



Contentious Politics of Expertise

Experts, Activists and Grassroots Environmentalism

Riccardo Emilio Chesta

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of Political and Social Sciences
of the European University Institute

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Department of Political and Social Sciences

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Abstract

Mobilizations on high-tech projects often become arenas of contention where expertise crosses political and technical claims. One of the aspects of these citizen mobilizations resides in the elaboration of alternative politics linking bottom-up communitarian knowledge with expert advice. This innovation addresses important questions for participation and democracy in general, since expert knowledge indeed maintains a delicate relationship with democratic politics. In this work I aim to analyze how common citizens, political activists and technical experts participate in using expertise, while contributing to making «technical democracy» work. Starting from a dataset of more than 500 episodes of contention regarding high-tech projects, I focus on an in-depth comparative study of mobilizations in the cities of Venice and Florence, given their importance in the rise of the so called «new environmentalism» in Italy. Analyzing four protest campaigns I shed light on the mechanisms of co-production, focusing on 1) the characteristics of bottom-up citizens' expertise, 2) experts' enrollment and their peculiar forms of engagement. In both cities I have selected two cases depending on their variation in terms of technological complexity, conflict intensity and citizens' participation. While in some high-tech projects political conflict and technical controversy tend to be confined to restricted mobilizations – regarding mainly activists and experts – others show high levels of participation and broader knowledge diffusion. Crossing these two main dimensions – political conditions and technological factors – allows to look at the role of different expert cultures (professional and disciplinary background) and their interaction/intersection with political cultures (e.g. political ecologist, conservationist, environmentalist). These dimensions help explain different typologies of expert enrollment, whether its participation is more organic to movement areas (expert-activist) or more episodic and linked to single-issue justifications (expert-ally). After a careful analysis of the Italian public debate about high-tech projects, a specific media analysis of the four cases in national and local newspapers, a multivariate ethnographic fieldwork was conducted in both cities that included direct attendance at public meetings, assemblies and demonstrations. Moreover, around 60 in-depth and semi-structured interviews were conducted with public authorities, experts, activists and citizens playing a central role in the mobilization. The outcomes show how conflict, rather than inhibiting it, transforms expertise production into a contentious politics by other means. Being understood as intrinsically linked to political interests, the meaning of contentious expertise needs therefore to be understood in terms of crisis of democratic accountability and legitimation. The use of expertise by social movements has, finally, a clear impact on their structure and composition, giving rise to uncertain and unexpected alliances as well as shifts regarding mechanisms of participation and mobilization.

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Contentious Politics of Expertise

Experts, Activists and Grassroots Environmentalism

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“The utopia of cognition would be to open up the non-conceptual with concepts, without making it the same as them”

“Whereof we can't speak, thereof we must remain silent”

INTRODUCTION

Speaking Truth to Society? The Contentious Politics of Expertise

A team of experts, professionals and intellectuals, lend their competences to the movement, making a comprehensive strategy of a myriad of local cases that in turn could make each committee meaningful and more efficient.¹

The novelty consists in the role that often highly qualified scientific competences have played in pinpointing environmental threats and also indicating possible alternative solutions. These competences, at the service of organized citizens, represent a form of new relation between knowledge and politics, between profession and democracy, that deserves less episodic attention than what has until now been paid to it.²

At the end of the 2000, Italy experienced the emergence of a new cycle of environmental mobilizations at the local level. All around the country, groups of citizens began to conduct sustained protests against infrastructure projects with significant environmental impact, contributing to a renewal of discourse on the environment and introducing new forms of collective action. In 2009, almost 166 spontaneously born citizens' committees were engaged in a variety of forms of contentious politics in Tuscany related to the environment. This group eventually formed an informal regional platform—the Tuscan Network of Citizens' Committees—to share common problems, alternative information and strategies. A similar phenomenon happened in Veneto between 2011 and 2013, where hundreds of citizens groups mobilizing against a variety of environmental threats—highways, hydroelectric power stations, waste incinerators, regasification plants, among others—met regularly under the banner of a common platform called «the Regional Network of Environmental Committees».

¹ «Un nucleo di “esperti”, professionisti e intellettuali, prestano al movimento le loro competenze per fare di una miriade di casi locali una strategia complessiva, che, a sua volta, possa rendere ciascun comitato più significativo ed efficace» (Asor Rosa, 2013)

² «La [...] novità consiste nel ruolo che competenze scientifiche, spesso di alto livello, hanno svolto nell'individuare le minacce ambientali ed anche, spesso, nell'indicare soluzioni alternative possibili. Queste competenze, che si sono messe al servizio dei cittadini organizzati, rappresentano una forma nuova di rapporto tra sapere e politica, tra professioni e democrazia, che meriterebbero una focalizzazione meno occasionale di quanto non si sia fatto» (Bevilacqua, 2010) also available at <http://archivio.eddyburg.it/article/articleview/16263/0/385/>

This phenomenon does not fit into clear or unique ideological categories. Indeed, the mobilizations spread as much in post-Communist «Red» Tuscany as in post-Christian Democratic «White» Veneto. More visible and sustained than in other places, these spontaneous citizen mobilizations found one of their key resources in the participation of several experts and in the use of expert knowledge. As will be explained in later chapters, close examination shows that the mobilization of expertise and research into credible and feasible alternatives were the core characteristics of this wave of Italian «new environmentalism».

The specificity and the relevance of the Tuscan and Venetian cases are then a privileged angle through which to observe new dynamics affecting expertise in contentious politics. The role that expertise plays as a key resource for these specific spaces of collective action is far from evident, particularly if we look for explanations in the political arena, the media or through parts of literature in social sciences that follow the «Nimby—Not in My Backyard» argument. In these frameworks, protest and conflictual arenas are not considered spaces where expert knowledge is produced, assembled and shaped by spontaneous collective actors like social movements. Indeed, even the field of social movements itself has underestimated this relation. The role of experts and expertise in mobilization processes has been partly overlooked by the main partial³ theories in the field, probably considered secondary to leadership and organization (Zald & McCarthy, 1977), communication frames (Benford & Snow, 2000) or political opportunity structures (Tilly & Tarrow, 2008).

This work seeks to analyze the processes of expertise mobilization in four local campaigns against infrastructure projects. Comparing different sites of contention that vary according to relevance and level of conflict—as well as the type of expert knowledge required—this research aims to show how and under which conditions, in highly technical controversies characterized by scientific uncertainty and complexity, expertise comes to be mobilized. Focusing on the interconnection between specific political contexts and taking protest campaigns as analytical units, I will illustrate the dynamics of expertise mobilization and its delicate relation with citizens participation and political activism.

³ By using the term «partial theory» I do not intend a criticism of some vague incompleteness in this perspective. Rather, I draw on the contribution by Zald and McCarthy (1977)—by far one of the most cited articles in the history of the field—which explicitly includes «a partial theory» as a subtitle. This work seeks to test the importance of resource asymmetries and their different allocation in structuring hierarchies and coordination among social movement actors and organizations. However, it does not explicitly refer to aspects like meaning making and symbolic processes as well as the political structure where collective mobilizations happen and in this sense can be thought of as partial.

In the next paragraphs I introduce the issue trying to bridge two fields that in the scholarly debate rarely interact: the sociology of expertise and the literature on contentious politics. The intersection between these two research streams provides the main theoretical references that I draw on in exploring this problem. First, if and how a mobilization expands in relation to the complexity of a technological project, and subsequently how these conditions relate to few key dynamics constituting grassroots expertise.

1. What is Expertise and Why Does it Matter for Contentious Politics

Studies of expertise and expert knowledge have traditionally been conducted by sociologists of knowledge, science, and technology interested in understanding the borders between authoritative knowledge and its deviation like false knowledge, non-knowledge or pseudo-knowledge (Bloor, 1976; Collins & Evans, 2004). Compared to expert knowledge at large—the type of authoritative knowledge produced and monopolized by a recognized professional specialist—expertise has been identified not only as a property of a specific actor, but as a practical skill (Nowotny, 2003; Jasanoff, 2003). In this sense, expertise is an analytical property possessed by a specific actor intrinsically linked to groups or institutions recognizing his or her legitimacy—be it a university or scientific institution, the research and development department of an enterprise, or an institutional expert commission. Expertise is therefore hybrid in its definition. It is a specific activity characterized by specific technical competences and goals, exposed to negotiation depending on the purposes of the social actors that use it and participate in its construction.

Principally employed in contexts characterized by uncertainty, it ideally has the scope to orient private or public action through applied knowledge and certified competences with the aim at deliberating and obtaining outcomes founded on criteria of higher rationality. Therefore, already in its constitution, expertise is axiomatically involved in the field of contentious politics (Pellizzoni, 2013). Moreover, its use and mobilization can be immediately conceived as a tool employed by broader social actors—be they social movements or civil society groups—to resist the new instruments of governance linked to the growing technicization of politics in general, as well as infrastructural or environmental politics in particular (Lascoumes & Le Bourhis, 1997; 2011).

A first analysis concerns, then, the definition of the main actors possessing expertise, the *experts*. As Eyal and Pok (2011) describe, the term expertise derives from the Latin root *expertus*

that literally leads back to *experiment*. In this regard, it is linked to accumulated experience in an everyday life condition as well as in a determined professional or scientific sector. However, this etymological recognition already suggests an ambiguity that in sociological literature separates *experts*—characterized by a certified expertise experimented in a professionally regulated field—from *laypeople*, or experts characterized by direct knowledge and specific experience of a life condition (Williams, 1976). On the nature of this separation, starting from the study of professions conceived as *jurisdictional struggles*—aiming at controlling the standards of certified knowledge as well as the relation between its legitimate producers and consumers—Andrew Abbott (1988) distinguishes the call for expertise in two domains, one being a *profession* founded on a corpus of abstract knowledge and the other a *craft*, based on the control of a technique. In its hybrid definition as well as in its practical use, expertise enters critically on the terrain of political legitimacy. The growing use of expertise to address publicly relevant issues forthwith poses the so-called «extension problem», or the entity of the expansion of participation and its democratic control (Collins & Evans, 2007).

Many empirical cases at the intersection of sociology of public health and sciences and technology studies show the articulation of this dichotomous tension between a «monopoly» and «generosity» on the side of experts in allowing or prescribing margins of openness to publics and actors outside of the professional field, therefore negotiating their influence and redistributing the power of their decisions on politically salient, technically complex issues (Rose, 2007). Possessing a monopoly regarding a technically and scientifically controversial issue means occupying what Bruno Latour (1988) calls an «obligatory passage point» that can influence its evolution and resolution. A form of expertise becomes, then, more powerful and influential if its concepts, discourses, the practical modalities (as well as its judgments) are grafted in a plurality of actors—experts' organizations, groups of laypeople, public or private authorities—as much as a purely abstract and ultimately esoteric knowledge results untapped, not respondent to any public and can be judged eventually as suspect (Rose, 1992). In this sense, far from following purely normative ideals and principles of self-regulation and autonomy, expertise often assumes the traits of the social interests that require its use. Therefore, even the universe in which expertise is produced is only partly subjected to internal and independent logics, principles of regulation and recognition that would suggest the existence of a totally autonomous «scientific field» (Bourdieu, 2001). In this sense, expertise is partially a different activity since the place of its conception and production is not entirely restricted to an autonomous scientific field but entails a broader space that can incorporate the business sector,

the political sphere, and society in general.

If expertise is linked to a variety of actors characterized by diverse roles and carriers of different typologies of knowledge, ideas and interests, the main issue concerns, then, the political management of its borders. The use and mobilization of expertise clearly poses a dilemma for democracy: *intensive* definitions restrict expertise into a regulated institutional tool of governance or innovation, while *extensive* ones tend to enlarge its borders to broader forms of participation, particularly concerning highly uncertain but politically relevant issues (Bonneuil & Joly, 2013). Expertise is finally characterized by *competence* (certified specialism on a specific domain), *asymmetry* (dividing experts from non-experts) but also *transgression* (dealing with applied problems and exiting purely abstract scientific issues) (Pellizzoni, 2013). In many cases, expertise is the outcome of a normative attempt at justifying choices and actions on scientific grounds, therefore using scientific discourses to increase their legitimation. As an example, technological innovation is not only a domain owned by technical experts but has become—particularly in Western countries—a general guiding discourse and a normative rhetoric (European Commission, 2001). This rhetoric catches the attention not only of policy-makers and interested business actors but also of new concerned publics, directly involved in its applications and effects. Hence, the problem is immediately one of democratic control at different levels. As an example, the expertise required to ensure effective political oversight of technologically complex projects as well as to monitor their concrete impacts highlights the need for a «technical democracy» (Callon, Lascoumes & Barthe, 2001). In the specific case of the European Union, not only new normative tools like the «precautionary principle» (Gee, 2002) but also new means of participation have been adopted to respond to the growing exigencies of democratization of technological innovation. It is alongside the diffusion of these institutional tools that the ever more frequent contentious episodes toward technological innovation must be analyzed, in an attempt to open the black box of technical expertise and finally reveal its social and political implications.

2. New Environmentalism and the Democratization of Expertise

Far from being totally new, on close inspection we observe that demands for the democratization of expertise have characterized every new wave of social movements: the critique of scientific and technological neutrality raised during the post-1968 wave, the post-Chernobyl anti-nuclear mobilizations of the 1980s and the popular epidemiology in the 1990s. However, some studies have shown how the use of scientific arguments by environmental organizations can be

ambivalent, since the logics of science and its outcomes are not predictable and can sometimes inhibit the strategies of campaigners or contradict their claims (Yearley, 1992). Single case studies have showed the peculiar relations that expertise entertains with more spontaneous actors, such as social movements (Epstein, 1996). If expertise has recently also been studied as a key aspect of the contentious politics associated with local mobilizations against infrastructure projects (Pellizzoni et al. 2013), this work starts from the specific hypothesis that expertise has increasingly become a «weapon of the weak». In Italy, the same actors participating to the wave of local activism known as «new environmentalism» have explicitly recognized the role of experts and expertise in the new mobilizations (Asor Rosa, 2007).

Even though all policies are grounded on some form of expertise, some sectors of policy making seem to be characterized by much greater complexity due to the prevalent use of technical and scientific arguments (Brint, 2001). Conflicts generated by infrastructure projects are characterized by complexity and uncertainty. This means that discourse within the political domain becomes highly technical while the obvious public interest. Furthermore, the logic of the politicization of environmental issues is such that they tend to transcend traditional political cleavages. Here, both public interest groups and citizens' groups are prominent actors in the process, but contention tends to occur absent strong ideological positions (Diani, 1988).

But far from being neutral, the use of technical and scientific expertise intertwines with politics at a higher level of complexity. The use of technical and scientific expertise in political arenas has been studied mainly in relation to particularly high-profile issues—such as like nuclear energy, climate change and genetically modified organisms—as a game among recognized institutional actors or structured organizations of civil society, whereby expertise is conceived only as an input in the policy-making process (Haas, 2004). While these streams of literature have excluded more conflictual situations (Lewanski, 2008), in the study of environmentalism a huge part of the debate has focused on the way national or international organizations use knowledge (Yearley, 2005; Mayer, 1993). Even here, the focus of the inquiry has been limited to those civil society actors characterized by structured professionalization and high levels of resources and coordination, with formal membership and State legitimation.⁴

⁴ Literature on civil society organization has pinpointed how structured environmental organizations have progressively assumed the forms of «public interest groups» using professional forms of lobbying, routinizing institutional relations with the political power, and co-producing environmental policies with public administrations. Increasing organizational constraints dues to their growth in terms of size and members have then changed the nature of their forms of action. As an outcome of this professionalization process, the creation of boards or directional offices have channeled participation into structured channels of coordination, while the mobilizing potential have been constrained in

However, if environmental organizations can be partly conceived as the natural outcome of the process in which environmental movements of the 1980s—1990s were institutionalized, it can also be said that new waves of local grassroots mobilizations all over the Western world in the 2000s suggest the use of forms of counter-expertise in the new *environmental justice movement* (Cable & Benson, 1993; Cable & Cable 1995; Akrich, Barthe & Remy, 2010).

Therefore, if on the one hand structured environmental groups have started reproducing a traditional model of «science which speaks truth to power» (Wildawsky, 1979), on the other hand the critique advanced by the new environmental grassroots proposes an alternative model of «science which speaks truth to *society*». However, the focus on science and expertise as a specific aspect of new environmental mobilizations seems quite absent in most of the literature on local conflicts. The «Nimby» label, as it has been employed in both social sciences and in the media, has tended to imply the demands of technocratic modernization constitute an inherent, even self-evident, public good, suggesting that citizen mobilization against infrastructure projects is irrational, narrowly self-interested and scientifically ill-informed. (Bobbio & Zeppetella, 1999; Tipaldo, 2011). On the contrary, the form of single-issue campaigns that contemporary social movements have assumed (Tilly & Tarrow, 2008) suggests a higher level of specificity and professionalization that are quite conducive to a critical use expertise by the same social movements. Single-issue campaigns highlight then new aspects denoting political activism. A growing level of professionalism and the use of autonomous forms of information and expertise give centrality to a new model activist (Ollitrault, 2001). This seems particularly true for many emergent cases of environmental justice mobilizations. On this wave, many contemporary episodes of contention have involved processes of bottom-up expertise mobilization concerning the environment and the public health developed to initially make sense of suspicious illnesses diffused in communities located next to industrial plants (Masterson-Allen & Brown, 1994). From the common perception of a problem—an environmental change, a puzzling harm—local communities have been able to mobilize specific forms of knowledge linked to their everyday-life experience and start a process of inquiry, data gathering and expert enrollment. These forms of mobilizations have been described also as a form of «popular epidemiology» where the knowledge of laypeople have contributed to integrating deficiencies of institutional expertise, suggesting new problems, gathering new data and shaping the scientific

targeted campaigns that calculate costs and outcomes. Entering in a relation of political exchange with the institutions and public administration, some environmental actors have abandoned repertoires of action linked to protest (Della Porta & Diani, 2004).

agenda toward new areas (Brown, 1987). Once again, the use of expert knowledge emerges as a key aspect of the tactics of contemporary environmental movements.

Contributions from the contentious politics literature and science and technology studies can further explain these new forms of grassroots expertise, and what these dynamics can reciprocally tell us about the state of science and democracy.

3. Key Questions Toward a Contentious Politics of Expertise

Collective thinking and knowledge sharing are fundamental aspects of collective action. The study of an issue or the elaboration of credible political claims are indeed essential to orient and conduct collective action. Social movements have already been described as «critical communities» or arenas in which activists and participants are engaged in a process of collective reflexivity (Rochon, 1998). Reinterpreting the old dilemma concerning how to reconcile theory and praxis, Eyerman and Jamison (1991) have used the term «cognitive praxis» to identify the type of practice-oriented knowledge that is produced in social movements.

While most of the contributions from public policy have focused on the institutional opportunities for a «technical democracy» to emerge (Callon, Lascoumes & Barthes, 2001; Maasen & Weingart, 2005), the «new political sociology of science» (Frickel & Moore, 2006) aims explicitly to research how non-conventional actors are able to contest scientifically and technologically complex issues—from industrial pollution to genetically modified organisms—and exert influence in the institutionalization of alternative scientific fields (Frickel & Gross, 2005), like AIDS bio-medical research (Epstein, 1996) or genetic toxicology (Frickel, 2004).

Combining contributions from collective action and social movements with science and technology studies it is possible to provide further evidence for specific mechanisms and dynamics concerning the production and mobilization of expert knowledge in contentious politics. Cognitive praxis is very important but less visible than other confrontational activities that refer traditionally to social movements. If in social movement dynamics, expertise production can be considered as a *politics by other means* (Latour, 1991), the key question is, then, how do experts and activists coproduce and mobilize expertise? Which dynamics affect expertise in contentious politics?

In this regard, I will show how recent waves of grassroots environmental activism in Italian cities provide important evidence. Investigating some of the most relevant mobilizations contesting infrastructure projects in two of the main centers of an emerging «new

environmentalism» in the country—Florence and Venice—I will try to answer specific questions:

- 1) Does the technological complexity of the issue at stake affect the spread of participation positively or negatively?
- 2) How does this aspect specifically affect the dynamics of co-production among experts, activists and citizens?
- 3) How does knowledge mobilization affect the actors involved? Eventually, when does the expertification of laypeople take place and under which conditions do experts politicize?

Except for a few studies concerning the opportunity structure of some specific fields like industrial biotechnology (Schurman, 2004), social movement scholars have not viewed technological aspects as likely to produce political consequences. However, case studies regarding infrastructure and other high-tech projects have shown how their specific characteristics can affect the political process as well as facilitating or impeding the participation of some actors compared to others. Even though the protection of a community or the environment at large can be considered a general civic value, the particularities of a technology can attract very specific typologies of experts potentially playing a prominent role in the debate given their technical and scientific authority. From this perspective it is possible to question how experts intervene in the arena and to show the way they eventually make sense of their engagement (or neutrality) and through a precise qualitative analysis of the on-going processes I aim to shed light on the concrete aspects of «technical democracy *from below*» that have been little explored. This point introduces a further central aspect of this specific form of contentious politics, like how and when collective action triggers a dynamic of expert politicization. In this case I seek to assess which expert actors enter or exit the contentious arena in a non-technical way and how to uncover the reciprocal relation between knowledge mobilization and the expertification of activists and citizens. The Italian wave of local environmental activism of the first decade of the 2000s is a salient case study to explore both these middle-range mechanisms and to assess the new relation between contemporary environmental movements and expertise in general.

4. The Analytical Unit: Comparing Variations in Four Cases of Expertise Mobilization

The four protest campaigns against infrastructure projects that I have chosen to investigate have

been selected on three factors. The first is *political context*—the two different localities being affected by density of infrastructure projects—the *relevance of the infrastructure* (costs, impacts, strategic interest) that in all the cases went beyond the purely local dimension and their variation in terms of levels of *technological complexity*, inhibiting or expanding the opportunity to mobilize. As will be explained in detail in Chapter 1, the cities of Florence and Venice share not only structural dimensions (size, cultural prestige) but they are also the cultural and political centers of the two regions—Tuscany and Veneto—that, while varying in political regional subcultures, have experienced high rates of local environmental mobilizations in the 2000s within Italy. Specifically, in Florence the main contested infrastructure projects were the high-speed train line and station «Tunnel Tav» and the waste incinerator near Case Passerini. In Venice, there were two projects. The first was the «MOSE»—an integrated system of rows of mobile gates to protect Venice and the Lagoon from flooding and exceptionally high waters. The second was tourist cruise ships. In the next paragraph I am going to explain why I found these cases particularly relevant for studying and comparing processes of expertise mobilization.

4.1. Research Questions and Hypotheses

Linked to the problem of expertise in contentious politics, the main research question driving this research is *whether—and if so, how—the technological factors associated with an infrastructural project affect the process of mobilization against it*. The idea that technological and material aspects influence the evolution of a mobilization is hardly a novel one in science and technology studies in general (Law, 1992; Akrich & Latour, 1992). The sociology of sciences and technology has maintained a traditional focus on the way technology is co-produced by technical experts, and specifically which social and political meanings are embedded in the technical artifacts. However, very few inquiries have entered the field of environmental politics, trying to link these analyses to processes of political contention (Pellizzoni et al., 2013). Specifically, while these last works have produced the first empirical evidence regarding a variety of infrastructure developments in the Italian case, they have raised new hypotheses concerning the role of complex infrastructure technologies in inhibiting political mobilizations, like in the case of off-shore plants in the Adriatic Sea (Ongaro, 2013).

The questions they introduce are at the core of the dilemmas of expertise in contentious politics. Pushing these research paths and questions toward this more specific focus, through a comparative analysis this work will try indeed to assess *whether—when the level of technological opacity is higher—the extension of a citizen mobilization is lower*.

Here, this term *technological opacity* has been introduced as the initial key heuristic concept to advance our analytical exploration. Technical opacity is defined as the existence of abstract and complex technological features that require professional expertise (through the form of abstract and specialized languages) and that can implicitly (or explicitly) favor political enclosure and inhibit a broader public control.

While *opacity* concerns, therefore, a specific technical domain (hydraulic or marine engineering as in the «MOSE» case, but geo-technical models for the «Tunnel–Tav» one, it can be strategically produced by specific stakeholders as a means to enclose the issue within the black box of a technical and expert debate. While resources like autonomous expertise and political activism are important for triggering a more or less extended citizen mobilization, under specific circumstances they can have trouble communicating the political issues at stake to laypeople or ordinary citizens, as well as the highly technical complexity and uncertainty of the issue can inhibit motivations to engage, therefore potentially configuring a mobilization populated only by experienced activists and experts. More specifically, in the definition of *technological opacity/clarity* I include the:

- 1) *Technological impacts* of the project, which trigger different forms of mobilizations depending on their salience, (e.g., if they directly and clearly affect citizens interests— as the city pollution in the cruise ships or the waste incinerator case clearly do—rather than if they affect non-human or abstract natural entities, like the Lagoon in the «MOSE» case and subterranean Florence in the «Tunnel–Tav» one);
- 2) *Technical provision* of costs/benefits, which defines the situation such that both proponents and opponents have difficulty supporting their arguments, suggesting that *the more uncertain a project is, the harder it is to frame a specific political goal* (as has been the case with the «MOSE» and «Tunnel–Tav»),
- 3) *Languages* mobilized during the debate, which reproduce the technical contents of the project, making the use of information more difficult and favoring either exit from the debate/mobilization or free-riderism and delegation to experts, in a way that *the greater the technical abstraction, the less the interaction between experts and the broader public* (a problem of both «MOSE» and «Tunnel–Tav»).

Far from being purely objective, all these conditions need to be conceived as heuristics, useful only to the extent that they can be applied analytically. Indeed, at the institutional level, *opacity* could be used as a tool to reduce public transparency concerning public goods like public

expenditure as has been already argued by Flyvbjerg in the analysis of the project of urban regeneration of downtown Aalborg (1997). Therefore, *opacity* is at the same time rooted in the specific technological structure of the project but also constructed by the actors constituting the political arena. In this sense, citizens' committees can be more or less capable of making the issue less opaque or clearer, through scientific communication or framing. Eventually, also political elites and proponents can actively use *opacity as a strategy* either to avoid its discussion (in a decisionist perspective) or contribute to making the issue more visible to improve democratic monitoring and public approval of it.⁵

However, I start investigating the technological structure hypothetically considering it as more relevant than the framing activity of the political actors. This analytical model helps to investigate whether—at an equal level of mobilization potential and in a similar political system like in Venice and Florence—technological clarity allows the emergence of a broader mobilization than in cases of technological opacity. With opacity I expect to find a debate confined into a technocratic arena where expertise plays a central and prominent role, excluding lay actors. On the contrary, in conditions of clarity I expect a democratic arena where experts and lay actors are most likely able to reciprocally interact, with the latter having greater possibility to participate in the debate. For «extension of citizen mobilization» I refer to a phenomenon of:

- 1) sustained presence of collective action, public episodes of contention (mainly number of public demonstrations and/or public meetings with high numbers of citizens' presence and participation), where;
- 2) the main participants' perceive their own limits or potentials to construct a broader consensus and have an impact on a broader public.

As said, the issue of clarity or opacity of the technological factors introduces aspects that are not natural but subjected to the framing activity of activists and movements participants (Snow &

⁵ From a similar perspective, recent literature has faced the importance of opacity and transparency in infrastructural policy-making, particularly in cases in the new principles of «global corporate citizenship» that sees the involvement of multinational companies in organizing public debates or information availability for local populations, particularly in areas characterized by absence or recent democratization, with the attempt at domesticating conflict. However, as in the case of the transnational pipeline project in Georgia, the transparency principle proposed by the same stakeholders and proponents that put information and communication available to NGOs and citizens groups has not at all inhibited conflict, but it has on the contrary multiplied the sources of contention (Barry, 2013).

Benford, 1988). Indeed, as suggested by the sociology of public problems in general (Gusfield, 1981), high-tech projects assume a salience in the public sphere not for their intrinsic properties but for the capacity of social groups (in this case, activists and movement members) to translate their specific traits into a set of problems (diagnosis of risks and threats) and political goals (prognosis of alternatives). However, I consider that some technological properties of the projects produce variation in the degree of difficulty of the framing processes, leading to differences in the degree of obstacles in the process of public communication.

The next section describes the four cases of local environmental mobilizations against high-tech projects that I have selected and the pertaining characteristics justifying their classification into different typologies and the logic of comparison.

Table 1. Level of Opacity/Clarity of High-Tech Projects

	Opacity			Clarity
Florence	High Speed Train (TAV)	-	+	Waste Incinerator
Venice	MOSE	--	++	Cruise Ships

4.2. Cases of Opacity

Projects like «No Tunnel–Tav» in Florence and «MOSE» in Venice (see Table 2) have been considered cases of technological opacity (defined with the sign – and – –), where both the technological characteristics and the derived claims supporting/opposing their realization are characterized by high technical complexity. The two cases however differ in levels of opacity.

In this first comparative line I have hypothetically classified «MOSE» as the extreme case of opacity (– –) on account of:

- 1) The *newness of technology*, attesting to the fact that there is no similar antecedent case of contention. Consequently, a citizens’ oppositional front cannot learn from any prior similar case (no information available either among broader movements cultures or networks, or from more structured actors, like environmental organizations);
- 2) The *properties of technology*, being the rows of mobile gates invisible to citizens, built far from the city, not directly affecting or posing risks to human communities but constituting only eco-systemic threats to the Lagoon, the sea fauna and vegetation. From this point of view, also potential claims linked to cost inflation of the projects—and risks

of corruption—are linked to deep knowledge of a highly complex and abstract technological systems.⁶

From these two main variables, the debate on the «MOSE» is hypothetically configured in terms of a technocratic arena, less likely to be permeated by citizens or laypeople grievances or participatory stances and with a higher importance given to technical and expert actors rather than activists.

The second case of opacity is the project to build an underground high-speed train line and station «Tunnel–Tav» in Florence, given the high levels of technical expertise in geo-technical engineering and urban planning required to have an informed opinion about it. However, if compared to «MOSE», it is a case of minor opacity (-), for two reasons:

- 1) The *diffusion of technology*. High-speed train lines are a well-known case of contention in Italy as well as abroad, and information and knowledge concerning both the national projects and the stakeholders involved was already available among activist networks all around the country. Specifically, the case of the high-speed train project between Lyon and Turin («TAV Val di Susa») has become a sort of proxy for—and symbol of—local opposition to infrastructure projects in Italy. Since the «No Tav» frame has assumed a further level of significance for local mobilizations all around the country, the Florentine mobilization could gain from the capital of experiences and information developed by the movement in Val Susa;
- 2) The *property of technology*. This is because the underground high-speed train project is still invisible to inhabitants. The construction sites are quite closed, almost invisible and composed of underground galleries) even though they potentially impact several buildings and houses in the historical center of Florence. Constituting, thus, a real risk for inhabitants and their security, they mix a set of human and ecological risks.

⁶ As previously mentioned, assuming the existence of a structural variable like the property of technology apparently contradicts some of the key arguments of actor–network theory scholarship which define properties not as intrinsic to technology but activated by a process of interconnection between the technologies and actors involved in a relational network. In this research I don't engage with the ontological disputes within this tradition of the field of science and technology studies (Law & Hassard, 1999; Minervini & Barbera 2013). Here I simply start from the assumption that some technological properties have an influence on the spread of visibility and intensity of a mobilization process as well as on the capabilities of social actors to organize in collective action. The entire historical literature on social movements, from classical Marxian and Weberian tools to contemporary contentious politics approaches, shows how a phenomenon like a «mobilization» is neither the pure outcome of structural conditions or the simple political construction of the actors.

4.3. Cases of Clarity

On the opposite side, the waste incinerator in Case Passerini (Florence) and the case of cruise ships in Venice have been defined as cases of technological clarity.

The waste incinerator project in Case Passerini (+) is hypothetically considered a case of limited visibility if compared with the cruise ships (++). Since incinerating plants produce a peculiar form of environmental pollution (nano-particles provoking human illnesses and contaminating surrounding agricultural land) the risk become easily salient for ordinary citizens. Moreover, criticism of the incinerating strategy for waste reduction began almost two decades ago, while movements in support of other options have diffused around Italy and the world, with the credible alternatives implemented by some local Italian institutions (the so-called «Zero waste strategy» in the Italian municipalities) serving as models. There are therefore previous cases of similar contention from which activists and citizens can get existing information and knowledge. Finally, the alternatives are not constituted by a pure technological strategy, but they invest directly cultural values like conceptions of economic growth involving a change in citizen everyday life practices – forms of commodities production, individual consumption and door-to-door recycling. In this case the arena is more opened to a democratic debate where experts and non-experts reciprocally interact.

The cruise ships in Venice (++) are hypothetically considered the clearest case. First of all, their technological properties are highly consequential (visually and environmentally). Higher than many city buildings, they are immediately recognizable by citizens and inhabitants. Being a means of transport, they traverse important parts of the city, producing land vibrations and belching fumes from their smokestacks. At the same time, their impacts are clearly visible in terms of air pollution and public health (like the smell and the color of the smoke, as well as the electromagnetic waves that interrupt private electronic systems) while at the same time implying economic impacts that prompt discussions on alternative forms of tourism management. Less visible are the claims concerning the erosion of the sea bottom. The presence of these concerns configures a distinct issue in which experts and non-experts debate and integrate their claims. Furthermore, the physical presence and passage of the cruise ships constitutes an opportunity for citizens and activists to create more disruptive repertoires of action, such as public demonstrations that occupy water channels and tracks and confrontational episodes where small boats encircle the cruise ships to impede their circulation.

Finally, drawing an initial comparative hypothesis, on the dimension of opacity the

«MOSE» is our extreme case (--), followed by «Tunnel–Tav» (-), while the waste incinerator in Case Passerini (+) and then the cruise ships (++) are in order the clearest of our typology. This latter case seems to be hypothetically where citizen participation is highest and where mobilization processes are characterized by more frequent interactions between experts and laypeople. While, each case is per se unique, this analytical variation is useful at a comparative level to show the specific forms that the mobilization assumes, the variety of actors participating in the arena, and a set of different mechanisms triggered by the specificity of the problem.

4.4. Within-Case Dynamics and Mechanisms

The analytical framework elaborated here aims at explaining a potential variation between a more technocratic and a more democratic arena where expertise can play different roles, assume different forms, while finally triggering different dynamics that are relevant to explain collective action processes.

Other than the technological factors of the project (categorized in dichotomic terms of opacity/clarity), further contextual variables related to the social and political environment and therefore influencing expertise need to be investigated, like, in particular:

- 1) *Cultures of activism*. While literature explains the cultural differences among social movements groups and organizations depending on the type of issue, level of organization, repertoire of action (Diani, 2015), I consider these aspects relevant since they can affect the way specific groups use expertise or dispose of specific experts that could study key aspects of the contested infrastructure projects and help constructing a debate about. Previous studies have shown how environmental mobilizations are culturally heterogeneous coalitions involving different groups – from conservationists to political ecologists, from social squats until citizens committees – characterized by different political resources, repertoires of action and claims (Della Porta & Rucht, 2002; Della Porta & Piazza, 2008). It is then interesting to see how these various and frequently fragile coalitions mobilize different forms of expert knowledge while contributing to a common platform;
- 2) *Typology of expert actors* that are mobilizing and the *expertise mobilized*. Here, an accurate description of the properties of the expert actors mobilizing is necessary. Both the scientific source of its legitimation (the so-called «credential»⁷) and the type of

⁷ In his seminal work on the case of activists' lay expertise on AIDS research, Steve Epstein (1996) shows

relation with the civil society groups must be analyzed in-depth.

Specifically, the properties of the expert relate to:

2.1) *Professionalism*:

2.1.1) *Disciplinary/professional membership*. Here we ask whether—and of so, how — specific expertise (discipline/profession) triggers/configures a specific form of political activism. If the literature has pinpointed how the social basis of the new social movements is consistently composed of middle-class socio-cultural professions (Kriesi, 1989), this evidence can help us to problematize variations in expert engagement, since some forms of expertise have a clear relation to politically sensitive issues. While these pieces of evidence are useful to elaborate some hypothesis (as noted by Kriesi, it is quite rare to find professionals related to technical or managerial roles in «new social movements» types of mobilization), since this research is mainly case-oriented, it is preferable to investigate experts-engagement depending on the specificity of the contested issue. Obviously, in a protest campaign that deals with environmental problems it is hypothetically more likely to see environmental or natural scientists mobilizing. However, this point suggests further paths that need to be explored in depth. As an example, in complex high-tech infrastructure projects like the «MOSE» in Venice, a system of mobile gates to protect the city from exceptional high waters, who counts as a *real expert*? The assessment of its political legitimacy and technical efficiency is quite an intricate and complex process dealing with a variety of problems and requiring different forms of expertise. Does it mean that a properly speaking expert does not exist? Does an expert like a hydraulic engineer have to speak about issues that transcend or evade his areas of expertise? If a specific disciplinary background is required (e.g. in the case of «MOSE», hydraulic engineering), why is there a

the processes through which outsiders—in this case, gay activists and militants struggling for an alternative politics of knowledge on AIDS—acquires the «credentials» to be considered legitimate speakers or actors involved in alternative research designs of trials at governmental scientific commissions. Epstein's evidence shows how these scientific «heretics» had to acquire mainstream scientific credentials to propose suitable alternatives and produce substantial innovation on AIDS research. This hypothesis must also be tested in the cases I explore in this work, to reveal whether there are particular variations depending on the issue at stake.

higher presence of urban planners in the debate?

2.1.2.) *Resources*. Here, we assess whether—and if so, how—the resources (scientific status and prestige, academic position, professional resources/constraints, skills favoring or not their participation) at their disposal affect experts' tendency to mobilize. In a slightly different context of investigation—the so-called «public understanding of science»—Bauer & Jensen (2011) have investigated the types of scientific actors engaged in activities of public dissemination and communication. The evidence collected from their survey data suggest a hypothesis that can help answering questions posed in this work. As they assert, senior researcher or established professors are more likely to engage, this could be related to many factors, which can be summarized in two main factors: 1) greater scientific reputation, which raises their public legitimation and impact; 2) more resources (scientific autonomy, more experience, time free from career-related pressures and constraints). These two hypothetical factors can easily be applied to explain actors more likely to mobilized with social movements (e.g., the more the resources and credentials, the more likely is engagement with social movements);

2.2.) *Associational Membership*:

2.2.1.) *The type of engagement*: Whether experts are *internal* to dynamics of civil society activism (expert–activist) or they are *external* to these dynamics (expert–ally), and so are engaging on single-issue mobilizations or with single-issue motivations and claims;

2.2.2.) *The scale of engagement*: Whether experts belong to purely local professional/activist networks or to broader ones at the national or transnational level.

On point 2) experts have been only recently studied as a peculiar actor involved in mobilization processes, and their forms of participation have been described in terms of «shadow mobilizations» (Frickel, Torcasso & Andersson, 2015). Following this definition, while experts in specific domains dispose of knowledge and information that can help or support social movements, their role is linked to specific constraints that make them less prone to public exposure. For this reason, it makes sense to refer to movements, activities and missions such as theirs as work «in the shadows». Many of the specific properties—like scientific or technical

authority—that constitute their «credibility» are not easily compatible with open activism. This is because, in the classical sociological conceptualization, scientists and experts must follow a normative orientation toward rationality instead of partisanship (Merton, 1956), but their material relations with—or subordination to—private business actors actually constraints their room to overtly contest specific issues, not to mention the economic actors with whom they engage. In this sense, a focus on the definition of membership permits to distinguish between diverse forms of participation in contentious episodes collective action.

I therefore define heuristically two ideal-types of experts mobilizing:

- 1) With the concept of *expert-activist*, I define an expert that perceives his profession as directly concerned with social and political interests and that is more likely to be organic to civil society associations or networks of activism. This allows to assess the nature of activism, if it refers to general forms of associations (the role of expert in specific groups/movement organizations) or to specific scientific associations with an emphasis toward public intervention (member of expert-activist organizations).
- 2) With the term *expert-ally*, I define an expert that perceives his mobilization as a consequence of a personal motivation limited to what is by himself perceived as a specific and delimited problem. To this extent, an expert-ally heuristically mobilizes more on single issues and acts based on the pursuit of a limited and specific rational argument.

However, if this distinction is useful at the analytical level, it could be subjected to shifts, since the collective processes here investigated necessarily have a dynamic nature that under specific conditions is more likely to produce political involvement or depoliticization (processual phenomena themselves). An in-depth study of the mobilization process (or protest campaign) contributes then in understanding specific dynamics involving expertise in contentious politics, while allowing to detect the typology of expert-actors participating and how they interact with other actors.

As said, studying the peculiar relation between expertise and political activism introduces necessarily the issue of potential expert-activist organizations and their specific cultures. For «culture» I define a set of values and beliefs concerning the way of practicing a profession that can have an orientation toward public engagement. In Italy in the 1970s, *Medicina Democratica*, or *Geologia Democratica* were specific groups that sought to link expert knowledge with

political intervention (Diani, 1988; Centemeri, 2009). This two similar groups proposed a distinct form of politicization of scientific activity that was directed both to specific political campaigns (like the construction of local public health units) and to alternative ways of practicing their respective scientific disciplines in academia (e.g., criticizing the connection between the university and private business, the conflict of interests among scientists, and so on). Similar dynamics refer exactly to what I try to define as an *expert-activist*, which links the engagement on a single issue (e.g., the contestation of illnesses on the workplace, polluting plants etc.) with a general way of conceiving scientific practice in other places like academia or professional associations.

5. Putting Mobilizations in Their Place

The case studies explored in this work shed new light on the role of expertise in contentious politics. The paired comparison of two localities – investigating potential variations between opaque and clear technological factors – founds its analysis on 4 different protest campaigns. So conceived, a protest campaign against an infrastructure project is a process where a variety of groups mobilizing on a common issue (challengers) are subjected to internal dynamics of interaction and coordination while being involved in a conflict with external actors (powerholders).

A protest campaign has necessarily a processual and always shifting definition, since the challengers constantly negotiate their internal composition, modify their alliances and tactics, this ultimately depending also on enclosure or openness showed by the powerholders. As will be shown in the relative case studies, the most common form of mobilization is the citizens committee composed that coordinate from spontaneous groups of citizens directly concerned by the negatives of the project to environmental associations with different levels of organization and with various associational cultures. In this sense, local citizens, squats, conservationist associations, scientific associations, political ecologists merge together into a collective actor that coordinates its actions but often have different positions on the technical alternatives or the tactics to adopt.

Although the paired comparison focuses specifically on Florence and Venice, the main cities of two of the most dynamic Italian regions, with a similar political-economic structure, the common context in which protest campaigns against infrastructural takes place is the Italian

political system in the 2000s. Specifically, the law «Legge Obiettivo» approved in 2001⁸ by the Berlusconi government concerning the definition and (de)regulation of the national strategic infrastructures is the main factor triggering local protests. Two are the aspects contained in the law that favors a deregulated and opaque management of infrastructure projects: 1) the absence of a justification (or even a self-definition) of what is strategic; 2) the creation of the «general contractor», or the abolition of external institutions controlling private enterprise. This system of procurement initiated in 2001 is the cause of the proliferation of new projects and infrastructure developments or the cause of acceleration of procedures of old latent and incomplete projects. To be specific, the law will be abolished in 2016 with the new code of public procurement,⁹ after the national Anti-corruption authority defined the «Legge Obiettivo» as «criminogenic». In this sense, every local case is at the same time very peculiar and finally singular – and various mechanisms refer to micro-dynamics at the local level – as well as part of this broader picture consisting of the Italian political system of the 2000, a case of enclosure toward the adoption of tools of deliberative democracy, in a moment in which at the European level, not only the European Union, but also States like France, Germany, Spain introduced new instruments to deal with local democracy. Moreover, all the four cases of protest campaign have developed over decades and therefore can be analyzed in terms of cycles of protest, with new and old actors entering or exiting the mobilization process. This is a temporal dimension that add further complexity to the analysis of an already complex and uncertain field; namely, that concerning protests characterized by the resort to highly technical arguments. As for the mobilization processes, the borders defining the temporal extension of an infrastructural project, its procedures and realization are already difficult to define for the political proponents, let alone sociologists or political scientists.

The idea for this research project started in 2011. Seven years of research are an important amount of time to be dedicated to such a complex and challenging topic. However, I'd be very naive or presumptuous not to be since the beginning aware that my personal intellectual activity will never be able to come out with something that has not been already thought by groups of activists, experts associations or citizens in the midst of pursuing their engagement in thinking and mobilizing, elaborating strategies and investigating alternatives in what are, finally, sustained collective action processes developing over decades.

⁸ <http://www.camera.it/parlam/leggi/014431.htm>

⁹ https://www.codiceappalti.it/documenti/CodiceAppalti.it_Ultimo_aggiornamento.pdf

CHAPTER 1

Grassroots Expertise and Local Environmental Mobilizations Case Selection, Data Availability and Its Biases

1. Definition of Local Environmental Mobilizations

As was detailed in the previous chapter, expertise and politics are intertwined at various degrees of institutionalization, from public administration and structured civil society organizations through to citizen committees and social movements. This research focuses on the most spontaneous level of mobilization of expertise: local, grassroots mobilization. Local environmental mobilizations allow us to investigate how expertise and politics are entangled at a specific grassroots level, where loose networks of informal relations mobilize at the level of the city or the neighborhood. In the broader spectrum of civil society actors, the use of credentialed expertise is also a constitutive feature of structured environmental organizations, and one of the main motives of the so-called “scientific environmentalism”, in which protest campaigns are ideally based on credible evidence and alternatives.¹⁰ Expertise is conceived in this context as the activity of scientific committees where experts have an explicit membership, thus following logics of scientific division and production that are similar to ordinary academic or research institutions (Rüdiger, 2000). Moreover, the discourse of campaigns founded on “scientific evidence” reproduces a technocratic view of the use of expert knowledge that is similar to the paternalistic model of the public understanding of science (Bucchi, 2010).

While focusing on local environmental mobilizations, I investigate quite spontaneous processes of aggregation of political demands in the forms of social movement networks mobilizing at the level of the neighborhood or the city (Della Porta & Andretta, 2001). Focusing on localities that have displayed a high level of sustained, episodic environmental contention could be advisable for various reasons. Relevant interactions between social actors involved in political activism often take place in territorially limited communities (Diani, 2015). The communitarian level of local politics is indeed a good vantage point, since it allows us to assess direct interactions among citizens, activists, civil society associations and the political power. This «reduction of scale» (Revel et al., 1996) allows us to investigate, through direct observation, the properties and motivations of the actors composing the mobilization processes, while

¹⁰ <http://www.legambiente.it/legambiente/perch%C3%A9-un-ambientalismo-scientifico>

collecting a variety and richness of ethnographic data that help in testing the main hypothesis as well as improving the accuracy of the explanations.

The first problem that research on local environmental mobilizations is confronted with, is the absence of structured and accurate datasets which justify a typology of «representative and thus generalizable» cases (Klinenberg, 2002). The fragmented and dynamic universe of loose episodes of conflict concerning industrial plants, infrastructure projects is indeed difficult to define. The case selection process is therefore oriented in this research by a logic of “relevance” that first tries to get a detailed description of a situation before “[stating] that a particular process, phenomenon, mechanism, tendency, type, relationship, dynamic or practice exists” (Lofland & Lofland, 1995). Indeed, before stating clear a priori hypothesis, an empirical observation of the complex dynamics operating in the process of construction of a protest campaign need to be conducted.

