms, and local civil society). Therefore, data collection was designed on the basis of an embedded case study design that allowed us to interrelate and integrate information from different jurisdictional environments and organizational units (Figure 1) (Yin, 2014).

Seventy-nine semi-structured interviews were conducted between 2014 and 2016 with the megaproject participants (Table 1). Interviewees included four groups of actors from different organizational entities: (a) supra-governmental (N = 21); (b) governmental (N = 24); (c) business (N = 5), and (d) civil society (N = 29). A snowball sampling method was used to identify the interviewees.

Open-ended questions were aimed at understanding interviewees' roles in the LT project. To increase the reliability of the findings, we triangulated interview data with documents including national and supra-national legal texts, press releases, international treaties between Italy and France, financial

Table 1. Overview of interviewees.

Actor groups	Organizations	No. of interviews		
Supra-governmental actors	European railway lobbies			7
	European Parliament			8
	European Commission			4
	Executive agency			2
		France	Italy	
Governmental actors	National administrations	4	4	8
	Subnational administrations	5	11	16
Business actors	Railway firms	3	2	5
Civil society actors	Organized groups of citizens in the surroundings of Lyon and Turin	10	19	29

agreements, and policy papers, as well as third-party studies and reports. Interviews and archival documents were analyzed through quantitative content analysis. The coding frame was structured according to the theoretical framework presented earlier. The coding categories cover both structural and agentic elements.

Results: Participatory governance in the LT case Structure

Setting up of the participatory venue France: ordinary administrative procedure

In France, the participatory venue was set up because of a binding ordinary administrative procedure provided for by the French legal system. As explained by a local public officer, "there is a whole legal process that must be complied with when carrying out a project like this. The railway company oversees the administrative setting up [which] involves a public inquiry procedure" (INT6). The procedure demanded that the railway company engages in public consultations with concerned citizens and civil society organizations. In parallel, an administrative authority composed of independent experts was established to consult citizens and civil society, collect their opinions, and write a report to inform the government that eventually decides whether to authorize the project. At the end of the public inquiry, there is the declaration of public utility (INT7), namely, an administrative act that allows the railway company to acquire the lands for the construction of the infrastructure (INT8).

Italy: state-led extraordinary venue

Following the strong conflict in the Susa Valley between 2005 and 2006, the central government set up the Observatory as an extraordinary participatory venue to deal with local protests against the LT (INT4). The symbolic episodes that manifested the explosion of this conflict were the so-called facts of Venaus in 2005, when NOTAV campaigners occupied the LT construction site to prevent the start of the tunneling works and, as a response, the police violently evacuated them. The images of this police operation circulated in the media and, within a few days, 30,000 people occupied the site again. The turmoil of these events and the determination of local opponents led the government to cede to NOTAV requests. At the end of 2005, construction works were stopped and, in 2006, the Observatory was established to have consultations with both concerned public administrations and the railway company implementing the project.

Representation and involvement France: beyond "independent" experts

The Public Inquiry procedure was the occasion for inhabitants of the municipalities affected by the LT construction to inform the railway company and the public authorities about their opinions and concerns. Anyone could write their opinion about the project in a dedicated register made available in the municipality: "These opinions will be examined by the members of the public inquiry committee who

¹ The full list of interviews cited in the text is available in the Appendix.

will decide which one is legitimate or not" (INT11). The members of the Public Inquiry committee were retired civil engineers appointed by an administrative tribunal from a roster for inquiring commissioners. For these reasons, the committee was conceived of as "a 'neutral' committee" (INT7). During the 2-month period of the procedure, concerned ministerial administrations and the railway company had meetings with local citizens and associations to explain the technical aspects of the project. As referred by a local public officer, "when the public inquiry procedure is launched, there is a technical follow-up work to be done: for example, it is necessary to organize presentations of the project to the citizens" (INT6). As reported by a public officer of the central government, "there were several contacts with associations [which] invited us to present the project and to answer their questions about them It was either a project manager from the Railway Company or myself ... who participated in these meetings" (INT7).

