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Knotting the net: From 'design by deception' to an object oriented politics

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Abstract

Research on megaprojects points out the crucial role of politics in managing major infrastructure projects. Politics is often here presented as misrepresentation by the project maker who manipulates everyone else. This is where power is concentrated in the hands of the few. However, this approach may overlook another lateral version of politics by which power is plural and ubiquitous, and which, through Latour's notion of Dingpolitics, combines the questions 'who has to be taken into account' and 'what has to be taken into account'. This brings the analysis further than stakeholder theory with its focus on abstract structural interests, towards articulated concerns about the objects that matter to people.

Through analysis of the Italian system for stakeholder management—the so-called *Conferenza di Servizi*, which was organised according to stakeholder theory with an emphasis on representation of interested parties—this paper identifies the limitations of representation to predict the fate of a megaproject. Settlements based on interests are not able to capture all relevant actors and all relevant types of knowledge. In contrast to stakeholder theory, Dingpolitics explains project management as a process of finding out the multiple, evolving and sometimes indefinite contours of claims and concerns from many human and non-human actors by analysing both what actors are worried about and how their different concerns, ambitions and claims are composed.
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1. Introduction

Stakeholders are important in project management research at least in the general sense that many different types of people, who all cherish their objectives, take part in the development of an infrastructure object (Cleland and King, 1968; Calvert, 1995; Cleland, 1998; McElroy and Mills, 2000; Winch, 2004). This invites the problem of coordination of interests towards common goals (Chinyio and Olomolaiye, 2010; Achterkamp and Vos, 2008; Littau et al., 2010; Mok et al., 2015). Stakeholder analysis and the management of stakeholder relationships are particularly relevant in the management of megaprojects (Mok et al., 2015), and Winch's (forthcoming) review of megaproject stakeholders expands the range of potential stakeholders from only those 'interested in the project' to also those 'affected by' the project.

Gathering insights from these studies, it is possible to develop a critique of the notion of 'interests', which is fundamental to stakeholder theory (Freeman, 1984; Freeman and Gilbert, 1987; see also Freeman et al., 2004, 2007), and illuminate the weaknesses of this notion for effective stakeholder management. In doing this, it is useful to contrast the dominant model in megaproject stakeholder management literature, which has focused on structural interests only. This model has led to two conclusions. One is that taking account of many interests is a difficult and often failing aspiration (Bruzelius et al., 2002). People seem to be self-centred and when they stand in each other's way conflict ensues even if attempts are made to try to include people and their participation. The answer to this problem

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typically suggests using more stakeholder management to acquire more knowledge about the relevant interests at stake (Sykes, 1990; Stannard, 1990; Flyvbjerg, 2007). Another type of conclusion is that because there are many interests, it is impossible to align them all and only the strong interests prevail. Here, stakeholder management turns into deception (Flyvbjerg, 2005; Flyvbjerg et al., 2002, 2003, 2009) where one group, typically project management, deceives the rest. While stakeholder theory generally suggests that stakeholder management means aligning interests, when deception happens some interests are able to dominate other interests. In this case, stakeholder management produces an altogether different storyline, namely, that the enrolment of others into the project requires that project management fool them about the fulfilment of their interests. The notion of interests is relevant to the notion of 'design by deception'; deception happens because project management's interests in undertaking the megaproject are considered more important than others' interests. Deception separates interests, rather than aligning them. Lying seems expedient to catch stakeholders' approval, giving them the illusion that the megaproject will meet their interests, but it embraces a certain definition of stakeholder that has an orientation towards those who control the project (Frooman, 1999), rather than those affected by the project (Winch, forthcoming).

Yet, interests are clearly relevant in project stakeholder management (Cleland, 1985, 1986, 1989; Wright, 1997; McElroy and Mills, 2000; Miller and Lessard, 2000; Boddy and Paton, 2004; Bourne and Walker, 2006; Javed et al., 2006; Littau et al., 2010) focusing on dyadic relationships between project managers and individual stakeholders (Aaltonen and Sivonen, 2009). Stakeholder theory posits that interests derive from a group's position in a system (Olander and Landin, 2008). In this theory, interest is shorthand for a generalised identity pertaining to a group's position in a social system. It is a structural concept; for example, managers are interested in money, architects are interested in quality, clients are interested in effects and so on. The problem is that by focusing on interests, research pays more attention to what people *should* be considering relevant than what they actually consider relevant. This is partly due to the problem that interest, as such, is not material. Interest is abstract, and this poses empirical problems because it is unpredictable what happens when people advance claims, problems and concerns that are difficult to associate with their interests.