According to the existing evidences in the contentious politics literature (Della Porta et al., 2004; Della Porta & Rucht, 2002), a «local environmental mobilization» can be defined as a protest campaign on a locally defined territorial scale characterized by a spontaneous network of citizens involved in a political conflict for the protection of the community from environmentally impacting changes. From this basic analytical distinction, it is possible therefore to identify the phenomena with a universe of observation.

The criteria of relevance need also to be defined. The concept of relevance can include some structural conditions, like the strategic importance or the high impact of infrastructure, the amount of population affected by potential damage and, finally, the high level of social capital providing resources for the mobilization, as the partial theory of resource mobilization suggests (Zald & McCarthy, 1977). But a relevant local environmental mobilization can also be the outcome of the framing ability of movement participants to create a publicly resonant movement that attracts resources and external consent, legitimizing it at a broader level a local mobilization (Snow & Benford, 1988). Definitions based on the capacity of social capital to create relevant mobilization can also be tricky. The presence of social networks, the density of social relations, communitarian ties and social capital are indeed not only a preexisting condition but also one of the main outcomes of social movements and mobilization processes (Diani et al., 2001).

These aspects introduce the importance of an exploratory phase. The complexity of case selection in social movement research always entails a compromise between a preliminary design and serendipity (Bob, 2005). This study develops from an “informed theoretical

agnosticism” based on abduction (Tavory & Timmermans, 2015), a research process that far from being linear, keeps a strong mutual connection among data gathering, data analysis and concept building (Blaikie, 2000). The principles of abduction in social research can be summarized in “an inferential creative process of producing new hypothesis and theories based on surprising research evidences” (Tavory & Timmermans, 2012). The following paragraphs describe the selection of cases, elaborated sequentially through the triangulation of sources such as: 1) the existing literature on environmental mobilizations; 2) media analysis of the most publicly visible and debated contentious episodes, and; 3) preliminary interviews with a few key activists and experts in the Italian environmentalist scene. Through a multi-site ethnography this research provides new data on specific cases that shed light on the broader dynamics of expertise in mobilization processes.

2. Data Sources and Case Selection

Together with the analysis of the relevant literature in history and social sciences concerning environmental movements and mobilizations (Biorcio, 1992; Corti, 2013; Diani, 1988; Della Porta & Diani, 2004; Della Porta & Piazza, 2008; Nebbia, 2014), three types of sources help defining the relevance of cases:

- 1) online datasets produced by think tanks close to entrepreneurial actors and proponents of the contested projects (specific think tanks like Nimbyforum, or websites of the main enterprises involved in infrastructure works in Italy),
- 2) interviews with relevant actors within environmental movements, activists, organizational leaders as well as maps, documents and websites produced by movements organizations and local citizen committees,
- 3) the emergence of specific cases of local environmental contention reported on the national mainstream media (like *La Repubblica* or *La Stampa*),¹¹ as well as more

¹¹ The choice of these two newspapers is linked to the accuracy of their online archives. *La Repubblica*, a traditional, mainstream, center-left daily newspaper has an open access, online archive for news both at the national and at some local levels. Its dataset has been also traditionally used for social movement research on protest media coverage (Diani & Della Porta, 2004). When I started this exploratory analysis, the platform “LexisNexis”—which gathers daily news from world-wide press—allowed me to consult the coverage of the Italian newspapers *Il Corriere Della Sera* and *La Stampa*. The dataset of the articles appeared in *La Stampa* starts from 1992 and is useful to gather information at an important moment for the emergence of a new wave of environmental mobilizations. Indeed, the end of the 1980s are considered by the literature in social sciences as the peak for the environmental mobilizations in the Western European countries (Biorcio, 1992). Being the dataset of

critical national media (newspapers interested in reporting and giving voice to movements activities like the daily newspaper *Il Manifesto*, *Il Fatto Quotidiano* or the monthly journal *Altreconomia*).¹²

While an activist dataset has the problem of being mainly conceived for practical purposes (to coordinate collective action, to keep channels of communication across different similar local mobilizations and to citizens), think-tank maps and datasets are financed by entrepreneurial actors that are—in most cases—also stakeholders in infrastructure businesses. They therefore often explicitly declare in their mission and goals the aim of mapping conflicts also for practical purposes, like lobbying in the public sphere and at the political level.

It is the case of a national dataset mapping local opposition to infrastructure projects called “Nimbyforum” (<http://www.nimbyforum.it>).¹³ Recently conceived to “pinpoint the most efficient interactive methodologies across different stakeholders to manage and reduce the phenomenon of territorial and environmental oppositions and the Nimby Syndrome”,¹⁴ the dataset is conceived to map and reduce what is considered a sign of a deficit of civic culture.

In 2014, the map shows 355 contested examples of infrastructure all around Italy. Local conflicts are concentrated in the Center–North regions: Lombardia, with 62 examples of contestation, is the most conflictual case, followed by Veneto (47), Toscana (38) and Emilia-Romagna (28).¹⁵ It is worth noting how these maps are well known as well as contested by

Il Corriere Della Sera only available from 2007, it was considered too recent and then not used for a further selection of environmental conflicts.

¹² *Il Manifesto* and *Il Fatto Quotidiano* (also known as *Il Fatto*) are considered two nation-wide alternative daily newspapers. While *Il Manifesto* frequently reports at the national level documents or interventions concerning emerging social movements that are not normally covered by other mainstream media, the more recent *Il Fatto* gives explicit coverage to groups mobilizing at the local level as well as recruiting some activists as collaborators on specific issues like justice, environment, civil rights. Particularly the online version of the newspaper gives special visibility to activists, critical experts or movements organizations. The recently founded monthly journal *Altreconomia. Mensile di informazione indipendente su economie solidali, diritti, nuovi stili di vita* (1999) is an interface where activists and researchers publish critical inquiries on a variety of social issues and so giving spaces to alternative forms of economy and consumerism, social and civil rights as well as the environment. Not only it gives a coverage to local mobilizations and campaigns, but together with the associations and citizens organizations that mobilized, it played a very important role in some national campaigns like the referendum on water in 2011 (Cernison, 2014).

¹³ In fact, the supporters of the Nimbyforum are the same business groups and promoters of many of the concerned infrastructure projects (Enel, Transadriatic Pipeline, Edison, Falck, Actelios–Gruppo Falck, Alpiq, Amiu, Amsa, Associazione Consumatori Utenti, Assoelettrica, Autorità per l'energia elettrica e il gas, Autostrade per l'Italia, Banco Popolare dell'Emilia Romagna, Buzzi Unicem, C.m.c., Conai, Edison, Enia, E.On, Federambiente, Ferrovie dello Stato, Gruppo Hera, Gruppo Italgas, Impregilo, Sei, Siemens, Sogin, Teseco, TRM, Waste Italia, Wisco).

¹⁴ <http://www.arisweb.org/i-progetti/nimby-forum>.

¹⁵ Dataset available at <http://www.nimbyforum.it/area-stampa/comunicati>.

activists, citizen committees and civil society organizations. As I had the chance to discover while introducing myself and my research before contacting or directly interviewing activists and members of citizen committees—in some cases finding myself suspected of being a member of the dataset—the “Nimbyforum” reproduces the political discourse of the same stakeholders lobbying in those economic and infrastructure sectors contested by the committees. The aim here is to delegitimize “local opposition” through use of a normative negative frame: democratic deficit and egoism.¹⁶ Furthermore, the map looks somehow incomplete and, in many cases, local mobilizations that are relevant on other levels—the media—do not appear in it. This is probably due to the common difficulties in gathering data on such a loose and fragmented phenomenon. Finally, such explanations are problematic not only because they mobilize vague cultural and politically normative paradigms concerning a national civic deficit but also because they consider local conflicts as atomistic phenomena. This analysis avoids, in this way, to discuss further basic conditions and variables traditionally investigated by the contentious politics literature (Della Porta & Diani, 2006) as well as by the theoretical toolkits elaborated by the sociology of technology (Law, 1991). Specifically, it must consider:

- 1) *The type of technology*, or the diverse typology of infrastructure and its different costs/benefits relations—in terms of environmental risks or economic opportunity—explaining a consequent variety of grievances (e.g. Biogas plants produce different types of conflicts with specific frames and claims and finally mobilize different actors when compared with, say, high-speed trains or waste-incinerators);
- 2) *The openness/enclosure of the local political system*, with the presence of institutional participatory tools (public debates, consensus conference, citizens juries etc.) to discuss environmentally *consequential* projects and channeling conflict or triggering specific dynamics of mobilization;
- 3) *Local social capital*, or the presence of specific civil society associations and organizations, with specific traditions or identities that can contribute in shaping political participation and the rise of collective action with different levels of formality, political *alliances* and repertoires of action.

¹⁶ Another source of contestation is that some members of national structured environmental organizations are parts of the scientific committee of the “Nimbyforum” project <http://www.ilfattoquotidiano.it/2011/07/19/il-nimby-forum-se-lo-conosci-lo-eviti/146333/>
<http://www.ruralpini.it/Materiali09.12.13-Imbroglia-ecologico-parte-IV.html>

Indeed, research on collective action and contentious politics generally agrees in explaining the rise of mobilizations with a combination of factors linking the density of social networks, political opportunities to achieve the goal, and resonant frames that motivate mobilization (Wright & Schaffer-Boudet, 2012). While the Nimbyforum dataset can suggest some important hypotheses concerning the concentration of conflictual infrastructure projects in the Center–North part of Italy, advanced fieldwork is necessary to understand the specific dynamics of mobilization, eventually according these areas major relevance. This can only be pursued through sequential, cumulative interviewing involving the comparison of different sites and actors.

The internet is nowadays a platform where data gathered by the media or in these datasets can be checked further. Using the new communication technologies, local communities affected by similar environmentally consequential projects have been increasingly able to build new and broader networks of reciprocal solidarity and resource exchange (Della Porta & al., 2004; Della Porta & Piazza, 2008). In this sense, not only can internet platforms and social media be used to gather data on movement initiatives but can also help broader civic groups mobilize around similar phenomena. In this regard, especially in the phase of case selection, the natural interactive nature of local mobilizations must be considered, especially regarding the influence that reciprocal exchanges exert on frames, discourses and strategies.

The interactive dimension denoting the local grassroots—their embeddedness in broader networks of activism or political groups—requires a relational perspective that does not conceive them as purely atomized and individual phenomena. “Islands in the Archipelago”, the Green metaphor used in the 1980s to describe the growing emergence of local collective action, proves to be in this context a pertinent tool to explain the contemporary forms of local environmental action (Diani, 1988). The attempt of local environmental actors is at the same time *specific*, aiming at focusing on the specific local problems and the communitarian level, and *general*, trying to understand the similarities of every local problem and its relationship with broader global processes without centralized structures and bureaucratized forms of membership and coordination. In this sense, this conception of the political practice among the recent environmental grassroots has been summarized and renewed by the “movement of the movements” of Seattle in 1999, as one of the strategies also for local collective action in a global age. For all these reasons, the most accurate way of approaching the study of local environmental mobilizations is *processual*, considering their dynamic change over time, and *interactive*; that is,

taking different shapes depending on the interactions with the political environment and its actors (Abbott, 2001; Tilly & Tarrow, 2008).

2.1. Local Environmental Mobilization Potential in Italy

Tuscany and Veneto are the two regions that shows the highest concentration of spontaneous citizen committees involved in local environmental mobilizations against infrastructure projects all along the first decades of the 2000s. Looking at the Nimbyforum dataset, the media analysis at the national level, more than other regions Tuscany and Veneto have been able to build sustained networks of local committees at a regional level. This was confirmed by the first round of interviews with national environmental activists. Indeed, instead of focusing on a specific source of environmental threat—like networks of citizens against incinerators, railway projects etc. —in both regions local activists have been able to coalesce into a common political platform, sustained in time, with a specific regional identity.

Although, it is impossible to find a unique explanatory condition behind this peculiarity, some aspects of the two regions are worth considering. Some trends are historically rooted in the development of the Italian environmental movements of the 1990s. The first attempt to create a new type of coordination of the local associations and groups involved in environmental and territorial politics dated back to 1981, with the creation of the green network called the “Green Archipelago” (Biorcio, 1992). One of the main representatives of the greens and lately founder of the Green party confirms how Veneto – and particularly Venice – played an important role in the rise of the political ecology groups, together with some other part of Italy like Trento, where the first congress of the green movements was hold in 1985 (Boato et al. 1982):

After Trento, Venice was also very important in the rise of the Greens [...] There was a moment in Veneto in the second half of the 1980s, beginning of the 1990s, when the Green party managed to achieve four regional councilors. In many parts, there were small green realities [...] this is the reason it is called the “Green Archipelago”. But in some small places also the experience of the Green University emerged [...] It was a sort of school, for cultural training with an ecological slant. They had two focal points: one was Venice [...] and the other one, a small village next to Ravenna, called Lugo di Romagna.¹⁷

¹⁷ Interview with national Green activist n.1.

While the historical presence of green networks cannot entirely explain the potential emergence of specific sustained local mobilizations, it can contribute to add an important condition like the presence of networks, traditions and practices conducive to the birth of new environmental mobilizations. Indeed, the Italian environmental movement emerged as a conversion of networks of New Left political activists of 1968, particularly strong in the two cities of Trento and Venice where the student movement played an important role. In particular, these indications are in line with the media analysis conducted by Della Porta and Diani (2004) that confirms how environmental protests in the North–East regions of Italy have had more local traits.

The city of Venice plays a prominent role not only in terms of historical concentration of associations and civil society groups but also for its political centrality at the regional level. The proximity with the Regional Council—where the political elites meet and deliberate—makes it easier for social movements and civil society groups to mobilize and directly reach the political headquarters. At the same time, it is easier for movements to attract media attention and to gain public visibility, therefore earning a status of “relevance”. The relevance of the Tuscan case was first introduced to me by one of the founder of the Green Archipelago and a historical Venetian environmental activist:

The only two big networks in Italy are in Veneto and in Tuscany. Everywhere else, they have never been able to create a real network. Even in other places there are some networks but not like those [in Veneto and Tuscany]. First, a problem must arise; after that can experts get across to locals the point about where the problem comes from and the fact that alternatives are possible [...]. Problems like the diffusion of cancer, water pollution, mines etc [...] and in Veneto there are lots of problems. Like in Lombardia. In Lombardia even more than in Veneto, but in Veneto there has been the capacity [...] to network.¹⁸

The perception of this environmental activist seems to confirm the hypothesis that has emerged from the various sources reporting a high level of local mobilization against different types of infrastructure projects in both regions. In other words, in the 2013 edition of the Nimbyforum dataset, Veneto is the second most vibrant region followed by Toscana.

However, the data in the forum dataset is not corroborated by what we know from activists and media reporting from the region. Interviews and further media analysis found no evidence of

¹⁸ Interview with national Green activist n.2

these kinds of platforms in the region of Lombardia.

Just a few articles report sporadic attempts—an assembly and some petitions—to create a regional network of committees in Lombardia,¹⁹ but no visible materials like websites with assembly reports or documents, nor a sustained regional debate triggered by local groups, nor any presence of a cycle of common and visible protest events can be found. An assembly in 2008 was sponsored by a leader–intellectual of the Tuscan network, but this can only confirm the importance of the Tuscan experience rather than the real importance or existence of a similar sustained phenomenon in Lombardia.²⁰ Assessing with stronger evidence the reasons for the rise of local environmental mobilizations in these two regions would exceed the scope of this research. These conditions already suggest the relevance of research that focuses on the Tuscan and Venetian universe of local mobilizations.

2.2. Regional Similarity and Variation between Tuscany and Veneto

One of the most visible platform gathering networks of local committees mobilizing on environmental issues emerged around 2007 in Tuscany.²¹ The local environmental mobilizations in Tuscany were also able to achieve broader national media coverage, with some attempts from some leaders-intellectuals like Alberto Asor Rosa²² to frame this wave of collective

¹⁹ See also the articles <http://www.alternainsieme.net/giugno%202008/sal222.pdf> and <http://archivio.eddyburg.it/article/articleview/11437/0/117/>. These detail the 114 local committees attempting to create a new regional network that are sponsored by one of the main leader–intellectuals of the Tuscan network, which is considered as a paradigm for the coordination of local environmental committees. However, apart from these few articles there is no source—not even at an upper level, such as national alternative or mainstream media—to locate the existence of a coordinated platform.

²⁰ Among the participants of the meetings trying to build a regional network in Lombardia, important leaders of environmental campaigns at the national level were present. Some members of the association “Salviamo il Paesaggio”—focused on environmental preservation and struggles against soil erosion at the local level—launched an important platform that started from a small municipality in Lombardia, Cassinetta di Lugagnano, next to Milan. This later spread all around the Italian municipalities. It is reasonable to think that the level of coordination and organization reached at the national level probably could have aroused the interest and the resources in this broader platform rather than in another regional network.

²¹ <http://www.territorialmente.it/>

²² Asor Rosa, a public intellectual and Emeritus Professor of the Theory of Literature at the University La Sapienza in Rome, is indeed one of the main founders of the Tuscan Network of the Committees. Publicly known for his original neo-Marxist interpretation of the role of men of letters and critical popular education in the 1970s, his intellectual inclination saw him drawn to New Left groups linked to specific vanguard and critical political journals like “Quaderni Rossi”, “Contropiano” and “Classe Operaia”. Adopting initially a critical perspective toward Gramsci’s historicism in the Communist Party and the recognition of the centrality of the working class, his engagement moved rapidly to more disenchanted views regarding the masses and bourgeois culture but without losing an engagement with the main formations of the Left in the public debate. His late phase indeed is

environmental action with the term “new environmentalism” (Asor Rosa, 2007; Agostini, 2015).

The novelty of this wave of collective action consisted in five dimensions. Specifically, it was:

- 1) *Definite*, with local goals, even though linked to a broader awareness of the problem,
- 2) *Proactive*, with actors mobilizing with technically qualified alternatives,
- 3) radically non-violent,
- 4) *Rooted at the local level*, with bottom-up forms of organizations, independent from political parties or interest groups,
- 5) *Neither pro nor anti-State*, proposing instead *less State* (i.e. fewer profit- and lobby-oriented actors), but *more State* in terms of legal control, with a long-term verification of the costs and benefits of the projects.

After a *statu nascenti* that gathered spontaneously hundreds of committees and launched some assemblies in 2007, the Tuscan committees formalized the birth of a “Tuscan Network of Committees” and organized periodical meetings to discuss territorial problems all over the region.

nowadays specifically oriented toward a reconciliation of the values and ideals of the Left with those of environmentalism. However, his engagement in localized and environmental mobilizations in Tuscany is linked also to a specific motivation. Known to spend his holidays in his country house in Monticchiello, near Siena, Asor Rosa was personally affected by a project of housing speculation in this locality in the middle of the 2000s, that brought him to deepen this local conflict and to study its more general implications. Asor Rosa was indeed not the only intellectual, speaking of the Tuscan case, to employ the term “new environmentalism” in the pages of the national newspaper *La Repubblica* in 2007. His status and reputation among the leaders of the Left Parties—and among them, the heirs of the PCI in the PD ruling Tuscany—was indeed a component that gave the citizen committees further credibility and a resource to access further channels of communication and negotiation.

Table 1.1. Composition of the Tuscan Network of Committees

City	N° Committees and Associations			Total Participants	Active Participants	Average Age
	2009	2008	2007			
Arezzo	7	6	5	240	64	40<50
Firenze	67	61	51	8721	603	>50
Grosseto	16	14	13	3285	311	45<60
Livorno	10	6	2	306	63	50
Massa	6	4	4	1265	75	<40
Pisa	10	7	6	257	83	50
Pistoia	2	2	2	145	35	>50
Prato	7	6	6	430	111	50
Siena	23	22	19	1194	242	>45
Lucca	8	7	5	975	95	>45
Altri	10	3	1			
Totale	166	138	114	16818	1682	

Source: The Tuscan Network of Committees, <http://www.territorialmente.it/chi-siamo/> Greppi (2009)

As it is visible from this table—produced by the members of the Tuscan network—the number of spontaneous citizen committees and environmental associations involved grew from 114 in 2007 to 166 in 2009 (+45%).²³ At a first look, Florence—the political and economic center of Tuscany—shows the highest rates of concentration of citizen committees. Numbering 51 in 2007, they rose to 67 in 2009 (+31%). As has been assessed in other research, political participation proves to be here a characteristic of the political center rather than the political periphery (Della Porta & Andretta, 2001).

There is also evidence that the Tuscan case played a role in diffusing all around Italy the need to organize fragmented local environmental grievances into a new regional platform. In fact, inspired by the Tuscan case, Venetian activists tried to create a similar political initiative.

²³ Placing the fluid organizational form that characterizes citizens' committees in the same box as environmental associations is a move open to criticism. However, these data have been conceived by the same activists for practical use rather to aid sociological explanation. The outcomes can in the end tell us something about the sites where collective action took place by showing the higher density of environmental mobilization and the relative centrality of the organizations.

Linked to some Tuscan activists from previous professional and political networks – the common participation to alternative Left formations at the national level, and particularly the common membership to associations of urban planners and architects – some Venetian activists met in the city of Vicenza at the “Festambiente”—a local festival organized by the Legambiente in 2011—to criticize the Regional Territorial Planning, to try to constitute a regional network of local environmental committees.²⁴ A further coordination of the local environmental committees was tempted on 30 November 2013 after a huge demonstration against the regional territorial and infrastructure policies in Venice²⁵. Finally, two main assemblies organized on November 2014 and January 2015 in Padua at the catholic and eco-pacifist association «Beati Costruttori di Pace» gathered almost 200 citizen committees and associations engaged in local environmental mobilizations.²⁶

2.3. Structural Patterns of Local Mobilizations: Socio-Economic Similarity and Subcultural Variation of the Two Regions

Some sociological aspects can help us understanding the similarities and variations between these two regions. The two consistently vary in terms of traditional political subcultures. Located

²⁴ See, «Toward a network of committees for the defense of the territory», Vicenza, 27 June 2011, <http://archivio.eddyburg.it/article/articleview/13412/0/408/>.

²⁵See «A common platform of the associations for the demonstration in Venice», in «Eco-Magazine» <http://www.eco-magazine.info/comunicati-delle-associazioni/3497/piattaforma-comune-per-la-manifestazione-del-30-venezia.html>

²⁶ “Don Bizzotto rallied 200 local committees”, *Il Mattino*, Padova, 11 January 2015, <http://mattinopadova.gelocal.it/regione/2015/01/11/news/don-bizzotto-con-200-comitati-salviamo-il-veneto-1.10646710>; Documents of the Regional Network, VENETO n.2, Flier, Toward the Demonstration: No Big Infrastructure Works—No Soil Consumption. For Democracy, Public Goods, for the Right to Breath, Work, Live in Veneto, October 2013

Known for this long-last engagement on issues regarding peace, social justice and migrants’ rights, Don Albino Bizzotto is a catholic priest leading the national pacifist association «Beati Costruttori di Pace». Linked to a grassroots and dissident form of catholic activism, his charismatic role on social issues made of him one of the main reference of activism in Veneto, being able to coordinate an ideologically various spectrum of citizens organizations and activities. His radio «Radio Cooperativa» is one of the infrastructures that discuss daily problems linked to local politics, giving voices to solidarity initiatives linked to the «Beati Costruttori» and the voluntary sector. Even though his figure was central and well-known since the end of the 1980s – and particularly among the first wave of green activism and eco-pacifist – his «conversion» toward a radical reform in the relation between Man and Planet Earth is linked to both a personal intellectual elaboration – the interpretation of the Brazilian theologian Leonardo Boff – and the general renewal of the Catholic Church – with Pope Francis’ Encyclical Letter *Laudato Si*, explicitly facing the need for a global ecological conversion. However, his link with the grassroots activity of the eco-pacifist networks in Veneto was not only central in the mobilizations of pacifist groups voluntarily demonstrating on the war front in Sarajevo in the 1990s, but also in the more recent mass demonstrations against the extension of the U.S. military base Dal Molin in Vicenza in 2007.

in the affluent North-Eastern part of Italy, Veneto was always called the «white whale» for being characterized by a regional catholic subculture and a strong, long-lasting christian-democratic political culture. On the contrary, Tuscany has always been considered one of the main «red regions» of the Center of Italy with a long-lasting socialist tradition. Although at the level of political identity Veneto and Tuscany could represent two opposite cases, economists and sociologists have shown the similarity of their economic structure, where a set of small and medium enterprises diffused on the territory constitute the so called «business clusters» (Becattini, 2007; 2009; Trigilia, 1986). According to this literature, the main aspect of the «business cluster» is its embeddedness in the communitarian structure of the small cities and villages diffused on the territory, characterized by the presence of trust relationships and density of social capital.

Other research has integrated this evidence, while showing how organizational networks of civil society associations and processes of social and political mobilization have constituted the regional and political subcultures of the Center–North Italian regions where Tuscany and Veneto are located, therefore sharing similar organizational patterns beyond their opposite cultural roots (Cartocci, 2007; 2012). Although these territorial political subcultures have experienced all along the 1990s a critical juncture (Caciagli, 2009), with the most evident case of a new political actor like the “Lega Nord” in Veneto redefining the cultural forms of parts of this regional area in the 1990s, the associative structures of their civil society have resisted the crisis of traditional political representation and far from fading away, high levels of social capital still persist in both regions (Almagisti, 2009a). Furthermore, as previously stated, the absence in Veneto and Toscana of big metropolitan urban areas—like Milan or Rome—can explain the necessity of a further level of generalization that gives visibility and relevance to mobilizations. Milan and Rome are indeed characterized for the political centrality – presence of political parties and national non-governmental organizations headquarters – and the communication centrality – where the main national mass media have their studios. The smaller size of Venice and Florence – the two political centers of Veneto and Toscana – translates into a relatively underrepresentation in the main national media.

Partly, the issue of the political underrepresentation of the Northern-east part of Italy has massively emerged in the 1990s, giving rise to a strong political movement like the Lega Nord – that arrived to rule the Veneto in 2010. While the political claims of the Lega Nord were quite different on a various set of topics properly denoting the main environmental grassroots, its political discourse expresses few similar needs concerning local identity, territorial autonomy

from the State and supra-national institutions at a political and economic level (Diamanti, 1996).

In the Tuscan case, although the crisis of the traditional “red” subculture has not produced the rise of a new political formation, the traditional party in power—the Communist Party and its heirs, the *Partito Democratico della Sinistra* and nowadays the Partito Democratico —have consistently changed its traditional organizational structure within the region (Florida, 2010). Instead of creating conditions for a withdraw from politics, scholars in social movements studies have assessed how the crisis of party politics in Tuscany created new windows of opportunities for social mobilizations and new forms of political participation (Della Porta & Andretta, 2001).

Finally, the fact that Venice and Florence are relatively peripheral from the national political and media centers can also be linked to a greater resources disposal – activists, organizations – to be allocated on local collective action rather than on broader national campaigns. Although, the worldwide cultural prestige of both cities contributes in assigning a more general attention to their environmental problems, therefore attracting international media. The intervention of international institutions like UNESCO and the special status assigned to the cities contribute also in this sense. All this makes Florence and Venice two universes where “relevant” local environmental mobilizations take place. The next paragraphs illustrate the specific cases within the two units of analysis.

3. Local Environmental Mobilizations in Florence and Venice

As has been asserted, both the consultation of the dataset produced by think tanks, activists discourse and the media confirmed the centrality that Venice and Florence assume for the regional networks of local environmental mobilizations. The economic and political centrality, the density of social capital in terms of civil society organizations, associations and committees explain the relevance that environmental conflicts assume in these two urban areas. Furthermore, the proximity with the local governments and the regional sections of political parties make the resource exchange between some institutional actors and the activists involved in citizen committees easier.

In the empirical chapters dedicated to both cases I aim at shedding light on the particular links among these types of committees and associations as well as other forms of organizations mobilizing on similar issues. On-line visible platforms with documents and video materials

concerning the campaigns related to the two regional networks²⁷ constitute important archives to detect actors, issues, claims and discourses. The choice to concentrate the research on the two centers is due mainly to two factors. First of all, to get a detailed picture of all the local conflicts – almost 166 in Tuscany in 2009²⁸ and apparently with a similar amount in Veneto around 2011²⁹ – belonging to such highly loose, fragmented and dynamic phenomena like the Regional Networks necessitate an entire research team that exceed the resource disposal of this project. Complexity and impossibility to entirely govern the process is already a problem regarding the activity of the committees themselves, before the activity of the researcher, as the founder of the Venetian Network suggests:

The problem of the environmental committees is that, if they are practical, facing concrete issues, they are overburdened with work. It is impossible to think a coordination where everybody makes everything all together. Therefore the only solution is trying to gather few common political moments where to build some common demonstrations, some collective expressions but then putting on-line all the activities that the single committees do³⁰

At the same time, the existence of networks of activists that cooperate on similar issues and goals means in practice that resources like expertise, information and strategies are relatively coordinated, furnishing a reciprocal assistance – although coordination could sometimes produce tensions across different levels – and finally contributing to create a certain homogeneity of discourses and claims. However, a further element is worth mentioning. While conflicts in Florence or Venice arrive directly to the regional political headquarters and media, it seems that the infrastructure of the «regional network» is mainly used by peripheral committees as a resource to gain visibility. As one of the key member of the scientific committee of the Tuscan Network of committees describes:

The Network [the Tuscan network of the committees] has a higher recognition from more peripheral committees. The Florentine citizen committees do not

²⁷ For the Tuscan case: <http://www.territorialmente.it/>. For the Venetian case:

<http://comitativeneto.altervista.org/wiki/index.php?title=Comitati>

²⁸ See Tab.1 p.12, or <http://www.territorialmente.it/chisiamo/> and <http://comitativeneto.altervista.org/wiki/index.php?title=Comitati>

²⁹ <http://mattinopadova.gelocal.it/regione/2015/01/11/news/don-bizzotto-con-200-comitati-salviamo-il-veneto-1.10646710>.

³⁰ Interview with Don Albino Bizzotto founder of the Venetian Network of Committees for the Defense of the Territory, Interview n.2, VENETO

recognize at the same level the authority or prestige of the Network. [...] In my opinion it is a territorial issue. The more the kilometers, the more the authority of the Network. In Florence, to speak frankly, if you place a banner most likely you're on the newspaper. You don't need to be supported by a further structure. On the contrary, those mobilizing against the highway Tirrenica or the wind plants in Maremma, as well as the committees in the Apuane Alps they refer to the Network to get a recognition. Let's say, for a committee to exist is necessary to be recognized by the media. It is a bit like this, it is sad to say, I know, but it is like this.³¹

Therefore, the function of coordination carried out by both the Venetian and the Tuscan Network reduces the asymmetries in the opportunities to mobilize, which would alternatively see the peripheral localities suffering from media underrepresentation and lack of resources. In this sense, the role of equalizer played by the Regional Networks suggests that there is a substantial homogeneity in terms of resources and claims between the most peripheral and the most central cases. These aspects, limited time and resources, and the similar dynamics affecting the regional cases, push me toward the study of the center – Florence and Venice – where conflicts assume a further relevance and centrality.

4. Technology and Politics between Opacity and Clarity

The four cases selected—the MOSE and the Cruise Ships in Venice, the Tunnel Tav and the waste incinerator in Florence—are emblematic of the political conflicts surrounding infrastructures in the two regions but they can easily provide insights for the Italian case in general. Their relevance gives the opportunity to analyze the problem of expertise in key contentious contexts.

The problem of expertise entails in fact immediately the specific problems that technological innovation poses to democracy. A comparison among different categories of technological opacity and clarity helps explaining the difficulties that democratic criteria like transparency and accountability face in different contexts. As has been introduced in the Introduction, technological opacity is frequently an assemblage between some structural (exceptionality of the technology, abstraction of its implications) and agentic factors (a political

³¹ Interview with activist of the Tuscan Network, n.1.

exploitation of technical jargons and uncertainty). Beyond the technicalities, it should be evident that big infrastructures are first of all object of contention because they imply political and economic interests. Therefore, an opaque political space inhibits criteria of democratic transparency and economic accountability, opening opportunities for hidden transactions and corrupt practices, as the literature clearly explain (Della Porta & Vannucci, 1994).

The MOSE, a system of row of mobile gates to prevent Venice from the *exceptional* high waters is one of the most relevant cases. The debate surrounding the infrastructure and the critiques that emerged against its realization are indeed a paradigmatic case of infrastructure policies in Italy. However, the technical difficulties to assess its utility and opportunity, the necessary uncertainty linked to its gigantic logic are highly connected to the political exceptionalism with which it has been approved and realized. In the classification of this research, the high abstraction of its economic and environmental negatives makes of the MOSE a case of extreme opacity, therefore presenting a further obstacle for the opponents to mobilize. The debate on the historical and natural definition of the Venetian Lagoon, the risks for its survival as well as for its peculiar flora proves to be difficult to reach a broader general citizens consensus. Moreover, the abstraction of the engineering aspect makes of qualified experts an important category to shape the legitimacy of specific critical positions. The analysis of the reciprocal interaction between activists and experts aims to show how these two analytical actors enters the arena and how they shape both the mobilization process and the debate at large.

Similar concerns are present in the Florentine case concerning the project of Tunnel-Tav. However, if some dynamics look similar to the MOSE case, like the opacity of many technological factors, the TAV has already some antecedents in other sites in Italy, like the Val Susa that contributes in giving the Florentine mobilization further resources like national experts on the issue and previous knowledge on similar cases. Therefore, the problematization of the TAV in Florence has a reference in other cases in Italy that can help overcoming the opacity, therefore reopening the controversy and relaunching a broader mobilization.

If the comparison of cases of opacity in both localities is studied in the first two empirical chapters, the following aims to test the dynamics of expertise mobilization in two cases of clarity.

In the mobilization against the cruise ships in Venice, the public impact of these «movable» infrastructures – their visibility – facilitates the spread of a consensus for critical actors mobilizing against their transit in the Lagoon. However, this positive condition for the development of a broader citizen mobilization is partly hampered by their shifting technological

features – the always new models of cruise ships entering the Lagoon – and also by the variety of technical alternatives proposed by the citizen committees that produce multiple options, therefore facilitating fragmentation of collective action. In the case of cruise ships, the type of technical alternatives shows indeed also the possibilities and limits to trigger bottom-up processes of expertise mobilization, depending on cognitive and material costs associated to the enrollment of experts as well as on the elaboration of autonomous projects. The dimension of bottom-up alternatives is crucial in the mobilization against the project of waste incinerator in Florence, which in terms of extension of the mobilization is similar to the one against the cruise ships. Previous mobilizations on incinerators at the national and international level give indeed to the actors mobilizing a set of knowledge and resources (the intervention of international experts, the exemplary cases of international communities following the Zero Waste strategy) that in an enclosed political structure as the Florentine one extends the level of mobilization. The technological aspects defining the incinerator project (the problem of waste, the polluting emissions, the strategy of sorting wastes and the separate collection) allows us to translate the technological problem in clear social, economic and political implications, therefore facilitating a public translation and a broader consensus toward the alternatives.

The analytical variation attempted in this work tries to test the specific dynamics involving expertise in mobilizations against infrastructure projects in two localities. It links a traditional set of problems concerning collective action with the problem of political participation in arenas that have high cognitive demands and in which expertise assumes a crucial function that translates into political authority, therefore modifying the relations between who is deemed legitimate to speak and take decisions and who is not. The process-oriented approach explored the specific interactions between technological and political factors and how they transform the role of activism. The processes of reciprocal recruitment of activists, experts, citizens and political authorities happens in a context of technological complexity and cognitive uncertainty. In this sense, the phase of expertise construction and knowledge processes play a crucial role in political mobilizations that calls for a specific contextual analysis.

CHAPTER 2

Defending Venice and the Lagoon Expertise and Civil Society Mobilizations Against the MOSE Project

1. Introduction

Regarding our main hypothesis, the mobilization against the Experimental Electromechanical Module (*MOdulo Sperimentale Elettromeccanico*, MOSE) project—an system of mobile gates intended to protect the Venetian lagoon from the *exceptional* high tides of the Adriatic Sea—can be considered a negative case, or a case of unaccomplished technical democracy. Here, expertise was confined to an enclosed arena composed of professional politicians—either institutional representatives or long-term activists—and professional experts.

The MOSE has had a huge influence on the Italian debate on infrastructure since the 1990s. Its technological majesty and complexity has given rise to much controversy about its utility and its hazards, involving the main political actors at both local and national levels. Even though so much attention has been catalyzed, local movements and civil society actors have encountered great difficulties in opening a debate characterized by high cognitive demands and opaque political procedures. Although the critical actors mobilizing within Venetian civil society are highly resourced in terms of expertise, social capital and political alliances at the local level, they have faced huge problems cultivating a broader consensus among local citizens and in influencing the debate. In this case, I will analyze how the abstraction and uncertainty linked to the infrastructure project have inhibited the spread of collective action and favored a specific political enclosure. I start by exposing the different phases constituting the debate regarding the infrastructure, with the early critical claims coming from institutional actors. I then chart the rise of a critical citizens' movement opposing the MOSE. Finally, I detail why this case ended in a defeat of the oppositional front, in the form of an intervention by magistrates that in 2014 engulfed all the political and entrepreneurial actors within the Venetian Region.

2. The Project

The MOSE project—which ran from the 1980s, when it was first conceived, until 2010, saw the spread of a visible citizens' opposition from the 1990s, ending in 2010. The study of the mobilization against the infrastructure must take a long-term perspective, given that political approval and technical realization have evolved over extended periods of time and with alliances

and axes of opposition among both proponents and opponents shifting over time. —. In addition, over time there has been at different points great uncertainty regarding the risks and benefits of the project. Here, we can speak particularly of the abstraction and uncertainty linked to the technological design of the project—in terms of economic and environmental costs and opportunities—that has played a vital role in shrinking and expanding the space for critical mobilization, affecting its evolution and impacts over time.

The first full draft of the MOSE project was first conceived in 1988 with the aim of protecting Venice and the Venetian lagoon from *exceptional* “high tides” of the Adriatic Sea. The definition of *exceptional* introduced the first technical problem. The phenomenon of “high tides” is indeed the outcome of a complex interaction among several factors: astronomic, meteorological and oceanographic. Formally, a “high tide” is a function of the average sea level (*livello medio mare, LMM*) defined in 1897 as the healthy zero-point for the sea level (*Zero Mareografico di Punta della Salute, ZMPS*). A “high tide” is defined as 80 cm or more above the ZMPS (Fersuoch, 2014).

The reality that the Venetian natural environment and the cultural patrimony of the city was being exposed to growing natural risks—due to climate change and the industrialization process along the coast—was thrown into sharp relief with the great flood of 1966, the most consequential in Venetian history. Given its cultural importance and the uniqueness of its historical heritage, a special commission composed of representatives from the local and national level came together to find establish a legislative instrument to structure planning for the protection of the city, the so-called “Special Law for the Safeguard of Venice”, approved in 1973.³² The special legislation regulating any intervention regarding the protection of the Venetian lagoon was improved then with two more “Special Laws” during the 1980s, until the general guiding principles of “gradualism, experimentalism and reversibility” were introduced in 1982.³³ These events made the conservation of Venice and the Lagoon a problem of national interest. Since then, any project or intervention in the city or its surrounding environment has to be read within this context of intersecting national and international actors—as when UNESCO that declared Venice and its Lagoon patrimony of humanity in 1987.³⁴

The decision to use specific national funds to build the MOSE, a huge technological system of mobile gates, emerged finally under a mixed Center–left government with the

³² <https://www.regione.veneto.it/web/ambiente-e-territorio/legge-speciale>

³³ <http://www2.comune.venezia.it/mose-doc-prg/documenti/finale/4.%20PARTE%20I.DOC>

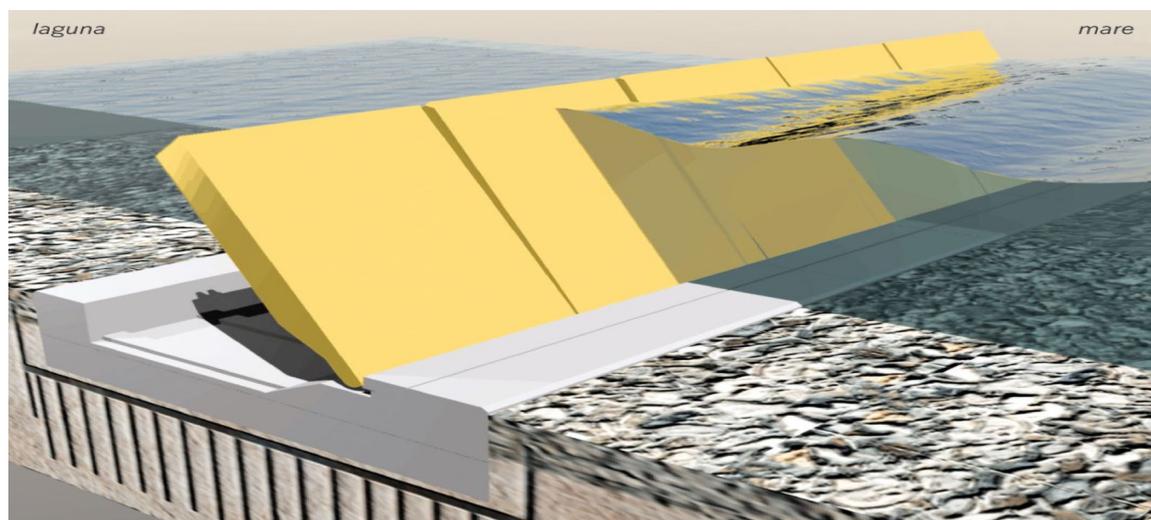
³⁴ <http://whc.unesco.org/fr/list/394/documents/>

Christian-Democrats in coalition with the Socialist Party. The acronym “MOSE” refers directly to the experimental electro-mechanical system but also metaphorically evokes the name of the biblical prophet MOSES, who in the book of Exodus passes through the Red Sea by dividing the water. In the public sphere, the prophetic metaphor highlights the epic character of modernity that large-scale infrastructure represents.

Figure 2.1 The MOSE, a system of mobile gates placed at the three different openings– Lido, Malamocco, Chioggia–between the lagoon (left) and the Adriatic Sea (right)



Figure 2.2 The core of the MOSE project is composed of mobile gates placed in the three openings to the Adriatic Sea that, when raised, can prevent tidal waters entering the lagoon and threatening to submerge Venice and the villages on the coast



2.1. The Political Environment

After almost 20 years of negotiation at the national and local levels, on 30 October 1988 a preliminary simulation of the MOSE was run in Venice, observed by representatives of the Center–Left government: Deputy Prime Minister Gianni De Michelis (Socialist Party, PSI), the minister for the State’s Shares, Carlo Fracanzani (Christian-Democratic Party, DC), and the Minister of Infrastructure, Enrico Ferri (Social-Democratic Party, PSD). While the representatives of the national government stressed the modernity and the technological excellence of this great piece of infrastructure, amplifying importance that it be completed, the local representatives of the municipality of Venice were unilaterally more prudent and somewhat skeptical concerning some of the technological details.³⁵ From the beginning, then, the project saw the emergence of a political cleavage between the upper tiers of government—the state and the region—and the municipality.

Within this context it is also important to note that right through the 1990s and the 2000s the administration of Venice was remarkably stable. Throughout this period, the city was governed by a moderate center–left majority. Here, the Greens—an important force opposing the MOSE—played an important role until 2000 when internal conflict saw the moderate elements sidelined and the party assume a more traditional radical Left posture.

Venice’s Leftist political coloring contrasts markedly with the center–right governing majority at the regional level. At both the regional and national levels, the alternation between center–left and center–right majorities hasn’t produced any difference or contrast concerning infrastructure policy. As other studies suggest, differences in the political ideology of national or regional governments have not produced any real variation as far as preparedness to acknowledge the critical stance raised at the local level is concerned (Caruso, 2015).

2.2. Technical Actors

Given the national interest in protecting Venice, a specific committee (*Comitatone*) composed of representatives and partisan experts from both the national and the local government has been set with the Law for the Safeguard of Venice in 1973, and with the specific aim at favoring a specific arena of consultation between the different political levels.³⁶ Following the evolution of

³⁵ *La Repubblica*, 4 November 1988.

³⁶ The composition of the *Comitatone* was then modified with the Law n. 798 of 29 November 1984, (in *Gazz. Uff.*, 3 December, n. 332). New interventions for the safeguard of Venice,

the controversy, the *Comitatone* is conceived as a special tool to improve the proximity between the political levels and to accelerate decision-making.³⁷

The execution of the technical studies assessing the MOSE project as well as its construction works were assigned to a consortium of enterprises called the *Conorzio Venezia Nuova* from 1984. The *Conorzio* was set up as a concession holder, selected by the Italian state through a public competition, to execute the project and to supervise the quality and regulatory compliance of its operations.³⁸

The size and complexity of the project has required coordination between multidisciplinary research teams from a variety of private and public enterprises. The first draft of the project presented in 1989 contained 3000 pages in 23 volumes of data, produced by the experts from Fiat engineering, CNR (Italy's national research center), Enea (the national agency for energy, technology and sustainable development), Enel (the national agency for electric energy), the Italian Ministry of the Environment, a consortium of the universities of Venice, Padua and Bologna and foreign research institutes from the United States, England, The Netherlands and Denmark.³⁹

It is then possible to affirm that the technological complexity and uncertainty of the project configured a vast and multiple set of expert fields. Moreover, the Italian political system at the end of the 1988—both at the national and at the local level—underwent a deep reconstruction. Therefore, we observe over time shifts in the make-up of proponents and opponents, depending from the interaction dynamics between the different political actors (parties, civil society actors and movements) and configurations (governments) at various levels (local, regional, national and transnational).

Since the beginning, the conflict around the MOSE has been indeed one of the most contested technological projects of the 2000s. To sustain a complex mobilization in time, citizen

http://www2.comune.venezia.it/casa/leggi/legges_ve_798_84.asp).