Italy: "trusted" experts

The structure and composition of the Observatory reflected the top-down setup by the central government. Through a decree of the Prime Minister, it was established that the Observatory had to be chaired by a government commissioner and, among its members, it included experts with technical skills appointed by relevant public administrations—both at the central (ministries of environment, infrastructure, interior, transport, and health) and local levels (Piedmont Region, Province of Turin, Municipality of Turin, and Susa Valley federation). The Observatory also included experts appointed by the manager of the Italian railway company and the international joint venture. These were not independent experts as their role was to defend and promote the interest of the parties that they represent. As explained by a technical expert, the choice of the expert profile depends on the position of the municipality: "While those municipalities that support the project may have a greater interest in being represented by an expert in economic and financial matters to highlight the economic benefits that project construction will generate, those municipalities that are against it would opt for profiles who emphasize the environmental risks of the project" (INT4).

Information flows

France: considering opinions

Within the framework of the Public Inquiry procedure, information was exchanged between local citizens and civil society, on the one hand, and the railway company and national administrations, on the other. Through public meetings, the latter inform the former about the technical aspects of the megaproject. As mentioned earlier, based on the knowledge gathered during these meetings, local citizens and civil society form their opinions about the megaproject and write them down in a dedicated register made available in the municipality for a 2-month period. These opinions are examined by the group of independent experts that seat within the Public Inquiry committee. On the basis of these opinions "the public enquiry committee develops its own opinion and says 'yes the project can be declared of public utility' or 'no, it is not justified' and issues observations or reservations" (INT7). In the latter case, the central government decides whether to approve the project through a public utility declaration. In the LT case, there were two public inquiries: the first one for the French access to the base tunnel (public utility declaration released in 2013) and the second one for the cross-border part of the base tunnel (public utility declaration released in 2007) (INT8).

Italy: expressing preferences

Within the Observatory, experts were essentially called to express their greater liking for one alternative railway route over another. As explained by a technical expert, "starting from March 2006 the old project is abandoned and we started from a blank sheet. In all the meetings that were held, the different route alternatives were discussed" (INT4). The Observatory was the place where the administrations "had to go to talk about the new high-speed line by putting all possible alternatives on the table: do we do it? If yes, how do we do it? Do we do it in this way or we do it in alternative way?" (INT10). Because of the decline of traffic between Italy and France, it was also important to consider the so-called "zero option," namely, "the option of not doing it" (INT10). However, the zero option was discussed during the initial meetings of the Observatory, but it was subsequently excluded on the basis of a cost-benefit analysis (INT3). This shifted the debate from the issue of whether building the new rail line to the issue of how to build it: "The main question to be debated became to decide whether the new line should have passed on right side of the Dora River or, conversely, on the left side" (INT9).

Influence over decisions

France: consultations with problematic access to public information

The Public Inquiry procedure can be understood as a consultation process without a binding effect on the final governmental decision. Over a 2-month period, the consultation in the LT case covered different aspects. First, the characteristics of the future line and, more precisely, "whether the line should be for the transportation of freight or passengers" (INT13). Second, issues such as employment, noise, and water pollution were debated: "All these points have been addressed and the managers of the railway company told us that they knew how to manage them" (INT15). Overall, as interviewees suggest, citizens had limited access to the information they needed to properly express their opinions and, eventually, influence decisions. This is exemplified by the words of the mayor of a municipality who stated that "in 2012 the public inquiry was rushed and ... we were in a hurry all the time. We did not have all the information we needed The files were in the town hall There were numbers, updates of maps, but it was very hard to understand them. They call it consultation, but it looks like a very manipulative process based on pre-established decisional pathways" (INT11).

Italy: consultations under the radar of (supra)national authorities

Experts consulted within the Observatory provided preferences about the railway project that had no binding effect on the final governmental decision. The Observatory took its place next to the "political" table. The former received its guidelines on the development of the infrastructure from the latter. As explained by an advisor of the Chairman of the Observatory, "the political table is composed of representatives of the national and subnational governments plus the railway companies managing the project. It is the liaison body between the project promoters and the technical experts of the Observatory" (INT5). The Observatory's technical work was subject to constant reporting to the political table that checked the compatibility with the political macro-orientations. In effect, the Observatory had no "effect on the decision-making cycle of the project: it has never done so and, in truth, it is not part of its nature" (INT5). The ineffectiveness of the Observatory over the project decision-making became patent in the late-2000s when local consultations proceeded slowly and various reports by the European Commission pointed to implementation delays. The European Commission even envisaged the possibility "to redistribute [financial] support from [TEN-T] projects that were delayed to those which were performing well" (European Commission, Final evaluation of the TEN-T Multi Annual Indicative Program, 2007: 36). Under the financial pressure of the EU, in 2008 the Chairman of the Observatory issued a document the so-called "Pracatinat Agreement"—asking the technical experts to stop debating about the project feasibility and to start working on the project implementation. Most of the local experts opposed this orientation as they believed that the LT project was technically useless. They argued that no increase in traffic between Italy and France justifying the construction of a new railway line emerged from the data. As opposition did not stop, in 2010 the central government publicly threatened local experts to expel them from the Observatory if they did not endorse the implementation of the project: "The government believes that the municipalities ... represented in the Observatory must be redefined [The municipalities should explicitly declare their will to be involved in the realization of the infrastructure ... in compliance with the European agenda" (Italian government, press release, 8 January 2010).