One potential solution to this problem is advanced by Latour (2004, 2005) in his theory of The Parliament of Things (Dingpolitics). 'Ding' recalls the archaic sense of the word 'thing', which does not refer to an object, but to a parliament, an assemblage. Particularly, the etymology (Old Norse, Old English and Icelandic: *þing*; German, Dutch: *ding*; modern Scandinavian languages: *ting*) is reminiscent of a historical Germanic governing assembly whose meeting place was called a *thingstead*.[1] Dingpolitics ('Thing-politics') involves a shift from a thing as an object to a Thing as a parliament where

matters are discussed, disputed and (possibly) settled for a while.[2] As a parliament, a Thing (the Nordic word for parliament) is a gathering, an assemblage, where objects, people and concerns meet. As a parliament, the Thing is a space for dialogue and problem solving among actors who mobilise their empirical concerns over some arrangements or objects (which is the second understanding of thing). Moving from interests to concerns involves moving from general claims to particular issues or objects (things) that concern actors. By attaching concerns to objects, the thing becomes a Thing, a parliament. When actors make collective decisions that impact objects, such as an infrastructure design, rather than saying that the infrastructure design is an effect of strong interests, it could be possible to acknowledge that each decision involves trade-offs between actors' concerns regarding the infrastructure design. In this way, the many decisions impact in various ways the design (object), which therefore is an effect of many practical or empirical concerns, rather than an essence of abstract interests. This involves a lateral dimension of politics that refers to plural and ubiquitous power by emphasising not only 'who has to be taken into account', but also, 'what has to be taken into account'; not only, 'what acts', but also, 'what is acted upon'. Such Dingpolitics takes into consideration not only different concerns, but also different affected objects. Politics is not only misrepresentation and direction from the project maker; it is also the identification of those who are affected by, and can object to, the project.

Therefore, the research question is: how does politics flow in an infrastructure project? As the paper will show, interest becomes weak in two senses. One is that it may not be possible to contain all interests in a logical model, and the other is that interest does not command the causality that it seeks. It cannot determine the effects of the actions produced in its name to be subservient to its effects.

The paper draws on data from a field study of Autostrade, a private company that under a government licence managed and built the main Italian motorway network. Through the case of the Italian *Conferenza di Servizi*, it is possible to show the practices used by Autostrade for addressing project management activities for major infrastructure investments. Rather than understanding this practice as a (purely) deceiving activity, the analysis identifies the role of surprising actors, surprising voices and surprising knowledge in this process. If the promise made by stakeholder theory is that an assembly of interests at a point in time will allow relevant things to be taken into

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[1] Wikipedia: https://en.wikipedia.org/wiki/Thing (assembly).

[2] The shift in the meaning of the word *thing* from 'assembly' to 'object' is [also] mirrored in the evolution of the Latin *causa* ('judicial lawsuit') to modern French *chose*, Spanish/Italian/Catalan *cosa*, and Portuguese *coisa* (all meaning 'object' or 'thing'). A word with similar meaning, *sak* in Norwegian and Swedish, *sag* in Danish, *zaak* in Dutch, and *Sache* in German, still retains the meaning 'affair, matter' alongside 'thing, object'.
The national legislatures of Iceland, Norway and Denmark all have names that incorporate thing:
Alþingi — The Icelandic 'General Thing'
Folketing — The Danish 'Thing of the People'
Storting — The Norwegian 'Great Thing'
(Wikipedia: https://en.wikipedia.org/wiki/Thing (assembly)).

account, the analysis suggests that the project's object—the infrastructure object—will continue to mobilise new actors and concerns. The concerns around the object, rather than abstract interest because of stakeholder representation, formulate and reformulate decisions on how to manage the geo-morphology of the territory in and around the motorway. This is a way of knotting different concerns and affections on the range of objects. This makes politics a matter of finding support for adaptations in the socio-material object to which the political process is oriented.

2. Actor network theory and Dingpolitics

Project management literature has only recently shown interest in the extension of stakeholder theory into actor-network theory (see Linde and Linderoth, 2006; Winch, forthcoming; Missonier and Loufrani-Fedida, 2014; Pollack et al., 2013). '*The Life and Death of an Aircraft*', a seminal piece of research on the social study of science by Law and Callon (1992), analyses the evolving stakeholder network around a failed UK military aircraft, the TSR2 project, along three interrelated conditions: a) the presence of a global network ready to provide various resources; b) the capability of shaping a local network able to utilise the resources which the global network provides when the expectations of its actors are satisfied; and c) the ability to build and maintain an obligatory point of passage (OPP) that forces the actors to converge on a certain topic, purpose or question and mediates all interactions between actors in the network by defining the action programme. Project management as an obligatory passage point sets up negotiation spaces that move from the local to the global, and vice versa. The space of negotiation has a 'variable geometry' where 'not all variations are equally feasible' and where the feasibility itself is gained in interaction (Callon and Law, 1997, p. 172).

The story of the TSR2 'was a complex interaction between the laws of aerodynamics, the experience of teams of engineers, the capacity of British industry, and so on and so on—the list is endless' (Callon and Law, 1997, p. 170). This implies that:

> …the TSR2 was not (simply) an aircraft…it was a network of heterogeneous relationships. Or, more precisely, it was a network that traced a compromise between different concerns, considerations and actors. Technicians, politicians, industrialists, different kinds of metal, metal fatigue, the production capacities of companies, wind-tunnels and budget restrictions, all of these were built into the TSR2 network and helped to give it shape. People are networks. Devices are networks. But so, too, are texts…(Callon and Law, 1997, p. 170).