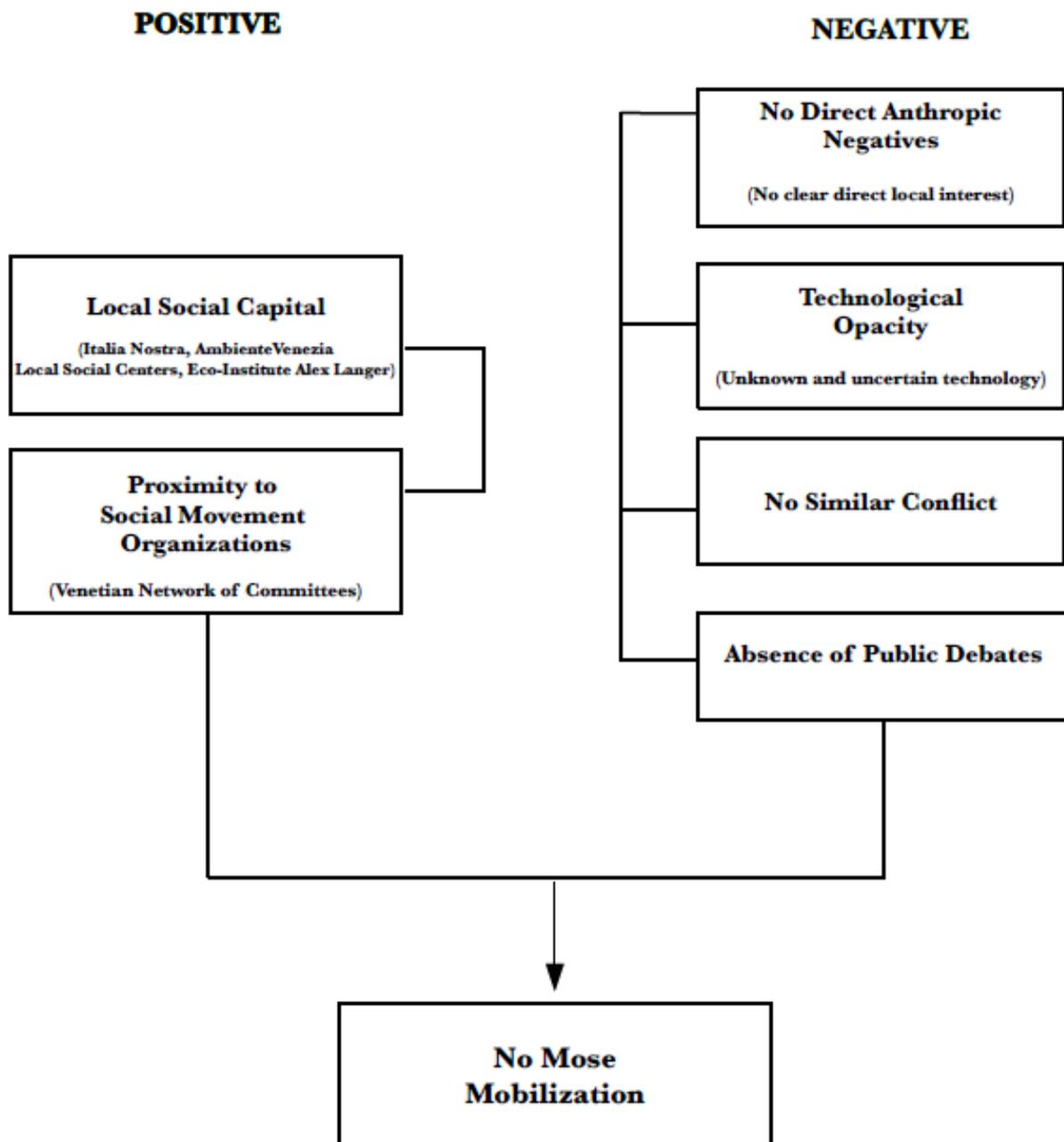
³⁷ The committee has thus an ambivalent function. Conceived as an additional arena to democratize the discussion and to include the local levels, in the making of the controversy it is progressively perceived by the municipality as a pro-MOSE tool that accelerates the procedures for its realization instead of implementing new evaluations and studies.

³⁸ In 1982, the first enterprises and firms involved in the construction of the MOSE were Italstrade, Grandi Lavori Fincosit, Società italiana per Condotte d'Acqua and Mazzi Impresa Generale di Costruzioni. Given the plurality and the complexity of works, the composition of the *Conorzio* changed in time and it adds also important actors involved in most of the important pieces of infrastructure in the region as well as in Italy, like the private «Fiat-Cogefar» - Impregilo, «Ing.E.Mantovani» and the public «Iri-Italstat» and Legacoop.

³⁹ *La Repubblica*, 29 September 1989.

movements and civil society actors have made wide use of expert knowledge. This chapter tried to assess if the technological opacity of the MOSE project affected the spread of citizen mobilization. To assess this general relationship, I will analyze how the “No-MOSE” citizen movement rose up and how the specific qualities of the mobilization (actors composition and resources) have affected the resort to expert knowledge.

Table 2.1 Factors of (Non) Mobilization Regarding the MOSE



3. Citizens, Experts and the Opposition to the MOSE

The long-term perspective—in which the MOSE has been studied, approved and realized—has not only had the effect of augmenting the uncertainty of its risks or benefits, but also to mitigate clear ideological positions, both in for and against. In the Venetian case, the linkages between political parties and broader civil society groups are worth considering, given the peculiar institutional success of the green movement at the end of the 1980s and its crisis at the end of the 2000s, a decisive period for the political discussion and mobilization concerning the MOSE.⁴⁰

On this time scale, it is useful to pinpoint different cycles and phases in which a critical front emerged and how it changed in relation to the political actors (allies as well as adversaries):

- 1) A first phase between 1988 and 2000 where the Greens were in government at the local and national level and in which the controversy concerning the opportunity to build the MOSE was limited to technical commissions and institutions, where the debate and its critics were seemingly confined;
- 2) A second phase between 2000 and 2006—including the critical moment of the main executive vote in 2003—where some changes at the local political levels saw the entrance of new critical actors and the emergence of a network of citizens' committee called the No MOSE Permanent Assembly.

After these two phases, which entailed a long and contested process of project discussion and approval, the mobilization entered a phase of latency in which both a firm bipartisan institutional will to realize the project and the entrance of new environmental issues at the local level (namely, the opposition to the cruise ships) inhibit the opportunity to launch a new phase of mobilization.

Finally, in 2013, the magistrates intervened, conducting a huge inquiry that drew the interest of the entire local economic and political establishment and was reported in all the main national newspapers. In 2014 the sentences against the main managers and directors of the *Consorzio Venezia Nuova*, the main enterprises involved, and part of the local political actors in government occupied the front pages of the Italian newspapers, where they were framed

⁴⁰ The trajectory of the Green Party at the national level—its rise and its decline—has many similarities with the Venetian case that experienced similar dynamics of internal conflict, due to the centrality that many of its local members had at the national level.

as a emblematic of a corrupt system.⁴¹

In a pun invoking a major event in Venetian folklore – the boat race called the Historical Regatta (*Regata Storica*) - the media ironically paraphrased the scandals surrounding the MOSE into the Historical Raid (*Retata Storica*) (Amadori, Andolfatto & Dianese, 2014).

3.1. Opening the Black Box: Technical, Institutional Politics and the Emergence of a Critical Stance

Since its inception, the MOSE has produced several fractures in the political forces, crossing ideological cleavages and producing friction between representatives within single parties at the national level, and those at the local level—particularly on the left.

Already in 1988, when the first general project was presented, critical voices emerged from the environmental organizations like the conservationists of *Italia Nostra* and the ecologist groups. However, critiques come also from representatives of small parties, such as the liberals of the *Partito dei Repubblicani* and from individual representatives in traditionally mainstream party like the Christian-Democrats.⁴² This chorus of different political forces criticizing the infrastructure project highlights how uncertainty shapes political conflict in a peculiar way. In the analysis of the MOSE mobilization, the usual emphasis on ideology—a tendency toward technological modernization or environmental protection—must be considered alongside territorial cleavage (local vs regional/national), seeing as a regional power was constantly allied with the national government. All along the process, the national government was indeed transversally in favor of the infrastructure, both during the center–right Berlusconi government and the two center–left ones led by Prodi.

In 1994 the city council (*Consiglio Comunale*) with a center–left majority⁴³ led by the

⁴¹ *a Repubblica*, 30 June 2014

⁴² *La Repubblica*, 4 November 1988.

⁴³ Between 1993 and 2000 the Center-Left majority at the municipality of Venice is composed by a coalition of political parties representing the new forces of the so called Italian «Second Republic», structured around a bipolar system with a majoritarian electoral system. The Center-Left coalition in Venice is composed by progressive post-Christian-Democrats (*Alleanza Democratica*), Post-Communist moderate Left (*Democratici di Sinistra*), New Communist Radical Left (*Partito della Rifondazione Comunista*), Green Party (*Verdi*). Concerning the last political force – the «Greens» - an important analytical distinction concerning their typical local political culture is worth noting. In Venice, the Green Lists and later the Green Party has shown one of the highest electoral scores in Italy: 4.44% in 1985; 10,85% reached in 1990; 6% in 1993; 8.13% in 1997; finally decreasing after 2000 (3.49%) and in 2005 (3.89%).

It is worth pointing how in 2000 an important change in terms of political culture characterized the Green movement at the national level (Interview with Green activist n.1). Entering in its institutional phase,

mayor Massimo Cacciari (1993–2000),⁴⁴ a member of the *Democratici di Sinistra* (DS), voted against the MOSE. The Green Party, the *Partito della Rifondazione Comunista* (PRC), half of the DS and parts of the opposition (the radical, right-wing *Lega Nord*) contributed to this negative vote. In line with the most technically detailed position on the MOSE—the one interpreted by the Greens—the mayor complained about the lack of resources dedicated to the ordinary maintenance of the city, while a huge amount of public finances were committed to studies and the construction of large-scale infrastructure.⁴⁵

The Greens emerged at this first stage as the most critical force, counting on its experienced experts with a double membership. In fact, some of their long-standing activists had important roles in local offices, such as the urban planning department responsible (*Assessorato Comunale*) as well as in the National Commission for Environmental Protection (*Valutazione Impatto Ambientale*, VIA). At this juncture, the Green Party was a fresh force in the political system, only entering office for the first time in 1993 (in Cacciari's administration in Venice); it would further assume a ministry at the national level under the Prodi government in 1996. This double membership is a point of strength for the elaboration of critical stance toward the MOSE but that at the same time can be easily seen as a point of weakness, since in the public debate the VIA Commission was accused of anti-modernist bias, conditioned by its socialization within Green political culture.⁴⁶

In this first phase of the debate, the main actors mobilizing against the MOSE were the traditional environmental organizations like the WWF and the local section of *Italia Nostra*. These groups highlighted the risks associated with the impact of the water gates separating the Venetian lagoon from the Adriatic Sea, which—it was argued—would transform the natural

the Greens became a party with a centralized direction in Rome, losing the informal structure of loose local networks of the Green lists. The Green Party decided to find a political space in the families of the radical Left and similar dynamics occurred in Veneto. The traditional liberal and pacifist culture of the Venetian green activists was replaced by a new generation of activists linked to the social squats and the radical Left of the Veneto («Corriere della Sera», 6 March 2000). In our analysis, these contextual details are necessary to distinguish different cultures and groups composing the mobilization, and also to understand conflictual dynamics crossing different actors participating in the citizens' mobilization against the MOSE.

⁴⁴ At the end of his first mandate as a mayor, Massimo Cacciari not only was an experienced member and deputy of the Communist Party (1976–83) – accused by the environmentalist for his pro-nuclear and pro-growth Marxist positions in the 1970s. From 1998 on, Cacciari was leading a movement with other local politicians, administrators and mayors (mainly linked to the center-Left parties like «DS» and «La Margherita») to improve the autonomy of the Italian municipalities and the local politics, the so called «Centocittà» movement.

⁴⁵ *La Repubblica*, 22 July 1998.

⁴⁶ *La Repubblica*, 26 November 1998

environment into a swamp and threaten biodiversity (the fish and the vegetation populating the lagoon). The discourse of *Italia Nostra* highlights the delicate cultural and artistic heritage of Venice, linking the issue of the environmental protection with the defense of the patrimony.

Already in 1998, in the public debate the MOSE was presented as large-scale infrastructure responding to the exigencies of modernization. The justification put forward for the huge national investment was not isolated but occurred within a larger general discourse associated with large-scale infrastructure projects all around Italy. As an example, the MOSE was compared with other infrastructure considered “strategic” for the country like the bridge over the Strait of Messina.⁴⁷ Moreover, the Venetian case was “elevated” more generally by the appointment of Paolo Costa as Minister for Public Works in the first Prodi government. Costa, a Venetian deputy elected in *La Margherita*,⁴⁸ was also former dean of the University Cà Foscari in Venice. His position in favor of the MOSE thus had an influence in strengthening the coalition of proponents.

On 11 December 1998, the VIA Commission rejected the MOSE project on grounds of environmental incompatibility.⁴⁹ VIA’s judgment was criticized on both sides of the aisle, at the national level from the center–left by the Minister for Public Works, and at the regional level with the President of the Veneto Region, Giancarlo Galan, representing a center–right political majority. Although the decision of the Commission was ratified by a legal decree signed by the Minister of the Environment (Edo Ronchi, Green Party) and the Minister of Culture (Giovanna Melandri, DS),⁵⁰ on 15 July 2000 the Regional Administrative Tribunal (TAV) accepted a judicial injunction granted to the Region of Veneto against the decree that formally impeded the executive procedure for the MOSE.⁵¹ The debate about the MOSE involved reciprocal attacks between political forces—with the Green accused of “fundamentalism”⁵² and a “Nimby Syndrome”,⁵³ while the *Consorzio* and the national government were accused of dubious exchanges and lobbying,⁵⁴ producing fissures within the individual parties. At the local level, the center–left DS was divided and its most important local leader—the mayor of Venice, Massimo

⁴⁷ *La Repubblica*, 14 October 1998

⁴⁸ A moderate, post-Christian-democratic political party, placed on the center-left, that was part of the national center-left governing coalitions of Romano Prodi in 1996–98 and 2006–08.

⁴⁹ *La Repubblica*, 11 December 1998.

⁵⁰ *La Repubblica*, 31 December 1998.

⁵¹ *La Repubblica*, 15 July 2000.

⁵² *La Repubblica*, 14 September 1998; 14 October 1998; 26 November 1998.

⁵³ *La Repubblica*, 9 November 1998.

⁵⁴ *La Repubblica*, 14 October 1998.

Cacciari—stood against the favorable position of the national government, including his colleague, the Minister for Public Works. Nevertheless, even though the political debate around the MOSE escalated in intensity, no real sustained episodes of protest or signs of citizen mobilization appeared. As an example, even after the mayoral election of Paolo Costa⁵⁵ on 10 September 2000, the WWF organized a demonstration flotilla crossing the city of Venice, with the participation of important national leaders—like the veteran environmental activist, Fulco Pratesi, the national spokesman of the Green Party, Giovanni Amendola, the Venetian senator, Davide Sarto, and the head of Venice’s department of cultural and environmental goods (*Sovrintendente ai beni culturali e ambientali*).

The demonstration denounced the environmental state of the Lagoon, the pollution produced by the petrochemical enterprises located near Porto Marghera, the phenomena of sea erosion modifying the lagoon sediments, as well as the lack of controls on fishing. Despite all these topics concerning natural protection, the MOSE was not explicitly mentioned as one of the main themes of the demonstration, as might have triggered tensions within the center–left system of alliances in government.⁵⁶

In this first phase of the debate, the grievances regarding the MOSE were confined to a heterogeneous political arena that crossed traditional political cleavages. The critical voices came primarily from institutional actors, mainly those linked to the Green Party, whose voice reached from the local to the national level. While the Green Party counted in its constituency many urban planners with positions at the University Institute for Architecture in Venice (IUAV), giving them resources to intervene with a competent opinion in the issue, in this phase there was also room for independent voices coming from the scientific world. At the end of 2001 some independent researchers from the University of Padua and the CNR presented an alternative

⁵⁵ While Mayor Cacciari emerged as an ally of the critical front opposing the MOSE, in April 2000 the center-left coalition in Venice decides to nominate as a candidate Paolo Costa, an economist and former dean of the local University Cà Foscari, member of the party *La Margherita*, former Minister for Public Works during the Prodi government and strong supporter of the infrastructure. Costa won in the second round of voting. He then formed a center-left coalition with the radical, leftist parties like *Rifondazione Comunista* (PRC), a new generation of the Green Party, linked to the antagonist area of the local social centers—the older generation of Green activists ran with an independent, eco-pacifist political formation called “Green Dove” (*Verdi Colomba*)—and finally a list gathering the volunteer and social work sector called “New City” (*Città Nuova*). In this regard, the political coalition led by Paolo Costa including also the radical left and the new Greens was a political experiment in Italy, an innovation seen also at the national level for the first time. However, locally this new alliance would prove tricky, producing several problems with the MOSE issue.

⁵⁶ *La Repubblica*, 10 September 2000.

project called ARCA (*Apparecchiature Rimovibili Contro l'Acqua Alta*⁵⁷) and sent the proposal to the *Consorzio Venezia Nuova*, but did not receive a reply.⁵⁸ Some local sections of environmental organizations like the WWF and *Italia Nostra* intervened with some public criticisms. However, this opposition did not give rise to publicly sustained visible protest or to real platforms like a network of citizen committees triggering more spontaneous and broader movement dynamics.

This was most likely related to the high uncertainty surrounding the project, which apparently accorded a major role to the advice of experts, be they private ones recruited by the proponents or public ones involved in the VIA commission. However, some events and political shifts around 2003–05 gave rise to a phase of contention, with grassroots environmentalists reopening an apparently technical and institutional debate. The next paragraph sheds light on the conditions producing these new dynamics.

3.2. Politics by Other Means: Citizens Opposition and the No MOSE Permanent Assembly

The citizen movement against the MOSE was composed of different levels of organizations—with different degrees of resources and structuration—interacting with each other and expressing a variety of political ideas and technical claims within the overall mobilization. Moreover, the entity of the mobilization itself changed depending on political events, which impacted relations with the local parties in government or in the opposition.

Initially few spontaneous and localized citizen committees, predominantly from the neighborhoods directly affected by the MOSE construction, mobilized with local environmental associations and with structured environmental organizations. However, some political changes produce their de-mobilization and give more centrality to associations linked to leftist organizations after 2003. The analysis of the interactions of different actors allows us to understand specific dynamics of the emergence of a critical front and the different use of expertise.

If the importance of MOSE exceeds the local context, attracting actors at the national level, the logic of its realization is linked to a specific bipartisan strategy, shared by center–left

⁵⁷ En. tr., “Removable Device Against High Water”.

⁵⁸ Cited in Document n. 1, Meeting Minute of the IV Commission at the Municipality of Venice about the ARCA project, 13 July 2005.

and center–right governments. Specifically, the approval of the so-called *Legge Obiettivo* in 2001,⁵⁹ while liberalizing infrastructure policies, excluded external controls on the projects elaborated by the proponents while also limiting the political procedures for their execution. The *Legge Obiettivo* immediately became the object of contestation among local movements all around Italy. This reorganization saw many projects—mostly highways and railways like the controversial Turin–Lyon TAV, but also mega-projects like the bridge over the Strait of Messina and the MOSE—accorded priority status, weakening both the power of the environmental commissions as well as the role of local communities in the decision-making process (Damonte, 2009; Bobbio, 2010).⁶⁰

The center–left majority in Venice led by the mayor Paolo Costa strongly favored the MOSE, in line with the center–right position on infrastructure of both the Berlusconi national government and the Galan regional government. Even if his internal allies on the Left, *Rifondazione Comunista* and the Green Party⁶¹ frequently criticized and opposed the MOSE during the sessions of the municipality council, in the end they did not stand against the final decision of Costa to approve the executive procedure of the project in December 2003.

At this point, the position of the mayor Costa was suspect. Indeed, the municipality council voted against the project, while the Greens and the radical Left introduced eleven critical revisions to the project that the mayor has to accept to retain coalition unity. However, this pact was not respected by the mayor and in December he approved the MOSE at the *Comitatone*, consequently canceling the vote expressed in Venice. The radical Left and the Greens held their fire at this time—allowing the coalition to stay in power—while the MOSE received final approval. This decision provoked the first shift among the opposition forces linked to the citizen movements and associations. Initially, as discussed, the mayor and the political parties at the local level (mainly the Greens and the Left and center–left parties) were allies of a citizen movement against a project perceived to be harmful for Venice. However, at the beginning of

⁵⁹ On 21 December 2001, signed by the Minister for Infrastructure and Public Works, Pietro Lunardi, member of the Center–Right government led by Silvio Berlusconi.

⁶⁰ At the same time, in France the so called “Barnier law” in 2005, modified later in the “law of proximity” promoted an opposite strategy, with the creation of specific democratic arenas where local communities, stakeholders, civil society groups interact and discuss on the issue (Revel et al. 2007)

⁶¹ As it has been described previously, in the 2000s the Green party under the Costa's mandate is composed by a group of politicians linked with the radical Left and the local social squats (led by Gianfranco Bettin and Beppe Caccia), substituting the old-liberal and non-violent Greens (led by Michele and Stefano Boato). While these latter return to a certain extent into a form of politics “out of the institutions” also with the cultural and scientific activities of the Eco-Institute, they also try unsuccessfully to run with a list called “Greens-Dove”. On the contrary, the new Greens are directly linked without interruptions or crises with the government of the municipality until 2015.

2004 the public sense emerged that they had bypassed the interests of the city, as activists with different backgrounds commonly declared, as per the following interview:

[n.8] The main turning point for the MOSE was 2003 when there was a vote for the executive planning of the infrastructure. The mayor was Costa with a Red–Green majority, although very close to the *Consorzio*, given his personal view. They had to vote at the city-council and of course the radical Left was not agreeing. They said there wasn't any condition to pass the project. However, they proposed eleven amendments. If these points were politically adopted by the mayor and transformed in a project transition, they were modifying the project in a way that it was considered possible to pass to an executive phase. With this trickery and mediation, the vote passed. Costa, as the mayor, went to Rome to the *Comitatone* and decided with his lawyer-consultant that the eleven points were accepted. He then proposed these changes directly to the *Comitatone* [...] but they ratified a positive vote not only for the execution but even the realization of the MOSE! [...] I was in Rome and I remember with some local journalists we thought that this change would have definitively produced a crisis at the municipality. “The majority will collapse” we thought. “The Red–Greens will step back because they can't accept something they have always opposed.” Then, was there a crisis? No. The representatives of the radical Left were denying the opportunity of a political crisis because they said they should think about it, they could not accept an external state commissioner to administer Venice that would do even worse things. So they have accepted the MOSE themselves.⁶²

[n.9] On the MOSE [...] from the point of view of us, the movements. There was at the beginning the mayor Cacciari, who opposed the MOSE but with his machiavellian perspective: “I am the one that decides, because I am in government” [...] I think he didn't see that the municipality cannot do anything in the face of the state, the *Consorzio Venezia Nuova* or other powers that overwhelm the power of the municipality. A sin of presumption. In his own way he opposed the MOSE but ineffectively. And he never looked for alliances with

⁶² Interview with local journalist and activist representative of the citizen committee n.8

the movements in the city [...] After him, Costa arrived. Now president of the Port Authority, former president of the University, former minister of the public transport under the Prodi government, governmental commissioner for the realization of the NATO military base Dal Molin in Vicenza [...] under Prodi, then confirmed by Berlusconi, then even by Monti so [...] a really big power. Why? Because when the municipality council voted against the MOSE and then the mayor went to the *Comitatone* to express a vote in favor of the project [...] The mayor that did this [...] I even voted for him [...] he went to Rome and voted in favor. And when he came back to Venice nobody brought his government down. It was a moment of great disappointment. Even for the Greens, *Rifondazione*, all those elements that verbally opposed the MOSE [...] So for them it was not a political problem [...] they preferred *realpolitik*. Therefore, on the MOSE, we didn't have that many political allies [...].⁶³

If these events produced a modification of the relations between civil society actors and their institutional allies, this shift was first visible in demonstrations organized by a group of local associations (*Ambiente Venezia*), spontaneous local citizen committees in Murazzi, Rocchetta, Certosa, Sampierota, expert organizations (*Medicina Democratica*) and local sections of structured environmental organizations (LIPU,⁶⁴ *LegAmbiente*).

In June 2004, a group of citizens meets the new President of the European Commission Romano Prodi, who as prime minister had approved the MOSE. Based on two appeals regarding the MOSE presented at the European level—one of them signed by 150 center-left Italian deputies—the citizens asked Prodi about the state of the project. He replied “I am not an expert on procedures; I am not aware of it.”⁶⁵ In August 2004 they meet on the construction site of the MOSE with the aim of gathering all the citizen associations, disseminating information about the environmental risks linked to the infrastructure as well as its suspiciously high costs.⁶⁶ A flash mob that descended on the construction works in August sought both to launch a campaign for the imminent autumn, but also to mobilize explicitly a popular front since their interlocutors at the local government had proven unable to concretely oppose the project.

⁶³ Interview with activist from the local squats and the «No MOSE Permanent Assembly» n.9

⁶⁴ Italian League for Bird Protection, structured environmental organization present at the national level since 1965.

⁶⁵ *La Nuova Venezia*, 4 June 1994

⁶⁶ *La Nuova Venezia*, 20 August 2004

In September 2004, with the participation of the local sections of the WWF and *Italia Nostra*, the Eco-Institute of Mestre and part of the leftist group *Sinistra Ecologista*, the group demonstrated along the main channels in Venice in a protest flotilla criticizing the impacts of large-scale infrastructure on the city. During the demonstration, the MOSE was represented as a huge shark attempting to devour Venice and the Lagoon. At the beginning of November 2004, the same group of associations launched the committee “Save Venice And Its Lagoon”. The main arguments mobilized against the MOSE were, first, the impact of the construction site and works on the environment and on neighborhoods like Sant’Erasmus—usually protected by communitarian laws regarding cultural heritage—and, second, the potential erosion of the sea bottom produced during construction. The associations asked that the works be blocked and for a new analysis of alternatives to the MOSE already proposed after the VIA Commission had published its findings.⁶⁷

Public attention peaked between 2005 and 2006, in proximity with the elections. At the local level, the victory of former mayor Massimo Cacciari in April 2005 in a controversial competition against another center–left candidate (former magistrate Felice Casson) seems to have introduced a critical new element in the story. However, the plot is complicated by the political elections that occurred at the national level in 2006, with the Greens explicitly opposing the infrastructure but in government in a center–left coalition led by Romano Prodi⁶⁸ that had endorsed the MOSE.

In January 2005, an alternative project—ARCA—was publicly presented by a group of independent experts from the CNRS and the University of Padua, in an event sponsored by the Alex Langer Eco-Institute. The ARCA was proposed as a technical alternative conceived by independent researchers and sponsored by the old generation of liberal environmentalists running with the Green–Dove political formation competing with the Red–Green coalition governing under Costa’s mandate. At a public conference, one hydraulic engineer—who had quit the *Consorzio* on account of his specific disagreement with the MOSE project—presented technical alternatives to MOSE’s rows of mobile gates.⁶⁹ This intervention by experts considered politically non-affiliated and independent of environmental organizations accorded more

⁶⁷ «*La Nuova Venezia*», 4 November 04

⁶⁸ The leader of the Green Party Pecoraro Scania explicitly asks the center-left coalition («L’Unione») to explicitly mention the contrariety to MOSE in the political program («*La Nuova Venezia*», 3 September 05) while Romano Prodi confirms the importance of the infrastructure investments – and citing clearly both MOSE and TAV – as one of the key components of his program («*La Nuova Venezia*», 18 February 06).

⁶⁹ «*La Nuova Venezia*» 27 February 05

credibility to the oppositional front. The experts from the VIA Commission had—in contrast—previously faced difficulty generating such neutrality. Together with the new, spontaneously born local citizen committee, “The Damage of MOSE”, which was mostly made up of neighbors at greatest exposure to the construction sites, a broader group of environmental associations (like *Ambiente Venezia* and *Italia Nostra*) organized a demonstration that counted 300 people in June 2005.⁷⁰ After these events, in July 2005, some activists decided to publicly launch the constitution of the “No MOSE Permanent Assembly” with the aim of:

[disseminating] widely public information on the entire MOSE system, on the state of the works at the harbor mouths, possible alternatives, the costs, the times and the forms of realization, but above all to transform critical knowledge into a critical mass of citizen oversight of the area that will block construction sites and prevent large-scale infrastructure projects: this is the sphere of intervention of the Assembly⁷¹ [...]. The infrastructure works have not been stopped until now because huge economic interests have operated at a political and social level, using public money to promote via propaganda largescale infrastructure at a national and international level: there was talk of MOSE but for few months very few people really understand its risks and the possible alternatives.⁷²

The document shows a key aspect concerning infrastructure policies: the technological and scientific aspects potentially inhibiting the democratic debate about their opportunity.

The need to rely on technical and scientific structures and commissions to conceive and evaluate technologically complex projects is indeed an element that not only undermines political representation but also the development of critical opinions in the public sphere as well as broader citizen movements. In this sense the associations and citizen groups demonstrating sought to link traditional forms of visible demonstration (flash mobs and parades) with forms of knowledge diffusion (conferences, lectures). In August 2005 a group of activists from the social centers.—known as *Disobbedienti*⁷³—together with the association *Ambiente Venezia* and other

⁷⁰ «*La Nuova Venezia*, 20 June 2005.

⁷¹ *La Nuova Venezia*, 9 July 2005.

⁷² Document of the No MOSE Permanent Assembly, cited in *La Nuova Venezia*, 9 July 2005.

⁷³ The group *Disobbedienti* is a specific organizational culture of the social centers born in Italy around 2000 following the alter-globalist Genoa social forum in 2001. While on the media are often defined as “No Global” they reject this label, choosing instead “New Global”, stressing their ideas and practices linked to a project of alternative globalization (Andretta, Della Porta & Mosca, 2002).

representatives of the radical Left at the municipality—tried to demonstrate with “No MOSE” banners and slogans at the Casinò Palace during the Festival of Cinema in Venice, but were blocked by the police.

The level of protest escalated in September when the group of “new globals” led by some representative of the radical Left in government tried to break a police roadblock during another event of the Festival of Cinema in the Lido. This protest shed light on the critical aspects of the project and the new mayor Cacciari (leading the new center–left local government) accepted the requests of the No MOSE Permanent Assembly to reengage the discussion of technical alternatives to the infrastructure,⁷⁴ involving the Waterway Manager (*Magistrato alle acque*).⁷⁵ In November the No MOSE Permanent Assembly declared it had gathered 10,000 signatures for a popular petition to be addressed to the European Commission in Brussels, and organized twenty different information points in places directly affected by the construction sites (near the Lido, Punta Sabbioni, Pellestrina, Chioggia) while disseminating information about the project and its alternatives.⁷⁶ The mayor agreed to sponsor the signatures at the institutional level.⁷⁷ Here, Cacciari’s support for the citizen movement and associations marked a distinct shift away from Costa’s political line.

The level of generality of the mobilization increased in a context of national contestation against large-scale infrastructure works that dominated Italy around the year 2005. In December 2005 a series of coordinated actions in different localities affected by infrastructure projects occurred, claiming “solidarity with No TAV” and with new global justice slogans.⁷⁸

Particularly present in the Venetian region, the *Disobbedienti* have their main headquarters in the squats in Padua, Marghera and Venice. Known for their radical repertoires of actions (squatting and houses occupations, boycotts, shop reductions, construction sites sabotage etc.), they reject violence although their disruptive forms of demonstration are often considered by non-violent and civil society groups as borderline. Specifically, in Venice they have been able to express some institutional representatives at the municipality council among the radical Left for several mandates in the 2000. With this institutional links the social squats in Venice have had the capability of influencing partly the urban social policies and to get resources for their cultural activities. Regarding this alliance with the center-leftist Venetian government, they have been criticized by other sectors of the civil society.

⁷⁴ «*La Nuova Venezia*» 4 November 2005

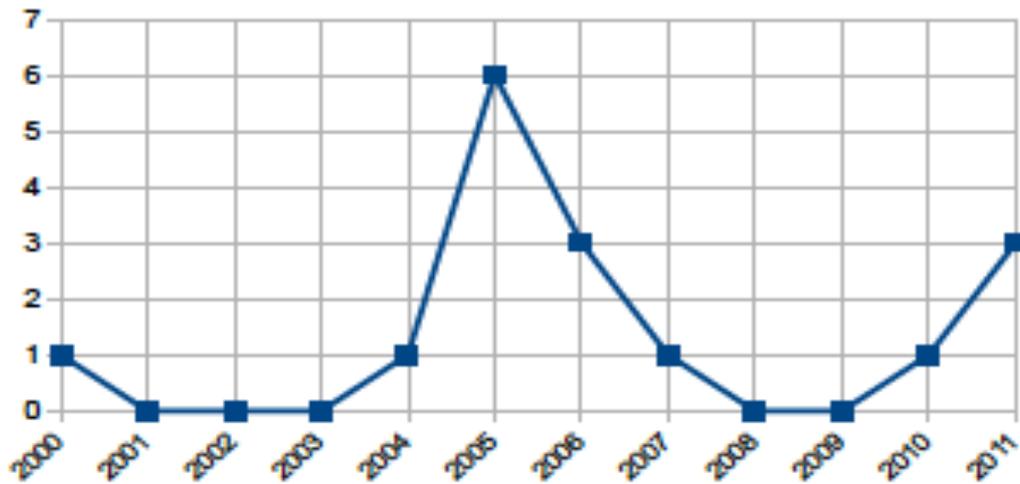
⁷⁵ The «Waterway Manager» or *Magistrato alle acque* is an institution dating back to the birth of the Republic of Venice and was guaranteeing the security of the city and the lagoon from external natural, political and military threats. After the Italian unification and under the Italian State, the *Magistrato* has the main competence to evaluate environmental security and impacting projects on the city of Venice, and it symbolically represents its institutional specificity.

⁷⁶ «*La Nuova Venezia*» 5 November 2005

⁷⁷ «*La Nuova Venezia*» 11 November 2005.

⁷⁸ «*La Nuova Venezia*» 8 December 2005

Table 2.2. Visible Protest Events against the MOSE Project



If 2005 saw the highest peak of protest events, in 2006 the No MOSE Permanent Assembly demonstrated in the main squares of Venice seeking to amplify the protests informing tourists and citizens with leaflets and gazebos⁷⁹ while the pro-infrastructure position of Prodi's national center-left government closed what political openness had remained,⁸⁰ explicitly confirming the political will to complete the MOSE. The Assembly now had the support of the main radical Left party and the Greens both at the local and national level that both tried to influence the government to renounce to the infrastructure. Minister of Infrastructure Di Pietro was confronted by a vocal protest flotilla in September 2006⁸¹ mainly organized by the local social centers. The protests escalated in October 2006,⁸² when the No MOSE demonstrated in Rome with other local

⁷⁹ *La Nuova Venezia*, 5 February 2006.

⁸⁰ «*La Nuova Venezia*» 18 February 2006; 27 June 2006

⁸¹ «*La Nuova Venezia*» 9 September 2006

⁸² *La Nuova Venezia*» 15 October 2006; In terms of national coordination the «NO MOSE Permanent Assembly» entertains frequent and sustained exchanges with other important local opposition groups like the «No TAV» - Val di Susa (in the region of Piedmont) and the «No Ponte» located in the two regions of Calabria and Sicily. The committees signed a partnership in Venice in February 2006 at a conference held at the IUAV (University Institute of Architecture of Venice) in which activists, experts and citizens analyzed the logic and impact of the different infrastructure projects in their respective communities. Even though these three local mobilizations are considered important at the national level, given the impact of the pieces of infrastructure, an important aspect emerges from these first conferences and meetings organized in Venice. While activists from the Val Susa recognize that the long opposition since 1991 has had the effect of creating new communitarian ties, activists leaders from «No Ponte» (No Bridge) affirmed that the protest against the project has spread even in traditionally conservative areas like Sicily and Calabria. On the contrary, a key activist from the NO MOSE Permanent Assembly declared that “although we have gathered 12,000 signatures for our petition against the MOSE, here in Venice we haven't reached the level of protest of the Val Susa”. This impression from the activists seems to confirm the hypothesis that not only social capital or political factors, but also the technological factors constituting the infrastructure, affect the rise of protest and mobilization. Its technological opacity negatively affects the expansion of a broader

committees and movements rejecting a general infrastructure policy at the regional and national level like the “No TAV–Val di Susa” or the “No Ponte”.

In December 2006 the experts from the *Consorzio Venezia Nuova* were the object of direct contestation since they were perceived as “dependent” on economic lobbies promoting a useless and risky piece of infrastructure.⁸³ In 2007 the leader of the national Green Party declared that the construction works were illegitimate since they were never definitively endorsed by any environmental assessment.

After a few years of mobilization, the protests decreased visibly and the activists did not see any opportunity to quash the political will of the government. In 2007 the *Consorzio Venezia Nuova* opened proceedings against the experts that had publicly criticized the MOSE for “media relentlessness”.⁸⁴ The campaign against the MOSE was reenergized when a new citizen mobilization emerged in the city with the contestation of the impact of the growing business of cruise ships in the Lagoon and especially in the central basin of San Marco. Expanding visibly around 2011, the “No Cruise Ships” movement proffered new arguments to mobilize citizens and environmental associations, although it partly contributed to relegating the MOSE issue to secondary status.

To conclude, we can say that the NO MOSE Permanent Assembly took the form of a network of associations and committees that evolved, over time, including a variety of collectives characterized by diverse size, level of formalization and repertoire of actions, from spontaneous groups of citizens from the neighborhoods directly affected by the construction works, to structured environmental organizations, local associations and expert organizations. Relations with local political parties were controversial, depending also on the extent to which the mayor would open and close the space for action at different times. Radical left parties were initially considered allies but were later criticized for their role in the local government that approved the MOSE in 2003. These events probably provoked a shift in the composition of the No MOSE front since citizen participation didn’t spread, and the mobilization was mainly constituted by actors with previous administrative experience, groups of social centers and radical Left grassroots activists. From this point of view, this configuration contributed in inhibiting the potential for broader processes of movement diffusion.

As we will try to assess in the next paragraphs, the isolation of the No MOSE Permanent

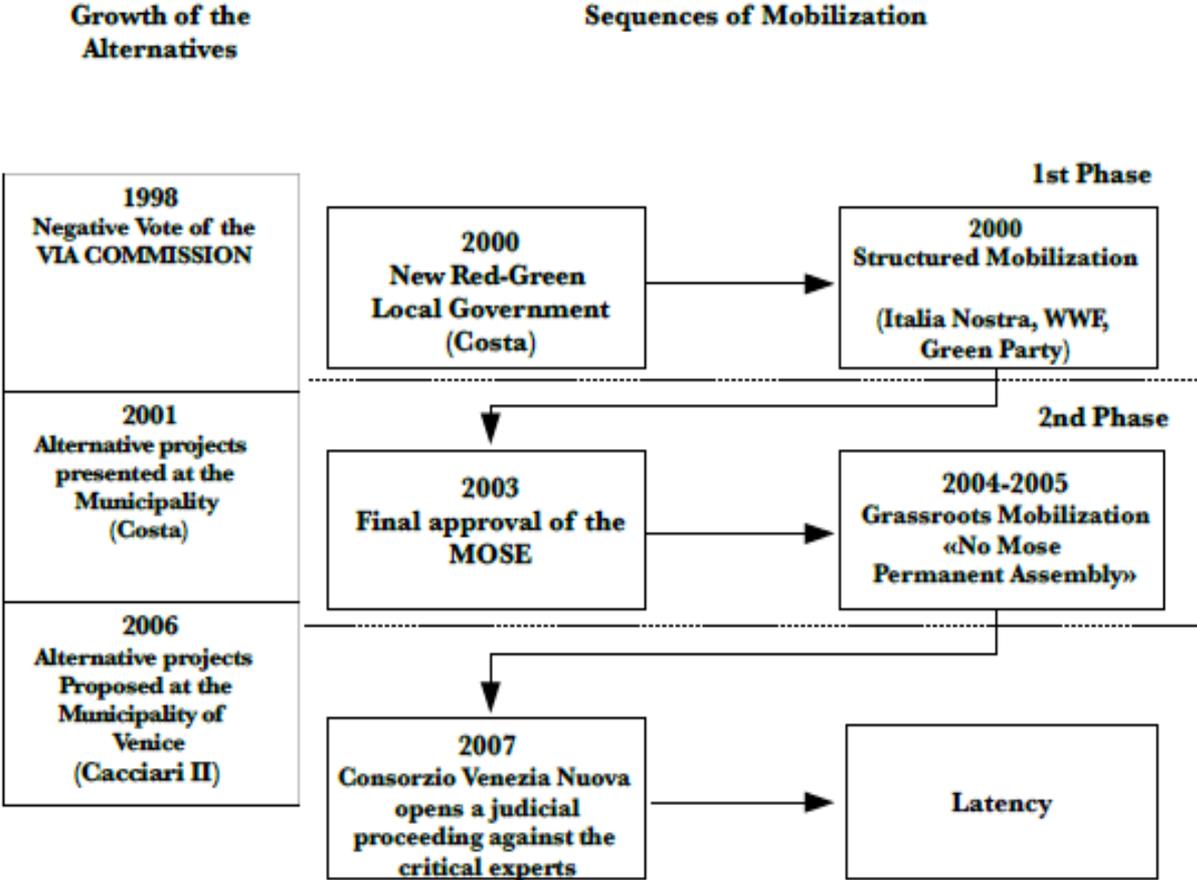
mobilization. *Il Corriere del Veneto* and *La Nuova Venezia*, 12 February 2006.

⁸³ *La Nuova Venezia*, 15 December 2006.

⁸⁴ *La Nuova Venezia*, 13 June 2007.

Assembly, together with the technological opacity of the project can be considered the two factors that contributed to enclosing the issue within a debate restricted to technical and institutional actors. This resulted in a foreclosure of opportunities for popular participation and thereby any broader diffusion of expertise.

Table 2.3. Sequences of Mobilization in Relation to the Growth of Alternatives



4. Expertise and Politics

From the analysis of the different phases within the debate, we can already see a peculiar politicization of expertise at the intersection of the technical and institutional arenas. The next paragraphs focus on the role of civil society actors and social movements in supporting some stances, in contributing to the reopening of a technical arena and finally in multiplying the issues and introducing new elements of social, economic and political discussion.

In the following discussion paragraph we want to focus on: 1) the contents and arguments crossing expertise and politics; 2) the type of experts involved, and, finally; 3) the specific processes of knowledge diffusion and expertification.

4.1. Expert Issues and Political Salience

Even though claims can be distinguished analytically across four key dimensions—naturalistic, technocratic, economic, and democratic—their existence in reality is highly intertwined, as the citizen groups mobilizing against the project also noted clearly (Fersuoch, 2014).

Table 2.4 Articulation of the Arguments for and against the MOSE

Proponents		Opponents
Creation of new occupations	Economic	Low quality occupations; Waste of public resources
Definitive protection of Venice from the periodic “high tides” of the Adriatic	Naturalistic	Enclosure of the harbor mouth threatens the existence of the lagoon and its biodiversity (flora and fauna); Likely to be ineffective in the long run due to climate change
The need for modern infrastructure in Venice and in Italy more generally	Political	Critique of the ideology of large-scale infrastructure; Corruption of political representatives
Advanced, modern and inconspicuous technologies; the mobile gates are dynamic and reversible	Technocratic	Inefficiency of the system of rows of mobile gates

However, some issues assumed more public salience than others at different times, depending on the actors involved and the occurrence of contingent events. Heuristically the main claims that emerged in the first phase (1988–99) were:

- 1) Technical and scientific arguments concerning the efficiency of the MOSE—with expert commissions discussing a very opaque object that would remain confined to a technocratic arena.
- 2) Economic and political claims, with local representatives criticizing the government for concentrating huge public resources on mega-projects while cutting funding for ordinary city management.

While the first phase was characterized by modernist and technocratic discourse that set great store in the potential for “grand infrastructure” to protect Venice from exceptionally high waters, the local representatives at the municipality level opposed, until 2000, a more prudent position, expressing skepticism about the MOSE project. In July 1998 the national government decided to appoint a committee of internationally renowned experts made up of five specialists from MIT Boston, the Universities of Brussels, Amsterdam, and Padua and Cà Foscari Venice.⁸⁵ At the same time, the VIA Commission voted the project down. The emerging controversy quickly overwhelmed the technical arguments, since some members of the international experts committee criticized the VIA for taking political stances rather than purely scientific ones. On the same issue, the local Green Party criticized the lack of democratic legitimacy of appointing academic experts without deep knowledge of the area as “an issue of civility”.⁸⁶

The negative recommendation of the VIA Commission in 1998 was based on four main arguments: “[First] the risks that the frequency of the use of rows of mobile gates [7–10 for the proponents, more than 30 for the VIA Commission] threaten the Lagoon, and produce dangers to public health. [...] [Second] Even the water carried in the basin surrounding the Lagoon (estimated at between 20–50 cm)—together with 1 meter at the base triggering the alarm for the rows of mobile gates to close—carries a risk of actually not even protecting Venice from high tides”.⁸⁷ The third argument was based on predictions of rising sea levels due to climate change, which would make the entire technological system of rows of mobile gates pointless. The fourth

⁸⁵ *La Repubblica*, 10 July 1998. Already the designation of certain experts as “internationally renowned” elicited some controversy. The media do not report how the commission was appointed and who was specifically composing it. As an example, among the “international experts”, it is worth noting Paolo Costa, professor of economics at Cà Foscari and future mayor of Venice in 2000.

⁸⁶ *La Repubblica*, 27 January 1999.

⁸⁷ «*La Repubblica*» 11 December 1998.

argument concerned the huge impacts of the construction sites and works in time and space, bringing a great amount of materials from external sites that would disrupt land surfaced and disturb sand at the sea floor.

The Commission criticized the idea of solving the problems of the Venetian Lagoon with a single technological choice, arguing the management of any interventions should be addressed to a variety of aspects given the complex natural system. The alternatives expressed by the VIA concerned a series of dimensions like the ordinary security and cleanliness of the channels, the uplift of the river banks (the Venetian city sidewalks) as well as the uplift of the geological grounds through specific materials. The main arguments were thus basically about the natural environment: governance of a fragile environment—the Lagoon—with its precarious existence in relation to the sea, which has always seen human intervention to keep its equilibrium and protect the city's identity.

The relation with global aspects like climate change meant the issue went beyond the local, even though as a project for Venice the issue already took national and international importance, in terms of the defense of cultural heritage seen as belonging to humanity.⁸⁸

Around the year 2000, naturalistic arguments occupied the debate with the intervention of structured environmental organizations—*Italia Nostra*, the WWF and LIPU—addressing the issue of biodiversity and the risks to specific animal species like birds and other life populating the Lagoon. While the technical and scientific aspects of the project were in the first phase confined within technical arenas, in the second phase (2000–06) they seemed to penetrate the public sphere and mix with other emerging grievances. The debate then became politicized, with the argument of a democratic deficit becoming more salient for two main reasons: 1) a local one, the mayor voting to give the MOSE the go ahead at the final session of the *Comitatone*, and; 2) a national one, with the growth of a coordination of spontaneous local movements based on a common sense of a lack of transparency around large-scale infrastructure projects derived by suspicious interests between the lobbies and corrupt political representatives damaging the local communities and speculating on the public goods.

Independent alternative projects like ARCA then reached a broader audience in the public

⁸⁸ Since the beginning, critical stances concerning the protection of Venice as a cultural heritage of the whole humanity mobilizes even a set of historical «private committees» gathering local and international noblemen from all over the world with the aim of defending «its unique cultural patrimony» (*La Repubblica* 8 November 1994). However, apart from some local citizens with important role in some conservationist environmental associations like «Italia Nostra», these types of groups do not play any relevant role in the mobilization against the MOSE.

sphere thanks to the growing critical front—the NO MOSE Permanent Assembly—which overtly contested the official expertise of the *Consorzio*, the latter seen as an appendix of private interests speculating with public resources. In this case, the alternative projects highlighted both alternative, environmentally friendly technologies and the issue of cost effectiveness,⁸⁹ linking the protest to a general discourse against corruption and political malfeasance regarding infrastructure projects in Italy.