Agency

Dissemination of evidence

French promoters: quantified evidence and public meetings with local actors

Early in the 1990s, local elected officials called for the construction of the LT to reduce the number of trucks circulating across the roadways of their region.² Through technical reports, quantified evidence is disseminated to the public and allows justifying the project construction on the basis of freight traffic increase. Local citizens and civil society were also informed through public meetings which were the occasion to present the results of studies about "different routes options, the economic profitability of

² "Savoie: Un projet de 60 milliards d'investissements—Le TGV Lyon-Turin deviendra-t-il une veritable "autoroute ferroviaire"?" Les Echos article (17 March 1994).

the project and the environmental impact" (INT7). In 1993, public meetings took place with all associations and stakeholders in order to discuss the importance and socioeconomic interest of the project: "Everyone was free to join and this allowed to create a direct link with citizens" (INT7).

Italian promoters: quantified evidence and no involvement of local actors

In the 1990s, the project was introduced in Italy by a group of industrialists from the Piedmont region called Tecnocity, which engaged in a promotion campaign to convince the central government (INT1). Thanks to the high-speed railway connections, Turin would become the hub of the European West-East line³ as shown through figures about transportation speed and time as well as the length of the new railway connections. Specifically, LT would improve passengers' experience by reducing travel time across Italy and with the rest of Europe. Through press declarations, railway managers informed the public that "most of the studies conducted in those years indicate that the current road and railway infrastructures will be saturated between 2015 to 2020,"5 thus calling for the construction of a new high-speed rail infrastructure, with a higher transportation capacity. On the basis of these arguments, in 2001 the Parliament passed the so-called Target Law (Legge Obiettivo), enabling the government to approve the project by a majority and to authorize the preparatory works for the construction of the base tunnel without any obligation to involve local actors.

French opponents: intra-institutional contestation

During the 1993 public meetings, there began to be some opposition to the LT. During these meetings, participants had a speaking time. The committee in charge of the meeting did not comment on the substance and guaranteed that there would be complete transparency: "The project promoter has to answer the questions that are asked and everyone is informed of the problems of the proposed project" (INT7). Over time, two independent authorities released two reports that casted doubts on the suitability of the LT and provided new arguments in support of local opponents. As explained by Daniel Ibanez—an experienced business consultant and a key spokesperson of local opponents—"in 2002 there is an audit report of the French civil engineering authority reporting that nothing justifies this project, [being] all traffic forecasts wrong" (INT14). Later, in 2012, the French Court of Audit declared in a report that the project could not be considered of public utility. Ibanez also participated in the 2012 Public Inquiry and formally expressed a negative opinion about the LT: "What you have to understand is that the French opposition is completely different from the Italian opposition—which has strong popular opposition In France [instead] you have strong opposition within the institutions" (INT14). Building his arguments on the reports released by the French Court of Audit and by the French civil engineering authority, Ibanez filed a formal claim to the French council of state to block the LT decision-making process and start a new Public Inquiry. According to this claim, a new public inquiry would have been necessary because the conditions had changed: "the freight traffic between Italy and France passing across the Alps has not increased as much as what had been forecasted during the Public Inquiry procedure accomplished in 2007" (INT14). Despite acknowledging the inaccuracy of the traffic forecast, in 2017 the State Council decided to reject the claims anyway in that such inaccuracy did not constitute a change of circumstances likely to make the megaproject lose its public utility.