The TSR2 is an example of the importance of actor-networks for understanding the role of the different actors participating in the construction of a megaproject and their diverse competing versions of its reality. Project management was an obligatory passage where all manner of relationships were articulated and transformed. Project management not only observed stable interests, it also transformed them into situated wants and concerns. It added concerns, and it transformed the courses of action deemed important given the gradual advent of new knowledge. The project

was not fixed from the start in immutable constellations of interests. So, the obligatory passage point transformed matters. This insight can be generalised by Latour's (2004, 2005) idea of Dingpolitics ('Thing-politics'), which makes project management a space, or an obligatory passage point, for finding situated objections and resolving their seriousness. The Thing, the parliament, is the assemblage where actors meet to sort out their common problems and is mediated by the thing, the object:

> Each object gathers around itself a different assembly of relevant parties. Each object triggers new occasions to passionately differ and dispute. Each object may also offer new ways of achieving closure without having to agree on much else. In other words, objects…bind all of us in ways that map out a public space profoundly different from what is usually recognized under the label 'the political' (Latour, 2005, p. 15).
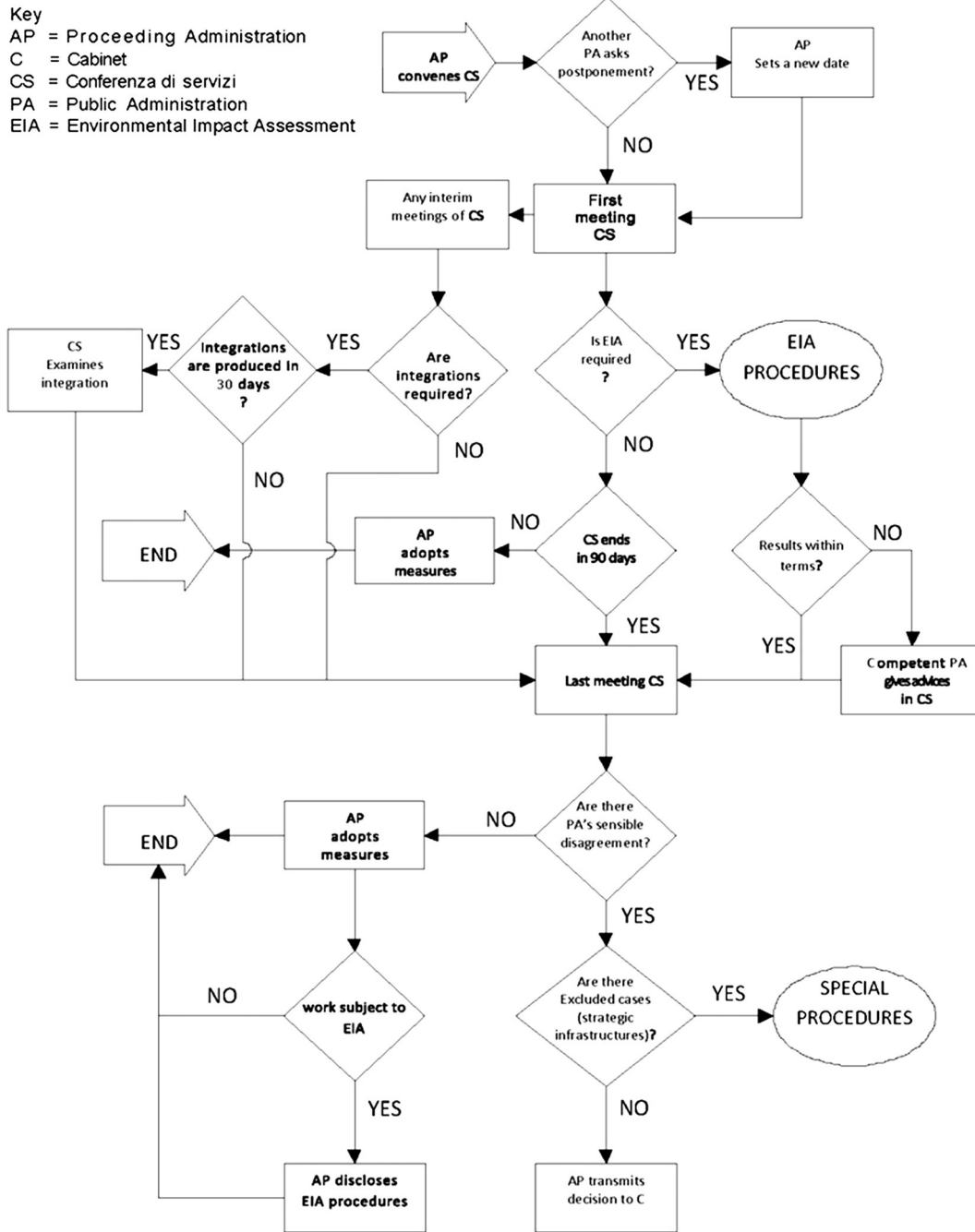
Dingpolitics (Latour, 2004, 2005) proposes that people and objects together occupy the space that is in the process of being developed and crafted. While the process of managing by deception may be described as one where alternatives are gradually silenced by the hands of the project manager, who is a manipulator, seeing politics as Dingpolitics, it is concerned with multiplicities of objects and people who all surprise by their engagement and abilities to raise new concerns that are not easily swept away by project managers. Dingpolitics is therefore both engaged with the identification of concerns raised by people and by nature and technology.