A cleavage characterizing the local and national level is also visible in the decision of the mayor in 2005–06 to establish a commission of experts from the municipality to find alternatives to the MOSE. This local expert commission all the alternatives that had been proposed to date:

- 1) The ARCA project, developed by a group of independent researchers that were later supported by the Green Party;
- 2) A single project elaborated by the independent studio “Ekosystem”;
- 3) The project PRINCIPIA, conceived by an former engineer at the *Consorzio Venezia Nuova*, which came out after criticizing the direction of the rows of mobile gates.⁹⁰

This last project introduced a new critical stance in the debate that was nevertheless not particularly prevalent in the public arena: the technical inefficiency of the mobile gates themselves. The direction of the gates, opposing the sea tides, would be indeed either inefficient or uneconomic, since their correct application—closing the Lagoon without opposing the sea tides—would be the only reasonable one from a technical and economic point of view. In this sense, the evolution of the controversy brought into the field of contention new actors coming not only from an authoritative scientific world, but also clearly exiting in clear dissensus toward the *Consorzio*. With this shift, the arguments of the opponents gained further credibility, even though the *Consorzio Venezia Nuova* reacted by opening a proceeding against the critical experts for “media hounding” in 2007.⁹¹ After a period of demobilization and decrease in public attention (2006–11), due to the rise of new issues in Venice—overall, the problems of the cruise ships—the argument of corruption reemerged with the inquiry of the magistrates in June 2014 that involved the entire *Consorzio*, some of its main enterprises and also bipartisan political

⁸⁹ At the demonstration on 30 August 2005 during the Festival of Cinema in Venice, the acronym MOSE was paraphrased by the participants as «Macchina Obsoleta Succhia Euro» (Obsolet Machine Sucking Euros)

⁹⁰ «*La Nuova Venezia*», 15 March 2016.

⁹¹ «*La Nuova Venezia*», 13 July 2007.

representatives at the regional and municipal levels.⁹²

In the evolution of the debate, a variety of expert arguments have been appropriated by new actors, some of them linked more to the political arena and others with civil society groups. These relations were not stable in time and were also conflictual. In the next paragraph we try to analyze the different properties of the experts and their type of interaction with the mobilizing groups.

4.2. Experts and Civil Society Actors

Different forms of experts intervened in the arena at various steps.

- 1) Three urban planners specializing in transport and mobility, with stable positions (two full professors, one researcher at the IUAV–Venice) belonging to the cultural area of the liberal Green Party, with previous administrative experience at the local and national level;
- 2) An independent natural scientist (full professor in Environmental Hygiene at the IUAV), member of many local and national expert commissions (including the VIA), linked to the Republican Party;
- 3) Four independent natural scientists, (one biologist from the University of Padua, one physical geographer from the CNRS, two professional engineers), proposing an alternative project, ARCA;⁹³
- 4) One civil engineer, a full professor in hydrodynamic engineering at the University of Padua, considered a leading global expert in hydrodynamic systems;
- 5) Three professionals with a long-term specialization in marine engineering associated with the PRINCIPA project, who had previously been involved in the MOSE project for the *Consorzio Venezia Nuova*. They later exited the *Consorzio* to propose an alternative project, “Gravity Bulkheads” (Di Tella, Vielmo & Sebastiani, 2005);
- 6) An architect with multiple memberships in environmental organizations (*Italia Nostra*, *Ambiente Venezia*), and with previous experience in radical Left parties.

⁹² «*La Repubblica*», 4 July 2014

⁹³ Presented by the authors at the municipality of Venice on 22 and 23th January 2005, see «*Il Gazzettino*» 20 August 2005

Table 2.5. Types of Expert by Professional Sector and Type of Engagement

Expert	Sector			Total
		Private	Public	
Activist	1 (architecture)	3 (urban planning)	4	
Ally	3 (marine engineering)	6 (3 natural sciences, 3 engineering)	9	
Total	4	9	13	

From this heterogeneous totality of experts (13) it is possible to analytically separate two heuristic categories: 1) the expert–activist, mainly but not exclusively involved in a double membership of recognized expert and activist in political groups (local parties, civil society associations or public interest groups) and 2) the expert–ally, mainly a technical expert intervening in the public sphere through his or her legal–rational orientation, detached from the political conflicts or the logic of collective action, with the aim of contributing to a civic problem with purely technical arguments. Even though experts are a relatively “rare good”, from a preliminary count, the predominant type of actors in the controversy is the expert–ally (9) if compared to the expert–activist (4). Even though professions like urban planning and engineering can intersect the private and public sectors simultaneously, experts mobilizing are mainly occupied in the public (9) rather than private sector (4).

While all the expert–activists came from the field of urban planning and architecture (4), the expert–allies were mainly from engineering (6) and less from the natural sciences (3).⁹⁴

The prevalence of the field engineering sheds light on the main feature characterizing the

⁹⁴ The indeterminacy (6-7; 1-2) is due to a multiple disciplinary affiliation characterizing an expert with a double academic recognition in engineering and physical geography. However, even though we try to sketch some properties of the expert-actors involved in the controversy and in the mobilization process, assessing a clear and neat correlation between disciplinary or professional background and attitude toward politics is inappropriate, given the huge level of differentiation and complexity among disciplinary fields that gives frequently rise to competence controversies among the same experts. Our attempt to identify the properties of expert actors has only a heuristic scope and focuses on finding some tendencies within a dynamic process that changes in time.

debate on the MOSE: its technical abstraction. The difficulty in translating the technical aspects into politically salient issues for a broader audience has been an important challenge for the mobilization as recognized by either experts and activists:

The movement has lost its capability to impact on the MOSE [...] because the citizens have been inattentive. But it is understandable because it was impossible to see anything [...] nothing was visible. Everything is under the sea.⁹⁵

The struggle against the MOSE is more difficult, because you talk in an abstract way of something that nobody saw, that it is still not there, since even what they have already built is under the water, and is easily marketed as a shield to defend Venice from the historical problem of the high water, and so on. While the arguments against are much more difficult to present in an understandable way. They are very complex reasonings, they presuppose an in-depth view of the situation in Venice, the Lagoon, the high water, all the specifics of the MOSE project [...] There have been demonstrations against the MOSE [...] but the participants were very few.⁹⁶

While the technical and scientific complexity of the issue froze the possibility of conflict expansion, it also negatively affected the possibility for lay expertise to develop. The main elements of discordance that potentially produced divisions among the critical front—without playing a relevant role—concerned those actors that were purely political, with some historical Green activists criticizing the radical leftist transformation of the new Green Party and its responsibility in the local center–left government that approved the MOSE in 2003. On the contrary, the different typologies of experts have mainly tended to collaborate and the different styles of intervention did not produce problems, conflicts or anyone exiting the project. It is possible to state that in conditions of conflict, while activists or political actors become divided on purely political issues, experts play the role of bridges, focusing on the goal. In this case, the rationality concerning the multiple alternative sources of expertise enriched each other without posing problems to the No MOSE front. The various alternative projects amplified the arguments of the (few) participants.

While sharing generational traits, expert–activists varied in terms of political culture,

⁹⁵ Interview with expert-activist n.7

⁹⁶ Interview with activist n.8

being mainly related to two political cultures developed among the new Left of the 1960s. Some traits emerging from the interviews date back to a typology of engagement in the local student movement of 1968, in which the faculties of Architecture and Urban Planning played an important role. The peculiarity of 1968 activism in Venice is linked not only to a particular elaboration of the “environmental issue” but also to a critique of the type of knowledge produced in the university shaping the role of urban planner:

I studied at the IUAV in Venice as an architect, because culturally I have always been interested more in architecture than urban planning and in the 1960s I got involved in student activism. I was a member of the Communist Party (PCI), in the anti-stalinist area of Pietro Ingrao. I was one of the founder of *Il Manifesto*, or I could even say that probably *Il Manifesto* was born here, at my house. After 1968 I took part to some extra-parliamentary movement groups until I had the will to exit definitively from politics in the 1970s. After that period, given also the experience I had with the environmental transformations that engaged Venice and the industrial port area near Marghera—that arrived here earlier, in the 1970s, if compared with other places—I understood that the environment had taken an important place in my personal background and culture. I participated then in the foundation of the national Greens. [...] When I was part of the PCI I had institutional responsibilities for a decade in a small village near Marghera, where a new working class composition was settling in the area and some urban conflicts were emerging. [...] I have to tell you sincerely—and I want to tell you this—that I was research assistant of my professor for some time, the architect Carlo Scarpa at the university, but then I preferred to exit the university and I think I was right, that the experience at the university—even though you have a big father—is a mechanism that restricts your freedom, with the sort of self-censorships you’re obliged to do. So I preferred to be a free professional architect, economically independent, absolutely free to do and say whatever I wanted.⁹⁷

I am someone that was born [culturally] in 1978, working on problems conceived on the ground and building alternatives with the people. It was called at that time—it lasted for six or seven years—*Urbanistica Democratica* [Democratic Urban Planning]. All the books, journals, newspapers [...] we started doing these

⁹⁷ Interview with expert-activist n.7

types of things already when we were teachers in a experimental high school, Massari. Planning alternatives from neighborhood to neighborhood—the so-called outskirts—using the 6 years of the school cycle—linking the teaching activities with the struggles in society from 1977–78 until 1985. Afterwards, the same thing, with the same method continued at the university. Within the university, all the research I directed was based on studies done to give answers to these questions. Nothing was a game. Everything started from the demands of the land and to give answers to real needs, real demands. This type of working philosophy had begun with *Urbanistica Democratica*, then it became after 1985 the work of the Greens, until 2000. The Greens experience was born through the contacts we got in Europe, with the German and Dutch Greens, studying the struggles for the environmental regeneration of Amsterdam and the alternative mobility in Germany. Everything started from real needs. [...] This is the method with which I grew up, a way of living actually, because it takes up 100% of your life. [...] But the method was basically to learn how to be able to tell very complex things to the worker in a two-page leaflet. [...] Talking with them you understood the problems and then you translated them in a leaflet [...] always after the dialog with the working-class leaders.⁹⁸

Even though the two profiles of expert-activists mobilizing with the critical front against the MOSE are different in terms of political culture—the former one linked to the radical Left and the latter linked to the Greens—they share a double identity as experts and as actors directly committed to a political goal. The relation that their expertise entertains with the “object”—the territory and its planning—assumes immediately a political relation. The mobilization in the No MOSE Permanent Assembly is then, *mutatis mutandi*, a prosecution of a previous form of political engagement, and in continuity with antecedent conceptions of knowledge democratization and publicly oriented knowledge production. In this case, the expert-activist is not a single-issue actor, since he or she links the mobilization against the MOSE as a particular form of activism, within a general engagement with the local community and the environment. Moreover, the expert-activist is not a newcomer and he or she links previous experience of knowledge mobilization and work to protect the land—the pollution in the industrial area of Marghera, the urban conflicts in the outskirt of Venice, the urban mobility in close urban areas—

⁹⁸ Interview with expert-activist n.6

with new ones.

From this point of view, participation in a mobilization for the defense of the environment is in continuity with the struggles for working class health or urban equality of the 1970s. The MOSE, then, is not a single case, but a specific manifestation of a general academic mode of knowledge production that reproduces the domination of the economic groups financing the research, therefore constraining freedom of thought and detaching knowledge production from real and socially relevant needs. While in this case the public engagement of experts had a positive influence on civil society, and in the collective arena their competence is in general recognized as valuable by pure activists and citizens, the public exposure seems however to produce professional negatives and risks:

The academic world is neither better or worse than in the past. Even the engaged experts [some expert-activists of the No MOSE Assembly, I can mention, they were even in the past [in the university] minoritarian. Well, right, the issue is that they are disappearing, maybe for seniority [their retirement]. [...] Personally, I haven't thought in terms of career, I've never done something for the career [...] "the school" was this one. Even the old ones, [the big names among the expert-activists, almost nobody arrived to be a full professor. They've been disadvantaged for their public exposure, because they were prickly, already in the 1980s. These people were critical toward the official political culture, even the leftist one, while the majority of the professors were organic to the political parties. Even on the MOSE. Here there has been a serious acquiescence from the university. Particularly for the double conditioning. The financial corruption and also the entire research on the Lagoon, that was linked to the Water Magistrate. All the technical expertise and competence was controlled by the *Consorzio*.⁹⁹

While these statements could be interpreted as a natural outcome of a "political" perspective on the events, this condition is instead in common with expert-allies. Not only the expert-activists—with their double membership, as experts in commissions or universities and organic to civic associations—but also the expert-allies, the ones working for private companies and mobilizing specifically in the issue, shared the view that the monopoly of expertise in the *Consorzio* was suspicious. After having criticized some aspects of the MOSE, the *Consorzio*

⁹⁹ Interview with expert-activist, n.5.

denounced the counter-expertise and public interventions of some expert–allies as “media hounding”. As one of the expert–allies declared (typology n.5, an engineer working for a private society and for the *Consorzio*):

I didn’t insult anybody. I just posed some doubts about the functioning of the technological structure, because the system with which they were experimenting was conceived through mathematical models, without proofs in the basin. I publicly challenged them but they never accepted a debate in this regard. Not even when the engineering society Principia wrote a clear critique of the MOSE system and of the endurance of the bulkheads in case of rough sea.¹⁰⁰

The proceeding started in 2007¹⁰¹ bringing all the experts that had expressed criticisms against the infrastructure in front of a judge, from the historical environmentalist expert–activists to the expert–allies of the CNRS and Principia. These common conditions produced a shift in the perception of the claims. While for the expert–allies, the critical claims were mainly presented from a technological point of view, stressing the inefficiency of technical details, the conferences and the public debates organized in collaboration with the environmental associations and the variety of groups contributed in creating a common picture of the nature of the problems. In this case, collective debating created the conditions for a politicization process, putting different actors in the condition to overcome their niches of technical specialization and while framing their technical expertise together with non-technical issues and claims like democratic deficits or moral arguments (public expenditure, waste, corruption). The collective experience and the public attention that the MOSE raised immediately brought the expert–allies to work on publications and books that were in the public interest rather than a pure technical function of consultancy.¹⁰²

From the analysis of the collective events that were held, a difference in the modality of

¹⁰⁰«*La Nuova Venezia*», 5 July 2014.

¹⁰¹ «*La Nuova Venezia*», 22 July 2007.

¹⁰² See the premise of the book *Will the MOSE Save Venice? A Critical Analysis and its Alternatives* where the authors introduce the reasoning behind the book: “Why this book? [...] After the dramatic judicial inquiries that laid bare a real metastasis of corruption and dishonesty linked to the project of safeguard of Venice we still have some spontaneous questions: are the approval and authorization of the project still valuables?”

The incipit follows showing not only their technical and scientific profile «we have worked for 40 years in key sectors of the marine engineering and offshore» but also «for the reason that we have developed an alternative system, and we have had to defend ourselves from the accusations of the Consorzio Venezia Nuova – and to have won the lawsuit – we are in a condition to give an answer, in science and conscience» (Di Tella, Sebastiani, Vielmo, 2016)

intervention is however evident. On the one hand, there was a direct link between the expert-activists and the citizen activists, participating in spontaneous public assemblies organized at the neighborhood level with the environmental organizations, the social centers, the citizen committees as well as at the sit-ins and the spontaneous colloquia and auditions at the municipality of Venice with local representatives. On the other side, the expert-allies tended rather to work on their own and preferred to intervene within the realm of a civic debate, a conference or through working papers and proposals sent to institutional representatives. However, in the case of the MOSE the collaboration between expert-allies and expert activism has not provoked any conflicts that could emerge from their different habits. On the contrary, while experts' public participation in the issue was valued positively—disconfirming the hypothesis of a tendency to avoid engagement out of an academic setting—their intervention was not silenced by the potential for repression from the proponents of the infrastructure. Even under enclosed political conditions and with high costs (judiciaries, occupational blackmailing) the experts seemed willing to participate in a just cause. There was room to think that the collective support from civil society underpinned the incentive to intervene, as an expert-activist declared:

All the very complex scientific work—very complex! [...] Other experts have helped us, because at the beginning we were not that super-expert [...] but now we have super-specialists working with us. World-wide experts! [emphasis]. People like [expert n.4 in the list,] are experts of subsidence or eustatism etc. Now we have reached a scientific level, to which we contributed of course, but it's the best you can find. But I think it was not that necessary to be that super-sophisticated at the beginning, even though it was sufficient to be scientifically equipped obviously. Hence, with the background we had, we already had clear ideas that we had to reequilibrate the Lagoon instead of placing huge cement gates [the MOSE].¹⁰³

For the conditions analyzed previously the expert-activists show a relatively lower scientific status compared to the expert-allies. However, the first ones show a surplus in terms of mobilization resources and experiences that allowed them 1) to raise the issue and 2) to open the space for the intervention of the expert-ally, which otherwise would not have had the force to intervene alone in the public sphere. While we have focused on the experts, we try now to

¹⁰³ Interview with expert-activist n.6

analyze another key point concerning mobilizations based on high cognitive costs: the modalities of knowledge diffusion and the expertification processes among participants.

4.3. Ignorance, Knowledge Diffusion and Expertification

As mentioned in the previous paragraphs, the evolution of the mobilization saw different forms of actors participating in the process of knowledge production related to the MOSE.

The issue mobilized a set of actors within Venetian civil society that raised different stances and contributed to generate a broad debate on the infrastructure from an initial enclosed arena where expertise was either an institutional property (e.g. the VIA Commission) or monopolized by the proponents (*Consorzio Venezia Nuova*).

The opacity of the project—its location at the harbor mouths at the beginning of the Lagoon, the technical complexity of the bulkheads and the systems of rows of mobile gates—was an important condition that limited public attention and impeded knowledge diffusion about the MOSE. Presuming the necessary high cognitive costs to participate in the debate, the mobilization created moments of scientific diffusion initially through the link with expert-activists—conceived as internal to a civic movement area—and later with the participation of expert-allies. However, while expert intervention was stimulated by activists, the No MOSE front encountered problems in achieving broader citizen participation and consensus. In this case, the mobilization tried to create the conditions for a learning process that would further foster both the strength of the movement and the credibility of its stances. While commonly the media discourses focused attention on citizen ignorance or the ideological criticisms of the environmental groups, the learning processes activated by collective action referred to the world of experts as well, as stated by an expert-activist:

With the MOSE we did not reach the numerical force to oppose it. As ignorant as we were, we didn't know the technical details; only as we struggled did we learn well the technical specifics of the MOSE and why it was wrong and would never have worked. We also, from the beginning, understood what the risks linked with the kickbacks (*tangente*) were, and we proved to be right at the end.

This declaration draws attention to the difficulties that democracy faced regarding technically and scientifically complex issues. The knowledge of an issue is not an a priori status but on the contrary, the outcome of a process, be it the work of consultants on a specific private or market-

oriented agenda or a public-oriented agenda with associations and civil society actors. Leaving aside the level of cultural and symbolic capital (professional and scientific skills plus academic credibility and status), in this case the expertification process drew in equally ordinary citizens and professional experts. However, in the specific case of MOSE, the technological structure and its characteristics limited the options of large-scale participation by lay actors.¹⁰⁴

The public relevance of the critical technical aspects linked to the infrastructure, as well as the public emergence of its political implications has been stimulated mainly by experienced activists (among which expert-activists) rather than common citizens directly concerned by its impacts:

You know what the rotten luck [*sfiga*, misfortune] of the MOSE is? You can't even have the Nimby effect. Being in the water, totally under the water, and covered up as a project with no impacts [...] the floating and disappearing gates, uh, so beautiful! In terms of public image, they are mitigated, relatively contained, they are invisible, they do not disturb, they open up just in case it's necessary [...] basically it seems to contrast Nimby aspects, but it doesn't even have concerned Nimby citizens. So the resistance is entirely on a cultural level and not on a direct impact. [...] For the motivation to oppose [...] I have for example a technical motivation, but I could mobilize also without it Then, my personal culture leads me to reveal my motivation because I am civically engaged. And among us, many of us have this sensibility. Many in the average population here have an environmental sensibility and from this generosity they participate and they say why it is wrong, and so on: "I want a more environmental friendly, sustainable city", and so on. And this is a general sensibility. But normally on these projects

¹⁰⁴ While the scope of this chapter is to focus on expertise in relation with movement dynamics, it is worth noting how the issue of technological complexity and political sphere is far from reducible to an eventual «citizens ignorance» as the old paradigms of the public understanding of sciences would suggest (Bauer, 2008). Not only, as we have previously illustrated (see paragraph 2.2.), on such complex pieces of infrastructure, ignorance is constitutive of the political elites themselves. A further example sheds light on this complex and unsettling aspect of opacity. After the intervention of the magistrates in 2014, the entire top managerial staff of the Consorzio Venezia Nuova is put under receivership. The Commissioner Raffaele Cantone, as anti-corruption officer, is appointed to control the regular completion of the works. When asked about the technical efficiency of the MOSE, whether the corruption has also involved calculated disfunctions – in order to guarantee further works for handling companies – the Commissioner admits: «I am not a technician and my job is not to establish if the floodgates work. There is a contract and our job is to see it through correctly» (see Chianca, 2017 p.5)

there was a core resistance coming from the directly concerned citizens, those for whom the impacts were closely felt. The ones that are fucked up, in terms of residence, acoustic troubles, or their landscape gets disturbed. Here [in the case of MOSE] they are absent! And here the entire opposition is on the cultural, technical, or even philosophical level plan.¹⁰⁵

This statement shows the general absence of a bottom-up mobilization starting from direct impacts. It adds important insights concerning the level of expertification and participation as two sides of the same coin. While given the limitation of the mobilization, there was an absence of processes of expertification from below, concerning newcomers and citizen-participants, some cultural aspects the environmental activism or the sensibility toward a common good (e.g. “a sustainable city”) are properties that enhance expertification. In this case, motivation as well as the possession of a political or civic culture triggered expertification and stimulates knowledge acquisition. In this sense, far from being a pure static acquisition or skill, expertise is the effect of a cultural process and so it can be partly acquired through the reconversion of other skills at the cultural or civic level.

5. Conclusions

The aim of this research has been to assess how the technological aspects of an infrastructure project could affect the capability of civil society actors to mobilize, to activate processes of public participation and consequently trigger processes of expertification and knowledge diffusion.

Concerning the first aspect, a common perception among the various actors composing the No MOSE front—experts as well as activists—is that the opacity of the infrastructure obstructed the spread of the mobilization to broader sectors of civil society. Public participation was consequently limited to activists and citizens engaged in environmental or civic associations or with previous political experience at the local level. However, the issue was never monopolized by experts. At the beginning, public rhetoric of “technological determinism” seemed to dominate the debate in the mainstream media, trying either to delegate the issue to internationally renowned experts—the logic of the “star system”—or delegitimizing critical experts as “partisans”. Already at this stage—what we heuristically identified as the “first phase” of the debate—expertise neutrality was contested and its links with political and economic

¹⁰⁵ Interview with expert-activist, n.5.

demands emerged.

The difficulty to mobilize related not only to technological opacity but also the occurrence of specific political events that either split civic opposition to the MOSE from their initial political allies: the Red–Green, radical Left formations at the local level and the mayor. This political divide with institutional allies at the local level contributed to the emergence of a spontaneous collective actor—the No MOSE Permanent Assembly—which tried to open the technical arena and to construct a “hybrid forum” with experts and citizens studying the impacts of the projects while disseminating knowledge about it.

On this point, conflict creates the condition for processes of knowledge production and learning, rather than inhibiting them.

Indeed, the No MOSE front made wide use of experts. Some had double membership — the expert–activists with both professional and civic memberships—and some were experts that had been silenced for their public criticism of the infrastructure. These were the so-called expert–allies, professionals in the private sectors or at the university mobilizing on the single issue.

The other important role played by the mobilization process was the multiplication of the point of view and knowledge concerning the MOSE. While the majority of the expert–allies tended to remain at the technological and scientific level of discourse, a cross-fertilization process saw them integrate broader claims linked to political and democratic issues (the critique of corruption or the absence of a public debate). In this sense, the movement against the MOSE sheds light on the limits of expertise. While ideally expertise is used as a key resource for improving transparency, it is either conditioned by the logics of (political or economic) demand or used as a rhetorical tool to enclose the arenas from a broader democratic control, thus in the final instance increasing opacity in decision-making. For this reason, one of the functions of the civil society actors is the “democratization of expertise”, or its integration with multiple issues and problems that are otherwise eliminated from the debate but are politically relevant (the public costs, the environmental impacts, the shadow of corruption, a prophetic ideology asserting that the problems of the Lagoon can be addressed with one large piece of infrastructure).

In this sense, among the variety of competences that the collective action raised, we have focused on the specific resources that other types of actors—mainly activists and citizens—mobilized to integrate the deficit of expertise. While on some aspects, experts themselves were ignorant—e.g., expert–allies were initially not aware of the broader political implication of specific poor technological choices—it is also true that the organizational capacities of actors

with previous experience in activism or politics created the condition for new knowledge production. Here, problems were addressed in such a way as to stimulate further research for experts, as the emergence of various proposed alternatives to the MOSE attests.

Finally, the initial hypothesis of a negative participation rate and expertise mobilization from below is attenuated by this intervention of activists and historically engaged citizens. However, the MOSE case has many features in common with the Florentine mobilization against the Tunnel–TAV. One specific general trait is indeed their *opacity*, which can be summarized as a general level of abstraction of the issues at stake and associated limits to participation.

6. Annex

6.1. Interviews

- 1) MB, Activist and Environmental Economist, President of the Alex Langer Eco-Institute , Former Regional Deputy for the Greens, Mestre, 2 February 2015.
- 2) FR, Engineer, Former Member of the Regional Environmental Agency (ARPAV), Member of *Medicina Democratica*, Mestre, 2 February 2015.
- 3) SB, Contemporary Historian of Venice and Mestre, Marghera, 2 February 2015.
- 4) CG, Expert–activist, Former Member of the Environmental Impact Evaluation (VIA) Commission, Researcher in Urban Planning and Mobility at IUAV Venice, 12 July 2016.
- 5) Stefano Boato, Urban Planner, Full Professor at IUAV, Representative of the National Commission to Safeguard Venice, 12 July 2016.
- 6) CG, Architect, Expert for the No MOSE Permanent Assembly and the No Cruise Ships Committee, Member of the Local Environmental Association *Ambiente Venezia*, 12 July 2016.
- 7) ST, Former Local Journalist, Spokesperson for the No Cruise Ships Committee, 12 July 2016.
- 8) TC, Activist, Spokesperson for the Social Center «Occupied Laboratory «Morion», Member of the No MOSE Permanent Assembly, Spokesperson for the No Cruise Ships Committee, 13 July 2016.
- 9) DAB, Founder of the *Beati I Costruttori di Pace*, Padua, Spokesperson for the Regional Network of the Committees, 21 July 2016.

- 10) LM, Activist, Member of the Local Environmental Association *Ambiente Venezia*, Spokesman for the No-MOSE Permanent Assembly, 5 September 2016.
- 11) MRV, Expert–ally, Professor of Urban Mobility at IUAV, Former Member of the Environmental Impact Assessment (VIA) Commission, 7 September 2016.
- 12) BT, Expert–ally, Retired Full Professor of Economics at Cà Foscari, 7 September 2016.
- 13) LF, Archivist and Activist, President of the Venetian Section of *Italia Nostra*, Venice, 9 September 2016.
- 14) AZ, Expert–ally, Industrial Hygienist and Professor of Ecology, Cà Foscari, Former Member of the Environmental Impact Assessment (VIA) Commission, 6 September 2016.

6.2. Documents

- 1) Meeting Minutes, Commission IV, Municipality of Venice, Discussion regarding the ARCA project, 13 July 2005.
- 2) Facebook Archive on the Lagoon (Articles and Documents gathered by Luciano Mazzolin on the cruise ships and the MOSE).
- 3) ARCA Project <http://archivio.eddyburg.it/article/articleview/2070/0/178/>
- 4) Special Laws for Venice: <https://www.regione.veneto.it/web/ambiente-e-territorio/legge-speciale>
- 5) *Consorzio Venezia Nuova* <https://www.mosevenezia.eu/>

CHAPTER 3

Experts and Activists in the “Florentine Node” Citizens Expertise in the Conflict Over the Tunnel–TAV in Florence

1. Introduction

Despite its relevance as a costly, “grand” piece of public infrastructure, the citizen mobilization against the Tunnel–TAV in Florence can be considered as a negative case, in which the citizen committee was not able to reach a broader constituency in the city. In this chapter I investigate this case of “technological opacity” and how it has influenced the mobilization process with a particular focus on expertise.

The Florentine tunnel for the high-speed train line—Tunnel–TAV—has been one of the most controversial projects in Tuscany since the end of the 1990s. One of the main aspects characterizing the political debate that it triggered concerns the mobilization of expertise by a grassroots citizens collective, the No Tunnel–TAV committee. I will focus on the dynamics of mobilization and the nature of expertise, focusing especially on the relation with political activism. The technological aspects of the project will be linked to the characteristics of the political context and the actors composing the mobilization. While the Florentine environment is blessed with a rich civil society sector, the opacity of the issue at stake—an underground high-speed train line dispersed in a set of loose and closed construction sites—has played a role in hindering the diffusion of collective grievances and the rise of a broader citizen mobilization. In the next section, I firstly reconstruct the main steps in the political debate on the Tunnel–TAV. Secondly, I focus on the characteristics of the actors composing the No Tunnel–TAV committee and finally look at the type of expertise mobilized.

2. The Project: Technical and Political Implications

The project of creating a new railway line—specifically conceived to accommodate high-speed trains traversing Florence—was first proposed by the Tuscan region at the beginning of the 1980s. The high-speed rail question, however, folds into broader discussions on infrastructure strategy at the national level. The first pact between private enterprise and the public authorities was signed at the national level in 1991, giving birth to TAV s.p.a., a consortium including Ferrovie dello Stato (the monopolistic Italian national railway operation, FS), the car

manufacturer Fiat, ENI (the National Authority for Hydrocarbons) and the IRI (Institute for Industrial Reconstruction).

The project was conceived as one node in a broader network of railway projects such as the Milan–Naples, Turin–Venice and the Genoa–Milan lines, in addition to the well-known TAV Turin–Lyon. An apparent final proposal concerning the Florentine metropolitan railway track was officially agreed in April 1999 and signed at the national level by the Ministry of Transport, State Railways and the local governments. In 2003 a complementary project to construct a new high-speed train station was proposed by the region with a public competition won by the studio of Norman Foster (Poli et al. 2007). The proponents of the project claim the construction of a subterranean station in the northern outskirts of Florence (in the former Macelli Area) would not only provide a dedicated station for inter-regional high-speed trains to transit, but would separate the local and high-speed systems, diminishing surface train traffic and allowing for improved circulation within the local train system. With a new underground track the main city station, Santa Maria Novella, would then be connected to a new high-speed station. With these features the new project would transform an entire metropolitan area, changing the urban connections from the main neighborhoods located in the northern part of Florence to the edge of the historical center.

As a technological project, the Tunnel–TAV introduced some dimensions that specifically affected the evolution of the conflict. First of all, the balance between costs and benefits produced by the new technology are highly uncertain. In the specific case of Florence, the positives are mainly identified as improvements in traffic congestion facilitated by system separation. Following this logic, the entire Florentine railway system should change, restructuring Santa Maria Novella and the city's second station, Campo di Marte, and adding one new station, the so-called Foster station.

The uncertainty is due to two main factors: the benefits bring with them tremendous metropolitan change, while completion of the infrastructure is decades away. The fact that between 2010 and 2015 the project plan was altered several times, received stinging criticism from the mayor of Florence and was subject to judicial investigation adds further doubts about the projected schedule and benefits. The characteristics of the technology are also a source of opacity. The underground station is being constructed in closed sites that are almost invisible to citizens. If the economic and transport benefits are uncertain, so too are the risks and costs. Estimating these is difficult, since it requires technical expertise in the domain of geotechnical engineering. All these characteristics are exacerbated by the approval of the so-called *Legge*

Obiettivo by the Berlusconi government in 2001 (n.443/2001) that accelerated procedures for approval, concentrated the power of decision-making in the state and weakened the role of environmental commissions and of the local authorities. While countries like France introduced at the end of the 1990s new procedures of public consultation on environmentally consequential technological projects—like the *débats publics*—Italy seems to follow a different path, reducing arenas for deliberative democracy and local public consultation (Bobbio, 2010).

A further element of opacity is still structural and regards the composition of the proponents. The *Legge Obiettivo* gives to the “general contractor”—the enterprise that wins the contract for planning and constructing the infrastructure—the function of oversight (concerning the forecasts of security and environmental risks). This calls into question the reliability and efficiency of both the project and the construction works, not to mention the question of transparency in oversight.

3. Actors and Coalitions

As introduced, the project approval process covers a period of almost 20 years. This long project horizon impacts the timing of mobilization.

If the idea of conceiving participatory processes for large-scale infrastructure has never been introduced in the Italian political system, the *Legge Obiettivo* has most likely closed eventual opportunities in this regard. However, the Tuscan region is an exception here, experiencing an openness of channels for political participation in the 2000s.

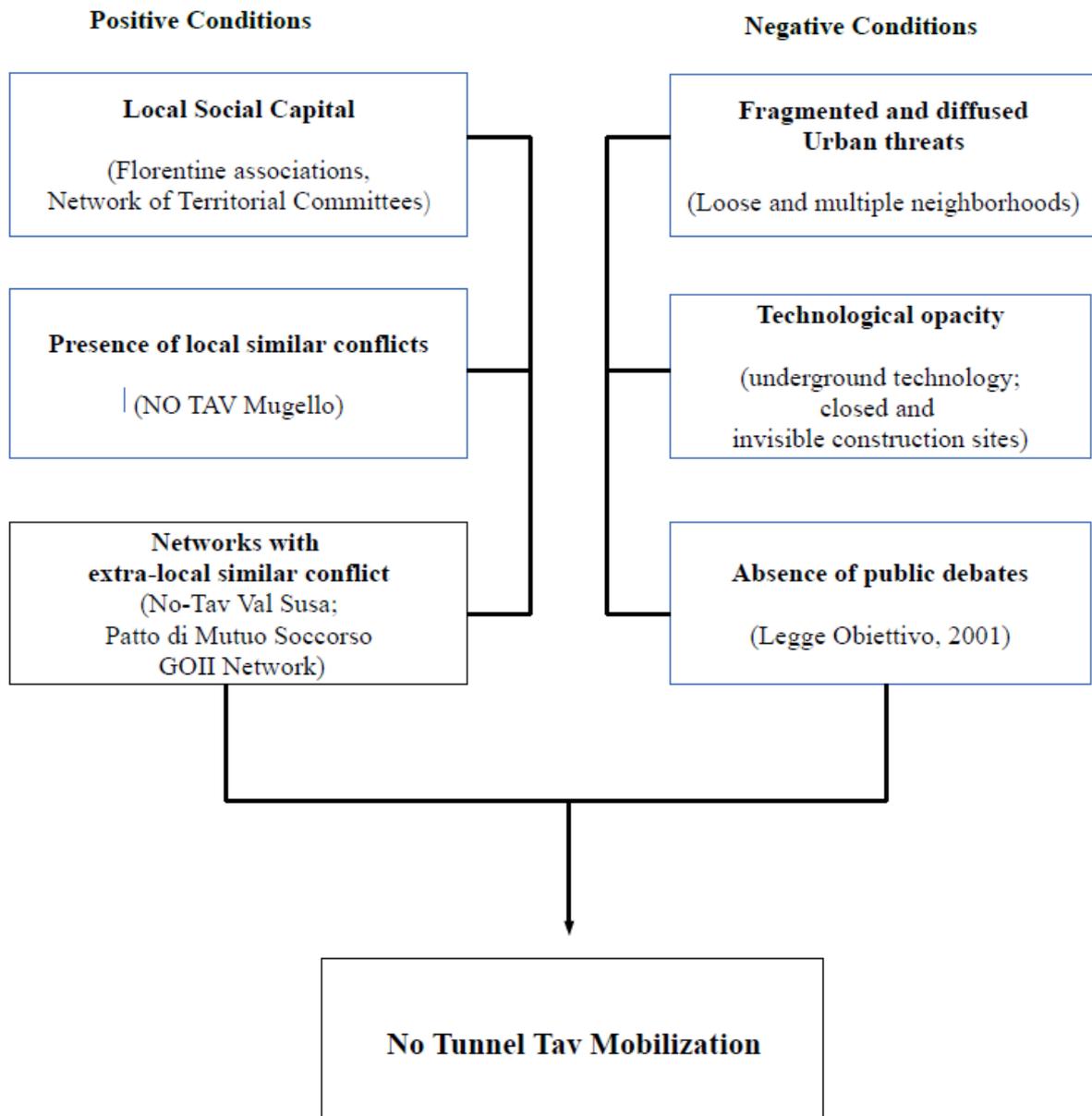
In 2007 the regional law on participation was indeed approved after a series of popular consultations and public debates organized by regional and national experts, in what has been described as a “meta-participatory” process: a law on participation conceived through innovative participatory practices (Floridaia, 2008). However, the Tunnel–TAV was not subjected to any participatory process and the lack of opportunities to discuss such an important urban innovation could have constituted a potential grievance for Florentine citizens.

Table 3.1 Proponents of the Tunnel–TAV Project in Florence

ACTORS	PRIVATE	PUBLIC
NATIONAL LEVEL	CAVET Consortium (General Contractor: FIAT-IMPREGILO)	FS (Ferrovie dello Stato) Ministry of Environment
LOCAL LEVEL	NODAVIA (CoopSette)	Tuscan Region Municipality of Florence

As summarized in Tab.1 (and to be described in-depth in the following paragraphs), the main events constituting the debate on the Tunnel–TAV saw the following main proponents of the project: the Tuscan Region and the municipality of Florence, together with the Ferrovie dello Stato (FS) and the CAVET Consortium (composed of Fiat and its subsidiary construction unit Impregilo). Part of the works were assigned to other satellite enterprises, the principal one being NODAVIA, a society controlled by the CoopSette, a financial and economic group that plays a dominant role in the Tuscan economy. In the main phases analyzed between 2010 and 2015 the Minister of the Environment—Altiero Mattioli, a representative of the center-right Berlusconi government—played a role in accelerating the procedures for the realization of the infrastructure, representing the voice of the national government and playing the role of ally of the proponents.

Tab.2. Factors of (Non-) Mobilization in the No Tunnel–TAV Conflict



As discussed previously, Florence is rich with civil society actors and particularly committees engaged protecting the environment and the landscape. Previous studies have documented the capacity of the citizen committees in Florence to build networks of assistance on common issues like urban regeneration and environmental protection (Della Porta et al. 2004). In Florence, the prestige associated with the historical center adds further weight to claims of civic associations and citizens mobilizing against environmentally consequential technological projects. Previous similar cases in the area—such as the mobilization against the TAV in the close area of Il Mugello (Della Porta & Andretta, 2004)—have produced a reservoir of documents and platforms to challenge high-speed railway projects. At the same time, between 2005 and 2006 the dimensions and visibility of the No TAV movement against the TAV section between Turin and Lyon went from the local to the national scale (Della Porta & Piazza, 2001; Caruso, 2010; Bobbio, 2012). This has provided new symbols and further resources for similar mobilization against infrastructure projects perceived as useless and imposed from the top down, like the “Pact of Mutual Support” (*Patto di Mutuo Soccorso*¹⁰⁶) and the “Forum Against Large Useless and Enforced Infrastructure” (*Grandi Opere Inutili e Imposte*, GOII) in 2016. In the next section the composition and evolution of the No Tunnel–TAV Committee will be analyzed in a dynamic interactional approach, following its intervention in a broader political debate surrounding the project. This perspective allows us to see the mobilization of expertise as part of a dynamic process of construction related to the evolution of the controversy.

4. The Political Debate on the Tunnel–TAV

The first phase of the debate emerged in 2010, where conflictual exchanges between institutional levels occurred, with the mayor on the one side and the regional government and the FS on the other. The No Tunnel–TAV Committee emerged to mobilize those citizens directly exposed to the risks from the construction works, proposing popular class actions with the support of anti-establishment parties like the Movimento5Stelle and with the civic list *Per un'altra città* (PUC) represented at the municipality level. While the No Tunnel–TAV Committee tried to mobilize broader citizens against the project, the debate went into hiatus until 2012 when some structured environmental organizations like *Italia Nostra* joined the cause.

The controversy shifted dramatically in 2013 when the public prosecutor in Florence

¹⁰⁶ <http://www.pattomutuosoccorso.org/>; <http://www.presidioeuropa.net/blog/tunisi-forum-contro-le-grandi-pere-inutili-imposte/>

launched an inquiry that from Florence extended to involve many other infrastructure projects all around the country. The inquiry produced a shift, with the arguments of the No Tunnel–TAV Committee achieving broader credibility in its attempt to establish a dialog with the Anti-Corruption Authority on the basis of the technical analysis elaborated by few experts from the University of Florence. In 2014 a further judicial proceeding sentenced the enterprises involved in the TAV in Mugello for illegal stockpiling of toxic waste. As will be shown in detail in later paragraphs, while No Tunnel–TAV has been able to gain public credibility since the beginning with the construction of a critical expertise involving a variety experts from the University of Florence, it failed in the end to sustain a broad citizen mobilization.

4.1. Emergence

At the beginning of its public emergence in the media, the conflict seemed to reproduce a political dynamic opposing the municipality with its representatives—the mayor and the party in the local government, the *Partito Democratico* (PD)—with the proponents, both the FS and the Tuscan regional government. The regional and local governments are both led by the same political majority, with a center–left coalition headed by the PD, and at both levels an opposition constituted by sectors of the independent Left and around 2011 the rising *Movimento5Stelle* (Five Star Movement, M5S). The conflict crossed different levels of the same majority, with the local opposition led by Matteo Renzi, the mayor (and later Prime Minister of Italy), contrasting with the upper levels of the same party, dynamics assuming the feature of a traditional local environmental conflict (Bobbio & Zeppetella, 1999; Della Porta et al. 2004). Although the mayor officially intervened in the debate with a critical view of the utility of the project—asking the FS for more guarantees concerning the environmental security and the urban impacts¹⁰⁷—the infrastructure policy of the municipality seemed to reproduce the pro-growth line of the PD at the regional and national levels, approving in 2010 the “Structural Plan” for Florence and making new urban land available for civil construction.

On the issue at hand however the power of the mayor is limited, since the Tunnel–TAV is classified as strategic at the national level. Consequently, the Ministry of Environment played an important role in prioritizing the Florentine TAV, privileging light procedures of evaluation

¹⁰⁷ Commenting on some changes that occurred to the project, the mayor of Florence threatened the FS that he would block the Tunnel–TAV if the enterprise did not respect previous agreements. *La Repubblica* (Firenze), 26 June 2010.

and trying explicitly to avoid an Environmental Impact Assessment.¹⁰⁸ In this case, the Ministry of the Environment being a member of the center–right national government, the mayor of Florence had to face the pro-growth position from both sides: his party ally at the regional level and his competitor at the national level. In terms of political interlocution, the citizen committee No Tunnel–TAV—which emerged as a well-defined actor in 2006—tried to pressure the mayor, mainly through some political groups considered as allies placed in opposition at the municipal level, like the civic list PUC. Although the peculiar leadership of the mayor of Florence seemed to personify a discontinuity with the traditional center–left subculture connected to the *Partito Democratico* that had ruled Florence for two decades, the committee was still suspicious in front of the mayor, recognizing him as the leader of a local party that still had strong relations with the entrepreneurial actors proposing the project (like sectors of the Tuscan Cooperatives).

From the beginning of the political debate, the region and the national government were strongly in favor the Tunnel–TAV, with the municipality expressing a more critical opinion. However, already in 2010 the No Tunnel–TAV Committee intervened in the debate citing the study of some urban planners and engineers of the University of Florence on the risks to buildings in Via Masaccio, near the construction site at Campo di Marte. The Committee compared the existing Tunnel–TAV project with an alternative project written by the University of Florence that would reduce both the costs and the environmental risks.¹⁰⁹ A potential class action from the citizens against FS was endorsed sustained by a Florentine deputy of the Movimento5Stelle.

4.2. Similar and Antecedent Conflicts

If infrastructure projects generally arouse popular contention, in Tuscany the tunnel project prompted a further element of popular suspicion. On a similar issue—high-speed train infrastructure in the northern Florentine neighborhood of Mugello—other groups of citizens had mobilized from the end of the 1990s (Della Porta & Andretta, 2004). Environmental groups and associations mobilized there, presenting critiques based on the potential damage linked to the excavation methods and technologies used to build specific underground tunnels galleries

¹⁰⁸ The Minister of the Environment rejected the option of conducting an Environmental Impact Evaluation (*Valutazione Impatto Ambientale*, VIA) as “crazy”, saying it would “waste two years”. *La Repubblica* (Firenze), 22 June 2010.

¹⁰⁹ *La Repubblica* (Firenze), 4 March 2010.

between Florence and Bologna. Public denunciations by citizens alerted the authorities that the excavation was causing pollution, until the magistrates intervened, opening proceedings against the CAVET consortium responsible.

The local grassroots environmental association, IDRA, played a central role in the mobilization in Mugello. Around 2013, while the controversy concerning the Tunnel–TAV in Florence was rising, the judicial proceeding regarding Mugello was still in the making. In March 2014, the TAV proponents were sentenced for illegal waste stockpiling. This increased suspicions of potential corrupt transactions between politicians and private actors related to infrastructure development all over Tuscany, but especially in Florence.¹¹⁰ IDRA played a role also in the class action for damages against FS, mapping the local buildings and citizens' properties and alerting citizens to potentially similar events that had happened in Mugello.¹¹¹ If citizens were alerted by these factors at the local level, the publicity produced by sustained local opposition to high-speed trains, like the No TAV mobilization in Val di Susa, also played a relevant role in providing motivation and resources for the mobilization in Florence. The public relevance acquired by the mobilization in Val di Susa between 2005–06 saw a local case in Turin transformed into in a symbolic political center where networks of local activists against large-scale infrastructure would meet from time to time with the aim of exchanging resources and strategies. The centrality of Val di Susa at a broader national level is explicitly recognized also by the No Tunnel–TAV activists:

We keep in contact because we understand very well that the problems are global. At a national level, it is a very diffused phenomenon. There was practically no region without some useless large-scale infrastructure project [...] [*on the exchange of information and resources*] On this, there's an uneasy but continuous work through the years [...] The first experiment of committee networking was the *Patto di Mutuo Soccorso* [mutual assistance pact] that was born as a proposal from the Val di Susa. The proposal was to give visibility to all these committees, because everybody knows about the TAV because there is such strong opposition, but some other experiences were a bit isolated, and were also feeling isolated. This aimed at spreading the awareness that the problem was common [...] Because there is a homogeneity. When I talk with other local

¹¹⁰ *La Repubblica (Firenze)*, 21 March 2014.