Italian opponents: extra-institutional contestation

According to members of Susa Valley communities, the promotion campaign about the LT was not adequately supported by the data: "Project promoters' assertion that the existing line will quickly become saturated is completely groundless [in that] both rail and road traffic through the entire western Alpine arc is in drop or stagnant." As seen, contrary to France, in Italy there was no legal obligation to consult civil society in the decision-making of large infrastructures. As declared by an Italian civil servant, "the Target Law introduces a fast-lane authorization procedure [and] all key phases in the decision-making process ... are centralized in the hands of central government administrations" (INT2). The joint venture firm could ignore local criticisms and was entitled to send expropriation letters to local dwellers

³ "Treno-lampo da Torino a Milano. Entro il 1999 i due capoluoghi uniti dall'alta velocità in soli 45 minuti," La Stampa

article (30 December 1992).

4 "Supertreno, un passo Avanti da Milano a Torino in 45 minuti e l'alta velocità va sotto esame," La Stampa article (10 March 1994)

LT general manager, declaration to the press (2006)

University professor and transport expert of the NOTAV movement, public declaration to the press (2012).

to acquire the local lands and to set the construction site to start the construction work. To prevent this, the locals mounted a social movement and launched the NOTAV campaign. The campaign publicly depicted the LT as a useless project imposed from the top, and that had to be stopped in the name of the collective interest. Activists thus occupied the construction site to prevent the start of the works with the police evacuating them right away. As mentioned earlier, the images of this police and management operation spurred a popular upheaval with a clear message to the government: the joint venture firm was illegitimately seizing the local lands.

Collection of information

French promoters: strategic misrepresentation through data aggregation

During the 2012 Public Inquiry, Daniel Ibanez realized that the traffic data presented by the project managers of the railway company were misrepresented to persuade the local dwellers of the worthiness of the project. He referred that "during the public inquiry the project promoters showed us some graphs with increasing transport flows from France, Switzerland and Austria to Italy [that] justified the construction of a new tunnel When we decided to take the same data and disaggregate them ... we noticed that while Swiss and Austrian flows increased, French flows dramatically decreased since 1988" (INT14). He believed that misrepresenting data was the way through which experts of public administrations behaved to technically justify the project construction. The (mis)use of technical knowledge was a successful strategy to secure the initial support of local dwellers. Indeed, says the coordinator of a local opposition group, "with the project construction we would have lost all the life quality we have in our villages. People understood this straight away since the beginning, but as the project promoters told the local people that they would have protected them—and they used several in-depth studies to support their claims—we trusted the promoters" (INT12).

Italian promoters: strategic misrepresentation through forecasting assumptions

During the Observatory meetings, the debate between experts was centered on the problem of forecast traffic models, as proponents and opponents held different opinions about the underpinning assumptions. Local experts disagreed with the appointed experts because the letter's forecast was based on a prospective rather than a retrospective approach. Instead of using past data about future traffic trends, "the experts of the government and of the railway company formulated conceptual assumptions about future traffic evolutions" (INT9). Instead of predicting future traffic from historical data series, forecast models assumed future increases in traffic as an effect of building the new high-speed infrastructure. According to this prospective approach, the new high-speed infrastructure is more performing than the old one and, therefore, it can attract more traffic than the old one. Overall, according to the local experts, promoters' assumptions were misleading and overestimated the increase in traffic flows (Mercalli & Giunti, 2015).

French opponents: alternative descriptions of existing data

The arrival of Ibanez in the 2012 Public Inquiry brought new expertise to opponents who could now rely on his knowledge to deal with the strategic misrepresentation of proponents' data. As he has commented, "my analyses and reflections were made available by Alpinfo, a widely-acknowledged reference for data on transport in the Alpine arc which provides in detail all the data on transit transport for Switzerland, Austria and France, to or from Italy, by road or rail" (INT14). By analyzing individual traffic curves from these countries and Italy, Ibanez proved the structural drop in the tonnage of freight between France and Italy for the Northern Alps. Therefore, he has been able "to make observations that are extremely useful for understanding the changes in tonnages over the past 15 to 20 years" (INT14).

Italian opponents: juxtaposition of data

For local experts, it was not possible to decide on the construction of such an expensive infrastructure using traffic forecast models based on unclear assumptions. Instead, the actual transport situation must be considered using the historical data already available. As stated in a pamphlet issued by the NOTAV movement (containing 150 reasons against the Lyon-Turin high-speed line), "the Lyon-Turin is an exemplary case of useless megaproject ... because traffic data show since 2000 a dramatic decrease of road and rail traffic between Italy and France" (NOTAV movement, 2012). Historical data presented in the pamphlet show that rail freight traffic between Italy and France had fallen from 10.1 million

Table 2. National configurations of participatory governance.