Dingpolitics requires representation both in relation to actors who have concerns and in relation to objects of concern. It is an object-oriented design asking not only the question, who is concerned (people), but also the question, what is to be considered (objects). Therefore, it asks not only which interests can be formed into acceptance, but more importantly, how we can design objects that we can (all) live with.

3. Project management practices for motorway infrastructures

The Italian system of megaproject management was strongly organised around stakeholders and their idealised interests. A representation of how these different interests were organised in relation to each other is shown in Table 1, which illustrates the flowchart of the so-called Conferenza di Servizi, the Italian process of megaproject stakeholder management. Table 2 gives an account of the main stakeholders participating in the Conferenza di Servizi and their interests, responsibilities and tasks. The Conferenza was set up as an instrument to authorise major works of public interest (Italian Law art.14 of the law 241/90; L. n. 340/2000; L. 11 February 2005 n. 15. and finally law n. 2 of 2009). It would convene at the project manager's request, who submitted a feasibility study to the Conferenza. The Conferenza would then make concessions, authorisations, licences, clearances and consents, which were required by law for infrastructure projects. It would end when a formal agreement

Table 1
Flowchart of the Conferenza di Servizi.

Key
AP = Proceeding Administration
C   = Cabinet
CS = Conferenza di servizi
PA = Public Administration
EIA = Environmental Impact Assessment

was found on specific solutions and a final measure was adopted to allow the megaproject to advance.

When the Conferenza di Servizi came to a conclusion, the General Management for Territorial Development of the Ministry of Infrastructure and Transport emitted the so-called 'final measure', which acknowledged the conclusive determination of the conference itself. This measure replaced all kinds of authorisations, concessions, agreements and acts of the participating administrations or of those invited to participate. Each modification of the project after the closure of the Conferenza required the opening of another new Conferenza and the whole process would begin again.

Before 2009, the Conferenza di Servizi could only close proceedings with unanimity among its participants because an infrastructure work, such as that of a motorway, required a sharing with the territories. While the single citizen would be

Table 2
Main stakeholders participating to the Conferenza di Servizi and their interests, responsibilities and tasks.

Actors	Interests, responsibilities and tasks
Ministry for Infrastructures and Transport	To build infrastructures for growth and development
Ministry for Environment	To build infrastructures environmentally compatible
Ministry for Cultural Heritage	To build infrastructures respectful of Cultural Heritage
Defence Ministry	To build infrastructures not interfering with military lands
ANAS (National Authority for Roads)	To supervise the activities of Autostrade and the regularity of the process of motorway building
Regions	To promote the socio-economic development of the geographic areas which fell under their jurisdiction and the interconnectivity with other regions
Provinces	To facilitate the interconnectivity with the local road networks and safeguarding of water springs
Municipalities	To protect and enrich resident population
Mountain Communities	To monitor the socio-economic development of the life conditions of the mountain populations; to safeguard waterways and hydro-geological resources
Authority for catchment basins	To defend, upgrading and govern water and land resources by pursue the permanence of the eco-systems' equilibrium
Services companies for railway transports, electricity, aqueducts, telephone	To protect the efficiency of their networks
Autostrade	To build infrastructures for a fast, safe and fluid mobility; to allow that "Variante di Valico" gains a presence under conditions of technical, economic, time and social compatibility.

weak (he/she could also undergo the expropriation of his/her property for reasons of public interest), the municipalities and all of the communities that had a legal statute (mountain communities, water catchment basins, provinces and regions) had the power of veto, and therefore a blocking power. Thus, if only one of the individual municipalities did not agree with the resolution of a specific issue, the conference could not have closure. If during a Conferenza di Servizi unanimity was not reached, the decision was referred to the Council of Ministers (as decreed by art. 81, comma 4 of the DPR 24 July 1977, n. 616). Based on this paragraph of the law, if the Council of Ministers considered it necessary to proceed, the Conferenza set out provisions as established by the parliamentary commission for regional affairs. The Council of Ministers deliberated the proposals set out by the ministers and the deliberation was made executive by a decree emanating from the President of the Italian Republic.

From 2009 until the recent Legislative Decree n. 127 of 30 June 2016, the regulation of the Conferenza di Servizi had undergone several changes. Decree 127 introduced a simplified type of conference, which does not envisage physical meetings, but only the electronic transfer of documents. In addition, the Decree assumes the tacit consent of the administrations that do not express their opinions. It also states the principle that all the administrations of the same category have to speak with only one voice. Local governments lost their power of veto, and this was only a prerogative of the state for those megaprojects whose environmental impact assessment was under the authority of the state itself (which practically remains the only actor with veto power). In addition, the deadline for the Conferenza, which was previously undefined, was peremptorily established to be no more than five months. The new rules have the objective of streamlining decisions and permissions on public works giving certainty to investors about timing and rules.

Although our study of the Italian megaproject management process started in 2009, following the specific development of the motorway construction project, this particular article primarily relies on documents and communication in media because these identify a wider account of network participants. These sources do not only originate from the project management perspective on the megaproject, but include surprising actors that would not have been expected to take part in its development. Through this approach, the study aims at understanding the concerns of various agencies over time. Latour and Callon understand the struggle over different meanings of reality (such as a megaproject) as a process by which actors attempt to enrol other actors to support their cause (see, e.g., Callon and Latour, 1981; Callon, 1986). The study therefore focused on the variations of actors and concerns mobilised not only within, but also beyond, the Conferenza di Servizi.