¹¹¹ *La Repubblica, (Firenze)*, 13 June 2010.

movements—with the No Cruise Ships in Venice, with the No MOSE, and No Ponte—there was an explicit agreement, we understand each other immediately. We are not able to make a political synthesis, in a sense of a unique movement [...] we are not able to do it, but the analysis [...] we are very close [...] the problem of the large-scale infrastructure is one single national problem. It would be necessary to give it a political substance. And about this, we do not know how to do it. [...] This would be a very specific issue, about which I have yet to find a solution.¹¹²

In the Florentine case, No Tunnel–TAV presented as a spontaneous, grassroots committee composed of a mix of mainly local citizens, transport experts and professors at the local university. While few of them shared the condition of newcomers, mobilizing for the first time, the core organizational activities were conducted by activists involved in issues concerning urban regeneration and environmental protection at the city level and linked to networks outside the region, such as the *Patto di Mutuo Soccorso* or the *Grandi Opere Inutili e Imposte*. As will be shown later, in the evolution of the controversy the committee would evolve into a typical urban-citizen movement against indiscriminate pro-growth policies, criticizing the corrupt political exchanges between political parties and entrepreneurial actors, a frame that links the committee to movements expressing a broader distrust toward politics at the national level in Italy (Della Porta & Vannucchi, 2012).

4.3. Judicial Inquiries and Transformation of the Controversy

From the media analysis, in addition to political activists, also critical experts played a role in expanding public awareness of the risks associated with the infrastructure. With their credibility linked to their academic status and their scientific knowledge, some professors of geotechnical engineering at the local faculty in Florence intervened in various ways in the debate, producing alternatives to the official project and sending detailed dossiers to local institutions. One of the letters that was publicly reported in the media was directly addressed by an engineer to the mayor, denouncing the copious mistakes in the project all of which posed potential risks to inhabitants. Detailing “[e]xaggerated dimensions, invasive excavation works, dangerous overlap with underground services in highly populated urban areas”,¹¹³ the letter

¹¹² Interview with No Tunnel–TAV activist, n.5.

¹¹³ *La Repubblica*, (Firenze), 13 June 10

sought also to reveal the limits of technical accuracy presented in some of the proponent claims.

From their professional authority, experts' position does not concern purely technical aspects—a basic requirement to enter the debate—but they also introduced a procedural problem concerning how projects are conceived. Given the nature of the procedures the FS has been unable to give any technical guarantee about potential damage, scheduling, costs or security. The local opposition on the Left, *Per un'altra citta'*, in line with the municipal President of the Environmental Commission, also criticized the FS as a “general contractor”, an institute conceived at the national level with the *Legge Obiettivo* (2001) allowing the proponent of an infrastructure project to autonomously manage inquiries into the state of construction. Of course, the result was an independence from external authorities and their capacity to monitor security or environmental risks as well as the costs.¹¹⁴

Responding to the criticism that emerged in the debate, both the region and the municipality created some institutional mechanisms both to prevent certain risks and address growing opposition from citizens demanding more controls. Both levels—regional and municipal—agreed to establish an Environmental Observatory in 2011, with the aim of informing citizens and monitoring environmental risks. The issue of cost inflation of the project was mainly discussed between the mayor of Florence and the manager of FS. At this stage, the position of the mayor was still critical, until proposing a possible new examination of the project and consequently a new procedure for its approval.¹¹⁵ The Environmental Bureau of the Municipality played an ambivalent role. While at the beginning, it seemed to support citizen initiatives—extending the number of potentially affected properties to 2000 houses, after the rejection by the regional tribunal¹¹⁶—it could not raise a legitimate voice in the case, being ignored in the end by the local institutions. While the No Tunnel–TAV committee and the citizens criticized the absence of the Environmental Bureau, they emphasized its limited impact, acknowledging its lack of real authority¹¹⁷.

The controversy would have probably followed the typical path of a local political conflict about urban regeneration, with sectors mobilizing for environmental friendly technologies and other parts—mainstream parties in government and entrepreneurial actors—supporting a pro-growth program. However, the claims of the opponents, contesting the cost

¹¹⁴ *La Repubblica (Firenze)*», 16 June 10

¹¹⁵ *La Repubblica (Firenze)*, 22 June 2010.

¹¹⁶ *La Repubblica (Firenze)*, 3 September 2010.

¹¹⁷ *La Repubblica (Firenze)*, 9 August 2011

inflation as a potential sign of hidden corruption, gained traction in 2013 when the national system addressing large-scale infrastructure—focusing specifically on the TAV system—was brought under judicial review. Specifically, some members of the PD were investigated, not only regarding the Florentine Tunnel–TAV project but 31 other contracts all over the country. The accusation from the judicial prosecutor refers to corruption of public officials, fake selection in assigning contracts, and mafioso infiltration of contract management.¹¹⁸ The judicial intervention reversed the balance of the conflict, creating new windows of political opportunity for the opponents and their discourse. From the judicial dossiers, the institutional environmental expertise was voluntarily falsified. With the corruption of a geologist—a member of the national Environmental Impact Assessment Agency—the level of toxicity of waste produced during the works were declassified, while other monitoring activities were falsified, with the aim of improving the costs of the works.¹¹⁹ The level of scandal overcame the main environmentalist arguments with the news that some security checks at local schools near the construction sites had been falsified. From this moment on, both the regional and municipal levels started positioning themselves on the side of the judicial authorities, with the President of the region, Enrico Rossi, publicly declaring his will to help the magistrates.¹²⁰ At the same time, the citizen committee No Tunnel–TAV proposed his expertise to collaborate with the magistrates, sending critical reports and their dossiers.¹²¹ The news that one of the main intermediaries involved in the cases of corruption was a Florentine manager gave the Florentine case a wider national dimension, with visible actors like public intellectuals entering the debate and intervening in the media against the project in 2014.¹²² The balance of the controversy tended definitively toward the committee when in 2014 another judicial proceeding concerning the TAV in Mugello found the CAVET directors guilty of illegal waste dumping.¹²³ The visibility of the issue was further confirmed when a letter from UNESCO was sent to the new mayor expressing deep concern about the cultural status of the city in the world.¹²⁴

¹¹⁸ *La Repubblica (Firenze)*, 17 January 2013.

¹¹⁹ *La Repubblica (Firenze)*, 19 January 2013.

¹²⁰ *La Repubblica (Firenze)*, 20 January 2013.

¹²¹ *La Repubblica (Firenze)*, 15 October 2014.

¹²² *La Repubblica (Firenze)* 22 March 2014.

¹²³ *La Repubblica (Firenze)* 21 March 2014.

¹²⁴ *La Repubblica (Firenze)* 23 November 15

Table 3.3 Critical Actors in the Tunnel–TAV Controversy

	Local	Supra-Local
Structured	LAPEI—University of Florence Local Section of <i>Italia Nostra</i> Environmental Observatory Civic List <i>Per un'altra città</i>	UNESCO Movimento5Stelle
Grassroots	No Tunnel–TAV Committee IDRA Association Tuscan Network of Committees for the Environment	

4.4. Expertise and Politics: between Opacity and Transparency

Excluding sensationalistic events that do not correspond to real internal dynamics of mobilization,¹²⁵ from the media a first picture of the dynamics involving proponents and opponents can be sketched.

The first outcome concerns the configuration of the two parts. On the one side, the opposition to the project is represented through a mix of arguments from political groups—local oppositions at the municipality or political activists engaged in urban mobility—and mainly professional experts in engineering and urban planning, constituting a sort of spontaneous organization for public interest.

¹²⁵ Sometimes anecdotes take priority over the real dynamics affecting the actors involved in the mobilization. It is the case of an architect from Padua that in 2011 sends a dossier to the mayor. His critical report focuses on the vibration of the Tunnel TAV that from the station of S.Maria Novella could cause the collapse of Michelangelo's David. The David is a symbol used by the No-Tunnel TAV committee to stress the importance of the cultural heritage of the city that needs to be protected by dangerous projects. However, even if the letter of the architect from Padua assumed an immediate public visibility, the initiative is neither considered as one of the central claims of the No Tunnel TAV committee nor the expert participates with any role in the Florentine mobilization. *La Repubblica (Firenze)*, 2 March 2011.

While the citizen committee made wide use of this technical resource, on the other side, the proponents raised a voice mainly through the chief director of FS, with frequent political intervention—mainly the Ministry of Environment and the Tuscan regional government. The analysis of the media coverage of the debate between 2010 and 2015 shows then an asymmetry in terms of the use of expertise. In the public sphere, the expertise of the proponents was subordinated to the entrepreneurial voice, that of the FS. The municipality proposed an independent Environmental Observatory in July 2010,¹²⁶ which contributed in supporting the first claim of the No Tunnel–TAV committee concerning the buildings at risks on the construction sites—an appeal rejected by the Regional Tribunal TAR in September 2010.¹²⁷ This then disappeared from the debate, a point that was raised by the No Tunnel–TAV committee after the judicial inquiry in 2013.

On the side of the citizens' committee, technical expertise is mobilized by a variety of voices coming from credentialed professionals at the local university of Florence. The liaison with professional experts is one of the key aspects explaining the possibility of the mobilization and at the same time its complexity. This constitutes probably the main obstacle for either its emergence in the public sphere and the mobilization of a broader support from the citizens. Together with these structural aspects, activists complained about the absence of visibility dedicated to such an important project, linking it to an explicit strategy undertaken by local political actors to hide illegal economic exchanges with the concerned entrepreneurial actors.

There is no transparency on the costs of the project. When we have seen that the project was relaunched [...] a small group of activists started to analyze it. The problem is that between 2006–09 there was total silence, a press blackout. Our goal in 2007–09 was principally to raise awareness of the project because nobody knew about it. It was practically a secret one. Even some members of the PD were participating in the first assemblies of the committee, but they said that the order, within the party, was not to talk about the project. Above all, not to put it in evidence—because if you understand what it is, you laugh.¹²⁸

Different levels of contention get intertwined, one more technical (the technological complexity), and one more political (an institutional political will to avoid the diffusion of a

¹²⁶ *La Repubblica (Firenze)*, 22 July 2010.

¹²⁷ *La Repubblica (Firenze)*, 3 September 10

¹²⁸ Interview with No Tunnel TAV activist, n.5.

political debate that could heat up). These two levels are mediated by a third: administrative procedures. The articulation of competences between the administrative and political sphere represents another aspect affecting mobilizations strategies. Being aware of the possibilities to produce observations to the technical proposals of the project, to access to the documents and drafts, as well as being alerted on the channels of opportunity to express discontent, are all aspects that negatively affect the transparency of the decision making and consequently citizens' participation. Moreover, these conditions have the effect to prevent a large citizen participation. The problem of technical opacity is also intertwined with the complexity of the administrative machine. In this case the role of experts as well as of citizens with previous political experience is essential.

5. Composition of the No Tunnel–TAV Committee

The constitution of a spontaneous citizen committee contesting the Tunnel–TAV project dates back to 2006, when local political activists of the independent Left took possession of some drafts of the project. This group was mainly constituted by citizens, apparently lay people. However, two main features are important to consider the centrality that some of them obtains in the mobilization process. Firstly, some of them had experience in the autonomous trade union (“Cobas”) of the local railway workers and in the local independent Left criticizing the new hegemony of the center–left government at the municipality level. The intertwining of these two sectors is essential to understand the possibility of the mobilization: for the *political* resources, in terms of capability to organize political demands and for the *technical* resources, in terms of knowledge of how the Florentine railways work, how the transport system is composed and who the entrepreneurial actors are.

In the development of mobilizations on technological projects, the aspect of technical competence is crucial, as has been shown also in the TAV-Val di Susa (Padovan & Magnano, 2011). Together with political resources, the presence of technical experts or the capacity to recruit them constitutes a central aspect.

Indeed, the initial citizens group sought to examine carefully the project and looked for some advisors, specifically seeking out professional ones. Given the specific technical nature of the project, they came immediately into contact with some professors in the Department of Urban Planning and the Faculty of Engineering at the University of Florence. It is from this mutual interest in a publicly relevant urban project that between 2005 and 2006 urban planners,

engineers, architects, lawyers, railway workers and some independent interested local politicians of the opposition—mainly from the Left—assembled in a study group with the aim of investigating all the impacts of the project on the city. Although it doesn't express any clear ideological position, in the group it is possible to identify a pretty dominant left-wing culture, even though many experts mobilizing were newcomers without political affiliation. This core group formed the No Tunnel–TAV Committee that, starting with a transversal interest, involved a coalition of actors with different political attitudes.

5.1. Counter-Expertise

An important dimension characterizing projects in the transport sector is its specific technical complexity. Political goals, economic interests, public health, environmental and human risks are all involved. This variety of impacts—positive and negative—calls ideally for a variety of professional expertise, and above all disciplines like economics, urban planning and architecture, medicine, earth sciences, and engineering. More specifically, the technical and scientific aspects of the infrastructure project are already the result of a co-production between private experts and the proponents (i.e. the entrepreneurial actors). The Tunnel–TAV project reflects indeed a mix of ideas of modernity and innovation as well as the interests of the proponents. These aspects shape a peculiar spectrum of possibilities and constraints concerning the discussion of the project. In this regard, only individuals or groups with competence in the field are likely able to intervene in discussion. Nevertheless, credentialed or professional expertise is not the only necessary condition for participation in such debate. Everyday knowledge of the landscape and knowledge of an industrial sector or administrative branch can constitute indeed a supplementary and necessary form of expertise that can become a resource for the elaboration of political claims (Epstein, 1996; Allen, 2011).

The main networks composing the No Tunnel–TAV Committee were already involved in different form of activism, from urban regeneration committees to grass-roots trade unionism, generally sharing a critical view on the local politics of urban growth. However, the committee was perceived as a collective without clear ideological or political connotation that could constrain the participation newcomers or common citizens:

When the committee was born, in 2005–06, a research group was formed. This group was centred in the Faculty of Urban Planning Department at the University of Florence. We were three or four from the Faculty; there were two

technicians from the Tuscan Region, two railway workers, and at the beginning there were also some center–left municipal council member in the opposition, but only at the beginning.¹²⁹

For the mobilization, it seemed that a further level of generalization of interests is necessary. The main trait constituting the new collective identity is not linked with citizens purely threatened by a “damaged property”, but with a broader idea of defending an historical city like Florence. The main frames concern mainly environmental and economic negatives: risks due to the specific fragility of Florence’s subterranean environment and a collusion between political parties in government and private powers producing a misuse of public expenditure. Instead of being opposed, the economic and environmental arguments are in this case two sides of the same coin.

5.2. Types of Expertise

Credentialed expertise has played an important role in the elaboration of technical alternatives to the project. At the same time its professional dimension was intertwined with other characteristics like the personal culture of public engagement and the propensity of the profession to be involved in civic initiatives. These characteristics twinned with the mobilizing power of activists explain how it was possible for political demands to be organized in a collective mobilization. It is however important to distinguish between experts and political activists, as well as local or supra-local¹³⁰ experts. This requires a close delineation of potential categories of participants and their specific properties. The core participants of the No Tunnel TAV Committee were:

- 1) Urbanists belonging to a local political association (*Per un'altra città*¹³¹) with political and technical knowledge of the Florentine case,
- 2) Urbanists and engineers belonging to national expert–activist networks, mobilized after the approval of the *Legge Obiettivo* in 2001 through the platform *MovItalia*, a national

¹²⁹ Interview with «No Tunnel–TAV» urban planner, n.10

¹³⁰ By supra-local, I mean experts that predominantly privilege broader national networks of activism or mobilization rather than Florentine networks.

¹³¹ Initially a cultural association and spontaneous political laboratory, the group «*Per un'altra città*» (PUC, <http://www.perunaltracitta.org/lista-di-cittadinanza-2004-2014/>) became a political group at the municipal level in 2004, being at the opposition until 2014 and placed on the Left in the local political space. The group coordinates an online newspaper gathering citizens critical voices on the main urban problems affecting Florence.

group studying the new national infrastructure projects presented in the law and supported by the environmental organization WWF. Some of them had an established professorship in the Faculty of Engineering at the University of Florence that facilitated sociability with other local experts,

- 3) Full professors in the Faculty of Engineering at the University of Florence and particularly in geotechnical engineering, most of them newcomers and not involved in previous political activities,
- 4) Engineers living and working as private professionals in the Florentine area and recruited by some activists as private consultants,
- 5) A retired engineer previously working for the State Railways (*Ferrovie dello Stato*, FS), the enterprise proposing the Tunnel–TAV project. From a purely technical and experiential perspective, he provided technical details concerning the changes of the internal organization and management of FS.

Table 3.4. Types of Experts Classified per Sector and Modes of Engagement

	Private Sector	Public Sector
Political Engagement	X	1,2
Technical Engagement	4,5	3

An attempt to classify the types of experts per level of public engagement and sector of employment can shed light on important dynamics. The first visible outcome of the Table 3.4. concerns the absence of experts both employed in the private sector and engaged in political groups. In the No Tunnel–TAV Committee, experts in the public sectors tend to be also those that belong to environmental organizations, political associations or other committees at the local as well at the supra-local level. Very important is the role of “technical engagement”, crossing public and private sectors. I define technical engagement as a form of involvement in the committee detached from traditional forms of activism within local or supra-local environmental or public interest associations. These typologies show a variation in the values and beliefs motivating the components of the Committee. A further element concerns the different costs of mobilization affecting the different categories. Most of the mobilized experts were public sector employees. It is not unreasonable to assume they would perceive public engagement against the project would be risky, given the public authorities who were backing

it. The overrepresentation of experts with a structured position in the university would suggest also that individuals with a higher resource disposal and authority are more likely to mobilize rather than young researchers without permanent positions in the academia, in line with some other evidence concerning the public engagement of scientists (Bauer & Jensen, 2011). Being able to assume costs (time subtracted to work) and risks of mobilization (credibility attacks, blocked career opportunities etc.) seemed indeed crucial aspects explaining the participation in collective action. These typologies help to understand the variety of the actors involved, and how the relation with technical aspects seemed to overcome traditional ideological conflicts.

5.2.1. Engineers and Professional Neutrality

The overrepresentation of urbanists and engineers within the citizens' committee sheds light which expert knowledge is required to construct a legitimate critique to the project. At the same time, the specific status of the urbanists and engineers shows important differences in their tendency to publicly intervene as critical actors in the debate. Although the specific features of the project concern engineering, the mobilization of engineers encountered difficulties, as one of the engaged engineers admits:

Engineers, especially those in academia, are in general reluctant to be involved in public actions, especially if they have political implications. I would say, in the worst case, this comes down to personal interest, more or less conscious, to first pinpoint the most fruitful way to be employed as a *super partes* expert. In the best case, it reflects a genuinely felt fear of entering cultural terrain that the engineer is simply not familiar with. The culture of engineering basically lacks the language of society or politics, at least as is used in the public domain. I was struck once something a lawyer said about one of his colleagues to me, not knowing that I was an engineer: "He interprets law like an engineer". It was clear that he was referring to the lack of wide historical and social knowledge that allows the law to be interpreted as it should be. From my long experience in engineering, if compared other professional categories, engineers present themselves, so to speak, at a *natural state*. They are less sophisticated, and culturally less informed. In general, they are too absorbed by their "mystique" of the field, that sees the engineer as a practical, impartial man, with a neutral, objective, aseptic language. They are not aware that neutrality is an illusion—both at the technical and scientific levels—and moreover in large-scale

infrastructure projects technical and political issues are always intertwined. But thank God there are always some exceptions.¹³²

Two main kinds of inhibition toward public engagement are mentioned here. The first one deals with a set of attitudes constituting the profession of engineers, whose tendency to work with mathematical and abstract knowledge saw them focusing generally on purely technical questions. One retired engineer at the FS who justifies his participation in the activities of the No Tunnel–TAV Committee as non-political is a case in point: “I am not a politician. I just try to inform citizens about what is happening in Florence, so that nonsensical projects can be avoided.”¹³³

The second reason that engineers are reluctant to be so publicly involved relates to their economic interests. Especially in the field of geotechnical engineering, the large-scale enterprises—like the state railways in Italy—are a major source of work. Being publicly recognized as a critical actor risks career backlash. The awareness of the interconnection between political will, economic interests and technical aspects contributed to the withdrawal of some engineers that had initially participated in the research group on the Tunnel TAV.¹³⁴ The likelihood of mobilization with the No Tunnel–TAV is therefore a function largely of professional autonomy. Having an established position in academia or in the public sector or an independent source of income makes it much easier to engage. Being retired is also a resource, since there are no potential career-related risks.

At the same time the risks associated with challenging the FS-backed project publicly can be set against the benefits, such as professional development. To a certain extent, being involved in the analysis of such a project in one’s “spare time” allows one to develop a range of competencies that can contribute to one’s career. On this point, some experts mentioned that their participation in the committee revealed the benefits of studying real projects in the making, and understanding the procedures through which an infrastructure is conceived.¹³⁵ Getting involved in publicly communicating scientific and technological work to citizens is also perceived as a positive, creating a sense of public utility enhancing the social responsibility of engineering:

¹³² Interview with No Tunnel–TAV engineer, n.7

¹³³ Interview with No Tunnel–TAV engineer, n.11

¹³⁴ Interview with No Tunnel–TAV activist, n.5.

¹³⁵ Interviews with No Tunnel–TAV» experts n.3, 7 and 10.

The TAV has become for me something like [...]someone who engages in charity or in the Red Cross, a sort of voluntary activity. Although you have lots of work to do, you find the time, the will to go once per week to spend a night, to do the stretcher bearer, these things. As for me, I found few hours per week, not more, to read all the documents, and I read lots of them. Every time I read a document I analyzed it posing my critical observations; I did this keenly, because it is my sector, geotechnical engineering.¹³⁶

Engineers became involved in the Committee through two main channels. The first was through the Faculty of Engineering—specifically, its geotechnical department—at the university, which shared the scientific environment and programs with some urban planners. Secondly, engineers were frequently put in touch with workers or activists who were looking for analysis of the security systems of the railway sector.

However, following Tab.3.4., the majority of those engineers mobilizing against the Tunnel–TAV were of the “technically engaged” type. Indeed, among the experts playing a prominent role in the mobilization, very few were “politically engaged”. On the contrary, urbanist and urban planners (who are indeed also generally part of academic faculties) and members of public interest associations or political groups were overrepresented in this category. The common experience of activism shared by citizens engaged in associations and urbanists involved in groups discussing problems of urban mobility in Florence constitutes the main condition channeling protest toward a political goal.

5.2.2. The Political Cultures of Urban Planning

Compared to engineering, disciplines like urban planning and architecture have a different relation to the professional demand. The specific relation with objects like territory, city, public spaces, transport systems and the housing sector have clear and direct public implications. Plans or projects elaborated by urban planners and architects are mainly requested by entrepreneurial actors interested in urban expansion, frequently producing a close and critical relation of the discipline to private business. At the same time, it is exactly in the Faculties of Architecture and Urban Planning that the predominance of pro-growth urbanism could produce actors cultivating a critical attitude toward the neo-liberal use of urbanist expertise. Almost all the urbanists of the No Tunnel–TAV Committee were indeed established members of the

¹³⁶ Interview with «No Tunnel–TAV» engineer, n.8

Florentine Institute of Urban and Territorial Planning—where they held permanent positions as associate, full or retired full professors. Specifically, the Florentine Institute has been an important center in the emergence of a peculiar approach to the urban planning, the so-called “Territorialist School” recognized at the international level. The main feature of this tradition is its peculiar update of a post-marxist communitarian paradigm that criticizes the role of neo-liberal capitalism in subordinating the needs of local communities to pro-growth projects linked to private speculation and decomposing historical identities based on the co-evolution between local cultural traditions and the natural environment (Magnaghi, 2000). The School sets up a national network based on interdisciplinary exchanges among urban planners, economists, historians, geographers, anthropologists and sociologists linking scientific research with local projects and activities directly linked with the analysis and impacts of local policies. The principles of the Territorialist tradition tends then to claim particularly the public and communitarian engagement of a discipline like urban planning that has yet in itself high public relevance. Some of the founding proponents of the Territorialist School, recognized professors of Urban Planning played also a role in mobilizing national and local networks of urban planners on broader cultural and political experiences like the Network for a New Municipality (*Rete Nuovo Municipio*) that in Florence at the beginning of the 2000s animated experiences of local democracy and contributed to the passing of a regional law on participation in 2007. Moreover, most of the Tuscan members of the Territorial School participated in the middle of the 2000s in the foundation of the «Regional Network of committees» a coordination of local environmental committees and associations with the aim of supporting local mobilizations against environmentally consequential infrastructure projects, sharing information, experiences and expertise on local problems.

If many of the experts linked to the Territorial School intervened on different conflicts all around Tuscany—with a strong attention to the problems of the political center, Florence—some others experts belonging to the Institute of Urban Planning and Architecture criticized its excessive public intrusion both on the public level and at the institutional level.

On this point, a further element has to be pinpointed. While the risk of engineering is indeed to produce a lack of engagement, the relatively greater tendency to engage of the urbanist has sometimes had the effect of producing internal conflicts among the experts.

On this point, an aspect concerning different political affiliations or philosophy among urban planners is worth to be mentioned. The presence and work of the network of “Territorialists” was indeed publicly recognized by Tuscan institutions in 2010, when one of

its members was nominated as Regional Council Member for Urban Planning (*Assessore Regionale all'urbanistica*). This element sheds light on the political culture of the Territorialists that expressed a more institutional profile, while other No Tunnel–TAV urban planners belonging to the Florentine Institute of Urban Planning were expressing a more grassroots oriented form of activism. So one of the urban planner mentions:

All of these [the Territorialists] are my collaborators in the Faculty of course. We have been divided on an issue...let's say of "rigidity". I personally impute them to be too much institutional. There's also a problem of control, of command of the structure that remembers past models of hegemony that I absolutely can't stand. The issue was that there was a very free network of committees [in Tuscany]. At a certain point, because it was necessary to relate with external experiences, it has been decided to transform it into an association. And so everything fell apart because they started to constitute a directorate, the presidency and with this direction the committees have experienced a subaltern condition, losing all its movement dynamic [...] In the dialog with the region, the municipality [...] I am more linked to the debates rather than to the structures. As an example, I personally disagree with the organization of the Territorialists. In my opinion they reproduce once again the model of the «Tuscan Network of the committees », with a summit. And even here, there was this combination between university, politics [...] a bit standardized. At a certain point, it happens that you find the big shot that is also a politician. [...] After a while the structure becomes heavy, with this tendency to monopolize the relationships with the institutions on the local territories. Indeed, in Tuscany it is difficult to make new experiences, once for the presence of the Democratic Party, and then for these pre-constituted structures.¹³⁷

Features linked to an academic culture have in this case a direct connection with an implicit political culture. It seems that a line of continuity between certain conceptions of the urban planning and political aspects privilege specific forms of action, or even different concepts of democracy. However, the intertwining of both dimensions—the professional and the political—seems much more a constitutive feature of the discipline if compared to the previous example of engineering. Although some Territorialists contributed in a decisive way to its rise,

¹³⁷ Interview with «No-Tunnel TAV» urban planner, n.6

the spontaneous form assumed by the No Tunnel–TAV Committee attracted urban planners closed to disciplinary approaches that seemed more marginal or at the borders of this predominant (although still critical) Territorialist paradigm. Few of them were already engaged with some of the public intellectuals that founded the Italian Green archipelago (Biorcio, 1992) at the end of the 1980s—like the chemist and environmental activist Enzo Tiezzi at the University of Siena. Some others belonged to cultural sectors considered as critical among both the mainstream urban planning and both the perspective of the Territorialists. Even in this case, the interest for research niches considered alternative to the mainstream represents a cost in terms of career opportunities and it requires a vocational engagement toward the public role of urban planner:

I've never thought about academia in career terms. I try to conduct my life in general and then my academic life, applying myself to things I know I could investigate in depth, those for which I felt sufficiently talented. Only those things I could transmit to students. I had some results. But, trust me, so important that they reward me for everything I've sacrificed in terms of career. I had such recognitions from part of the students and also I had lots of satisfaction when, talking about the projects we studied, like the "No TAV", when I introduce some observations on the city that concerns the formal world, I started from history and then elaborated different projects and views that are really subversive [...] Because they are not conceived as coming out of real planning practices. But they interest a lot. Citizens are very interested in it [...] Because, if urban planning is not interesting for anybody it becomes a discipline for the élite, for technocrats... that destroys the patrimony. Not only the urban or the historical one, but our territorial one. The city and the country-side. Without even knowing that it is going to be defaced. The fact that in forms – the urban structure and its social meanings - we recognize resources is revolutionary, subversive.¹³⁸

The awareness of the social and political responsibility of the profession appears in this case clear. While from the part of engineers we observed the self-perception of the "technician" and phenomena of exit—when the issue became clearly connected to political implications—within the urban planners the link with political activism is constant.

¹³⁸ Interview with «No-Tunnel TAV» urban planner, n. 10

This professional difference introduces important implications in terms of political intervention and coordination. From the critical urban planning discourse, citizens' participation is an important component in the foundations of the territorial planning. Seen as inhabitants of the city, citizens are an essential component of the democratic conception and at the same time carry a specific form of expertise, the knowledge of the landscape. While this could also be claimed by some engineers, in all the urban planners involved in the mobilization, citizens' participation in urban projects constitutes the core aspect of their conception of environment. The environment is then conceived not only as a natural landscape or urban technological system but on the contrary, as a populated space and a social system. Therefore, in this conception, the technological and sociological dimensions are deeply interconnected. Finally, while urban planners seemed to intervene directly in the public sphere, the mobilization of engineers was possible only through the brokerage activity carried out by political activists.

5.3. Technical Alternatives and Types of Action

With no participatory tool activated at the institutional level, the Tunnel–TAV project provoked instead the mobilization of a spontaneous citizen committee that focused mostly on studying the project. From this point of view, the development of a critical assessment of the project—and its alternatives— by the citizen committee can be interpreted as a replacing absent independent monitoring institutions and environmental assessment procedures

The reason for a sustained mobilization in time—although unsuccessful in involving a broad constituency of citizens—resides in the elaboration of technically certified alternatives.

The main criticisms were directed toward the costs of the Tunnel–TAV project (€1.7 billion), the risk that houses and buildings located near the underground railway track would collapse, and the lack of any legal way of stockpiling the earth excavated during construction, which were classified as toxic waste.¹³⁹ The alternative project—building a surface station—was justified on the basis it would save €1.4 billion by using existing railway track, and avoid soil excavation and exposure of houses to vibrations and the risk of damage.¹⁴⁰ In this regard, even though the committee tried to translate the technical complexity of the critical projects

¹³⁹ Document n.5 «Environmental Damages of the Project by Teresa Crespellani, full professor of engineering at the University of Florence»

¹⁴⁰ Document n.2 «Proposal of a Surface Transit for the High-Speed Train – Technical Relation of the Alternative Project» by the Technical Group for the Study of the Tunnel, No Tunnel TAV committee, Italia Nostra – section of Florence, Citizen committees of the Florentine area

elaborated by its experts and discussed during the assemblies in short fliers and short summaries,¹⁴¹ the activity remained confined into the core of experts and activists composing the initial group in 2006. As previously assessed, any attempt to involve broader alliances among citizens through demonstrations or public assemblies was partially unsuccessful, as described by the same activists:

There has been almost no huge demonstration. When we organized the biggest one in 2010 we counted 2,000 people, too few by our judgement to make an impact, seen given the importance of the problem. At the end we almost ceased to organize them since it was useless to demonstrate when the No TAV group was composed of militants. I don't want to say that this work was not useful to create a collective sensibility [...] because if nowadays we talk with the citizens, the TAV is perceived as a problem in Florence, but they [the citizens] felt they could delegate it to us, so that the mobilization remained composed only of militants.¹⁴²

Given the scarce participation at demonstrations, the critical study of the project and the elaboration of technical alternatives constituted the main activity of the committee that tried to open a broader debate in the issue by organizing public meetings and assemblies.

¹⁴¹ Document n. 8 «Flier on the alternative project and the political omissions» by the No Tunnel TAV committee; Document n.9 «TAV in Florence: comparison between the two projects» by the No Tunnel–TAV committee

¹⁴² Interview with «No Tunnel–TAV» activist, n.5.

Tab.3.5 TAV in Florence: a Comparison between Projects

	FS Project Tunnel TAV	No Tunnel–TAV Alternative Surface Project
Mode	7km long underground tunnel	Two new high-speed tracks built on already existing ones, one tunnel for a 450 m long track
Station	Underground, at the Slaughterhouses (Area Macelli), completely disconnected from the rest of the transport system. 500m x 50m x 30m Demolition of the park of the Slaughterhouses	Surface level, using one of the existing stations, with a proposal to construct an integrating station between Statuto and Santa Maria Novella
Construction sites	Three construction sites: in Sodo, Macelli, Campo di Marte	Two along the railway track between Statuto and Le Cure
Costs	1 billion 500 million (declared) 3 billions (forecast)	300 millions to add two railway tracks
Times	Eight years declared by the experts, Twelve, taking into account the amount of work in progress, the excavation, the draft of the project	3 years, included the time for a serious Environmental Impact Assessment
RISKS		
Aquifer	Collision at the beginning of the tunnels and the station with underground waters with the high risk of collapse of entire neighborhoods	None
Buildings	All the building located less than 150m from the Tunnel (more 2000 as declared by Ferrovie dello Stato), plus the ones interfering with the acquifer	5 to be demolished which only 2 houses
Environmental Problems	1. Impact on the acquifer 2. Pollution of surface and underground waters 3. Dust 4. Noise 5. Disposal of 3 million m ³ of toxic material	Only the material produced in the railway area, given the reduced excavation of earth

(Source: Document n.9, No Tunnel–TAV Flier)

To overcome the opacity of the issue and the political enclosures, the forms of action undertaken by the committee were mainly at the level of scientific production and communication.

Together with the elaboration of alternatives, this activity of translation constituted another important side of the mobilization. The committee used conferences and public assemblies as a form of public awareness-raising about the implications of the project. Furthermore, public lectures in the squares of Florence were also organized by some urban planners, with the aim of creating spaces to interact and discuss with citizens.

The committee became also a space that created bridges among different disciplinary backgrounds—overall between urban planning and engineering—that normally within the scientific organization of the university departments are separated.

The main repertoire of action was, then, moderate, privileging the production of technical reports, petitions directed to institutions, requests for public debates and arenas of discussion. This goes against some public representation that focused on episodes of conflict escalation regarding the «No TAV» Val di Susa committee. The importance of producing scientific reports and to amplify their content through public conferences and demonstration was a strategy to make the issue salient. While these actions played a role in creating an alert for the general public—without visible feedback—it could have contributed in catching the attention of the judicial authorities. At the same time, while resorting to judicial authorities is potentially controversial—as the expensive and unsuccessful civil actions addressed to the regional tribunal TAR show— the inquiry of the public prosecutor intervention shows once again the problem of institutional control to prevent suspicious influences of lobbies on large-scale infrastructures.

6. Conclusions

The mobilization of critical expertise was the main resource constituting the «No Tunnel–TAV» mobilization. In an arena characterized by opacity—technological complexity and political enclosure—the co-production of technical alternatives between activists and professional experts dominated committee activity. Although expertise played a central role in constructing a critique and a frame for the mobilization, the role of political activists with bonds at both the local and national level was central to aggregating the critical demand and recruiting external experts. The double experience as lay experts of the railway system and in autonomous trade

unionism helped trigger the initial alarm regarding the problem and to construct a political platform for the mobilization. In some cases, the activity of the committee triggered the participation of experts less inclined to mobilize. This was clearly observable in the case of engineers, more prone to avoid political engagement and to work at a technical level within their academic or professional borders. In this case, the fact that political activists were predisposed to link their claims to certified and reliable data instead of privileging strong ideological frames helped to cultivate a broader consensus and attract new allies within a difficult field such as engineering. From this point of view, the expertise of urban planners was less difficult to mobilize, given their mixed membership in academic institutions, civil society associations and political groups. Although the institutional enclosure would have contributed to a conflict escalation, and despite the fact that political activists did not frame the opposition as a purely environmental contestation—involving political, economic and public health issues—the level of technical complexity and the abstract character of the project probably inhibited the expansion of protest to a broader popular participation.

While the claims of the Florentine «No Tunnel–TAV» mobilization reflect the general reference to a national economic and political system of large-scale infrastructure that the more famous «No TAV» in Val di Susa had elaborated, the mobilization did not reach the same level of visibility and a similar conflict escalation. In Val di Susa, the project affected a community with dense local and traditional ties, while in the process citizens' property (land and houses) were expropriated. These events produced confrontational episodes with the police, while in the Florentine case the structure of the construction sites, the loose and less visible urban impact failed to reach the public imaginary. However, beyond this dissimilarity, the claims in the two cases are similar. Like the «No TAV» Val di Susa, the Florentine «No Tunnel TAV» committee produced claims in line with the anti-corruption movements of the 1990s, emphasizing the democratic deficit characterizing the large-scale infrastructure policies and the hidden exchanges between lobbies and public affairs. Moreover, they target the specific inutility and inefficiency of projects oriented toward private profits—shared with specific political actors as was certified by the magistrates¹⁴³—while socializing the costs and risks.

The democratic deficit is also highlighted by the «No Tunnel–TAV» experts reporting the absence of real opportunities to debate the issue with experts employed by the proponents.¹⁴⁴ The institutional expertise of the Environmental Observatory was perceived

¹⁴³ *La Repubblica*, Firenze, 16 September 2013.

¹⁴⁴ Document n.5 «Environmental Damages of the Project» by Teresa Crespellani, full professor of

with skepticism, given its low capacity to raise challenges on issues like the waste produced by the works. Skepticism toward institutional environmental regulations was also due to the perception of experts' cooptation into corrupt dynamics, emerging also from the acts of the magistrates. Specifically, this was clear in the way the geologist of the VIA declassified the toxicity on purpose the excavation earth.¹⁴⁵ However, no particular grievance was directed toward the role of experts. Indeed, while expertise played a role in the oppositional front, experts from the proponents had no voice in the debate.

The citizen mobilization can be seen as an attempt to reopen a debate that had been closed. No tool of public consultation was activated and in this sense, the mobilization of a critical expertise is an attempt at democratizing a sphere where through the mechanisms of the general contractor, produce a lack of democratic transparency and efficiency.

7. Chronology

August 1991 The National Authority of the State Railways signed resolution n.971 giving birth to the «TAV s.p.a.», a public-private consortium for the realization of a national network of high-speed railways. The resolution was signed in presence of the Minister of Transport, the President of the IRI (the Institute for the Industrial Reconstruction) and the President of ENI (the National Authority for Hydrocarbons).

April 1997 a proposal concerning the Florentine metropolitan railway track (The Tunnel-TAV project) was finally part of an official agreement signed at the national level by the Minister of Transport, State Railways and local governments.

December 2001 approval of the «*Legge Obiettivo*» n.443/2001 accelerating the procedures at the national level for the realization of large-scale infrastructure projects, introducing the formula of the “general contractor”, while reducing instruments for environmental assessment, as well as the tools of public consultation with citizens and local authorities.

January 2006 a group of autonomous activists, engineers, urban planners took possession of the drafts of the TAV project. Together they started analyzing it through specific public assemblies and at workshops at the University of Florence.

December 2007 approval of the Tuscan Regional Law on Participation, the first device concerning the organization of public debates to improve citizen participation in debate about infrastructure impacting on the landscape and environment.

engineering at the University of Florence»

¹⁴⁵ *La Repubblica*, Firenze, 20 October 2014.

November 2009 demonstration organized by the No Tunnel–TAV committee, with the participation of 2000 citizens from San Marco the construction sites.

October 2010 demonstration organized by the No Tunnel–TAV committee with Vandana Shiva. 800 citizens participate

January 2013 Florence’s Public Prosecutor launched an investigation into 31 large-scale infrastructure projects all around Italy. The inquiries concern the Florentine Tunnel–TAV project. Through a geologist, the proponents were found to have falsified the environmental assessments to declassify toxic wastes. The president of the Tuscan Region, Rossi, publicly declared his intention to bring those responsible to court.

September 2013 through a Tuscan deputy of the Movimento5Stelle the No Tunnel–TAV committee sends to the Italian Parliament its dossiers with technical alternatives to the project elaborated with the engineers and urban planners from the University of Florence

October 2014 the No Tunnel–TAV committee sends a dossier on the critical points concerning the project to Raffaele Cantone, President of the Anti-Corruption Authority. The Florence public prosecutor defines the Florentine Tunnel–TAV project «full of illegal elements»

July 2015 the environmental committees and association that had mobilized a few years prior against the TAV in Mugello—where the enterprises were sentenced for illegal stockpiling of toxic wastes—intervened in the Florentine controversy, demanding that a call be made for a new recruitment of highly qualified independent experts.

November 2015 UNESCO intervened in the issue writing a letter to the municipality of Florence expressing concerns regarding the new infrastructure projects in Florence.

8. Annex

8.1. Interviews

1) RL, Independent Authority for Participation at the Tuscan Region, professor of Public Policy, University of Bologna, September 8th, 2014

2) MM, Public Authority for Participation at Tuscan Region, professor of Public Administration, University of Florence, January 28th, 2016

3) IA, Researcher in Urban Planning, University of Bologna, Member of “*Per un’altra città*” and the Tuscan Network for the Defence of Territories—October 27th, 2015

4) PB, Emeritus Professor of Urban Planning, President of ReTe—Tuscan Network of the Committees for the defense of territory, TAVernelle Val di Pesa, December 16th, 2015

5) TC, Retired Railway Worker, Member of Independent Transport and Mobility Trade

- Union—COBAS, Spokesman of No Tunnel TAV Committee, Florence, January 28th, 2015
- 6) GP, Expert–activist, Urban planner, Professor in the Faculty of Architecture, university of Florence, March on 8th, 2016
 - 7) TC, Expert–ally, Professor of Geotechnical Engineering, University of Florence, February on 5th and 17th, 2016
 - 8) MP, Expert–ally, Private Engineer, Perini & Puggelli Associates, Scandicci, Florence, February on 10th, 2016
 - 9) AZ, Expert–activist, Engineer and Urban Planner, Professor of Infrastructure Engineering, University of Florence, February on 6th, 2016
 - 10) RG, Expert–activist, Architecht, former member of the Radical Left Party «PRC», Retired Professor of Urban Morphology, University of Florence, Florence February on 8th, 2016
 - 11) VA, Expert–ally, Engineer, former Ferrovie dello Stato, Florence, February on 15th, 2016
 - 12) MM, Expert–ally, Professor of Urban Planning at University of Florence, February on 11th, 2016

8.2. Documents

- 1) Alternative Project of «Firenze Novella» Station
- 2) Proposal of a Surface Transit for the High-speed Train—Technical Relation of the Alternative Project by the Technical Group for the Study of the Tunnel, No Tunnel TAV committee, Italia Nostra—section of Florence, Citizen committees of the Florentine area
- 3) Graphical sketches of the Proposal for a Surface Transit of the High-speed Train
- 4) Tunnel with High-speed Train Station - critical elements concerning the realization of galleries with one tunneling machine by Perini & Puggelli Ingegneri Associati
- 5) Environmental Damage of the Project by Teresa Crespellani, full professor of engineering at the University of Florence
- 6) The Tunnel TAV and its current problems by Alberto Ziparo, full professor of Engineering and Urban Planning and Roberto Budini Gattai, Urban Planner, University of Florence
- 7) High-speed Railway. The Florentine Node. Analysis and Perspectives by Alberto Ziparo, Antonio Fiorentino, Roberto Budini Gattai, Giorgio Pizziolo, Vincenzo Abbruzzo
- 8) Flier, «The alternative project and the political omissions», by No Tunnel TAV committee
- 9) Flier, «TAV in Florence: comparison between the two projects», by No Tunnel TAV committee

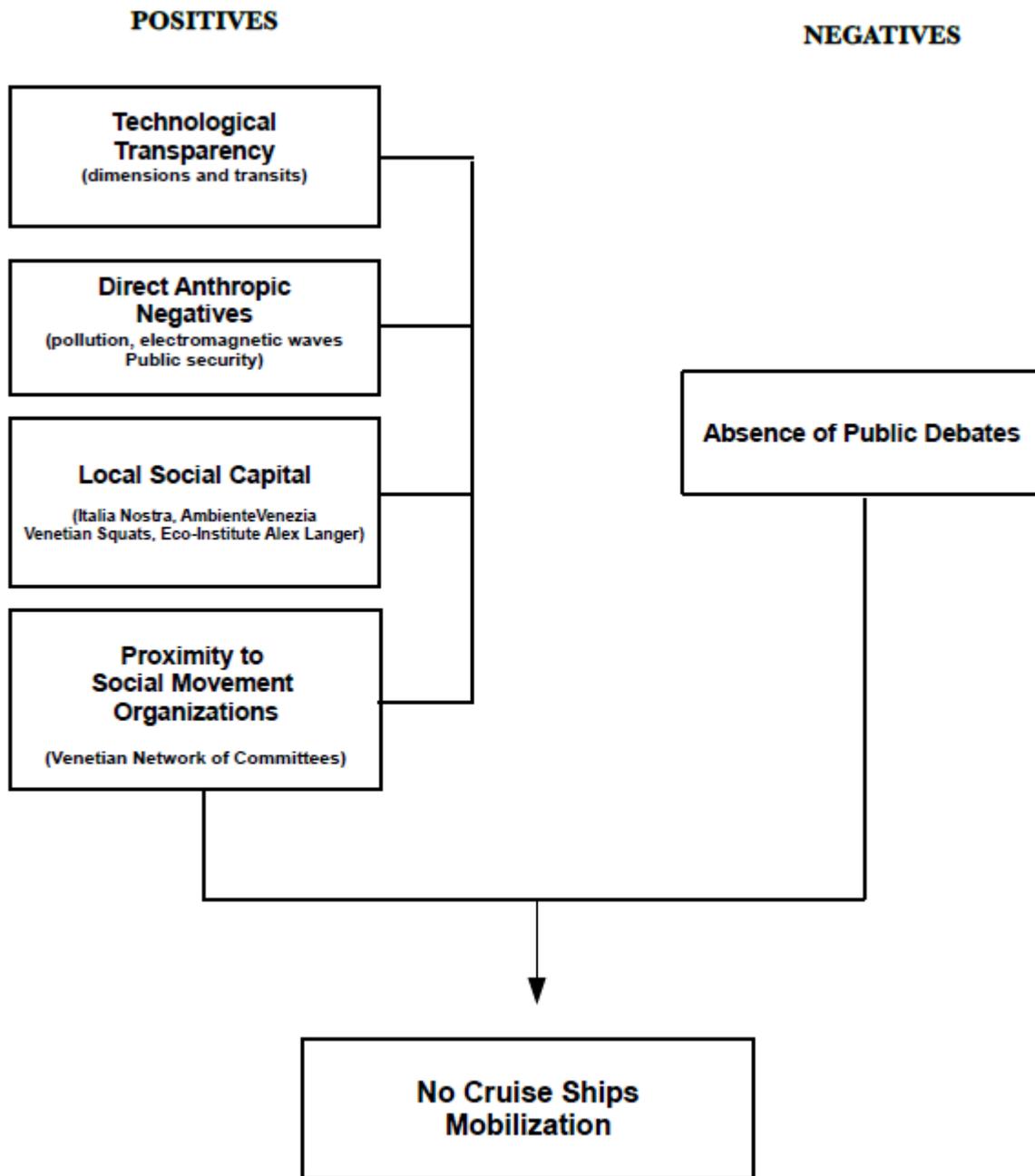
CHAPTER 4

Experts, Citizens and Activists in the “No Cruise Ships” Movement in Venice

1. Introduction

The cruise ships issue has been one of the most salient political issues in Venice in the last decade. The mobilization that emerged to contest their transit in the Lagoon produced one of the most intense levels of civic participation seen in the 2000s. While the presence of the cruise ships in the Lagoon of Venice involves complex technical and scientific issues concerning the use of the terrain, the natural environment and public health, their clear and direct impact on the local economy and urban management gave rise to an intense and sustained citizen mobilization. Moreover, the growth of the contestation prompted a counter-mobilization by interest groups. Here I investigate how the «No Cruise Ships» movement in Venice intervened by constructing a set of critical knowledge about the issue. I look at the interactions among a variety of civil society actors and experts and how they co-produced expert knowledge. The evidence suggests that the rise of a broad citizen mobilization contributed above all to producing knowledge about problem that—to some extent—supported the development of technical alternatives. It also prompted a crisis in the erstwhile quiet technocratic management conducted by the Port Authority (*Autorità Portuale*) and multinationals within the cruise ships sector. For all these reasons this case lends weight to the idea that citizens can, under specified conditions, contribute to the democratization of expertise. Certain concrete technical factors (the risks to public security, the visibility of smoke-stack pollution, the waves produced by ship transit) the citizen mobilization was able to create a broad coalition with citizens and civic association, to enter the debate, and to propose specific alternatives.