			France	Italy
Structure	Setting up of the participatory venue		Ordinary routinized administrative proce- dure	State-led extraordinary procedure to deal with the local opposition movement
	Representation and involvement		(a) "Independent" experts appointed by an admin- istrative tribunal, (b) individual citizens, (c) civil society organi- zations, (d) national administrations, and (e) railway company	"Trusted" experts appointed by (a) national and local government administrations and (b) railway company
	Information flow	S	Opinions	Preferences
	Influence over decisions		Consultations with dif- ficult access to public information	Consultations under the political control of national authorities and the financial pres- sure of supra-national authorities
Agency	Dissemination of evidence	Proponents	Quantified evidence dis- seminated through technical reports and public meetings with local actors	Quantified evidence dis- seminated through promotional activities and no involvement of local actors
		Opponents	Intra-institutional con- testation of quantified evidence	Extra-institutional con- testation of quantified evidence
	Collection of information	Proponents	Strategic misrepresen- tation of transport flows through data aggregation	Strategic misrepresenta- tion of transport flows through forecasting assumptions
		Opponents	Representing traffic flows through alternative descriptions of existing data	Representing traffic flows through historical data and juxtaposing them with economic and environmental data

tons of freight in 1998 to 3.7 million tons in 2012. As for the environmental impact, supporters of the LT argued that the project would reduce polluting emissions as a result of the shift of a fraction of freight and passenger traffic from the highway to rail lines powered by electricity. However, proponents seemed not to consider the energy and environmental impact of construction operations: "The 42.5 million cubic meters of material extracted for the total construction of the 270km line ... will be dug by gigantic milling machines driven by electric motors. Similar machines will be used to shatter millions of cubic meters of rocks to be kneaded with 15 million cubic meters of cement" (NOTAV movement, 2012). Table 2 summarizes our findings.

Discussion: toward a deliberative approach to megaprojects

Having showed some important limitations in the two cases of participatory governance under examination, we make a case for a deliberative democratic approach to governance of and research on infrastructure megaprojects. This does not imply rejecting the participatory component of forums. It rather means integrating participatory and deliberative stages in democratic governance, as is increasingly happening with hybrid democratic innovations (Elstub & Escobar, 2019).

Deliberative democracy is arguably the main area of development in contemporary democratic theory (Bächtiger et al., 2018). Empirical and theoretical engagement with deliberative democratic ideas thrives in disciplines such as urban planning (Baltz, 2022), social movement studies (Della Porta & Doerr, 2018), and public policy analysis (Fischer & Boossabong, 2018), to name but a few. Considering these developments, the lack of engagement with deliberative democratic ideas in megaproject management is striking, and this study intends to break new ground in this direction. At its core, a deliberative democratic take on megaproject governance suggests that participatory efforts to include as many relevant actors as possible are of limited democratic value if strategic action is left unchecked. As seen earlier, in contexts marked by divergent values, interests and power, the democratic potential of participatory governance can be easily jeopardized. Instead, a deliberative democratic approach demands that governance is based on inclusive discursive practices that engage in an authentically deliberative and consequential way.

Some distinctive elements from the above characterization deserve special attention as they express core democratic concerns for complex governance. These refer to who participates, how communication occurs, and to what effect. First, the deliberative democratic emphasis on discursive practices means that the focus of attention shifts from the aggregation of preferences to the way preferences are communicatively formed in the first place (Cohen, 2005). Also, to be democratic, deliberation needs to be inclusive of all interests and perspectives of those affected by a certain decision (Young, 2001). This is particularly important to reject forms of deliberation limited to experts or powerful actors only, which is all too common in megaproject governance. Another essential point is about what makes inclusive communication deliberative. Some widely acknowledged features of deliberative communication include three aspects. Authentic deliberation should not be coercive, it should be reflexive and consequential. The decisions made in deliberative spaces should bear effects, for instance, directly, in policy decisions and/or, indirectly, in the relevant public debates (Dryzek, 2009).