3.1. The Conferenza di Servizi, a system for megaproject stakeholder management

The Conferenza di Servizi, a meeting space where different actors shaped the megaproject and produced relevant alternative possible choices, was an interactive and iterative process, which was preceded by a long planning phase:

The cornerstone for the success of the Conferenza di Servizi is the involvement in the planning phase of all the actors that have a voice in determining infrastructure choices. All the requests, needs, concerns and objections, which are not clarified in the preliminary phase, will result in the interruption of the Conferenza di Servizi later. This then becomes an occasion for confrontation among the various public actors who have an interest at stake because they are affected by a megaproject. It is therefore appropriate that the political composition of the different stakes of the involved actors takes place outside the Conferenza and even before its starting point. Therefore, the project planning needs to be opportunely shared and organised among the different stakeholders in order to avoid the obstruction and blocking

Fig. 1. *The Variante di Valico Megaproject.* This figure shows the overall layout of the Variante di Valico. It highlights the different lots which compose the megaproject and the various territories which are affected by it. The green line represents the current route; the orange line is the upgrade and enlargement of the current route; the yellow line is the new route; the grey line is the downgraded or abandoned route and the red dots represent the connection to the ordinary roads.

of a public infrastructure at the executive phase (Managing Director for Territorial Development Policies—Minister of Infrastructure and Transport).

It was in the planning phase preceding the Conferenza that the stake net was composed, that is, the way in which the different stakeholders would be held together in a collective was articulated. It is here that the variety of human and non-human entities that ask to sit together in the new assembly, as protagonists and bearers of citizenship rights, begin to compose the stake net.

'Operative roundtables' between Autostrade, the companies undertaking the works, and the municipalities were used to manage these relationships, and they met periodically. These were the 'tools' used to gather the recommendations of citizens and control bodies and to programme subsequent interventions. There followed thus the need to actuate the agreed programme and demonstrate to the community in question the efficacy of this tool. For the most part, the activity of approval building was undertaken externally to the Conferenza di Servizi, which itself became a moment of synthesis, of coming together, and of orchestration and formalisation of the various articulated concerns and claims. A series of acts and bilateral agreements between Autostrade and the various actors were often produced in the phases that preceded the Conferenza.

3.2. Knotting the net: the Variante di Valico megaproject

The *Variante di Valico* (VaV) was a motorway tract of about 66 km on the Italian Apennine between Tuscany and Emilia Romagna (see Fig. 1). The megaproject was, until its completion in December 2015, the most important motorway infrastructure under construction in Europe. It was thought to eliminate or reduce the serious drawbacks of an existing road that climbs up through the gorges of the mountains, making it difficult to pass through during winter when it snows or causing delays and queues due to the slope of the road in the other seasons. To realise this major infrastructure motorway project, it was necessary to enrol a multiplicity of actors in a project management platform that established itself as an obligatory passage point between global and local networks of actors. Here, the Conferenza di Servizi was a means of coordinating interests related to the megaproject as a space where actors would negotiate, learn, conflict and cooperate in order to reach acceptance about the infrastructure project.

To build the VaV, it was necessary to find expertise, not only for the building process, but also for the design of an environmentally compatible and sustainable motorway project. Recalling Law and Callon (1992), project management became a central obligatory passage point as it would position the project in a global network of actors in order to obtain time and resources to build and maintain a local network. The power of actors depended on their ability to enrol and persuade other actors. Table 1 illustrates the principal actors of the Conferenza di Servizi for the VaV. These actors could all influence the project, but no one had the power to control everything. They sometimes had the power of veto and could block the progression of the motorway project. Other times they had regulatory power, such as that belonging to ministries and regions.

As the notion of Dingpolitics suggests, actors were all those assembled in a parliament of things, which could make a difference, induce variations in programmes, or which could condition others' choices. The actors in this megaproject story also included lands, mountains, rivers, springs of mineral waters, and landslides, that is, nature.

One concern was the Ripoli landslide, which was put in motion by the excavations of the Val di Sambro tunnel (one of the most complex works constituting the VaV). From a construction point of view, the VaV was a complex and sophisticated engineering megaproject with tunnels (the longest one 9 km) that would drill down the Tosco-Emiliano Apennine and viaducts and bridges that had to be compatible with hydrogeological, geological and morphological issues, which largely emerged and were discussed during the various Conferenze di Servizi that took place during the various stages of project design. However, the Val di Sambro and Sparvo galleries were a piece of this megaproject that, given the magnitude of the landslides that concerned the areas crossed by this megaproject, cast doubts on the compatibility of this infrastructure with nature and the geological characteristics of this area:

…those tunnels are pressed by slow, relentless and devastating landslides of millions of cubic meters of earth and rocks. The movement of the mountain has touched the Val di Sambro

tunnel pushing it to the side and running the risk of bringing it off-axis with respect to the open motorway route. The landslide that was set in motion is so big that even the neighbouring villages, Ripoli di Sotto and Santa Maria Maddalena, began to move as taken by the hand of a giant (*Il Fatto Quotidiano*, March 23, 2014).[3]