Tab.4.1. Conditions of Mobilization against the Cruise Ships



2. Problematizing the Cruise Ships in Venice

The critical stance against the growing presence of cruise ships in the basin of San Marco—in the middle of the historical center of Venice—dates back to the 2000s, coinciding with the rise and evolution of the cruise ship business. Through the 1990s, the cruise ship industry saw huge technological development, with vast growth in ship dimensions and passenger capacity. The visible impact of contemporary models is also significant, as they rise as high as 60 meters above the water's surface. The average house in Venice is 15 meters high. Additionally, the cruise ships produce also loud noise, electromagnetic waves and smoke-stack pollution that are risky for the security of citizens and for public health. At the same time, their presence is linked to the business of the private companies and the Port Authority which casts the problem in classic terms, as a conflict between environmental health and the interests of the powerful economic players. At the same time, the cruise ships create a conflict that opposes the local residents and the environmental associations to the Port Authority and a network of multinationals - the lobbies of the cruise ships sectors.

In this sense, the growth of public discontent concerning the cruise ships also reflects the Venetian inhabitants' Janus-faced approach to tourism, where it is seen both as a potential resource and a problem. Revenue from passenger-related spending grew by 440% between 1997 and 2010 (Lanapoppi, 2011), augmenting long-standing grievances concerning the commodification of the city. In the middle of the 2000s—joining the historical debate concerning Venice's environmental vulnerability prompted by the 1966 flood—the city has hosted a long and difficult debate about the management of the Lagoon. This debate, as discussed in Chapter 2, was the origin of the contested large-scale infrastructure project, the MOSE (*MOdulo di Sperimentazione Elettromeccanica*), still latent at the time the issue of the cruise ships burst into public sphere. On this point, in the analysis of the problem as well as the mobilization, the presence of a latent conflict over the MOSE, which would occupy a central position in the Venetian political debate, has to be taken into account. The mobilizations against the MOSE and the political crises it provoked at different levels (between local and national politics) and among different actors (local government and its more radical allies), and between the civil society actors and its allies in government, played an important role in the rise of a local movement gathering and organizing opposition to the cruise ships.

2.1. Political Environment and Civil Society Actors in Venice

As was described in the chapter on the MOSE (Chapter 2), local governments in Venice was continuously dominated by center–left majorities through the 2000s. The situation changed in 2014 after a huge shock that overwhelmed the entire Venetian political class—also ironically called the “Historical Raid” (*Retata Storica*)—who resigned *en masse* after a judicial investigation. The magistrates investigated corrupt transactions between politicians and the proponents of the project, the *Consorzio Venezia Nuova*.¹⁴⁶ After these events, the new elections in June 2015 saw the victory of the center–right candidate, Luigi Brugnaro, a genuine historical change in the Venetian political panorama.

The victory of a pro-growth candidate could be perceived as one more sign of political enclosure against local citizen movements mobilizing against the transits of the cruise ships in the Lagoon. However, looking at the relations among local government and civil society sectors at the beginning of the 2000s allows us to understand the composition of the new mobilizations. Indeed, between 2000 and 2005 the local government was ruled by Paolo Costa. He became the president of the Port Authority in 2008. The Port is the principal institution overseeing the cruise ships and relations with the companies that own them.

Specifically, the evolution of the No Cruise Ships movement around 2010 is linked to these major shifts at the local level and the collapse of the center–left coalition in power in 2014. The previous mobilization against the MOSE contributed therefore to movement infrastructure, facilitating the creation of new collaborative ties and resources of exchange among various civil society organizations and actors—from the structured environmental organizations to social centers and citizen committees. At the beginning of the mobilization, the «No Mose Permanent Assembly» represents a key organizational structure that can be easily converted in the new mobilization. In the creation of the «No Cruise Ships» local movement we can then state two conditions that are similar to the «No MOSE Permanent Assembly»: the political enclosure of the local representatives and the social density of civil society organizations. Similar movement configurations contrast with the dissimilarity of the technological factor—the cruise ships—whose opacity can nevertheless be tested in comparison that of the MOSE.

¹⁴⁶ *La Nuova Venezia*, 4 June 2014.

2.2. The Problem of Expertise between Independence and Partisanship

The need to assess the impacts of the cruise ships on the general environment of the Lagoon emerged around 2001, with a study of the WWF that linked this new rising threat with global problems like climate change as well as other traditional environmental problems affecting Venice like tourism, the petrochemical site at Marghera, city management, and fishing (Perlasca & Paoletta, 2001). Concrete discussion in the political arena began around 2003, although in these same year the Venetian political class—and the environmental groups—were discussing the opportunity of the MOSE. Also for this reason, together with the limited and episodic impact of the cruise ships, the issue was then probably obscured and did not give rise to a real sustained and visible mobilization. Single experts— a professor of Public Health at the local Cà Foscari University—intervened in the media stressing the cruise ships’ pollution impact and denouncing the attempts to hide the environmental risks to the Lagoon (the wash effect of waves from the ships and the erosion of the mudflats and sediment loss on the sea floor) as well as the noxious emissions from the ships’ drains.¹⁴⁷ The intervention was, however rather isolated, and the Port Authority immediately replied, denying through the voice of its general secretary the real impact “does not produce any dangerous consequence for coasts or foundation.”¹⁴⁸ Another consultant of the Port Authority—an engineer of the private consultancy office «Protecno»—declared furthermore that the impact of the transit on the sea wave movement is almost zero and that in aggregate the ferry boats¹⁴⁹ create more repercussions on the state of the Lagoon.¹⁵⁰

The representatives of the Venetian Neighborhood n.1—located in the historical center and one of the most affected by the transits—reacted to the statements of the Port Authority in the local media with the support of the structured environmental organization *Italia Nostra* and the Superintendent of Venice.¹⁵¹

¹⁴⁷ *La Nuova Venezia*, 10 August 2003.

¹⁴⁸ *La Nuova Venezia*, 21 August 2003.

¹⁴⁹ Translation of the Italian *Vaporetto*, a specific ferry boat used as a means of public transportation in Venice, substituting either for the bus (for collective trips) or the taxi (for smaller groups).

¹⁵⁰ *La Nuova Venezia*, 21 August 2003.

¹⁵¹ The Superintendent of Venice is a State authority linked to the Ministry of Cultural Activities and Tourism, with local competences on the protection, conservation and renovation of the artistic and cultural heritage. In Venice they can express advices on specific problems affecting the historical patrimony. The limited power of their advices as well as their subordination to the political power is frequently criticized – as we will show all along this paper – by the citizen committees and environmental organizations.

Between 2004 and 2006 the debate on the MOSE and its alternatives concentrated all the attention of the environmental groups. However, an important political shift happened during the MOSE debate in 2003¹⁵² with the Red–Green radical left—a traditional ally of the local movements—that finally does not resign after the approval of the infrastructure at the national level. From that moment on, the local environmental movements find no ally in the institutional arena. In March 2004 a committee called «Save Venice and its Lagoon» led by *Italia Nostra* publicly addresses for the first time the need to divert the cruise ship transit away from the Basin of San Marco.¹⁵³ Furthermore, another political force gathering moderate, non-violent and liberal Greens (the “Green Dove” group) decided to stand in local elections in 2005, running on the risk to Venice from the infrastructure politics of the mainstream representatives. The MOSE and the cruise ships were explicitly cited in the program prime examples of such risks.¹⁵⁴ On September 2004 the «No MOSE Permanent Assembly» decided to support the mobilization of citizens in the Santa Marta and Riva degli Schiavoni neighborhoods for a ban on transit of the cruise ships in the San Marco basin. In the media, the «No MOSE» argued the waves from the ships were part of the problem the MOSE was designed to solve. For the first time, the committee expressed publicly a solution—an alternative transit out of the Lagoon, with a reversible and floating port for the cruise ships to dock.¹⁵⁵

In this first phase, the controversy on the impacts of the cruise ships showed the Port Authority was all-too-ready to defend the interests of the businesses served by the cruise ships. Officially the municipality took no clear public position. Only an early public intervention by the Superintendent in 2003¹⁵⁶ and a single expert—a consultant for the municipality—addressed the problem of the environmental risks linked to the cruise ships. While the Port Authority provided data and evidence on the problem through its internal experts—reports that minimized or denied the negatives—at this stage no real counter-expertise emerged from the public institutions.

The civil society actors—local committees and environmental organizations—produced some documents that analyze the problem of the cruise ships in the framework of the general environmental vulnerabilities of Venice. In the next paragraph we try to investigate

¹⁵² See Chapter 2 on the MOSE mobilization for precise contextual and political details.

¹⁵³ «*La Nuova Venezia*», 14 March 2004

¹⁵⁴ «*La Nuova Venezia*», 30 May 2004

¹⁵⁵ From the on-line archive *Laguna Ambiente Archivio Ambiente Venezia*, article from «*Il Gazzettino*» 24 September 06

¹⁵⁶ «*La Nuova Venezia*» 22 August 2003.

more in detail the contextual conditions that give rise to a local movement that grew in intensity and expands in numbers, gaining an international visibility. Specifically, its growth and evolution contributed in articulating a counter-expertise that broke the monopoly of evidence asserted by the private interest groups and the Port Authority.

3. Emergence of the Movement

The «No Cruise Ships» movement emerged and spread in Venice through the 2000s with different levels of intensity, in relation with some political changes at the local level but also with the growth of the touristic market of the cruise ships. The rise of a collective mobilization was then linked to the growing presence of the cruise ships not only in number of transits but also in their infrastructure weight and dimensions:

The cruise ships are not like any other classic infrastructure, like the MOSE. You wake up in the morning and you find a cruise ship in the Lagoon. It's the outcome of a process. The shipbuilding gigantism, its frequency, is a process. From the luxurious cruise ship with four trees that someone can say is beautiful until bigger models of sailing ships [...] something has changed. Before there were smaller models transiting with less frequency. Then gradually there has been acceleration in terms of dimensions and number.¹⁵⁷

The movement peaked between 2011 and 2014. However, the first visible protests date back to October 2006 and the first documents of spontaneous citizen committees mobilizing specifically on the issue came into view at the beginning of 2007. The growth of consistent citizen and inhabitant participation was seen not only in higher levels of participation at a growing number of popular demonstrations with respect to other historical environmental or urban problems, but also in the number and variety of groups and organizations joining the mobilization. Indeed, the initial spontaneous network of citizen committees concerned mainly the citizens living in the central neighborhoods—where the cruise ships ritually stop to let passengers admire San Marco square—but in time its mobilization was joined by various local environmental associations (from the WWF, *Italia Nostra* and *Ambiente Venezia*) and by the local social centers linked to a traditional alternative left-wing culture. With this articulation, the mobilization assumed then the traits of a popular urban movement. The relation that this urban movement entertains with the local institutional political actors change in relation with

¹⁵⁷ Interview with «No Cruise Ships» activist n.6

specific events—and particularly the events of 2014, which paradoxically saw the election of a center–right mayor supporting the positions of the Port Authority and the cruise ships sector.

Within this unit of analysis, we try to analyze the composition and evolution of the citizen committee «No Cruise Ships» and how the different actors contributed at various steps and with different positions in democratizing expertise hitherto confined to the offices of the Port Authority or the institutional administrative levels.

3.1. From Latent Grievances to the Constitution of a «No Cruise Ships» Committee

The first visible protest directed toward the cruise ships appeared in October 2006 with a sit-in with slogans and banners contesting the transit of the cruise ship, the *Brilliance Sea*. The protest was mainly led by a group of local citizens of the neighborhoods Santa Marta and Riva dei Sette Martiri (where the cruise ships most frequently dock) and was supported by the «No MOSE Permanent Assembly», a network of citizens' associations, committees and left-wing activists already protesting against the MOSE. These groups immediately merged their claims under a common slogan «Stop the MOSE, Stop the Cruise Ships». ¹⁵⁸ Specifically, the demonstrators highlighted the problem of smoke-stack pollution, vibrations and the electromagnetic disturbance produced by the transit of cruise ships in the basin of San Marco. Already in this phase, the committees ask to ban the cruise ships from San Marco. In November 2006 the center–left mayor Cacciari defined the cruise ships as «incompatible with the delicate equilibria of the city», ¹⁵⁹ indicating support for the stance laid out by the movement. In January 2007, groups of citizens gathered in the «coordination of the No Cruise Ships neighborhoods committees» collecting the first signatures among the population to present a petition to deputies of the European Parliament visiting Venice. ¹⁶⁰ Another demonstration took place in March 2007 at the Boat Show (*Salone Nautico*) led by the same citizen committees with banners and leaflets that focused on the need for a sustainable presence of the cruise ships and criticizing environmental impact. ¹⁶¹ Protest accelerated again in 2008 with public demonstrations directed toward new cruise ships but also toward key institutions at the local level (the Municipality, the Superintendent and the Port Authority).

Another phenomenon allows us to confirm the salience that the issue assumed for the

¹⁵⁸ *La Nuova Venezia*, 31 October 06

¹⁵⁹ *La Nuova Venezia*, 7 November 06

¹⁶⁰ *La Nuova Venezia*, 22 January 2007.

¹⁶¹ *La Nuova Venezia*, 26 March 2007.

public. Alongside the initial mobilization among inhabitants (mostly citizens located in the most affected neighborhood and the traditional environmental associations), a counter-mobilization emerged to defend the cruise ships. Indeed, a group of citizens and workers employed in the cruise ship economy launched the «Cruise Ships in Venice» committee in 2008. The committee was a collective highlighting the economic benefits of this kind of tourism for the city and explicitly attacking the critical committees as «destructive» while comparing them to the «no-incinerator» committees.¹⁶² While in March 2008 the coordination of the «No Cruise Ships» citizen committees repeated the format of protest with slogans and banners like «Cruise Ships Kill Venice» when the cruise ship *Musica*¹⁶³ was transiting, at the end of the month a demonstration ended in some tense confrontation between the police and some young activists of the social squat *Laboratorio Morion*.¹⁶⁴

If these series of demonstrations helped to shed light on the problem, in April 2008 the «No Cruise Ships» committee rallied in Palazzo Ducale to submit to the Superintendent a dossier on the risks posed by cruise ships,¹⁶⁵ together with nominations for the “Attila prize”,¹⁶⁶ an award given to the authority most negatively affecting the environment of Venice. Specifically, the committee asked for a public debate and criticized the statement of the Superintendent that the cruise ships were “entering the Lagoon with the engine switched off and towed by a tug”.¹⁶⁷ Together with the submission of the dossier on the environmental damage affecting the Lagoon to the Courts of Accounts (*Corte dei Conti*),¹⁶⁸ these demonstrations certify a first step in the making of independent studies and research on the issue by the citizen committees,¹⁶⁹ since the only evidence available on the cruise ships came indeed from the Port Authority’s experts.

¹⁶² *La Nuova Venezia*, 18 February 2008.

¹⁶³ Flagship of the Cruise Ship company Msc, the «Musica» is 293 meter long and 32 meter large for a weight of 86 000 tons, with a capacity of 3000 passengers and 987 crew workers. For the network of citizen committee, this cruise ship was taken as a goal given its structure that well represents the incompatibility with the fragility of the Lagoon («*La Nuova Venezia*», 17 March 2008).

¹⁶⁴ «*La Nuova Venezia*», 31 March 2008.

¹⁶⁵ «*La Nuova Venezia*», 8 April 2008.

¹⁶⁶ The «Attila Prize» refers to the leader of the Huns empire, known for his conquest and devastation of the Italian territories in the High Middle Age. Among the spontaneous networks of Italian environmental activists, the prize is commonly used as a ritual to symbolically criticize the anti-environmental work of public representatives or entrepreneurs.

¹⁶⁷ *La Nuova Venezia*, 8 April 2008.

¹⁶⁸ *La Nuova Venezia*, 22 April 2008.

¹⁶⁹ The dossier is signed by the «Observatory on the Transformations» gathering a group of associations and committees like «Network of the Citizens’ Committee against the Cruise Ships», «No MOSE», «Permanent Assembly against the Chemical Risk», «Ambiente Venezia» «Venice Common Good» and «Italia Nostra».

In this first part of the mobilization, the critical front seemed to be characterized by a transversal composition, with a variety of groups with diverse organizational and political backgrounds. While the first initiatives came from the spontaneous citizen committees located in the key neighborhood, another important role of support was played by the «No MOSE Permanent Assembly», the squat «*Laboratorio Morion*» and other more structured environmental organizations like *Italia Nostra*. The repertoire of action privileged visible but non-violent forms of demonstration, like petitioning or cultural and scientific dissemination. Together with more traditional forms of expertise emerging from the local assemblies (dossiers or publicly oriented scientific papers), photography and visual reports emerged as one of the key tools to demonstrate the impacts of the cruise ships. Citizen committees contributed in addressing the problematic presence of the cruise ships in the Lagoon capturing their transits with cameras and photos at various moments in the day. In this first phase, the organization of conferences and exhibitions with videos and documentaries portraying the problem—like the «Venice Dies» cultural program in the neighborhood Le Zattere¹⁷⁰—was one of the main tools used by the growing movement to catch the attention of the citizens and authorities of Venice. In May 2008 Paolo Costa¹⁷¹ became president of the Port Authority, as the outcome of an agreement between Romano Prodi and the Prime Minister Silvio Berlusconi and with the approval of the Governor of the Veneto Region, Giancarlo Galan.¹⁷² After this appointment, the first act of the «No Cruise Ship» committee was to demonstrate in a protest flotilla to deliver the Atilla Prize to the new President of the Port Authority.¹⁷³ After this growth in 2007–08 the movement entered into a phase of latency, as the electoral campaign in 2010 for the appointment of the new mayor of Venice approaches.¹⁷⁴

¹⁷⁰ *La Nuova Venezia*, 25 April 2008.

¹⁷¹ Ex-Minister of the Infrastructure under the first Prodi Government, and ex-mayor of Venice for the mandate 2000-2005 leading a center-left coalition, Paolo Costa is at the time well known for his strong pro-growth policies, and particularly in favor of the MOSE. Seen as an adversary by the local social movements and environmental organizations, his appointment is perceived as a clear pro-Cruise Ships position. For more details about his profile and role in the Venetian infrastructure policies see Chapter 2.

¹⁷² *La Nuova Venezia*, 14 May 2008.

¹⁷³ *La Nuova Venezia*, 14 September 2008.

¹⁷⁴ In April 2010 Giorgio Orsoni gets appointed as new mayor of Venice leading a center-left majority supported by a Red-Green radical Left formation, SEL («*Sinistra, Ecologia, Libertà*») that supported with other names and symbols the center-left local government of Cacciari I, Costa and Cacciari II.

3.2. Growing in Generality and Intensity

It is between 2011 and 2013 that the movement entered a new phase of growth, in terms of the intensity of protest events, citizen participation and visibility in the public sphere, attracting the attention of national and international media. If, on the one hand, the growth of mobilization created new ties among various actors characterized by different civic cultures and repertoires of action, on the other hand tensions emerged among the different components of the movement concerning the choice of borderline repertoires of action and the types of alternatives. While these aspects produced some shifts in terms of internal coordination—with the change of spokesmen—the tensions did not significantly affect the unity of the movement or the type of interactions with institutions (e.g. no episode of violence escalation, repression by the authorities or cases of violent extremism by the participants). Nevertheless, these dynamics sheds light on the differences concerning the claims and strategies elaborated by the different components.

At the beginning of this new cycle of mobilization, a collective communiqué circulating in July 2011 restated the claims and goals of the citizens movement:

We are a consistent group of Venetian citizens gathered around the problem of the growing presence of cruise ships (610 mega-ships in 2010 alone) that transit in the Lagoon just meters from San Marco. [...] We have sent a letter to our local representatives to inform them about issues we care a lot about: the emissions and loud noise produced by the maxi-ships; their capacity to move hundreds of thousands of cubic meters of water in lateral channels in a few seconds; that the city lets these tourists land when they do not sojourn here; and the progressive undermining of health, architectural heritage and the fragile environmental equilibrium. [...] We belong to political parties, associations, local groups with a different nature, but our initiative is spontaneous, grown from an aggregation of free citizens and not subordinated to any form of manipulation. We don't say just «NO», we aim at opening a constructive debate to which we will participate with concrete proposals, while respecting touristic and commercial exigencies as well as an acceptable quality of life for the

residents¹⁷⁵

The communiqué ends with three types of demands: 1) the *immediate* production of further data and evidence on the environmental impacts (loud noise, vibrations, sea wave movement) and a public debate, 2) *short term* solutions like the substitution of the motors of the maxi-cruise ships with environmental-friendly ones, a limit to their transits in the week end, and a discussion about the future of the Port in Venice, 3) *within three years* goals like the construction of a terminal for the passengers out of the Lagoon in alternative to the actual terminal located at the Maritimba station, 4) *within a decade* exclusion of maxi-cruise ships from the Lagoon and restituting the Maritime area to city control.¹⁷⁶

Already in July 2011 the committee can attest a high level of elaboration in the problem of the cruise ships. Its complexity, regarding urban transport, energetic choices, levels of pollution, environmental modification, economic impacts, democratic levels needed a variety of competences. Only attracting a plurality of participants with various forms of expertise was the citizen movements able to give rise to a sustained mobilization in time. The committee sought not to be purely confrontational but requested a public debate on issues that has so far been confined to technical offices of the Port Authority, and sought to democratize key parts of the city that had mainly been under the control of a national authority (and basically subtracted to direct public monitoring). Moreover, a few cultural events at the end of 2011 indicated the growing interest of citizens in the issue. Between November and December 2011, two book presentations at the local social center *Morion* and the municipality hall in San Leonardo registered an unexpected level of participation:

The two public presentations of this book, *They Call Them Boats*,¹⁷⁷ have been a litmus test of an enormous citizens malaise here in Venice on the issue of maxi cruise ships. An unexpected event, that caught everybody off guard. Me, the editor, my friends. Here at the public hall in San Leonardo, which is managed by the municipality, hundreds of people arrived; there was even a crowd in the street pushing to enter. So, we started realizing the situation that had to be

¹⁷⁵ Press Communiqué *Cruise Ships out of San Marco Basin!* from the «No Cruise Ships» citizen committee, 11 July 2011, p.1.

¹⁷⁶ Press Communiqué, 11 July 2011, p.2.

¹⁷⁷ The original in Italian is *E le chiamano navi. Il crocierismo fa boom in Laguna*, edited by the press «Corte del Fontego» in Venice in 2011 (Testa, 2011).

faced.¹⁷⁸

Ideally these two book presentations can be considered as the beginning of a new cycle of protests, stimulating the spontaneous critical actors to channel their demands into sustained visible collective actions. Following this wave, the local environmental association *Ambiente Venezia* distributed a dossier on the cruise ships in the Lagoon to citizens and to the mayor of Venice, Giorgio Orsoni.¹⁷⁹

The debate provoked initial reactions, with the Minister of the Environment, Corrado Clini, launching an idea to create a new off-shore port where the cruise ships could dock. While the solution received initial support from the mayor of Venice, the citizen committees criticized the idea of a new infrastructure project as not approaching the problem at its roots. They criticized the absence of a debate on the toleration threshold for the cruise ships (dimension and number per week) as well as the lack of independent studies on their impact.¹⁸⁰

Criticizing the Territorial Planning Asset (PAT, «*Piano d'Assetto Territoriale*»), the citizen movement against the cruise-ships linked the specificity of the problem to a general agenda that similarly included the construction of a new airport area in Tessera, a high-speed roadway project between Venice and Trieste, a new subway project in the Lagoon, and new buildings and palaces between Mestre and Marghera. A group of one-hundred citizens tried to intervene during the debate at the municipality located in Cà Farsetti, with a slogan playing on the acronym “PAT”, calling it a “Territorial Killing Plan” (*Piano d'Assassinio Territoriale*).¹⁸¹

In this sense, the critical movement against the cruise ships cast grievances within a broader discourse about mismanagement of the Lagoon in general.

3.2.1. The Peak

The most intense phase of the mobilization was between December 2011 and December 2013, when the movement spread through both visible protest events, with repertoires like the protest flotillas and on-water engagement of the ships that attracted international media attention.¹⁸²

¹⁷⁸ Interview with No Cruise Ships activist n.5.

¹⁷⁹ *La Nuova Venezia*, 3 December 2011.

¹⁸⁰ *La Nuova Venezia*, 11 December 2011. This position distinguished the citizens front from the representatives of the Green Party at the local government. Indeed, later on the local councilor at the environment (*Assessore comunale all'ambiente*) – belonging to the radical Left formation SEL – supports the idea of the minister and the mayor of an off-shore port, «*La Nuova Venezia*», 15 January 2012.

¹⁸¹ *La Nuova Venezia*, 14 December 2011.

¹⁸² In February 2012, the protest reached the pages of the New York Times (*La Nuova Venezia*, 8

At the beginning of January 2012, fifty demonstrators at the Punta della Dogana¹⁸³ contested the first maxi-cruise ships arriving in the new year. While the movement is gathering new forces and spreading in terms of popular participation, an external event accelerates its growth. On 13 January the cruise ship *Costa Concordia* capsized and sank near the island of Giglio, the deaths of 33 people onboard.¹⁸⁴

The event created immediately political consequences for the Venetian case. While the day after two-hundred No Cruise Ships demonstrators contested the entry of the *Magnifica* into the San Marco basin with the slogan “Big Ship, You Kill Me”, the Minister of the Environment Corrado Clini explicitly declared that the accident would have direct consequences for the management of cruise ship traffic in Venice, meeting the agreement of the center-right president of the Veneto Region, Luca Zaia, and proposing the alternative of an off-shore port.¹⁸⁵

At the same time, the «No Cruise Ships» committee was invited to appear before the Environmental Commission of the Italian Senate to discuss the issue, and the first outcome of the debate is an agreement among committees, structured environmental organizations,¹⁸⁶ the President of the Veneto Region and the Minister of the Environment to ban cruise ship transit in the Lagoon.¹⁸⁷ This first important outcome confirms how the activity of the committee partly influenced public consensus on control of the flows of cruise ships to preserve the environmental stability of the Lagoon. Together with more confrontational and protest repertoires, the committee continued to produce and forward dossiers and petitions to the main

February 2012), attention that continued with an article written by the public historian of art Salvatore Settis, *Can we save Venice before it's too late?*, in the *New York Times*, 29 August 2016 see also <https://www.nytimes.com/2016/08/30/opinion/can-we-save-venice-before-its-too-late.html>.

On 25 September 2011, the prestigious Venetian Institute for Sciences, Humanities and the Arts—an esteemed Italian academy founded by Napoleon—awarded the German journalist Fiona Ehlers for her journalistic critique published on 21 February in the weekly newspaper *Der Spiegel* with the title *Das Leben einer Toten* (The Life of a Dead), (see Testa, 2014).

¹⁸³ The *Punta della Dogana* is the most important transit point of the Giudecca Canal, crossing the historical center, where cruise ships normally stop and move close to the San Marco square, to give their clients the opportunity either to get off for few hours, either to have an overview on the whole city.

¹⁸⁴ Controversies concerning the security, the risks and the responsibility of the captains and the direction of the *Costa Concordia* occupied the Italian debate for months, while attracting the attention of the international media.

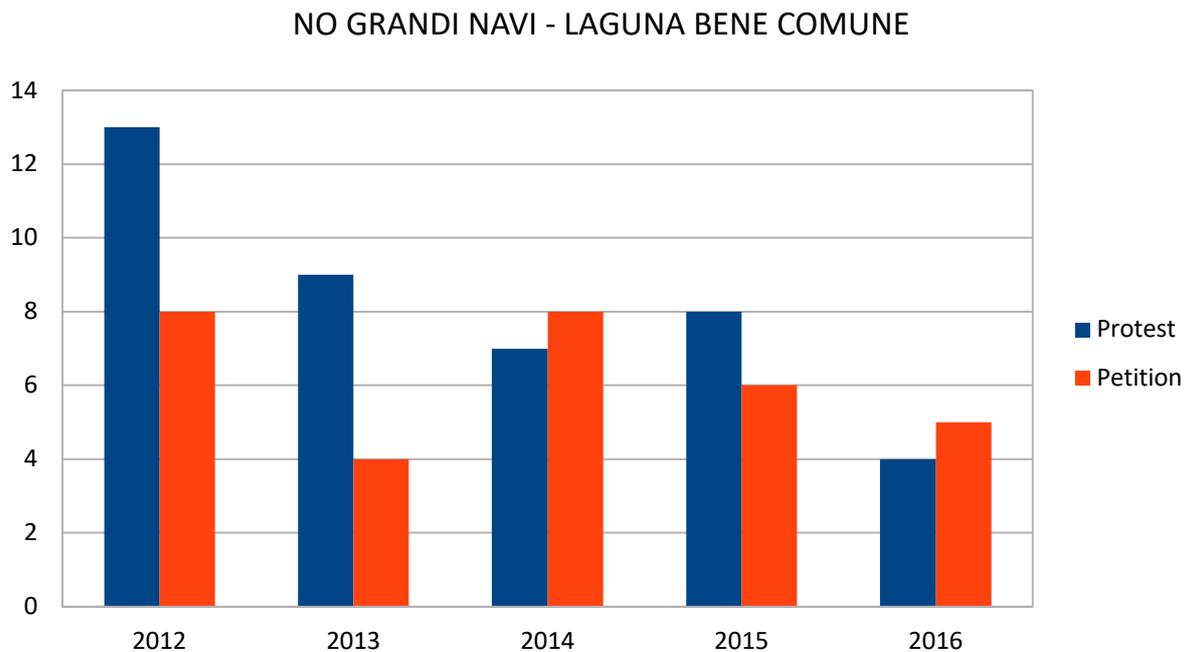
¹⁸⁵ *La Nuova Venezia*, 15 January 2012.

¹⁸⁶ Mainly the *Legambiente*, the biggest national environmental organization in Italy, raise in some moments the voice at the institutional level, given its strong links with the Democratic Party (PD). However, its relation with the specific committees in Venice is sporadic, confirming the ambivalence of keeping connection between governmental and protest actors (Pellizzoni et al, 2013; Pellizzoni & Osti, 2008).

¹⁸⁷ *La Nuova Venezia*, 15 January 2012.

institutional centers at the local, national and international level. The production of dossiers on the risks and costs cruise ship transit was as important as the organization of demonstrations and more visible events.

Figure 4.2. Annual Number of Petitions and Protest Events against Maxi-Cruise Ships in Venice (2012–16)

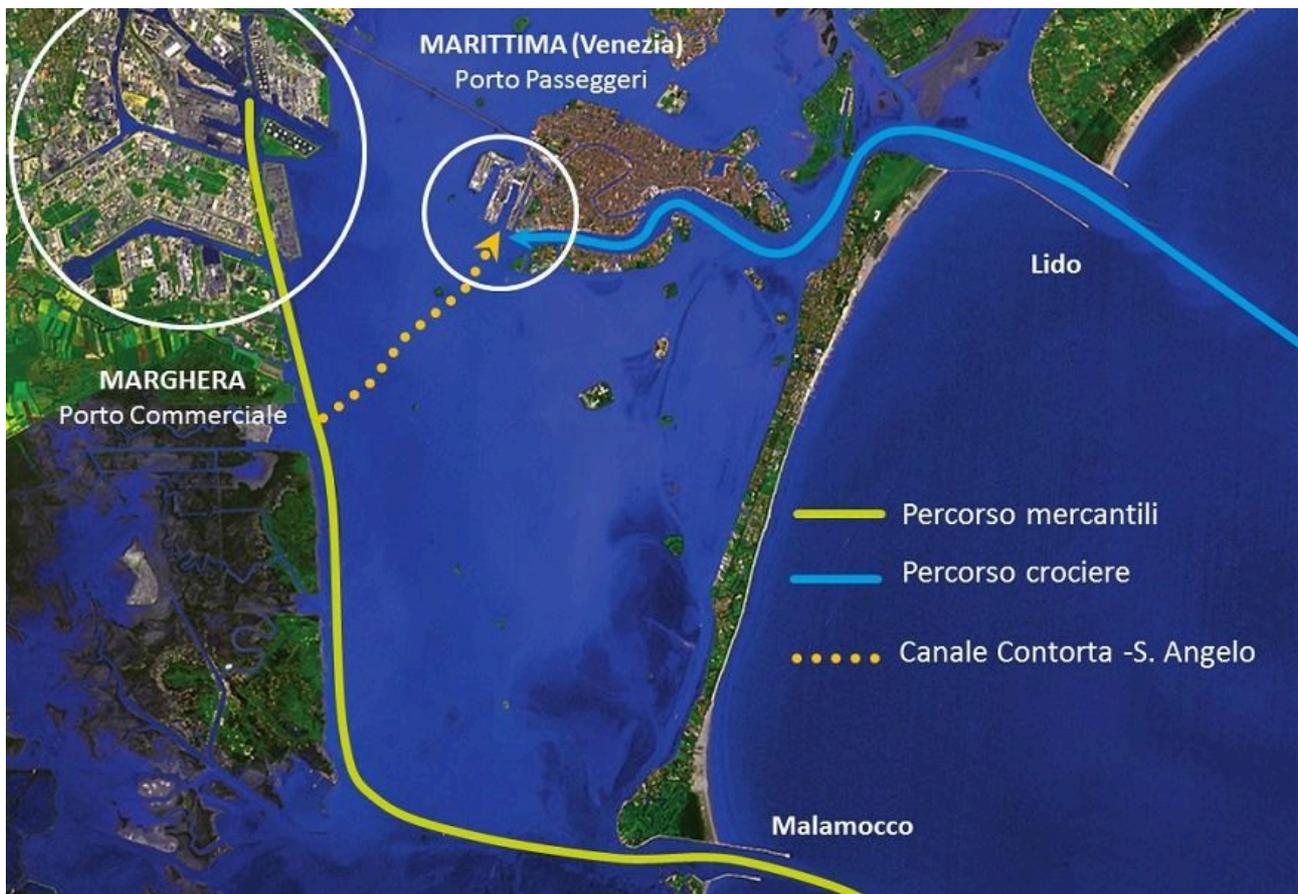


After Costa Concordia disaster, the Venetian case was taken up for discussion in the national Parliament,¹⁸⁸ heralding the arrival of the issue at the national level, while the municipality agreed to amend the PAT to restrict cruise ship transiting of the Lagoon.¹⁸⁹ While social pressure and the contingent shock of the Costa Concordia appeared to focus the attention of institutional politics, the hypothetical solution proposed by the Minister of Environment with the Port Authority was still highly technocratic. Indeed, the proposal by governmental actors, together with the Port Authority, to excavate a new channel—the so-called *Contorta*—linking the commercial port with the Maritime station, was clearly a pro-growth approach.

¹⁸⁸ *La Nuova Venezia*», 18 January 2012.

¹⁸⁹ “The PAT assumes as its goal the definitive expulsion of the cruise ships that are not compatible with the historical city and the context of the Lagoon. The public administration promotes a series of studies on the environmental, health-related, morphologic impacts to be realized in 18 months, defining a maximum threshold for a daily touristic sustainability” [Art.35 Pat – 2012, Municipality of Venice] *La Nuova Venezia*, 25 January 2012.

Figure 4.3. Proposed excavation of a new channel for the transit of the cruise ships, the so-called «Contorta» channel (the broken yellow line)



On 28 January, with a reunion at the local university IUAV, the committee and experts in urban planning, engineering, economics discussed establishing a political platform, but decided not to propose a single alternative project. They agreed to continue general opposition to cruise ships in the Lagoon to request a limit for “transit volume” (as a vector of the number and dimension of ships passing). In this sense, the committee, as a network of different civil society groups and associations, sought to avoid internal divisions and convey the image of a spontaneous collective actor not linked to any specific proposal (as an informal public interest group would do).

At this turning point, probably the peak of its public emergence, the No Cruise Ships committee appeared to be managing to keep all the groups and cultures united. The criticisms concerning the logic of the channel *Contorta* were amplified together with a loss of credibility for those actors responsible for bringing it to fruition. The technical committee of the Waterway Manager (*Magistrato alle acque*) commissioned an outfit linked to the *Consorzio Venezia Nuova*, the «*Studio Thetis* to undertake the impact studies on the *Contorta*, a clear conflict of

interest.¹⁹⁰ The *Contorta* proposal was criticized by the internationally renowned expert in hydraulic engineering, Luigi D'Alpaos, of the University of Padua, who underscored its destructive impacts on the equilibria of the Lagoon.¹⁹¹ This public intervention from an authoritative external voice such as D'Alpaos contributed implicitly to further legitimization of the critical positions of the «No Cruise Ships» citizen committee. In March, the latter organized a sit-in at the headquarters of the Waterway Manager, demanding a copy of any documentation related to plans to solve the problem of the cruise ships and for the Aarhus directives of 1998 on the right of citizens to be informed about issues concerning public risks to be respected.¹⁹²

In July, the committee addressed further criticisms to the Venetian Environmental Protection Agency (ARPAV) for the cruise ship pollution,¹⁹³ while in October the Port Authority and the municipality commissioned the local universities Cà Foscari and IUAV further studies to find alternatives to the *Contorta*.¹⁹⁴ The *Jolly Nero* motor vessel accident in Genoa in 2013 produced a huge debate on the security of the ports on the national media . However this event saw the committee in Venice react prudently, not «speculating on the dramas» but stressing the importance of finding criteria for public security related to cruise ships transit.¹⁹⁵ The claims of the committee receive a public endorsement not only by the scientific world, as the case with the appeal of the scientists in November 2013 that criticized the construction of the channel *Contorta*. The visibility of the problem grew beyond the technical and scientific field grew, drawing the attention of popular celebrities—from the national singer Adriano Celentano as well as to various filmmakers—who through 2013 launched petitions and publicly denounced the handling of the cruise ships issue.¹⁹⁶

This was the moment when both the public visibility of the issue and the protests peaked. In December 2013, at the demonstration of the Venetian Network of citizen committees—with

¹⁹⁰ The main concessionaire charged to realize the MOSE, already criticized by the citizen committee «No MOSE permanent assembly» for its opaque procedures of evaluation and its ambivalent selection of the enterprises charged to realize it. For further information, see the specific chapter 2 on the MOSE case. *La Nuova Venezia*, 7 February 2012.

¹⁹¹ *La Nuova Venezia*, 28 February 2012.

¹⁹² *La Nuova Venezia*, 16 March 2012.

¹⁹³ *La Nuova Venezia*, 28 July 2012.

¹⁹⁴ *La Nuova Venezia*, 18 October 2012.

¹⁹⁵ *La Nuova Venezia*, 8 May 2013.

¹⁹⁶ As an example, in August 2013 the singer Adriano Celentano denounced in his TV shows the situation in Venice (*La Nuova Venezia*, 9 August 2013), while in October of the same the film director Gabriele Muccino launched a petition to expel the cruise ships from the Lagoon («*La Nuova Venezia*», 21 October 2013).

the participation of 160 local committees from all over the region —the local squats tried to challenge the limits of the authorized protest flotilla and was involved in a borderline confrontation with the police at the Maritime station. This event prompted internal tensions between the radical and moderate wings of the movement.¹⁹⁷

3.2.2. The MOSE Shock

If at the end of 2013 the «No Cruise Ships» committee reached its peak in terms of public visibility and participation, this seemed to be the result of broader dynamics linked to the general growth of environmental grievances at the city level—the unsolved conflict regarding the MOSE—as well as at regional level, with the birth of a Venetian Network of citizens committees.¹⁹⁸

With all this happening, the committee commissioned new studies on the impacts of the cruise ships. In December 2013, an economist from the Cà Foscari University published a cost–benefit analysis of the cruise ships on the local economy, emphasizing not only the negative impacts on public health of the pollution, but also challenging the scale of the economic benefits to Venice asserted by the Port Authority.¹⁹⁹

The costs of mega-cruise tourism fall mainly on those who draw no direct benefit from the tourist activities of the cruises, e.g. the majority of the residents in the historic city, who have to bear an annual burden *per capita* of some €3,300; this provides a partial indication of the deterioration of the quality of life borne by visitors and residents and ultimately translates into an increased tax burden at local and national levels. [...] In other words, there is good reason to fear that once the environmental quality and the attractiveness of a tourist destination have declined, tourists will abandon it in favour of a different port—and that this will be the fate of Venice. To continue to boost cruise tourism on large ships at Venice is senseless and economically mistaken (Tattara, 2014, p.35)

¹⁹⁷ *La Nuova Venezia*, 1 December 2013.

¹⁹⁸ Launched in some assemblies in 2013 held at the headquarters of the eco-pacifist network *Beati costruttori di Pace* in Padua, the Venetian network of citizen committees for the defense of the territory tried to gather all the local mobilizations at the regional level (from the Alps to the valleys and Lagoon) into a general framework of opposition toward the policies of soil consumption that Veneto region promotes (Document n.3 «No Big Infrastructure Works – No Soil Consumption- for the Democracy of Common Goods and the Right to Breath, Work and Live in Veneto»). For further information see the case selection and the introductory chapter to the Venetian case.

¹⁹⁹ *La Nuova Venezia*, 17 December 2013.

Coming from an independent expert of the local university, the new study offered fresh arguments for the mobilization against the cruise ships. The study also showed the net economic gain was almost zero, even before considering the environmental and social costs, especially for the industry's workforce, which resides mostly outside of Venice.

At this point, the issue had attracted the attention of various actors. 2014 was indeed a crucial year for the evolution of the mobilization and while the No Cruise Ships committee denounced the absence of a Health Impact Assessment (VAS) on the *Contorta* project,²⁰⁰ in March the Port authority received seven different alternative proposals for dealing with cruise ship transit in the Lagoon:

- 1) A *Contorta* channel proposed by the Port Authority,
- 2) A dock in Marghera by the municipality of Venice,
- 3) A new sea bypass between the Giudecca Canal and the Sacca Sessola and San Clemente islands, written by the national Undersecretary for Economics, Zanetti (Lista Civica) and financed by the Venice Terminal Passengers (a society linked to the business of cruise ships),
- 4) An off-shore port in the Lido harbor mouth, proposed by the Democrat former vice minister De Piccoli,
- 5) An off-shore port at Lido proposed by the 5 Star Movement provincial council member in urban planning from the nearby municipality of Mira
- 6) A dock at the Lido proposed by an architect from the Cà Foscari University,
- 7) An alternative tunnel linking the Maritime station (called «*Vittorio Emanuele Channel*») proposed by a private citizen.

The submission of the projects to the Port Authority attracted the attention of politicians of the Left, with the Democrat Senator Felice Casson (PD) expressing the need for «transparent procedures» and denouncing the weak credibility and independence of both the Port Authority and the Water Manager.²⁰¹ In May an event seemed to confirm the lack of transparency in the procedures, with the emergence of negative environmental (VIA) and public health (VAS) assessments for the *Contorta* channel published by the national VIA Commission. While the document was already approved in September 2013, the acts were published, increasing public

²⁰⁰ «*La Nuova Venezia*», 17 January 2014.

²⁰¹ *La Nuova Venezia*, 11 March 2014.

grievances over the opacity of the procedures, seen as being driven by corrupt influences.²⁰²

The crisis of credibility in the institutions was flared again when in June 2014 the magistrates launched an enquiry affecting the entire Venetian political class, for irregularities linked to the MOSE project. Employees of the enterprise «*Mantovani*», commissioned to construct the MOSE, and the *Consorzio Venezia Nuova* as well as local representatives were investigated and arrested.²⁰³ The event triggered the collapse of the entire local government, with the local administration placed under the authority of an external commissioner. The protest escalated, with a new waves of protest episodes directed toward the main institutions in Venice—the occupation of the offices of the Water Manager—and in Rome, at the Ministry of Infrastructure, with protesters staging sit-ins bearing slogans like «No large-scale infrastructure projects—No Mafia in the Lagoon», and finally with the committees asking to be received by the new commissioner Zappalorto to collaborate to his inquiries providing dossiers and data concerning the MOSE.²⁰⁴ In October 2014 two experts from the University of Padua left the research unit «*Corila*» that was commissioned by the *Consorzio Venezia Nuova* to develop alternatives for the cruise ships, criticizing the choice of the *Contorta* channel: «too many points have not been accepted and remain obscure ».²⁰⁵ In December 2014, after a year and a half of works and studies, a new proposal for an alternative floatable and reversible «off shore» port was presented by a group of experts from the IUAV University, linked to the Alex Langer Eco-Institute.²⁰⁶

The elections in April 2015 saw the victory of a center–right majority led by the former president of the Venetian industrial federation, Luigi Brugnarò, expressing a pro-cruise ship position and a strong rapprochement to the Port Authority. In October 2015 the conservationist national organization *Fondo Ambiente Italiano* (FAI) launched a proposal to transfer the cruise ships transit in Trieste, approved by *Italia Nostra* and supported by the center–left minister of cultural activities Dario Franceschini.²⁰⁷ In this case, another option was proposed to solve the problem, although one that was distinctly «Not In My Backyard» in approach. In November, coinciding with the world-wide demonstration against climate change, a march was organized in Venice. Led by Don Albino Bizzotto—one of the leaders of the eco-pacifist network at the

²⁰² *La Nuova Venezia*, 10 May 2014.

²⁰³ *La Nuova Venezia*, 4 June 2014.

²⁰⁴ *La Nuova Venezia*, 16 July 2014.

²⁰⁵ *La Nuova Venezia*, 2 October 2014.

²⁰⁶ *La Nuova Venezia*, 6 December 2014.

²⁰⁷ *La Nuova Venezia*, 5 October 2015.