Of course, this article cannot envisage a fully-fledged account of deliberative governance of megaprojects. Here, however, we intend to show some useful ways in which deliberative democratic ideas can be used to assess strengths and weaknesses of extant participatory arrangements to megaproject management. For instance, while both cases featured spaces for citizen participation, neither one was built to enable substantial deliberation. The objective was to land a hear to potential complaints from the interested parts of the public, in the French case or in the Italian one, to explain to them the decisions that had been made. In terms of representation and involvement, in both procedures, the underpinning logic was that of the marketplace, where ideas must be "sold," rather than the forum, where ideas are exchanged to construct a decision. Also, while in the French case, both sides—the supporters of the project and the communities on the receiving end—had a place at the table, in Italy, there was no place for local communities. Moreover, regarding information flows, deliberation is conspicuous by its absence, although the French process' stress on opinion seemed more amenable to reflection than the Italian one. In this case, there seemed to be little ground for anything other than clashes of preferences. Looking at influence over decisions also shows that consultations had a limited impact in both cases. The non-deliberative nature of these processes emerges also in the fact that in both cases involved actors were in perpetual disagreement over the nature of evidence and information and the ways in which these were. Overall, neither process seems to have contributed to democratize the governance of the LT megaproject. The French Public Inquiry has been ultimately unable to add democratic value, wasting insight that might have been generated from the process. The Italian Observatory, with its marked exclusion of critical voices, arguably reinforced the opposition between the pro-LT camp and the NOTAV movement. Envisaging an ad hoc forum after disorder erupted, as in the Italian case, rather than a routinary procedure, as in France, only exacerbated the democratic problems. More generally, the two cases might betray the different experience with participatory governance in the two countries. The long-standing tradition of débat publiquein France (Revel et al., 2007) clearly did not suffice to develop deep democratic governance in the case under examination. Yet, it might have concurred to prevent the adoption of a makeshift solution as occurred in Italy, a laggard in democratic innovations (OECD, 2020). Interestingly, in 2016, Italy introduced for all major infrastructural projects a mandatory dibattito pubblico—a forum largely drawing from the French experience.

Before concluding, we offer a necessarily succinct overview of how a deliberative approach could help improving the democratic quality of megaproject governance. Consistent with recent scholarship on deliberative democracy (Elstub et al., 2016), we contend that to promote democratic governance of

megaprojects there should be a shift in focus from isolated forums or participatory processes to systemic thinking. The governance of megaprojects can be thought of as a deliberative system made of "a set of distinguishable, differentiated, but to some degree interdependent parts" (Mansbridge et al., 2012: 4-5). Following Dryzek (2009), we need to recognize that different types of actors populate different spaces. On the one hand, there are empowered actors that are "recognisably part of institutions producing collective decisions" (Dryzek, 2009: 1385). On the other, there are actors in public spaces that can be found, for instance, in "the media, social movements, activist associations ... and designed citizen-based forums of various sorts" (Dryzek, 2009: 1385). A fundamental challenge is to understand how to foster accountability from empowered to public spaces and transmission of preferences from public to empowered spaces.

To be sure, as the systemic approach makes clear, individual sites of engagement cannot perform the democratic work for the entire system. This is true for the French forum, particularly for its limited powers, but it applies even more to the Italian case. Isolated from other bodies, with little room for democratic deliberation and without meaningful and clear mandates, the Observatory could hardly prevent the balance of power from tipping toward experts and powerful interests, thus undermining both epistemic quality and participatory equality (see Chambers, 2017).

Importantly, forging a deliberative democratic approach to megaproject governance is unlikely to result in a unitary set of recommendations specific to this policy area. Rather, it will stem from the ability to develop a growing body of analyses of success and failures that needs to critically engage with findings from other policy areas. For instance, deliberative scholarship finds that contextual features affect the ability of individual forums to have a systemic impact. With regard to climate change policymaking, Boswell et al. (2022) show that understanding how different deliberative innovations interact with their respective contexts is crucial to design robust deliberative innovations. This is likely to apply also to megaproject management. As our article illustrates, participatory governance in the opposite ends of the same infrastructure both failed, but they did so for different reasons. On the contrary, Butzlaff's (2022) finding that in the context of urban planning policy-making, citizens, planners, and administrators display a public commitment to democratic participation while retaining a concealed preference for a controlled management process does not seem to apply to our case study. Particularly in the Italian case, some citizens vehemently opposed to participatory forums concealing controlled management by powerful actors. Our analysis suggests that the participatory governance of the Lyon-Turin railway might be interpreted as partially successful forms of "governance-driven democratization" (Warren, 2009). That is, elite-driven attempts to respond to democratic deficits, de-linked from competitive logics of mainstream politics, seeking to go beyond traditional constituency to involve those affected by a certain policy decision. Our case study is a far cry from more meaningful forms of "democracydriven governance" that are emerging across a wide array of policy domains (Bua & Bussu, 2021). Indeed, our case study shows forms of participation that were institutionalized but failed to be embedded in the relevant contexts. Building on Bussu et al. (2022), we argue that this occurs because the temporal and spatial logics as well as the practices that are prescribed are systematically aligned to those of organizing elites to the detriment of those of other actors. Deliberation's role is not to curtail dissent but to democratize decision-making. It should help recognizing and engaging the role and perceptions of involved actors, especially the less powerful ones, when the more powerful ones unequally influence the norms and definitions appropriate to a given situation. In a nutshell, public deliberation should be built in addition to the existing form of engagement, not against them (Felicetti & Della Porta, 2019).