The power of the landslide emerged in its full force in 2010, when the various Conferenze di Servizi had already been concluded, and it dramatically slowed down the progress of the megaproject, which was completed only in December 2015. It was possible that actors participating in the conferences had been unable or unwilling to listen to the voice of this natural giant. The silent actor that had been affected by the megaproject was beginning to take its revenge, greatly impacting the other actors in the network and the schedule and budget of the project:

Since 2010, the village of Ripoli on the Apennine began to move because of the excavations: evacuated families, a barred church, cracks on the walls, expropriation, and a viaduct of the old motorway that passes above the village started to move…(*Il Fatto Quotidiano*, November 6, 2015).

To secure the infrastructure, Autostrade locked down the tunnels with strong steel rings and fortified the existing motorway viaducts. In addition, it compensated the citizens and communities affected by the work. Autostrade also faced litigation from the subcontractors who had performed the excavations and who requested more compensation once the landslides started. The subcontractors, who were affiliated in a temporary association of companies, requested through litigation that Autostrade adjust their compensation, given the increased digging costs due to the unforeseen landslides:

…subcontractors consider themselves damaged. They claim to have spent much more than expected and would like to receive from Autostrade 564 million euros of higher compensation and fees with respect to the initial agreed cost (*Il Fatto Quotidiano*, March 23, 2014).

In addition to the civil litigation brought by the subcontractors, there were cases initiated by the citizens who asked magistrates to investigate the reliability of the project, that is, to determine whether the VaV project was good or bad. The different citizens, who had suffered damage to their homes and were associated in a committee headed by a surveyor who was a resident in the mountain village, argued that, from the beginning, the VaV project was based on a faulty and inappropriate design:

…in our first complaint to the judiciary in 2011, we already claimed that the route of the Val di Sambro tunnel was wrong and had to be made at another point and deeper (Chairman of the committee of Ripoli citizens; from an interview with *Il Fatto Quotidiano*, March 18, 2011).

[3] All of the quotations from the Italian newspapers were translated by the authors of this article.

The concerns around this megaproject grew. From the assemblies of angry citizens, to the still ongoing trials between Autostrade and the subcontractors who had performed the excavations, to the magistrates investigating the landslide, new actors were added. There were experts appointed by the magistrates who had to give advice over controversies generated by the object, the VaV, as it, by disturbing nature, had activated the landslides. The assembly of relevant parties (the Thing) that an object gathers around itself, 'triggers new occasions to passionately differ and dispute' (Latour, 2005, p. 15). Here, the experts, who had been appointed to study the landslides and to understand whether the tunnel excavations played a role in provoking them, produced conflicting opinions — thus creating new controversies.

Two courts investigating the responsibility for the Ripoli landslide, one in Rome and one in Bologna, appointed two experts. The jurisdiction of the court in Rome had been invoked by Autostrade's subcontractors, who claimed extra-contractual fees. The court in Bologna had the matter brought before it following a complaint for culpable disaster and landslide against unknown persons from the Ripoli inhabitants who had houses damaged by the landslide.

The expert named by the Bologna court produced a report focused on the analysis of the project design, culminating in the final draft dated 2004 and in the executive project dated 2008. The expert's report shows that:

> From the earliest stages of the project design, the presence of landslides was considered along the route, but nothing indicated the presence of active movements…and, at the same time, the governmental agencies involved never expressed concerns about the road design or the feasibility of the work.

This report did not define precise responsibility for the causes of the landslide.

On the other side, the experts appointed by the court in Rome maintained that when in July 2004, the final draft of the gallery (produced by Spea—a subsidiary of Autostrade) was presented, it enclosed a geological report, which recognised the presence of 'extensive quiescent landslides'. However, at that time, Autostrade maintained that the route of the tunnel was deep enough to pass under those large landslides. But, according to experts, in the final draft, there was not

> …an instrumental geotechnical monitoring of the area and an evaluation of the impact of the excavations based on the monitoring results. Autostrade did not use the technical tools (e.g., inclinometers, piezometers)[4] necessary to measure with certainty the status of landslides. They made only on-site visits and used photo-interpretation.

The study requested by the Civil Court of Rome, which ended in June 2015, seemed to identify responsibilities in the project design. As reported by a newspaper:

> …the project's final draft and the executive version did not take into account that with the excavations the quiescent landslide 'could have been reactivated'. Autostrade, in 2004, when deciding on the implementation of the Val di Sambro tunnel of the Variante di Valico, did not carry out sufficient monitoring to assess the impact that the work would have on the mountain…and the experts from the Rome court seem not to have had any doubts on another point, that digging deeper into the tunnel would cost more, but it would cause less trouble (*Il Fatto Quotidiano*, November 6, 2015).

According to the experts from the Rome court, even the subcontractors, who between 2007 and 2008 realised the final design, would have had to 'monitor' the area by installing inclinometers. They had to monitor the landslide also at the cost of asking for delivering the executive project six months later than the six granted by Autostrade in the contract. The experts from the Rome court also said that requiring a closer monitoring until 2007–2008 in the final and executive designs would have led to discovering that through the excavations, the quiescent landslide 'could have been reactivated' and 'that this possibility, if considered in due time, would probably have led to different design decisions'.