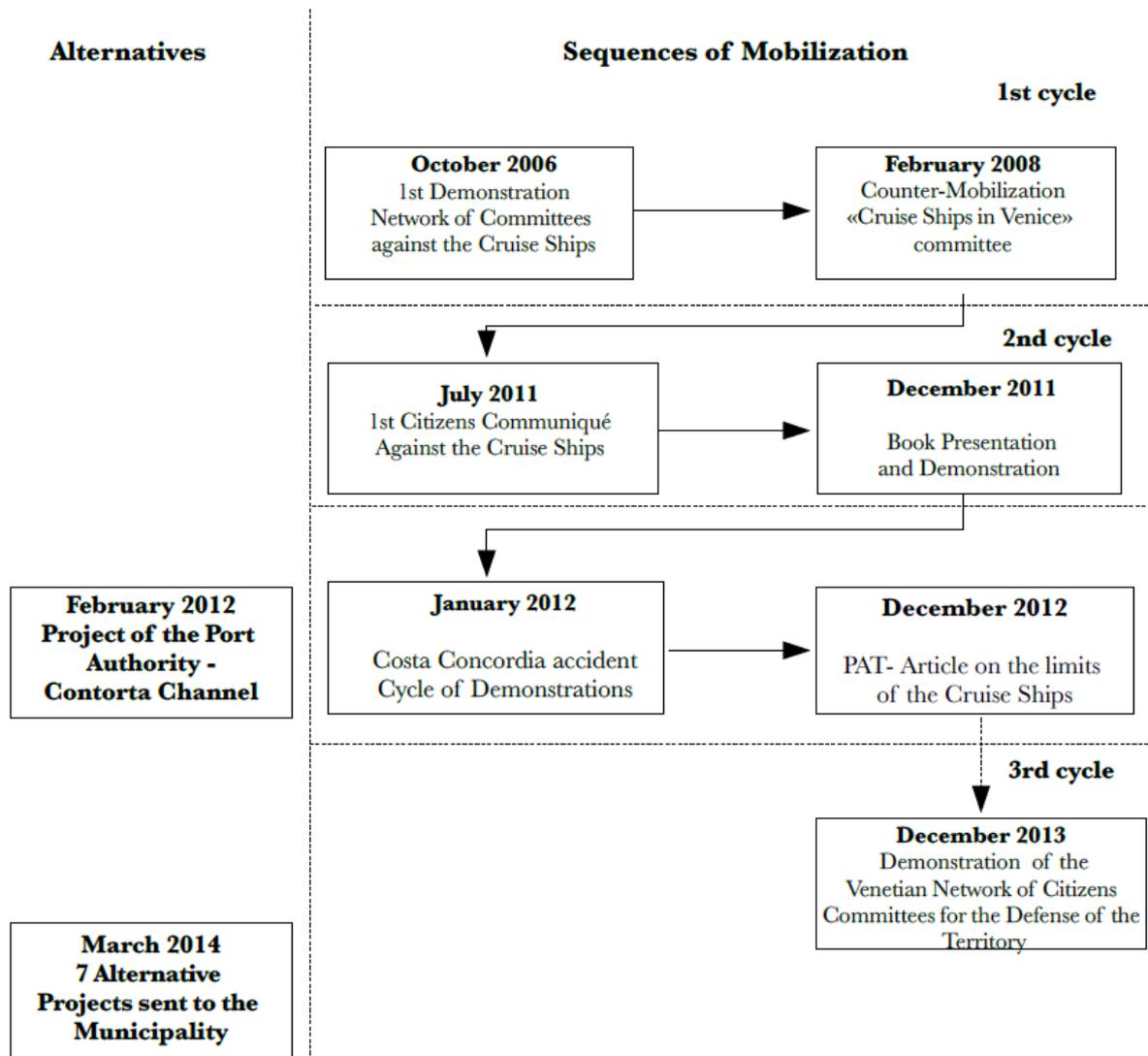
regional level—the demonstration saw many local environmental committees for with many flags of the «No Cruise Ships» committee on display. The march was another episode in which the arguments of the local committee manifest its links with broader claims concerning environmental awareness.²⁰⁸

By this stage, the movement had spread city-wide, grown in numbers, multiplied its stances, and from an initial localized problem to more general claims, it prompted the development of more and more complex arguments. From the emergence of sporadic events in 2008 through to the peak in 2013, the committee's composition changed, gaining in generality of its frames – from purely technical to cultural and political ones - and expanding the typology of actors, while articulating a variety of sources of knowledge of the issue. The demonstrations, with innovative repertoires of action—like the protest flotilla or the on-water engagement—contributed firstly in addressing a problem that had previously been a set of latent grievances or confined to a domain of specialists belonging to environmental organizations. This politicization process did however trigger also a counter-movement composed of workers and interest groups linked to the business of cruise ship tourism. The polarization saw no real confrontation between the two mobilizations, since the pro-cruise ships mobilization could not match the socio-cultural appeal or reach of the «No Cruise Ships» committee. However, even the counter-mobilization confirms how salient the issue has become in the public sphere.

Salient but very complex, the issue attracted a variety of expertise, the borders of which are not clearly defined. Many actors belonging to various sectors—not entirely linked to the world of official consultancy or activism—intervened. Consequently, it is worth looking at the properties and dynamics of knowledge production.

²⁰⁸ *La Nuova Venezia*, 30 November 2015.

Tab.4.2. Sequences of Mobilization in Relation to the Alternatives



4. The Construction of Knowledge

As we have seen, the composition of the No Cruise Ships committee evolved in time, changing its relations with the political allies. New links were forged among a variety of civil society actors, from the conservationist organizations (WWF, *Italia Nostra*) to the most radical actors (the social squats). All the while, citizen participation and spontaneous coordination oriented toward pragmatic goal attainment—reconsidering of the presence of the cruise ships in the Lagoon—was maintained.

The mobilization over this demand produced a multiplication of bottom-up studies as well as stimulated the production of an independent expertise to complement and criticized a

type of knowledge that was either the expression of the offices of the interest groups and the Port Authority or absent on many aspects (public health risks, economic costs of cruise ships for other forms of tourism). The analysis of the main events in which the «No Cruise Ships» committee has been involved has showed how the claims and arguments have evolved in time and how the committee has affected the political agenda. As shown in Tab.1, the production of petitions based on dossiers is as important as more visible actions like protest demonstrations. Indeed, this confirms the importance of the elaboration of a counter-expertise for mobilization.

The process of knowledge production is indeed a key aspect of the mobilization that can be analytically explored in three dimensions:

- 1) How expert arguments are intertwined with political ones in the debate;
- 2) The types of expert actors that have participated in shaping a critical expertise in relation with lay-actors like citizens and political activists;
- 3) The counter-expertise produced by the «No Cruise Ships» committee.

The study of these aspects allows a comparative regard with the previous cases and specifically with the «No MOSE» mobilization. After having tested how the technological factor—the cruise ships—interacts with social and political conditions, we focus on the characteristics of bottom-up expertise and the dynamics of expertification.

4.1. Expertise Problematization: Its Mobilization and Limits

As we have seen in the evolution of the «No Cruise Ships» movement, different components animate the debate on the cruise ships and in elaborating alternatives to solve the problem of their transits in the Lagoon.

Various critiques emerged at different times. At the beginning of the problem (2001–06), the issue was still confined into a cultural debate regarding some political leaders and few “conservationist” environmental organizations (WWF and *Italia Nostra*). The impact of the cruise ships is specified in terms of pollution and in terms of compatibility of the touristic flows, in a discourse that embraced a general discussion on the mass tourism and the risk to transform Venice into a “Disneyland”. The protection of the natural environment of the Lagoon and the habitat of the historical center of Venice emerged as the two main problems.

Between 2006–11, a spontaneous network of citizen committees emerged—mainly from the neighborhoods of the historical center—sharing the critique to the polluting emissions

but also introducing the issue of the electromagnetic waves produced by the cruise ships radars as well as the issue of the risks that the transits produced for the public security. The invention of new repertoires of action by this new citizens' movement—the on-water engagement of the cruise ships—catalyzed broader public attention at a supra-local level (national and international) and the issue grew in salience. The critique stimulates a broader debate, produced a new phase of citizen participation—with massive demonstrations and petitions—while at the same time triggering the birth of a counter-movement composed of workers and interest associations defending the cruise ships business.

Up until that point the Port Authority had monopolized the politically relevant expertise denying or minimizing the environmental impacts of the cruise ships. However, the «No Cruise Ships» movement explicitly contributed in amplifying the need for more scientific evidence. The effects of this conflict on data and evidence produced a shift in the arguments pro/against the ships. With the support of internal expertise, the Port Authority—together with the growing pro-cruise ships committee—emphasized then the economic benefits that the business of cruise ships generates for the city, and the controversy assumed the traits of occupational blackmail.

Between 2011 and 2016 the «No Cruise Ships» movement grew in intensity and visibility—in proximity with the huge demonstrations of the regional network of Venetian citizen committees against the «Useless and Imposed Large-scale Infrastructure Works» (*GOII—Grandi Opere Inutili ed Imposte*) that took place in Venice.²⁰⁹ In 2011 a book presentation on the problem of cruise ships in Venice unexpectedly gathered hundreds of citizens at the municipality hall «San Leonardo» in the city historical center (Testa, 2011), giving voice to citizens latent grievances on the issue and implicitly contributing to a broader collective awareness of the problem. The interconnection between cultural, scientific events and public demonstrations stimulate a multiplication of knowledge on the cruise ships. The rise of the issue in the public sphere attracted indeed some academic experts with no links with

²⁰⁹ At the end of November 2013 more than 160 groups participated in demonstration organized in Venice by the Regional Network of the Venetian. Led by the priest Don Albino Bizzotto—a main leader of the eco-pacifist national network «Beati costruttori di Pace» —the parade moved to the station S. Lucia gathering committees opposing different types of projects (the waste incinerators between Treviso and Mogliano, the highway Pedemontana in Vicenza, the cement plants in Padua, the pipeline project in Rovigo and many others). It finally ended in a boat parade that from S.Marco moves back to the Marittima station. The demonstration increases the visibility of the local grievances and contributes in giving them a further level of generality and awareness, exchanging ideas and information among the participants, finally recognizing the similarities of the different problems and their link with a common national and regional infrastructure policy. «*La Nuova Venezia*», 1 December 2013.

sectors of activism. This refers to the publicly renowned full professor in hydraulic engineering at the University of Padua—who had previously critically contributed to other environmental controversies in Venice (e.g. on the MOSE)—who intervened many times between 2013 and 2016 against the plans to construct the *Contorta* channel.²¹⁰ While this type of intervention gives resources and arguments to the committee, at the same time it implicitly legitimizes with scientific evidence the popular opposition, finally increasing the public credibility of the «No Cruise Ships» committee.

With the diffusion of an «occupational blackmail» discourse, other experts get stimulated in investigating further problems related to the cruise ships, investigating the economic costs/benefits of the cruise ships for the municipality of Venice. The study gets therefore diffused among the activists in 2013 and then published in 2014 for a local press (Tattara, 2014; Fabbri & Tattara, 2014). In this case, independent studies and observations on the transit of the cruise ships in the Lagoon got stimulated by the growing salience of the problem that the citizen committees contributed to produce, through visible demonstrations and the dramatization generated by innovative protest events.

Critiques are not only addressed to political institutions, the cruise ships and the Port Authority. Indeed, series of criticisms are directed toward «boundary organizations» (Gyerin, 1999; Guston, 2001): the environmental protection agencies like ARPAV and the private societies for scientific consulting chosen by the Port Authority. In the first case, the methods of data gathering of Regional Agency for the Environmental Protection are contested. The choice of monitoring emissions in specific places like Sacca Fisola is indeed perceived as politically biased with arguments linked to the intensity of winds that would finally lighten the survey of the polluting emissions produced by the cruise ships transits. Doubts that increase in their legitimacy when an independent institute like the Venetian Oncologic Institute published data concerning an excess of neoplasms between Mestre and Venice that for the committee addresses further reasons for the limitation of the cruise ships²¹¹. The same type of criticism—lack of independence and transparency—is directed toward the choice of the society «Thetis» - related to the *Consorzio Venezia Nuova*—to assess the environmental suitability of the

²¹⁰ An independent expert in environmental hygienism denounced explicitly the connections between the consultant of the Ministry of the Infrastructures Ercole Incalza – involved in the realization of many other pieces of infrastructure like the MOSE and TAV at the national level – and the project of the Contorta channel, as part of a general practice characterizing a «system» of the infrastructure projects in Italy. «*La Nuova Venezia*», 14 March 2015.

²¹¹ *La Nuova Venezia*, 11 July 2013.

Contorta channel, even though transparency lack and other unsolved questions concerning real environmental sustainability were negatively affecting the credibility of the Consorzio already on the MOSE project. Further suspects emerged later when in May 2014 the VIA Commission published a negative advice on the *Contorta* channel that was already voted, approved in an official document—but silenced by the Ministry of the Environment—in September 2013²¹² and in October 2014 technicians of the scientific unit «Corila» - linked to the *Consorzio Venezia Nuova*—publicly resigned in conflict with the types of research outcomes published by the directors. Finally, the skepticism of the civil society actors is not directed toward science and expertise in itself, but toward the real independence of the expertise and the dubious transparent relations between representative politics and business actors.

An important aspect concerning citizens expertise emerged from these dynamics. The sense of opacity—which contrasted with the public salience and visibility of the issue—saw the movement reach out for evidence not only from “internal” experts (through the mobilization of *expert-activists*, professional experts known for their environmental activism) but also through the link with independent professional experts at the local university, becoming *expert-allies*.

Data and evidence from broader independent research centers—the Venetian Oncological Institute, the Faculty of Hydraulic Engineering of Padua—contributed in enriching arguments with more scientifically robust knowledge. The process of knowledge mobilization triggered by the citizens movement look for evidence on problems on which there is no knowledge, launching hypothesis on suspicious phenomena—the impacts of the electromagnetic waves, the environmental sustainability of the new channels projects, the polluting emissions in the public health. In this sense, the movement problematization launched new alerts on which scientists and experts start new analysis, innovating the scientific arenas. All these aspects seemed to enrich the assemblies and conferences launched in the city by the «No Cruise ships» committee, that finally constitute indeed moments of collective reflection and analyses where knowledge is put in public. Focusing on the relation between experts and lay actors, allows then to shed light on the dynamics of knowledge production and dissemination in these collective arenas.

²¹² *La Nuova Venezia*, 10 May 14

4.2. Typology of Experts and Their Relation with the Movement

The experts from the «No Cruise ships» movement have mobilized at different moments with a variety of arguments related to their field of expertise. The main expert actors emerged in the mobilization are:

- 1) a professional independent urban planner and a citizen-activist with an historical engagement with the movements and parties of the radical Left and member of the local environmental association «*Ambiente Venezia*», mainly supporting the alternative project of building a sustainable off-shore port for the cruise ships, proposed by the independent society «Duferco» related to the center-left politician De Piccoli;
- 2) a group of urban planners (3) linked to the first generation of the Venetian Greens, with established positions at the local university IUAV (2/3) and previously involved in the national environmental commission (VIA). With their historical engagement on urban and environmental issues, they are perceived by the citizen committees as «hybrid» actors, mixing their professional skills with a direct engagement in the public issues. In this case, they contributed to the problem of cruise ships with the elaboration of an alternative project of a floating outer harbor;
- 3) an independent economist, retired full professor at the University Cà Foscari in Venice, that intervened in the arena after the growth in visibility of the citizens movement, with the publication articles and a critical book on the impacts of the cruise ships on the local economy;
- 4) An architect, full professor at the IUAV, organic to the «No Cruise Ships» committee, proposing an outer harbor at the Lido;
- 5) an independent environmental hygienist, ex member of the VIA Commission, intervening mainly on the specific aspects of the procedures and the environmental aspects of the projects (*Contorta, Trezze*);
- 6) a team of four experts composed of two full professors in engineering at the university of Padua, a researcher in oceanography and physics at the National Research Center (CNR) in Venice and a researcher in oceanography of the university of Trieste. One of the professors in engineering is considered to have a world-wide reputation in hydro-dynamic engineering. While he already intervened critically on another public issue

affecting the Venetian environment and its Lagoon—the MOSE—he always intervened in the arena autonomously without being organic to any group or committee. Also the researcher of the CNR has a previous experience of critical engagement on the MOSE.

Tab.4.3. Type of Expert in Relation to Professional sector and Type of Engagement

Expert	Sector			Total
		Private	Public	
Activist	1 (urban planning)	4 (urban planning)	5	
Ally	X	6 (1, economy) (2, engineering) (3, natural sciences)	6	
Total	1	10	11	

A first outcome concerns the majority of experts (ten) hailing from the public sector; only one was from the private sector. Expert–activists (five) and expert–allies (six) are almost equally represented, an aspect that tells us something about the political and technical ambivalence of the issue.

Analyzing the typology of intervention in the media and the activists perceptions in the interviews, we can define the experts type 1, 2, 4 in the category of “expert–activists”, while type 3, 5, 6 sit in the category of “expert–allies”.²¹³ A common characteristic of all the experts involved is their professionalism. They almost all belong to or had established positions in relatively close universities and research centers (except one that works as a private professional). The use of international expertise is then less privileged compared to the knowledge of the territory that local experts can have. This seems a first variation if compared with the case of MOSE, where the use of internationally renown experts was more evident. The fact that all the experts intervening hold structured positions in the university or research

²¹³ For a punctual discussion of the two ideal-types, see Chapter 1 [better to give chapter number].

institutes—or they are retired from university - exempt them from potential professional risks due to their public exposure. Expert–allies are represented by natural sciences (three), engineering (two) and economy (one). While five of them (engineers and natural scientists) had previously intervened as expert–allies in other environmental controversies (like the MOSE), the economist is the only real newcomer. Even though the participation of the expert–ally was principally motivated by a previous civic interest and not only by a technical motivation:

I never been involved in problems of local politics before, when I was teaching. Only since retiring. I think it was exactly in parallel with my retirement that I started working on the cruise ships issue. Maybe for their visual impact [...] So, I started participating at the assemblies of the No Cruise Ships movement and I started immediately to give a scientific contribution that quickly got published as a Working Paper for the Department of Economics [...] that formed the basis for my further studies on the cruise ships. The movement even appreciated it since there wasn't anything [written] about it previously.²¹⁴

For this expert–ally, it is the «visual impact» of the cruise ships that produced the motivation to study the phenomenon in its environmental and economic aspects. The use of a critical expertise constitutes his way of participating in the movement, filling a gap in knowledge that can be eventually used to understand the phenomenon that gets discussed during the assemblies. In this regard, the political engagement is linked to a general civic sensibility and mediated by an independent specific technical role that do not link the work on the cruise ships with a previous activism or political experience.

On the contrary, all five expert–activists are urban planners, have previous experience in public administration (environmental commissions, local councils), therefore adding an administrative and political experience to their expert knowledge. This gives them further resources, a surplus in political skills and social capital that links their activity with civil society actors. The previous membership with political parties or associations evidences how their relation with the territory is neither single-issue nor confined to a local sphere of mobilization. On the contrary, their work seemed to connect the local single aspect with broader cultural or political dynamics, as the public intervention of this expert–activist in an assembly shows:

²¹⁴ Interview with expert–ally, n.10

Until now they [the Port Authority and Venetian business actors] have exploited the Lagoon as much as they could, as safeguarding positions [*rendite di posizione*]. The struggles have obliged them to take decisions. Decisions, of course, that we don't share, obviously: the excavation of the *Contorta* channel, and a series of projects that have been chosen already before. When I was in the Safeguard Commission in 2003 there was already a first proposal to set up the Petrol Canal that finally we were able to reject. Then, they started already to talk about a series of projects, like the subway under the Lagoon, as a sort of series of fires all around the Lagoon. Now the climate has changed for those that have the power to use the land and the environment for their business. They think to adapt the entire Lagoon [...] turning it into a diffused port for all sorts: merchants, passengers [...] an impressive signal was given by one of the two speakers—whom is, not by chance, the author of one of the projects of the reef in the Petrol Canal—at the Venetian Institute of Sciences, Letters and Arts. He was trying to show culturally and scientifically that it has always been like this, explaining that this is what the Venetian Republic always did. Of course historically the Venetian Republic has modified the Lagoon, , because the Venetians had to live in the Lagoon. But this was done in a way that was always compatible with the survival of the Lagoon. The changes the Port Authority proposes nowadays is going to definitively destroy the concept of Lagoon itself. They say “You environmentalists think that nature is always the same.” They use this surreptitious method to transform the Lagoon in a diffused Port where they put everything, projecting subways, excavating channels, transiting cruise ships. For those that are convinced—like me—that this is the complete destruction of the Lagoon, I think we are in the most delicate moment for the Venetian history after the post-war period. Among «*Ambiente Venezia*» there are—and fortunately!—different positions. The articulation of the different proposals is the sign that it is not an ideological position, but that they are reasoning that propose—within the law—experimental, gradual changes and works that can be modified and updated in time.²¹⁵

²¹⁵ Intervention of expert-activist n.1, press conference of the «No Cruise Ships committee» on the project of excavation of the Contorta and Petrol channel, 17 December 2013., <https://www.youtube.com/watch?v=xtfOlZus8Sk>

This view framed the problem of cruise ships into a broader historical and political picture of Venice and introduced the cultural and political embeddedness of expertise that is far from being either purely single-issue, or purely technical and neutral. In this sense the work of experts is two-fold. On the one hand, it refers to a technical level—accessing, understanding, translating or eventually elaborating the technical issue—and on the other hand it helps recognizing the political aspect of the issue.

As was shown in the case of the MOSE, the expert-activists come mainly from disciplines at the intersection of technical and social sciences—like urban planning, architecture and economics. Almost all expert-allies are on the contrary in engineering and natural sciences. This introduced the problem of the relation between experts and the demand of expertise. While demand for engineering is intertwined with the business sectors, urban planners have more relations with the public sector—be it the public administration or public in general. However, if it is useful to analyze how the disciplinary structure structures the political behavior, the complexity of these relations is better explained through a processual perspective.

Many experts that individually mobilized to criticize the MOSE from their own individual technical criticisms started—when the cruise ships problem emerged—collaborating with expert-activists, recognizing a general political issue was at stake. It is the case, as will be shown in the next paragraph, in the elaboration of the alternative project of a floating offshore port proposed by a group of expert-activists in urban planning (n.2). These shifts not only produced—like new ties and solidarity among different actors with different cultural backgrounds—they also produced also credibility costs. Another well-known engineer from the University of Padua who had also taken a risky stance on the MOSE was criticized by the emerging pro-cruise ships committee for the technical advice he gave to Commissioner Zappalorto as «not being technical but political».²¹⁶ In this sense, the mobilization triggered processes of transformation through engagement, bringing actors that had not previously been involved to intervene publicly on the side of activists.

As will be shown in the next paragraph, there are different opinions among the movement participants on both the role of mobilizations and the importance of proposing alternative projects. However, the «No Cruise Ships» committee demonstrates that even though the borders between politics and expertise are blurred, the resort to highly professional and

²¹⁶ *La Nuova Venezia*, 25 October 2014.

credentialed expert knowledge is activity launched deliberately to increase the strength of a movement. In this case, expertise enforces the movement and its arguments rather than inhibiting its expansion.

4.3. Critical Expertise: Alternatives in the Making

Since its emergence, the committee has elaborated different stances concerning the problem of cruise ships in the Lagoon. The solutions embraced by the committee have been far from either purely oppositional (i.e. a Nimby approach) or ideological rejection of the cruise ships tout court.

In this regard, the committee has contributed in opening a debate on several problems that were previously ignored by the political authorities. In the end, it has elaborated several alternatives depending on specific changes that have invested the cruise ship sector. First of all, the cruise ships sector itself has faced several technological innovations for which new models of ships were barred from transiting the Lagoon. Secondly, the configuration among the actors—opponents vs proponents—has changed at different times (e.g. with the Municipality playing a diverse role, while the alliance between Port Authority and cruise ships being stable). The presence of critical experts mobilizing on the wave created by the «No Cruise Ships» committee has made the elaboration of technical alternatives a crucial aspect of the maintenance of a sustained (and credible) collective action. However, the support for specific alternatives varied depending from the type of association or group composing the committee, contributing partly to a professionalization and differentiation of the movement.

With their technological evolution—the increase in their dimensions and diffusion at the end of the 2000s—the models of cruise ships transiting in the basin of San Marco have challenged the limits of sustainability. Since the beginning, the basic proposal of the committee—that characterized its unity—was to find a threshold of compatibility between the transits and the equilibria of the Lagoon and its inhabitants. In 2012, the new pact between the Ministry of the Environment of the Monti government and the president of the Port Authority, Paolo Costa, proposing the excavation of the *Contorta* channel, adds a further environmentally consequential solution. The proposal of the committee to find a real compatibility between cruise ships business and the public security of the city was further articulated in a specific part of the Territorial Plan (PAT). Here, the plan explicitly (but generally) banned the cruise ships judged as incompatible with the historical context of the Lagoon and the city, fixing a threshold

for daily touristic flows as well as explicitly asking for independent studies and inquiries on their environmental and public health impacts. In this sense, the position of the committee aims at stimulating further inquiries with the only request of being proposed by research units and institutions that are not linked with the interest groups or the Port Authority.

Alternative projects emerged as the movement expanded between 2012 and 2013. In this sense—in common with evidence that has emerged in the previous empirical cases investigated—we see that conflict creates (rather than inhibits) the conditions of knowledge production and learning. The solutions advanced by the various collective actors composing the «No Cruise Ships» committee can be summarized as follows:

- 7) Demand by the spontaneous citizen committees of the historical center of Venice emerges, seeking compatibility between cruise ships and the security of the Lagoon. The proposal advocates a limit on the number and dimensions of cruise ships so as to protect the environment of the Lagoon and at the same time ensure a compatibility with the economic needs of the city. Other economic surplus can be pursued but out of the Lagoon. Consequently, it opens a debate on the *how* (off shore ports, Malamocco harbor mouths, connections for passengers arriving in Ravenna or Trieste). This position aims also at monitoring alternatives rather than proposing specific alternatives, that for the citizen committees should be proposed by the State or the public authorities;
- 8) A an alternative transit of the cruise ships at the port in Trieste, radically opposing the cruise ships as a form of tourism judged incompatible with the city of Venice (option proposed by the local section of the conservationist organization «*Italia Nostra*»)
- 9) The project elaborated by the studio «Duferco engineering», a private society founded by the former Democratic deputy and Venetian Vice-Minister for Public Works De Piccoli, to build an off-shore port placed in the locality of Cavallino, where the cruise ships can dock, and the passengers can reach Venice via small ferries (*vaporetti*). The project is supported by the leftist environmental association «*Ambiente Venezia*» and by the local squats;
- 10) The project of a floating an off-shore port at the harbor mouth of Lido is raised. This would follow the principles of reversibility so that the port can be indeed disassembled and reused for other purposes while not modifying the surrounding environment. Conceived by a team composed of expert-activists—urban planners at the IUAV, with previous experience of activism and holding positions in environmental commissions—

the project is economically less expensive than the other projects.

The articulation of proposals shows how the only actor that officially radically rejects the cruise ships in their totality is the structured conservationist organization «*Italia Nostra*». The position of the citizen committees was the most flexible and at the same time the only one recognized institutionally. A specific article of the PAT in 2013 (see footnote 45, par. 2.2.1.) established a limit of compatibility for the basin of San Marco that banned those cruise ships exceeding it from the Lagoon. Instead of proposing or supporting a specific alternative, the citizens component conceived its role as a constant activity of monitoring the positions and alternatives emerging at the political level. They are however contrary to other consequential interventions that could negatively affect the Lagoon. This is how the citizen committees explain their role, and how it probably changed after the issue emerged into the open with the first demonstrations:

The demonstration is useful to expand an issue that initially is perceived by a minority, contributing to make it a broader collective concern. [...] Now [2016] the issue of cruise ships in Venice has become an international issue. Whoever comes here knows that there was this problem. Therefore, it is no longer necessary to demonstrate. Or you could demonstrate against the project of the Trezze Channel, if you wish to diffuse to a broader audience why you oppose the project. Nevertheless, now it is a phase in which what counts a lot is the declaration on the newspaper, the opinions. Now you have to be the watchman at those levels in which you can have an influence with your arguments to avoid that politics carries out a sleight of hand. The Port Authority and the mayor can also stipulate an agreement in which the cruise ships can arrive in the Lagoon through the construction of the Trezze Channel, but I don't need a demonstration anymore to impede it, I go directly to the Environmental Assessment (VIA) Commission when they will present it [...] and we try to take it apart, as we demolished the *Contorta*–Sant'Angelo channel project.²¹⁷

This idea of focusing on the specific aspects of the problem without having a strong *a priori* position introduced a key point defining these types of «evidence-based» mobilizations (Pellizzoni, 2011), in which the issue reconfigures ideological stances and political alliances. As has been shown in the analysis of the mobilization process, no claims is related to any sort

²¹⁷ Interview with citizen committees activist, n.5.

of “ideological environmentalism” opposing the business of cruise ships. On the contrary, the seek for alternatives articulates technical aspects with values like the right to live in a proper and healthy environment respecting the traditional and historical equilibria of the Lagoon of Venice. The claims of the spontaneous citizen committee are based on the recognition of this right and value, and the seeking of expert evidence to support the criteria of compatibility was then mediated by it, opposing the expertise shaped by the business interests of the Port Authority.

However, while the demonstrations have then the role of making the claims public, the statements of the member of the citizen committees representative show also its controversial aspects. Indeed, if the most spontaneous component of the citizen committee thinks that the protest demonstration is indeed just a step in a process that brings toward a professionalization of collective action—the monitoring and critique of projects in specific arenas like the VIA Commission—other components linked to a radical leftist form of activism—the local squats—emphasize the role of visible and confrontational protests in keeping a broad public attention and stimulating a popular control in the issue. In this case, borderline repertoires of actions brought to some tensions with other components characterized by less conflictual practices of demonstration. However, far from being purely focused on the logic of protest, even these forms of radical activism base their arguments on expert knowledge to support their positions. Indeed, the two main components of this type of traditional leftist activism—the «Morion» squat and the association «*Ambiente Venezia*»—established a consensus in supporting the off-shore port project elaborated by Duferco engineering. The relevance of the professional expertise is in this case recognized even by the most radical activists:

The project, the alternative [...] is just one. It is Duferco engineering’s proposal [...] I mean, we are not able to present a project, you need several million euro to present a project, we are not that naïve. Duferco is a Swiss multinational that built ports all over the world. So it is not a group of amateurs working on it.. This project is a port at the harbor mouths, between the two harbor mouths of S. Niccolò. This is a project, not an idea or a sketch. A project that received a positive evaluation from the Environmental Assessment (VIA) Commission, so it is even advanced at a procedural phase, contrary to the Tresse, *Contorta* channels and all the other bullshit. And this project is the only one that maintains the cruise ships in Venice. With this we convinced also the workers of the baggage transport [the founders of the «Cruise Ships in Venice» committee]

with whom we almost came to blows. Finally, they agreed, and they came to our demonstration. [...] I tell you this, even against my values, because for me cruise ships are an anthropological catastrophe, as a model of tourism, but ok, they exist. However, the «No Cruise Ships» committee doesn't talk about the developmental model, it talks about cruise ships. Basically, with this project we overcome the initial radical oppositions that were saying—this was the position of *Italia Nostra* - «the cruise ships have to go to Trieste». We know that people have to work and that nobody—neither the mayor, nor the Port—can stop the cruise ships gigantism in its entirety, but we can find a limit. And the growth of the technology already saw new models that are so big they can't physically enter the Lagoon. [...] Therefore this [the Duferco project] is the only solution that is compatible with both the environment and jobs

After the end of 2013, shifts in its internal composition saw the «No Cruise Ships» committee officially supporting the private-sector Duferco project that VIA Commission approved. This position shows how the technical efficiency of the project—linking values like environmental protection with economic compatibility—is perceived by even the most radical activists as more important than any previous ideological issue. The other counter-project proposed by non-institutional actors is the floating off-shore port. Not attached to any private group or enterprise, the project is the outcome of a real personal engagement, elaborated in two years and sent directly to the ministry of infrastructure, the environment and cultural goods without seeking compensation. The state of the project is explicitly a «preliminary proposal», since the costs are unsustainable for a group of volunteers, as described by the authors themselves in the annexed letter written to the ministers:

Most likely, in order to make a real comparison possible, further detailed studies should be necessary to go beyond this preliminary proposal, which a group of volunteers clearly cannot afford. In the case that your [the Ministerial] technical structures can take charge of further projects we declare to be since now available to cede freely the draft here presented, only asking for an honorary recognition of the of the idea.²¹⁸

Alternative projects emerged here as a form of substitution for proper technical evaluations

²¹⁸ Document n.2, Alternative Project, Avamporto Galleggiante Bocca di Lido. Terminal Passeggeri, 2013- 2015

from the public administrations. In a context where public institutions had lost all public credibility—particularly after the MOSE inquiry in June 2014—counter-expertise emerged either with the production of alternative proposals, independent from the influence of the interest groups or the Port Authority, or through the monitoring of existing ones. As one of the expert-activists states about the project of a floating off-shore port:

I'm grateful to all the people that gave legs to a credible project that respects the three criteria regarding the Safeguard of the Lagoon [gradualism, reversibility, experimentalism]. I want to stress that what we are doing substitutes for a public function that in a civil country would not be produced by a group of volunteers, but a farsighted administration.²¹⁹

Producing projects requires costs in terms of time and money sacrificed. At this level of complexity, studies and research are not only difficult to carry out but they are also expensive. This introduces another aspect concerning mobilizations over technologically complex issues. In this case the mobilization of citizens regarding the Lagoon, expertise emerged in opposition to the monopoly of scientific resources captured by the Port Authority. Duferco's project was probably chosen by the leftist component of the «No Cruise Ships» committee since it was both the most technologically advanced available, and the only one that received a positive vote at the VIA Commission. Being a multinational society specialized in off-shore ports, «Duferco» could afford the costs of presenting a project, while the group of independent experts working for two years on the floating off-shore port project could only afford to produce a bare bones, preliminary proposal.

Finally, the «No Cruise Ships» committee was not directly involved in producing alternative bottom-up projects, since its positions on the solutions were many. It rather seems that the major role of the committee was either to make the problem public, so as to stimulate a multiplicity of studies and a search for alternative solutions elaborated by independent actors—either citizen-experts or even private enterprise. Even though the positions of the committee have diverged, the reciprocal interaction among citizens and experts in common arenas has stimulated these dynamics.

²¹⁹ *La Nuova Venezia*, 6 December 2014.

4.4. Professional Experts as Political Translators

One of the key aspects of the discussion and socialization of knowledge between experts and activists that happens in the mobilization is also the acknowledgment of the limits of expertise in its pure authority. In this sense, expertise, that should be used as a form of enlightenment—in an ideal evidence-based policy-making—takes the traits of a tool formalizing interests behind public decisions.

What is considered to be relevant knowledge is not purely scientific and technological knowledge but also administrative jargon that is used to make democratic control ineffective. As explained by a dialogue among activists during a press conference of the «No Cruise Ships» committee presenting the *Contorta* channel:

[Activist 1, presenting the official public documents of the project]: [Contorta] is a project that acts in an underhand way; it has not been presented on the media although it is incredibly important for its impact on the Lagoon. The document we present here at the conference and that we prepared explains this project and also part of the imbroglios. There are indeed some declarations on the impacts [concerning the reef and the polluting materials of the project] made by the Water Manager that are false [...] Here they call these new sandbanks «shifted» sandbanks. A pure invention. Here we face pure illegality. Not only are the kickbacks illegal. Not only the Mantovani²²⁰ [...] but the projects themselves, the ones that the Port Authority, Paolo Costa—and behind him, the *Consortio Venezia Nuova*, the Water Manager, behind him, alas, in silence, also the municipality of Venice—are advancing. So that we haven't heard anything said about the illegality of these projects, but also that they are anti-Venetian, against 1500 years of history of the Lagoon of Venice.

[Expert-activist] [showing annexed maps of the official reports of the *Contorta* channel project]: Here there is a totally rigid artificialization. They propose to build an artificial island for a waste deposit that corresponds to no, actual pre-existing sandbank. This is not a reconstruction! [but a fabrication]. They are

²²⁰ The enterprise producing the MOSE and many other mega-projects in the region.

artificially augmenting for 500 meters the space that was initially conceived for the sandbanks. [...]

The Special Law for the Safeguard of Venice of 1973, written to preserve the ecological and physical integrity of the Lagoon, updated in 1984 explicitly tells to eliminate the cause of damage of the Lagoon. Furthermore, the Law in 1992 that imposes the restoration of the Lagoon morphology—and not further artificializations! The PALAV²²¹ imposes to restore the channels and with compatible materials [...]

[Activist 1 reading a specific passage of the Special Law]: Land reclamation and filled intervention are forbidden [*interventi di bonifica e colmata*]. That means that everything here is outlawed²²²[...]

In this presentation held at a conference supposed to launch the demonstration of the Venetian Network of the Citizen committees in November 2013, a few aspects must be considered as relevant in the analysis of the relations between expertise and activism. First of all, the conference brings experts and activists together not only to elaborate a new credible «alternative» project. The logic of the conference in itself is to communicate what normally would remain hidden, in a sphere of opacity, therefore being exempted from public understanding and consequently from public critique. The work of either activists and mostly expert-activists consists of translating what—in this example—is described on the official documents of the *Contorta* channel project a «translated sandbank» in its real source of pollution or further environmental damage.

The role of the expert-activist is to distinguish and communicate the borders of scientific and pseudo-scientific language affecting either the level of transparency of the project—the language doesn't allow non-specialists to understand the real issue at stake—and its legitimacy—its illegal or incoherent aspects.

In this sense, the accusation of illegality address the way the projects are written and

²²¹ Plan for the Lagoon and Venetian Areas (*Piano dell'Area della Laguna e dell'Area Veneziana*, PALAV) is a legislative tool for the defense of the natural landscape and territory of Venice and its Lagoon approved by the municipality and the Region in 1991, later on included in the Special Law for the Safeguard of Venice in 1992, excluding new interventions affecting the unity of the Lagoon (like water gates) and its natural state (like waste deposits).

²²² Press conference of the «No Cruise Ships committee» on the project of excavation of the Contorta channel, 17 December 13, <https://www.youtube.com/watch?v=xtfOlZus8Sk>

presented, therefore leaving space for opaque interpretations and so bringing the conflict on the level of understanding of what is at stake (a waste deposit framed as a sandbank, an excavation defined as amelioration, and so on).

For these reasons, the traditional role of the political activist enters necessarily in relation with other figures like the expert. The capability of creating a space of understanding—the analytic and cognitive part—is a necessary precondition for mobilization that must precede the instrumental activity of *framing* the issue (Snow & Benford, 1988). The expert is a key figure in triggering this learning-process. However, it is in his will to engage with politically-relevant problems that his role becomes publicly important, intersecting with the work of political activists. In this case the specialist—the professional expert—played a fundamental role in framing the issues at stake—recognizing problems and translating them from opaque to transparent issues—so that they could be publicly discussed and criticized by broader publics.

4.5. Lay Knowledge and Its Contribution

If as we have seen, the «No Cruise Ships committee» has mobilized multiple expertise and made wide use of various typologies of experts among the professional world—mainly public universities and research centers—one of the key aspects of the movement has been the role of laypeople in elaborating new claims and needs that contributed in triggering processes of knowledge production about the issue. This process is central to understanding the limits of a supposed «technocratic» paradigm, where professional experts entirely control the issue, prevailing on the political issue and more or less implicitly enclosing the arena from broader democratic debate (Brint, 1990). Citizens or laypeople contributed in changing the terms of a debate that was confined in institutional arenas, and where the Port Authority and the interest groups have a clear dominant position in the agenda setting. Many types of lay knowledge, for example familiarity with the territory and its environment, contributed in activating the citizen mobilization. One of the spokesman of the «No Cruise Ships» committee, a citizen from the neighborhoods of the historical center of Venice developed his knowledge about the Lagoon through his long passion for sailing:

Before [writing the book they *And call them boats* that triggered the mobilization in 2011] I was writing things for pleasure, when I retired from the job in 2007. I wrote a book on the «Al Terzo» sail—the traditional Venetian sail; is one of my passions. I have always been a sailor, both with traditional and

sailing boats. I own a sailing boat.²²³

Cultural practices linked to the Lagoon provide a set of knowledge, a «lay-expertise» that can help understanding specific public problem like the cruise ships and their impact on the Lagoon. The type of experiential knowledge of related cultural practices—the environmental changes of the Lagoon and its relationship with the activities of human actors—contributed to the problematization of the issue. It also helped in activating the critical stance toward the cruise ships, together with the feeling of being directly affected. Here, we are speaking of Venetian citizens living in the historical center who are the most threatened and who were the first to collectively organize dissent.

However, if cultural resources in leisure activities can be reconverted as resources to problematize politically relevant expert knowledge, triggering expertification processes along the way, another aspect concerns the capability of engaging in collective action. Even though it is possible to find particular properties in the type of individuals mobilizing, expertification in social movements is a collective process therefore it requires the crucial aspect of social capital. To some extent, experiences of activism contributed in generating collective learning since collective action involves engaging in collective thinking and sharing ideas and knowledge.

The contribution of laypeople to the problematization of the cruise ships emerged also through the bottom-up videos and documentaries reporting their visible impacts on the city. Cameras and photography that followed the ships across their for entire journey through the Lagoon—from the sunrise until the sunset—and that documented all the emissions, loud noise, vibrations, water waves and passenger movements were absolutely crucial here.²²⁴ This augmentation of visibility further stimulated controversies about the accuracy of “official” reports, thereby enhancing public attention on the issue. One citizen video—which depicted the Legend of the Sea together with damaged channels and shores—was emblematic of the kind of popular visual documentation of the ships’ impacts that had, in the age of social media,

²²³ Interview with activist from the citizen committees, n.5.

²²⁴ With the diffusion of information through the Internet, various videos are directly posted on the main websites like Youtube or through specific pages of the main social networks like Facebook (like the «Comitato Nogradinavi» group <https://www.facebook.com/comitatonogradinavi/?fref=ts>). The videos are used to compose documentaries that are directly sent to the main local public authorities (Superintendence, Municipality, Court of Counts etc.) and give rise to many debates concerning specific technical aspects perceived by the citizens as problematic. Videos and photos have a central role in problematizing the cruise ships as well as creating hypothesis concerning the impacts, finally stimulating further inquiries and the seek for more studies and evidences on the problem.

the prospect of going “viral”.²²⁵ These video records were exposed at exhibitions in the main cultural places of the city like the Arsenal and during world-wide known events taking place in Venice like the «Biennale of Arts». While this cultural elaboration triggered a broader public debate, the work of photographers and amateur reporters was often included in dossiers composed by experts and activists and sent to the main institutions like the municipality, the Superintendent, the Corte dei Conti, the Water Manager.

The newly elected center-right mayor of Venice, Luigi Brugnaro, nevertheless courted controversy when—referencing a public exhibition in the Palazzo Ducale featuring pictures of the ships taken by the photographer Berengo Gardin—he stated: «We are talking about photography, so there are different angles through which it is possible to see the story: there is the opinion of the artist and then also other opinions. Only by seeing all the evidence can we be certain of what is true»²²⁶. The public visibility spawned significant growth in issue salience, with artists at the national level intervening against the cruise ships and gathering signatures through petitions against them. Although the issue is indeed technically complex, the shocking images of the maxi-cruise ships threatening the cultural heritage of Venice contributed in attracting indeed the attention of many common citizens and laypeople, not only scientists and experts.

In this sense, the visual aspect contributed in stimulating a cultural debate that opened the technical arena to further cultural and political discussion, prompting new press reports, books and cultural activities that took up not just the issue of cruise ships but the destiny of the city of Venice more generally. The result was a broader collective culture that—whiles definitely not an underground or counter-cultural movement—appeared to fail to garner any representation in the institutions.

5. Conclusions

The mobilization against the cruise ships in the Lagoon of Venice can add more evidence about the dynamics of expertise in contentious politics. As the analysis in the chapter has shown, the movement emerged and changed in time, alongside the development of cruise ship technology—specifically the construction of larger and more intrusive vessels that were capable of physically dwarfing the city as they moved through the Lagoon. The technological

²²⁵ *La Nuova Venezia*, 22 April 2008.

²²⁶ *La Nuova Venezia*, 10 August 15

factor contributed indeed to other more traditional variables—frame, resources, political opportunities—in affecting the course of mobilization. On this point, the type of threat being more visible and consequential—in terms of public security of citizens and historical heritage, as well as in terms of touristic flows—its issue salience clearly favored a broader level of participation, especially compared to the mobilization against an opaque and concealed project like the MOSE.

At the same time, while the problem was initially confined within institutional and technical arenas—with the Port Authority monopolizing studies and policies—the spread of the movement obliged political and economic actors to find alternatives and to base their proposals on independent and more accurate evidence. The «No Cruise Ships» movement grew in generality from a spontaneous aggregation of local citizen committees of historical neighborhoods that eventually merged with existing environmental associations and informal collective actors who had already begun to mobilize against the earlier MOSE project. In this sense, the cruise ships mobilization was never really a purely single-issue actor, but one that readily cast the problem into a more general political framework of local political and economic élites seeking to transform the Lagoon into an open, diffuse commercial port. The popular mobilization stimulated further studies and the production of independent expertise, thereby prompting a larger public debate that grew in generality between 2011 and 2016, culminating in the focused attention of national and international actors and media reporting the problem of cruise ships transiting the Lagoon.

The type of problems that the cruise ships produced also influenced the conception of alternatives. The different components of the committee contributed in producing new sources of professional expertise – both independent from and internal to social movements - as well as monitoring and assessing the new projects proposed by the political authorities at different steps of the debate.. There was a huge contribution in the stimulation of expertise production from bottom-up laypeople activities like spontaneous video and photo reports, creating new hypothesis for further studies on a multiplicity of aspects: public health, electromagnetic risks, sea waves and so on. In this sense, the issue stimulated great participation from laypeople and common citizens. The relation between experts, activists and citizens did not give rise to conflicts, but did stimulate knowledge cross-fertilization at the public assemblies and conferences organized by the committee. In this sense, the issue that was confined to the offices of the interest groups and the Port Authority became object of public contention and stimulates initiatives becoming common culture like expositions, book publications and massive

mobilizations. The spread of protest created some tensions when the confrontational activities of some sectors linked to the local squats escalated, although this produced no great public ruptures in the final instance. The committee maintained the characteristics of a spontaneous urban movement for the defense of the local area, composed of a variety of actors from citizens to experts and activists without clear ideological stances, but focused on more pragmatic goals, with the main being the monitoring the projects dealing with the transit of the cruise ships. In this case, the citizen mobilization contributed to democratizing a technically complex arena.