Conclusions

Our article has assessed two cases of participatory governance connected to the building of an infrastructure megaproject. Such an effort, which is common in other policy areas but still lacking in megaproject literature, has identified some crucial weaknesses from a democratic standpoint. We have argued that a more deliberative governance of megaprojects could help overcoming such limitations.

According to our analysis, the specific problems affecting the participatory governance of megaprojects may be of two types. First, issues can be of structural nature as megaproject governance may be framed within institutional settings which are not designed to foster bottom-up participation, to ensure representation and involvement of stakeholders outside the megaproject team, to facilitate information exchange between external stakeholders and the megaproject team, as well as to allow the former to

influence the decisions taken by the latter. Our findings in this respect mirror those of few previous studies examining institutional obstacles to public participation that can prevent participatory mechanisms to achieve fairness and effectiveness in decision-making processes concerning megaprojects (Groves et al., 2013; Leifsen et al., 2017; Sneddon & Fox, 2007). We add to this literature by bringing agentic factors into the picture and provide additional evidence on the whole range of limits of participatory governance in megaprojects. In fact, our study also points to an additional agency problem, specifically to the ethical conduct of public officers and managers within the megaproject team that strategically misrepresent and disseminate megaproject information to avoid or navigate through the resistance of external stakeholder groups rather than engaging in appropriate and careful discussions. These latter findings add to the literature on optimism bias and strategic misrepresentation in megaproject management (Flyvbjerg, 2021).

Our case for a deliberative turn in megaproject management builds on recent debates in deliberative democracy and points to, first, the need for a systemic understanding of innovative forms of governance and, second, to the importance of critically engaging with scholarship from different policy areas. Finally, it suggests that megaproject management should embed, rather than just institutionalize, forms of democratic governance. We encourage future research to systematically investigate these aspects and develop a much-needed body of evidence that might help democratize the governance of megaprojects. Indeed, we hope our research has shown how the growing body of scholarship on deliberative democracy might provide a valuable framework to think about the democratic challenges that megaprojects pose to policy-making.

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Conflict of interest

None declared

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Appendix

List of interviewees (reported or cited in the main text)

Code	Profile	Date	
INT1	Public affairs manager, La Transpadana (previously called Tecnocity)	27 October 2014	
INT2	Civil Servant, Piedmont Region	28 October 2014	
INT3	Public officer of the Piedmont Region	28 October 2014	
INT4	Technical expert representing the local administrations of the Susa Valley in the Observatory	05 November 2014	
INT5	Advisor of the Chairman of the Observatory	03 December 2014	
INT6	Public officer of the Savoie Department	18 March 2015	
INT7	Public officer of the central state administration in charge of infrastructure policies	25 March 2015	
INT8	Regional manager of the French railway infrastructure firm	17 April 2015	
INT9	Technical expert representing the local administrations of the Susa Valley in the Observatory	14 October 2015	
INT10	Mayor of a Susa Valley's municipality concerned by Lyon–Turin construction	19 October 2015	
INT11	Mayor of a municipality concerned by Lyon–Turin construction	22 March 2016	
INT12	Coordinator of local opposition groups in France	07 April 2016	
INT13	Coordinator of local opposition groups in France	15 April 2016	
INT14	Daniel Ibanez, spokesperson of local opposition groups in France	05 May 2016	
INT15	Local politician interested in the Lyon–Turin project	15 July 2016	