> In 2010, when the mountain began to move, the subcontractors suggested to Autostrade to make a single gallery that would include both Val di Sambro and the nearby Sparvo. However, this gallery was also affected in 2013 by the landslides and problems associated with inner lining breakage, and it is reinforced today with futuristic steel rings. The proposal was a single tunnel that would go deeper into the mountain, but Autostrade said no (*Il Fatto Quotidiano*, November 6, 2015).

Would it have been better to make the long tunnel? The experts said yes. From a geological and geo-morphological point of view, a longer and deeper tunnel would have been better even if there would have been an increase in the overall costs of the work.

Meanwhile, the surveyor from Ripoli, who was the head of the committee of citizens fighting against the gallery that had activated the landslide, offered data about the landslide:

> The meters positioned now across the whole area leave no room for doubt…. There is a house that from May 2011 to the end of July 2012, moved by more than 16.9 cm. In the same period, one of the meters placed on the church marked a movement of 9.5 cm (*The Journal of Florence*, January 27, 2015).

The story of the activation of the landslide that caused damage to Ripoli's mountain community did not stop there. In

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[4] These are monitoring systems that define the extent and depth of the landslide (volumes at stake); the ongoing movements and their variations in space and time; the dependence of the movements on changing meteorological and hydraulic conditions; the influence of external factors not directly related to landslides (e.g., earthquakes); the stress state of the rock mass; and the effectiveness of the stabilisation and consolidation works that have been realised.

2015, a feature film, *Suspended Stories*, was shown at the film festival in Venice. It was based on the story of the inhabitants of that village on the Apennine in the province of Bologna, who for many years had been struggling with the excavation of a tunnel for the VaV. Through a story whose plot drew only partly from reality, the film highlighted the controversies in a village divided between those who saw the new tunnel a perspective of well-being and economic growth and those who were concerned about the risk of the depopulation and death of a small community.

Even if the Conferenza di Servizi for the VaV had come to an end, the concerns in the net were mobile, always evolving, and never closed, because Dingpolitics does not know closures. It is a never ending assembly. Dingpolitics, as a kind of politics that also takes care of the concerns of inanimate things, those which are 'affected by' the project, gathers distributed agencies. These are not necessarily linked to intentionality, but to possible different programmes of action whose unpredictable and changeable emergence modifies the net and gives rise to new evolving concerns that cannot be contained in the time-space of a Thing, such as the Conferenza di Servizi.

4. Discussion

The case study shows that interests may be an organising devise in the Conferenza di Servizi, but interests were replaced with concerns in the activity of building the motorway. It also shows that even if it was possible to identify interests and stakeholders for the Conferenza, as a matter of design, when in action, the mountain made new actors appear. This does not mean that the Conferenza is not important; it is an obligatory passage point where parties meet and make choices about common problems related to the project. Yet, it did not create closure. The mountain developed concerns about, not only the roads, but also housing, money, and indeterminable responsibilities. It also raised concerns about ways of listening to the mountain by controversies of instrumentation for monitoring the mountain. Last, it raised concerns about the logic of the construction per se. Above all, everything happened under conditions where causality was always under scrutiny and debate.

This is a difficult condition for stakeholder theory because it seems, in principle, impossible to frame all interests, on the one hand, and on the other, merely identifying interests would not be able to produce acceptable courses of action because objections would arise. People may disagree in the future even if acceptance has been reached in the past, and new objects and instruments may raise new concerns when they act on accepted courses of action. Therefore, it is difficult not only for people to understand each other, but in spite of measurement instruments, it is also difficult to understand what the mountain 'would be concerned' with.

Therefore, it is possible to challenge the overly reductionist account of interest proposed by stakeholder theory. Even if it is, as a short hand, possible and sometimes reasonable to impose interest by the institutional position of an actor or actor group, this only provides a small account of this person's or group's

agency. This agency is more realistically an account of the concerns mobilised by objects that actors propose. The Conferenza, organised by stakeholder theory, is a small point in time where things come together, but afterwards, things explode in new concerns. In a sense, it is not possible to know what an object contains before it starts to operate. Then it turns out to have scientific, political, ecological and economic concerns that were not raised when interests were assembled in the Conferenza.

The settlement proposed by the Conferenza is limited in time. This property plagues stakeholder theory. While a dynamic account focusing on the objects and concerns facing the assemblage of actors will produce more avenues for debate and strife, and will be more acceptable than a mere structural account. This is why Dingpolitics is a welcome addition to the conundrum, where it is possible to get acceptance and yet not be able to predict.

The case of the VaV contributes to the theory of project management by showing the indeterminacy of the number and character of actors involved in the assemblage of the infrastructure design. It also shows that interest may not be an adequate understanding of the wants and propositions developed by actors. In short, it proposes a theory that makes power lateral, rather than hierarchical, and one that identifies structural arrangements as points where things come together, but where afterwards, things take on lives of their own. In contrast to stakeholder theory, Dingpolitics does not assume that acceptability is prediction and therefore marks the end of a process. It assumes that acceptance is a moment where things come together, but this togetherness cannot be guaranteed; new concerns arise because of the progress of the infrastructure project. This is because interest does not explain wants; and stakeholder theory does not explicate the number of concerned and objecting parties.

The notion of interest that stakeholder management theory endorses is too general to understand what happens in practice. It cares more about returns and needs than expressed wants. Stakeholder management literature for megaprojects highlights the importance of not restricting the definition of stakeholder to those interested in the project, but to include those affected by the project (Winch, forthcoming). This paper advances the importance of concerns that are not linked to the position of actors, but to evolving and sometimes surprising relationships, which knot the net more so than interests.

Literature on megaprojects acknowledges the crucial role of stakeholder management in megaproject development. Flyvbjerg et al.'s (2002, 2003) seminal analyses of megaprojects say that project management activities to secure a project depend on project makers' manipulations of costs and benefits. This lying (see also Wachs, 1989, 1990) consists of intentionally manipulating the estimates of costs and benefits 'to serve the interests of promoters in getting projects started' (Flyvbjerg, 2007, p. 585). Flyvbjerg's notions of design by deception or strategic misrepresentation (Flyvbjerg and COWI, 2004) are grounded on the idea that megaproject planning is a process involving a multiplicity of actors with conflicting interests (Flyvbjerg, 2007, p. 581). Flyvbjerg et al. (2009) point out how 'local government has little interest in

providing accurate forecasts' (p. 178); 'builders have the primary interests to win the tender' (p. 179), and 'strong interests and strong incentives exist at the project approval stage to present projects' costs and benefits as favourably as possible' (pp. 179–180). In addition, 'megaprojects involve multiple stakeholders, public and private, with conflicting interests' (Flyvbjerg, 2014), and 'the interests and power relations involved in megaprojects are typically very strong' (Flyvbjerg et al., 2003, p. 7).

The word interest, in the sense of being interested rather than creating interests, dominates the scene. This word is not used by Flyvbjerg to suggest how it may be possible to create attention[5]; his view of interest, with project makers at the centre, primarily cares about returns. The politics is that interest makes actors propose values and costs that they do not believe in, but are necessary for them to get approval. It is, as Flyvbjerg says, 'design by deception'.

The VaV case study offers an additional account of politics involving concerns about how assemblages of actors are composed and evolve.

5. Conclusion

How does politics flow in an infrastructure project? This research question can be answered as the continuous process of proposing objects to be concerned with and moments of coming together in acceptance. This acceptance will not be effective in the sense of achieving closure because new concerns that arise because of the progress of the infrastructure project will always surprise. These surprises create disputes about new courses of action whose effects can only be partially known. This is a lateral form of politics.

The episode of the Ripoli landslide shows how the notion of Dingpolitics is not an abstract thing, but has concrete project management implications because it implies a consideration of how the net can be knotted. A net involves a great variety of actors with different epistemic properties. Landslides, far from being mere isolated facts without consequences, could be a testimony of a lack of democracy in those parliaments where interests only are debated and concerns are forgotten. This forgetting could suggest a rethinking of our way of being together (Latour, 1987).

In the democracy of Dingpolitics, it is necessary to proceed to a redefinition of the status of objects. The objects are protagonists of life in society, and therefore, Latour (2004) acknowledges their existence as a strong status, with an ability to express strong opposition to our will, and to be determinant presences able to change the environment around us.

Dingpolitics proposes a constitution that has to regulate the net of actors because the distinction nature/society, like that of subject/object, is no longer viable, and no longer holds. It is based on a division of roles defined a priori: the person, the

subject, the centre, surrounded by objects. But far from granting such an anthropocentric distribution of roles, a pre-eminence in stakeholder theory, Dingpolitics narrows it down to size in our world and proliferate new actors, things and facts that are interconnected.

In a general sense, this provides an orientation to the study of overruns and escalation in major projects. This emphasis on escalation over time has been noted (Winch, 2013). Other research emphasises the bad will of actors who design projects by deceptions (Flyvbjerg, 2005; Flyvbjerg et al., 2002, 2003, 2009), which most likely is part of the story, and others again emphasise the problems of aligning interests (Sleesman et al., 2012), which is also a likely explanation. This assumes that, in principle, it should be possible to arrive at a stable solution at the planning stage. However, Dingpolitics raises a different issue, namely, that abstract interest is inadequate as an explanation of the future. Escalation research tends to assume that planning is the fallacy; Dingpolitics tends to assume that the world is the fallacy. Therefore, Dingpolitics has a strong desire to investigate the sources of overruns and escalation, rather than merely attribute them to the politics of planners. As the case of the VaV suggests, it is the mountain that raised the development of escalation, and therefore, Dingpolitics urges us to be particular about the evidence of escalation processes, rather than merely note the fact of escalation and ascribe politics to it. When such detailed investigation happens, Dingpolitics is a vibrant approach to understanding how projects develop and move.

Conflict of interest

There is no conflict of interest.

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[5] This dimension is retained, for example, in the word 'interessement', which has been used by some Science and Technology Studies (STS) scholars (Callon, 1986; Akrich et al., 2002) to refer to the process of creating attention and concerns. These works are not about being interested, but about how to create interests.

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