6. Appendix

6.1. Interviews

- 1) MB, Environmental Activist, former local Deputy for the Green Party, Eco-Institute «Alex Langer», Mestre, February, 2th, 2015
- 2) CG, Expert–activist, Urban Planner, Researcher in Urban Mobility at the IUAV, ex Member of the VIA Commission, Venice, July, 12th, 2016
- 3) SB, Expert–activist, Urban planner, Full Professor at the IUAV, Venice, Member of the National Commission to Safeguard Venice, Venice, July, 12th, 2016
- 4) CG, Expert–activist, Architect, Expert for the «No Cruise Ships» Committee, Member of «Ambiente Venezia», Venice, 13.07.16
- 5) ST, Citizen Activist, Spokesman of the «No Cruise Ships» committee, Ghetto Novo, Venice July, 12th, 2016
- 6) TC, Local Squats Activist, Spokesman Local Squat Morion, Member of No MOSE Permanent Assembly and No Cruise Ships Committee, Venice, July, 13th, 2016
- 7) DAB, Spokesman of the Venetian Network of the Committees for the Defense of the Territory, Member of «Beati Costruttori di Pace», Padua, June, 21th, 2016
- 8) MAV, Expert–ally, Full Professor of Urban Mobility at IUAV Venice, Ex Member of the VIA Commission, Venice, September, 7th, 2016
- 9) BP, Expert–ally, Economist, Full Professor in Political Economy at Cà Foscari, Venice, September, 6th, 2016
- 10) LF, Citizens Activist, President of the Venetian section of «Italia Nostra», Venice September, 7th, 2016
- 11) AZ, Expert–ally, Environmental Hygienist, Former Member of the VIA Commission, Venice, September, 6th, 2016

6.2. Documents

- 1) «No Cruise Ships» committee, Press Communiqué, *Maxi-Cruise Ships out of S.Marco basin!*, 11 July 2011
- 2) Alternative Project, *Avamporto Galleggiante Bocca di Lido. Terminal Passeggeri*, 2013-

2015

3) Venetian Network of Committees for the Defense of the Territory, *No Large-scale Infrastructure Works—No Soil Consumption. For the Democracy of Common Goods and the Right to Breath, Work, Live in Veneto*, Padua, 11.11.13

6.3 Archives

1) «La Nuova Venezia», daily newspaper on Venice and Mestre

2) *Laguna Ambiente Archivio Ambiente Venezia*, Facebook online documents database and selected newspaper archive

CHAPTER 5

Political Participation and Diffusion of Expertise in the Mobilization Against the Waste Incinerator in Florence

1. Introduction

The long campaign against the project to construct a waste incinerator near Case Passerini in the so-called “Florentine Plain”—an urban area of 1.5 million people between the outskirts of the cities of Florence, Prato and Pistoia—has involved a multiplicity of actors, from experts to activists and concerned citizens, participating in the process of expertise construction and diffusion. By exploring the interaction of the technological aspects of the project—a waste incinerator plant—and its social context, the social and political environment of the Florentine Plain, I will try to explain how conflict and participation spreads in a political process connoted by high cognitive costs. Political issues connoted by complexity, techno-scientific arguments and delegation to experts are commonly used to enclose democratic discussion. In this case, a set of conditions (the public salience of the issue, the enclosure of the political system and the growth of new grassroots movements, produced a cycle of contention where expertise was mobilized by different types of citizen committees. The analysis sheds light on the mechanisms and dynamics affecting experts, citizens and activists in the development of a collective mobilization seeking to democratize a technical arena. I argue that citizen mobilization against the incinerator in Case Passerini can be considered a case where laypeople were motivated to participate in a highly technical arena and make use of expert knowledge—both by recruiting experts and by activating expertification processes among laypeople—to attain political goals.

2. The Project

2.1. Incinerators between Politics and Technology

Incinerator plants are an ambivalent technology. In the public sphere, they give rise to scientific and political controversies concerning their risks and benefits. The controversy resides already in their definition. Concerning the newest generation of such plants, proponents use the term “waste-to-energy facility” to underline their benefits—like the supposed energy recovery derived from furnaces—while critics stress the risks linked to the process of waste incineration itself, putting the emphasis on the term “incinerator”.²²⁷

²²⁷ This struggle on the definitions forces, in the same way, the researcher to make a choice. In the present chapter I chose the term «incinerator» since the focus is on the mobilization and the actors' political construction of the issue.

Since the late 1970s, these plants have served across the advanced industrial countries as a common technological strategy to dispose of waste from a range of sources—from private consumption to industrial production. From the start, their sustainability was a matter of contention and debate (Frigerio, 1979). But the mobilizations of concerned local populations exposed to their negative effects has been variable, rising at different times and with various critiques and claims characterized by heterogeneous levels of generality.

Being a complex technological facility, incinerators are proposed as a solution for a public service—waste management—that bears directly on the everyday lives of citizens. Waste management concerns the entire industrial chain from production and consumption of goods through to the public health and the environmental impacts of the material needing to be disposed of. Furthermore, the technological properties of the infrastructure has themselves evolved since the 1970s, with shifts in the nature and degree of the impact over time. While the early incinerators produced visible pollution (thick, dark smoke containing dioxins and other dangerous components), the latest generation of incinerators are presented by proponents as a more environmental friendly technology, with fewer visible emissions and—importantly—the capacity to produce energy from the waste incineration process itself. Different incinerator models eliminate different forms of waste, each type regulated by specific rules depending on origin and hazard. Depending on whether they take solid urban waste or the “harder”, industrial (often toxic and difficult-to-dispose-of) materials, incinerator types will generate different kinds of criticism. The controversial aspects of the infrastructure triggers, then, a variety of responses, from critiques of the sustainability of the economic cycle of production–consumption–incineration through to objections to the risks that citizens face from pollutants and soil and other environmental contamination. Therefore, a multiplicity of actors like public enterprises, experts, politicians and citizens participate in the debate in the public sphere mixing scientific and technical arguments with social and political concerns from public health until energetic policy.

The arguments used by the proponents—mainly multi-utility enterprises with a mixed management composed of private and public actors—is in this sense «technocratic», giving the importance to the value of modernity and efficiency of the incinerator plants, since they are also proposed as an alternative to the unsustainability of waste dumps. On the contrary, environmental movements and local citizen committees criticized incinerators through two main arguments. Firstly, its highly non-civic message that prefers to burn wastes instead of reducing at its source the non-recyclable materials used to set up commercial products and consequently impeding any investment on the economic and broader civic virtues of recycling. Secondly, incinerators do not cancel waste but simply transform it into nanoparticles and other toxic substances that get released in the atmosphere, so then contaminating lands and exposing local population to health-related risks.

To understand how these technical arguments enter dynamics of political conflict, it is necessary to link them with the actors and the specific political environment in which these controversies take place. A focus on a protest campaign—like the mobilization against the incinerator project in Case Passerini—allows us to study the conditions under which different actors (experts, activists, citizens) interact with each other at an intermediate level between a single protest event and the study of an entire movement area (Della Porta & Rucht, 2002). This level allows us to inquire how in this specific mobilization process, expert actors relate with non-expert actors, and how they contributed to construct a form of counter-expertise. The specific field of environmental policies linked to waste management presents a set of conditions that necessarily influence the mobilization processes. The level of democratic enclosure and the strength of decisional aspects—the so-called DAD model (decision, announcement, defense) (Bobbio 2004; Bobbio & Zeppetella, 1999)—cannot be conceived separately from the technical opacity, that is the use of scientific arguments not only as a resource to legitimize choices and solutions to the public problem, but also to enclose the debate into expert institutional channels. As two faced of the same coin, in the next paragraphs I will reconstruct the conditions and the sequences explaining the mobilization process and the mechanisms of expertise diffusion in the case of the Case Passerini incinerator. Located at the outskirts of Florence, it is one of the most important projects in central Italy, contestation over which affected the main actors involved in waste management policies at the national level.

2.2. The Waste Incinerator in the Florentine Plain

In the early 2000s, the local waste plan of the cities of central Tuscany («Ambito Territoriale Ottimale», ATO6—including Florence, Prato, Pistoia) proposed a project for a new waste incinerator. The incinerator was conceived by political authorities as the solution to finally implement at the local level the European directives concerning waste management converted in Italy through the Ronchi legal decree in 1997. The directive aims to reduce the production of waste overall and to limit garbage dumps, and to this end the local administrations of the ATO6 immediately proposed to invest in a new incineration plant. A further goal of the European directives is to make the territorial units autonomous on waste management, following the principle of territorial proximity. Hypothetically, the new incinerator should concentrate in a single plant the service of waste disposal that was treated in several other incinerators all around the center of Tuscany, reducing the activity of other similar plants located in Selvapiana and Chianti (Florence) and Montale (Pistoia). At the beginning of the 2000s the location was still in discussion²²⁸ but after almost five years of negotiations among the

²²⁸ *Il Tirreno* (Prato), 3 July 2000; 23 February 2005,

municipalities of Prato, Pistoia and Florence²²⁹ the idea of placing the new infrastructure in Case Passerini—a small neighborhood near Osmannoro in the outskirts of Florence—became a real option. Finally, the choice of this location affects directly the municipalities constituting the so-called “Florentine Plain”—an urban area of 1.5 million people between the outskirts of Florence, Prato and Pistoia—characterized by a density of local civil society associations. Although the area is quite peripheral, its environment is far from being marginal.

The so-called Florentine Plain is indeed characterized by municipalities like Sesto Fiorentino—also known ironically as «Sestograd» for its historical concentration of militant organizations of the Communist Party—with an historical political tradition linked to left-wing associationism. Moreover, the area is affected by a concentration of sources of pollution linked to various infrastructure (industrial activities, highways networks, the Florentine airport) that gave rise of citizens spontaneous local committees oriented toward the improvement of the environmental conditions since the 1970s.

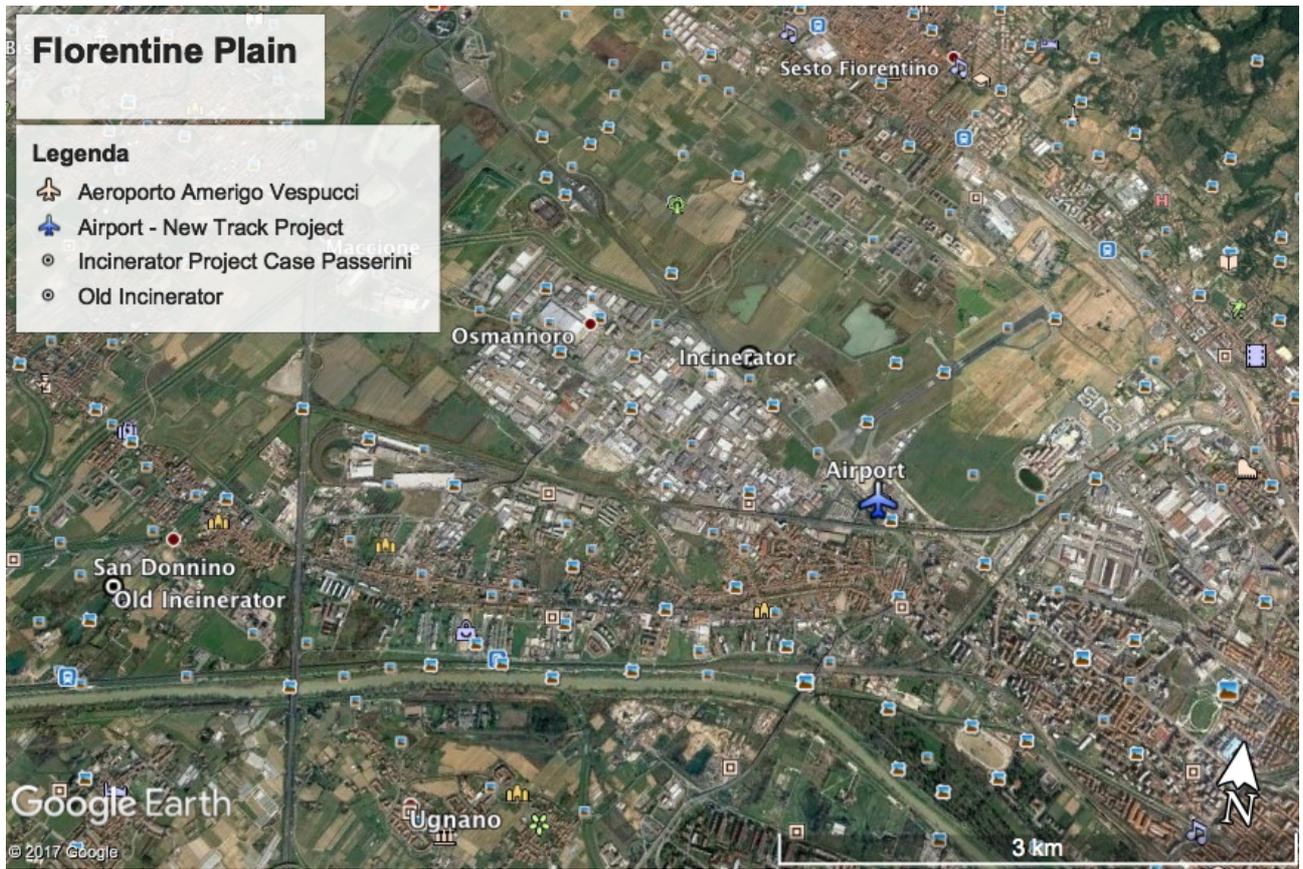
The institutional conditions at the beginning of the 2000s are quite peculiar in this sense, since the municipalities still share the same political majority—local governments ruled by the mainstream center-left party, the Partito Democratico della Sinistra—PDS²³⁰—all initially agreeing in building a new incinerator in the area. Another key aspect shows the ambivalent and politically treacherous role that the local governments share. The four municipalities involved not only make up the so-called municipal unit ATO6 that is responsible for the waste management plan for the area, but they are also associate partner in the public enterprise dealing with the waste management itself: Quadrifoglio s.p.a.. This firm is supposed to bring the incinerator plant to fruition, together with the national multi-utility Hera s.p.a. The incinerator was finally completed with public funding administered by the municipality and ultimately, the citizens. This model is the source of the political dynamics and the specific grievances that arose concerning the opportunity to build the new infrastructure as well as the citizens’ aspiration to have a voice in it.

The interdependence between the crisis of the local Left in power as well as the crisis of the incinerators as an industrial strategy for waste disposal is well summarized by the activists of the Zero Waste Italy movement that labelled the project in Case Passerini the “Stalingrad of incinerators”.

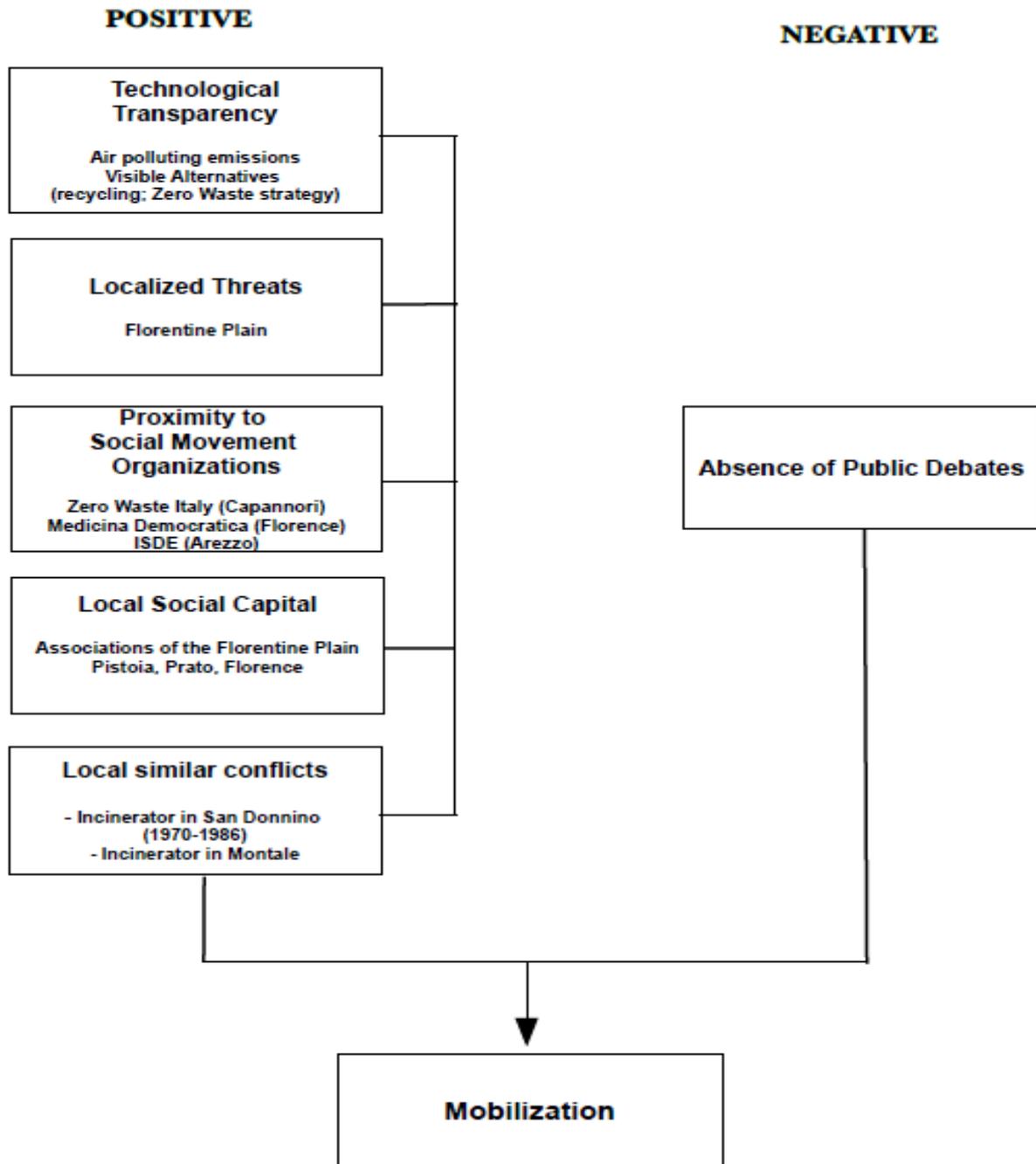
Figure 5.1. The Florentine Plain on the Outskirts of Florence and Associated Infrastructure Projects

²²⁹ *Il Tirreno* (Prato) 3.8.05

²³⁰ From October 2007 the party became the Partito Democratico – PD.



Tab.5.1. Static model: Factors of Mobilization in the case of the Waste Incinerator in Case Passerini



3. Explaining the “Stalingrad of incinerators”: Rise of the mobilization

3.1. The First Cycle

All along this story there are local administrators who initially personified the legitimate expectations of the citizens, but later—reprimanded by their party—they changed ideas and declared that there is no alternative. There are local officials that fake political struggles while they are secretly negotiating. And then there are the citizens. Citizens that self-organized, becoming experts in waste management, revealing creativity and a competence that frankly surprises. Citizens opposing decisions that had been already taken, often paying from their own pockets and with their own health; but that probably had no idea how to establish large alliances and how to become sovereigns. It is a story of huge missed chances, a story of a generation of local administrators able to negotiate behind closed doors to produce consensus. It is indeed a story of citizens that for all the vast energy and enthusiasm they mustered for the mobilization were not able to change anything. It is then a story in which institutions and citizens did not meet. That is to say, a paradigmatic case of bad administration and bad politics that, victim of its own prejudices, naturally produced what we call nowadays anti-politics. It is the story of how transparency and democratic participation became empty words, claimed only in the space of a brief electoral campaign, and immediately substituted by other words like managerial administration and technical decision-making. From this point of view, the reduction of politics to a technique of administration and the consequent mockery of the moral and political patrimony of the community reflects the mockery of the common environment that the incinerator represents.²³¹

Two major elements emerged from this small introduction to a document recapitulating the story of the incinerator project in the Florentine Plain. Far from traditional political contestations regarding the cyclical conflictual relation between citizens and institutions, the activists of the local committees indeed pose the issue of «transparency» on a further level. Firstly, far from being an instrument of clarification through evidence, technical expertise can be used, in arenas like environmental policies, as a tool to eschew democratic transparency and accountability. Secondly, in this scenario the nature of conflicts themselves is different and it reflects on a new ambit—the production of bottom-up expertise—and triggering new processes - the politicization of experts and citizens' expertification. This aspect seems counter-intuitive, if we consider the Nimby hypothesis, describing local conflicts on infrastructure projects as forms of Luddism. All along the mobilization

²³¹ Document n.1, Network of the Committees of the Florentine Plain, *Dossier Incinerator*, September 2012, p.1

against the incinerator project in Case Passerini, civil society groups and citizens organizations have made use of various and articulated sources of scientific and technical knowledge. The long-term timing of the mobilization—that can be analytically divided in three cycles of contention—can be explained only with alternative scientific evidence concerning the opportunity of the project, as the only means to sustain the legitimacy and the credibility of the opposition. The use of expert knowledge was in fact immediately related to specific political interpretations, since it introduced the dimension of legitimacy—the incinerator as in/evitable and un/necessary technology—as well as ultimately, the dimension of the modalities of participation. If choices on complex technical issues necessitate expert advice, then only those with a specific degree of expertise in the field will be allowed to participate to any deliberative process, consequently excluding further democratic extensions to broader publics. Participatory processes and delegation to expert advice are not easily intertwined with representative politics and this case helps shed light also on the «age of participation» (Baiocchi & Ganuza, 2016) and its limits. The early 2000s can be described indeed as a period of abundance of participatory tools concerning specifically the environment.²³²

In the specific case of the Case Passerini waste incinerator, the demand for more scientific evidence and data concerning environmental health was one of the first claims advanced by the local committees at the beginning of the mobilization in the early 2000s. Already in 2001, when the two enterprises dealing with local waste management («Quadrifoglio s.p.a.» and «Safi s.p.a.») identified locations for two potential new waste incinerators—Greve in Chianti (a municipality in the southern part of Florence) and Osmannoro (in the heart of the Florentine Plain)—a petition signed by 57 local doctors underlined the risks to human health and environmental pollution from the emission of dioxins and other carcinogenic substances. In 2001, the committees requested a first Health Impact Evaluation (*Valutazione d’Impatto Sanitario*, VIS), one of the first tools introduced by the European Union to improve decision making over infrastructure, particularly in relation to their impact on local communities.

Following this demand, the concerned local municipalities of the ATO6 organized a consultation. The epidemiological inquiry conducted by independent researchers of the University of Florence and Siena had two goals: to evaluate the environmental health state of the Florentine Plain and to propose some workable solutions for waste management in the area. The first results of the VIS came out in 2005 and certified:

²³² At the end of the 1990s in the European Union, different tools emerged from national legislations (in the Italian case like the institution of the Environmental Impact Assessment – VIA in 1988) and the Aarhus convention in 1998, or the different Seveso directives (the 1st one received in Italy in 1999, the 2nd one in 2003), until the Health Impact Assessment in 1999 (implemented in Italy as VIS in 2002).

the delay of the procedure with respect to the decisional process, the absence of any interaction with citizens, the lack of credibility of the [previous] technical structures that produced further distrust from the citizens, the difficulty in separating the technical role from the political one [...] and the distortion or instrumental interpretation of its technical contents (Bianchi, Buiatti, Bartolacci, Linzalone, Minichilli, Corti, Lombardi, 2006: p. 53).

It is quite clear that, even though the judgment came out of an independent scientific inquiry, its conclusions had an immediate political effect. In fact, rather than inhibiting the rise of collective action, the critical outcomes of the VIS enforce the critical positions of the local committees. The ATO6 decided however to pursue the option of the waste incinerator, interpreting the results of the VIS which showed a high level of pollution in the Florentine Plain, with the hypothesis of building a new plant in the less populated area of Case Passerini.

The decision raised a set of grievances regarding various groups of citizens populating the surrounding area of the Florentine Plain. Indeed, the specific type of benefits and costs constituted by an incinerator do not affect a single municipality or neighborhood upon the others—the recycling system as well as polluting emissions touch indeed all the municipalities of the ATO6. Consequently, the *properties of the technology* potentially produced favorable conditions for cooperation and networking among the civil society and citizen groups. As a result of historical environmental mobilizations in the area, in the early 2000s a network of committees assembling local spontaneous citizen groups located in Prato, Florence and Pistoia were still collaborating through a reciprocal exchange of information and the coordination of collective protests on common local issues.

The main organizational form of the opposition to the incinerator project was therefore a typical network of spontaneous citizen committees, characterized by informal membership, low resources and organizational structure, local concentration and specific political goals (Della Porta & Andretta, 2001). The chronology of the mobilization followed some specific paths linked to the evolution of decision-making regarding the project. The first protest event took place in October 2001—right after the emergence in the media of the project—with a huge street demonstration in the northern Florentine outskirts surrounding Peretola to the neighborhood Le Piagge. In 2002, within the world meeting of the new global movement in Florence, the European Social Forum, the network of committees organizes several workshops on the new practices of waste reduction and recycling, together with the newborn movement «Zero Waste Italy». The conferences and workshops were linked to a huge public demonstration against all forms of incineration that started in the neighborhood of Peretola and finished in Piazza della Signoria in the city center of Florence, to finally deliver a document signed by 56 doctors underlining the risks of the new incineration plants for human health

and the environment.

After this first phase of growth in public visibility, favored by the dynamism of the European Social Forum, relaunching the opposition to the incineration strategy, with huge popular demonstrations that build solidarity among historical activists and newcomers, the network focuses more on the study of the alternatives. The international appeal of the event attracted international experts belonging to the «Zero Waste» movement,²³³ seeing the movement become much more general in its arguments and frames. In this phase, the network of committees expanded and broadened its horizons, participating in the «3rd World Day of Action On Wastes» with 180 grassroots movements from 45 different nations organized by the transnational organization G.A.I.A. (Global Alliance Against the Incinerators). Finally, the issue assumed a precise contour when, interpreting the epidemiological results of the VIS in August 2005, the ATO6 choose definitively to locate the new incinerator plant in Case Passerini near Sesto Fiorentino. Not only was the incineration strategy then confirmed, but it was justified through a clear misrepresentation of the evidence of the VIS, as an activist summarizes:

Although the VIS was an innovative tool, its results were hidden wherever they were in conflict with the realization of the infrastructure. In the early phase of epidemiological screening of the potential areas, they realized that in the area of Osmannoro the health conditions were already heavy, so they chose Case Passerini just because, they say, it is less populated. In the analysis they evaluated the source of pollution and they say that the risks of the nano-particles produced by the new incinerators cannot be evaluated [...] It is an inquiry that has been misrepresented in its outcomes and manipulated in its analysis.²³⁴

The oppositional front denounced both the «misrepresentation» and the «manipulation» of the scientific evidence for political goals. In this sense, expertise has been subordinated to political interests, closing all the windows to discuss alternatives, as has been assessed in other analysis on the case (Givoni, 2009). However, rather than inhibiting conflict, this political enclosure produced further motivations to protest. Another series of demonstrations in October 2005 in Florence and in Prato relaunch the mobilization against the project. Another document signed by 113 doctors emphasized the hazards for endocrine, reproductive and immune systems from the pollution of the incinerating technologies.²³⁵

²³³ Above all, an important event has been the series of public lectures given in Tuscany by the American chemist Paul Connett, collaborator of the world-wide environmental researcher Barry Commoner, concerning the recycling systems in 2004.

²³⁴ Interview with activist n.6

²³⁵ Document n.2, What did the network of committees really do, p.1

At this point, the mobilization faced a crossroad. On the one hand the first phase of mobilization has reactivated a previous social capital on similar issues with giving new public visibility to the problem—mainly the lack of opportunities to build a further source of pollution in an environmentally delicate area. However, a first innovation in the arguments regards not only the hazards of the incinerator but real alternatives to this economy elaborated by the «Zero waste» international networks. But while on the side of the alternatives the opportunities grew, on the other hand, the local and regional institutions closed any possibility of reopening the discussion about the infrastructure.

The committees decided then to pursue an institutional path, pushing for a popular referendum. This took place in Campi Bisenzio, one of the municipality concerned by the polluting emissions of the new plant on 3 December 2007. 10 970 voters (31.1% of the participants) voted at the local referendum with 84% of the votes against the waste incinerator project. Since the committees declared that 10 000 votes was the ideal threshold for the referendum to be successful, the outcome was interpreted as a clear popular expression against the incinerator. On the contrary, the president of the province of the Partito Democratico Matteo Renzi denied the value of the result and reaffirm once again the necessity of the incinerator²³⁶.

²³⁶ *La Repubblica (Firenze)*, 3 December 2007.

3.2. Latency and the Creation of a Board of Independent Experts

This further enclosure from the political institutions seemed to definitively freeze the mobilizing potential emerged that enters a phase of latency until the end of the first decade of the 2000.

Neither the VIS nor the popular consultation persuaded the upper institutional levels—the province of Florence, the Tuscan region—to review the project. At this point, in the attempt at mediating between the upper institutional levels and their constituencies, the municipalities introduced a further scientific tool. Some local administrators of the main concerned municipalities of the Florentine Plain proposed an institutional board to assess the technologies of incineration, composed of four experts, to find a solution. The composition was mixed. Two experts (engineers) were nominated by the local administrations, while two were chosen by the citizen committees (an expert of waste management, member of the «Zero Waste» Italy and an industrial chemist of the organization «Medicina Democratica»).

The institutional board initially had the goal of mapping and analyzing all the strategies of waste management all around the world. For this purpose, several visits to a variety of industrial plants in US, Spain, Israel²³⁷ were held. As a result, in June 2010 the local administration of Campi Bisenzio decided not to approve any act in favor of the new incinerator project in Case Passerini until the scientific community declared its compatibility with health and environmental safety. However, once again, in October 2010 the president of the region of Tuscany approved the plan for waste management and the incinerator. This additional decision from the region seemed to definitively overcome any participatory process and to close any possibility for an oppositional front and seriously certifying the end of any possible alternative solution to the incinerator, as an activist describes:

The old group was withdrawing [...] it hadn't anymore any force to oppose the decisions of the administrations that, as you can see, were continuing without any doubts. This is what happens when you elaborate and elaborate a lot and maybe you're not able to mobilize broader sectors [...] yes, you reach a wide mobilization with the referendum in Campi Bisenzio, but even there, the results have been cancelled by the institutions.²³⁸

The intellectual energies that activists and experts dedicated all along a wide process of mobilization seemed therefore depleted by a reiterated institutional enclosure.

Far from being just a dynamic involving opponents and proponents, further elements

²³⁷ Document n.1, p.7; Interview with «citizens expert of waste management», (n.14); Interview with citizens' expert «industrial chemist», (n.2)

²³⁸ Interview with expert-activist n.2

characterize however the opportunity to build the incinerator. Although the political institutions showed until now a strong line in favor of the choice of the waste incinerator, the construction works were far from being executed. In the shadow of the economic crisis in 2008, with consequential budget reductions for public administrations, the realization of the new infrastructure was indeed silently postponed.

At the same time, a similar controversy was emerging in the same area that made the political situation in the Florentine Plain more complicated. The environmental health impact assessment had suggested some options to mitigate the environmental costs of the new incinerating plant. One of them was the creation of a natural park in the same the area, the so-called «Park of the Plain». While the committees had the idea of «environmental compensation» as a further element of confirmation of the polluting potential of the incinerator, another infrastructure project emerged. The region of Tuscany presented a plan to enlarge the «Amerigo Vespucci» airport of Florence, located in Peretola, just a few kilometers from the new incinerator site.²³⁹

This project gave birth to new spontaneous groups of citizens mobilizing on the issue. However, it also introduced a further level of grievance linked to the fact that the new airport would erase any possibility of a new natural park. Far from distracting citizens, the project of enlargement of the airport implicitly made opposition to the incinerator stronger. In February 2012 the citizen committees against the incinerator once again took to the streets denouncing the consortium «Hera-Quadrifoglio» that, organizing the waste gathering and disposal, as well as building the incinerator is in a clear position of conflict of interests. The citizens present an alternative waste plan, called «Alterpiano», in which they propose investments on the door-to-door waste recycling and the alternatives elaborated by the «Zero Waste» Research Center located in the municipality of Capannori, near Lucca, headquarter of the Italian «Zero Waste» movement²⁴⁰ that 2007 became the first municipality following the Zero Waste strategy, becoming a symbol and a paradigm at the national and international levels. Moreover, in March 2012 a judge sentenced the management of the incinerator located in Montale (near Pistoia) for environmental contamination caused by an accident in 2007. The WWF, environmental organizations and local citizen committees received reimbursements and compensation, while the event reflects also in the public perception of Case Passerini. Further institutional decisions to close the plant in Montale in 2020 gave further relevance and credibility to the opposition to the project in Case Passerini. However, despite these events, after a decade of mobilization the citizen committees finally entered a phase of latency, without finding any institutional openness to their stances. On the other hand, the multi-utilities enterprises and the local

²³⁹ «*La Repubblica (Firenze)*», 7 May 2010.

²⁴⁰ *La Repubblica (Firenze)*, 12 February 2012.

administrations did not seem to have any interest in accelerating the procedures of fulfillment. On both sides the stasis seemed to reign.

3.3. New Actors and the Birth of a New Cycle of Mobilization

Among us there are doctors, professors, professionals, housewives, unemployed, pensioners, people with kids and without. Everybody gives its own skills. We have studied to understand what the alternatives to incineration are. Then we have started to inform the others together with professors, experts, researchers.²⁴¹

At the end of 2014, the national government headed by Matteo Renzi approved the decree «SbloccaItalia» (d.l. n.133, 12/09/14), that simplified the bureaucratic procedures to fulfill infrastructure projects. Specifically, the art.n.35 of the legal decree created the opportunity and gives priority to the construction of waste incinerators. The national decree has a direct impact on the local level, since the project was publicly relaunched on the press at the beginning of 2015 and it received the approval of the «Conferenza dei Servizi» organized by the ATO6 where only the municipality of Sesto Fiorentino expressed a negative vote²⁴². A spontaneous group of young mothers recently settled in the neighborhoods of Brozzi and Peretola—right near the location where the new infrastructure should be built—was puzzled by the news and started discussing the issue out of the local elementary schools, where they usually meet:²⁴³

At the end of 2014 we discovered that through the «Sblocca Italia» a new waste incinerator plant near Case Passerini would have been built. Worried about the health of our kids, we therefore started looking at information available about it. Data were alarming. We've started then getting in touch with other mothers in the neighborhoods and we got in touch with the local committees focused on environmental issues. Therefore, we've decided to constitute our own group²⁴⁴

With the rise of this new spontaneous group, the mobilization entered a new phase of contention. Composed of young women worried for the health of their sons, the group mobilize with a pragmatic interest in finding alternatives. This group of women associates in a spontaneous citizen committee called «Mamme No Inceneritore». The mobilization started with the simple aim at solving a puzzle:

²⁴¹ Activist from the committee of Mamme No Inceneritore, quoted in *Altreconomia*, 7 January 2016.

²⁴² «Piananotizie.it – Quotidiano Online della Piana Fiorentina», 6 August 15

²⁴³ Focus group with «Mamme No Inceneritore», n.12

²⁴⁴ Activist from the committee Mamme No Inceneritore, quoted in *Altreconomia*, 7 January 2016.

The committee was born with this question: “Is the incinerator good or bad for health? Is it useful or not? From the research we have done also through the internet we have discovered an enormous amount of scientific studies conducted by scientific institutions and research centers in Italy and abroad that tells us that the waste incinerator plants are damaging health. It is not a case that in Florence 173 doctors have signed a document in which they affirm that this plant is dangerous. So then, it is not the committee «*Mamme No Inceneritore*» that affirms this, but there are the doctors of ISDE and Medicina Democratica [...]”²⁴⁵

The mobilization process started then with a defined and specific collective knowledge interest. With some assemblies in the neighborhood of Brozzi, at the local library «334», as well as at the social club «Società di Mutuo Soccorso» in Rifredi, the new group of mothers met with the historical local committees and reached out to doctors, epidemiologists, chemists, experts in waste management and pediatricians. After a first moment dedicated to the study and learning, between 2015 and June 2016 the «Mamme No Inceneritore» organize a series of public debates, conferences, public events and huge street demonstrations where they give new energies to the previous oppositions to the incinerator project.²⁴⁶ The first huge public demonstration was in June 2015 with 2,000 citizens walking from Peretola to Le Piagge together with the «Zero waste» movement, the regional network of committees for the defense of the territory, the autonomous trade unions COBAS and the local associations.²⁴⁷ Getting public visibility in the media and attracting the attention of the local politicians, in July 2015 they were invited to the Palazzo Vecchio by the mayor of Florence to debate the issue with the stakeholders and the public administration.²⁴⁸ While the dialog with the institutions showed no openness toward a withdrawal of the project, the mobilization was massively relaunched and on 24 May 2016 they organize a national demonstration in which anti-incinerators committees from all over Italy participate. Around 10 000 people marches from the Florentine Plain until the city center where experts from the «Zero waste» movement, the doctors of ISDE and Medicina Democratica intervene²⁴⁹. Also as an effect of the cumulation of grievances linked to the incinerators and the airport, in June 2016 at the administrative elections in the municipality of Sesto Fiorentino—where the incinerator would be localized—the candidate of the alternative Left signs an agreement with the Zero Waste movement to block the authorizations to the incinerator plant. At the second ballot he

²⁴⁵ Activist from the committee «*Mamme No Inceneritore*», in *Incinerator: Pro and against*, broadcast, LadyRadio, Florence, 12 April 16, <http://www.ladyradio.it/video/cronaca/1153/Inceneritore--scontro-fra-pro-e.html>

²⁴⁶ <http://www.mammenoinceneritore.org/eventi/iniziativa/>

²⁴⁷ *La Repubblica (Firenze)*, 11 June 2015.

²⁴⁸ *La Repubblica (Firenze)*, 24 July 2015; <https://www.youtube.com/watch?v=t5U6cbeu-7k>.

²⁴⁹ *La Repubblica (Firenze)*, 14 June 2016.

finally wins the elections against the candidate of center–left²⁵⁰.

4. Actors and Interactions

From the reconstruction of the events we can identify the dynamics of emergence of a heterogeneous oppositional front that, although started its mobilization from a localized problem, grew in generality all along the 2000s, mobilizing citizens from broader geographical places and with wide claims. As has been observed, one of the main arguments constituting the protest is that the technical and scientific evidence are recognized by citizens as subordinated to the political decision-making, contributing to make democracy opaquer. Requests of further tools of inquiry and scientific assessment are more the prerogative of the spontaneous citizen committees rather than the local political levels, that are on the contrary more prone to accelerate the procedures and seems on this point more prone to conform to party discipline rather than to respond to their constituencies, even though the respect for the decisions taken by the upper levels of their respective political parties are in few cases tempered by some innovative solutions like the mixed institutional board around 2010. The use of independent expertise was one of the main claims of the committees that identified scientific evidence with more democratic transparency and consequently its absence with abuse of power or hidden exchange between stakeholders and political institutions. On this point, expertise is perceived as an important aspect of democracy, and citizens show trust in science, while their skepticism rather refers to its institutional domestication. If the first analytical part focused on the conditions and sequences of the mobilization, it is now necessary to analyze how expertise gets mobilized by the citizens, toward whom do they address their needs and claims for scientific evidence and finally how they make use of and contributed to expert knowledge.

4.1. An Institutional “Nimby” Syndrome?

The long-term mobilization against the incinerator in Florence seems to be founded on a high level of resources—both cognitive and organizational. In terms of *social capital*, the presence of historical committees with previous experience on waste incinerating policies, old expert–activists organizations as well as the proximity with national and transnational movement organizations like «Zero Waste» and «ISDE» have helped in providing the organizational infrastructure and expertise, setting technical and political alternatives as well as extending the visibility of the mobilization, although this aspect was also related by the prominence of the city of Florence, the political center of Tuscany²⁵¹. All these factors have contributed in making the mobilization transcending the purely

²⁵⁰ «*La Repubblica (Firenze)*» 19 June 2016.

²⁵¹ Moreover, in 2013 the ex-president of the Province and ex-mayor of Florence Matteo Renzi became national

particularistic goals. The claims of the actors composing the anti-incinerator front have been also articulated on a double level, emphasizing the existence of more environmental friendly and economically sustainable alternatives. The geographical and the territorial interdependence constituting the municipalities of the ATO6 on environmental issues, have favored the citizens coordination of collective actions all around the municipalities of Prato, Pistoia and Florence. Ironically, the Florentine case is one in which citizen committees have accused the political strategies undertaken by the respective municipalities as «Nimbyst»:

When I hear about the “Not in my Backyard,” I tell you that the municipalities, not the citizens, had a Nimby syndrome. Citizens have always proposed alternatives to the incinerator plant. The idea that the municipality of Campi Bisenzio for example has proposed was to allow the incinerator plant at the extreme outskirts of the municipality of Florence, 10 meters far from Campi Bisenzio. When they closed the incinerator in San Donnino they built the waste dumping of Case Passerini, principally to solve problems from Florence. This has been the second operation. At this point the municipalities of Campi Bisenzio thought to have more political weight, because it solved a problem for Florence, they thought to have a credit in terms of more political weight. The reward [ironic] has been the new incinerator plant in Case Passerini or Osmannoro—and the new airport in Peretola. And even now that all the majors of the Florentine plain are against the airport, they simply gather the outcome of their own politics. Because they didn’t oppose at that time [...] with oppositional politics I don’t mean that they should have defended «my backyard». In all these years, they had no idea of what to propose. They had an incredible historical chance, I think. To say no to the incinerator in Case Passerini or Osmannoro with the proposals that we [the local committees] did.²⁵²

In this words, the citizen committees criticized a politics of compromise and political exchange that brought the municipalities of the Florentine Plain to be subordinated to the more powerful political levels like the Region or the municipality of Florence.

secretary of the Democratic Party and later Prime Minister of Italy. Not only was he responsible for the approval of the waste plan when he was president of the province of Florence, but he maintained a pro-incinerator attitude also as mayor of Florence. Its rise as leader of the Democratic Party and later on Prime Minister has produced the implementation of huge parts of its political and administrative staff from Florence. Its rise at the national level and on the public sphere contributed implicitly in giving a growing importance to the territorial conflicts in the Florentine area. The activists of the «Zero Waste» movement have given indeed further importance to the case of Case Passerini, coining the definition of «the Stalingrad of the incineration strategy», (cit. Interview with activist n.14).

²⁵² Interview with local resident and Florentine activist n.7

Moreover, these institutional conditions create a transversal political cleavage that not only oppose the local territorial level to upper political ones—in a classical game that put the periphery against the center—but also the citizens to local administrations. For the committees, the common ideological communality made the municipalities responding more to the discipline of the higher level of their respective political parties—the Democrats governing the Region and later in government at the national level—rather than to citizens demands.

The negotiation process conducted by the local administrations in a single issue perspective—the incinerator plants and the airport in 2011—had on the one hand the effect to increase the grievances of the citizens living in the Florentine Plain and on the other hand to relaunch a coordinated, sustained and diffused mobilization process involving all around the concerned municipalities. For the respective mayors, at the institutional level the issue was then solvable only in terms of a distribution of costs and benefits related to the different political weight among the municipalities—with a clear hegemony of the municipality of Florence on all the others. Right on this point, the institutional strategy of the local administrations has been seen by the committees as «Nymby» and as rival. These specific conditions of the Florentine Plain are then necessary to understand the capability of the local committees to cooperate on a common strategy against the incinerator, avoiding the «Nimby» trap and favoring the adoption of broader claims and alternatives. For local citizens settled in the outskirts of Prato, Florence and Pistoia the Plain is considered a common territory, both in terms of cultural and environmental richness—the historical patrimony and the landscape—as well as the common environmental threats linked to the traffic, the sources of industrial pollution and other infrastructure—like the incinerator in Montale (province of Pistoia), or the airport of Florence in Peretola. Moreover, the perception of being a peripheral zone, at the border of a city like Florence, obliged to pay all the environmental costs of the city, contributed in increasing the motives to mobilize.

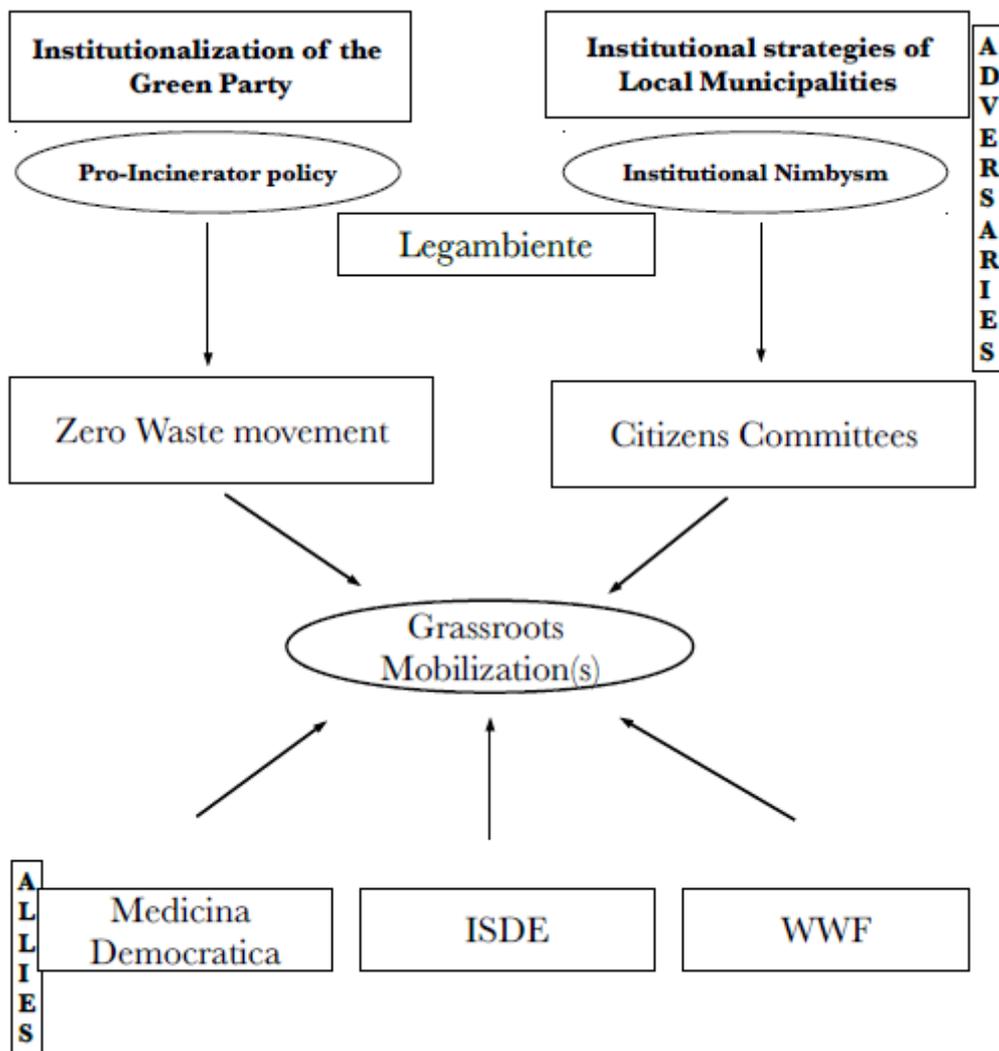
This common condition was clear since the beginning of the cycle of contention against the incinerators strategy, when the first demonstration in the 2000 targeted not the single plant but the general policy of waste management based on incinerator plants adopted in Tuscany as well as all over the country. Local committees from Pistoia, contesting the already existing plant in Montale, as well as citizen committees from Prato and the outskirts of Florence participated all together in protest events and public meetings promoting alternative ways of waste reduction like the «Zero Waste Strategy»²⁵³. As has been shown in the previously, the mobilization continued also through other means, with legal actions and meetings between citizen committees and the municipality of Florence until

²⁵³ In 2000 the first mobilization was organized concurrently with the European Social Forum held in Florence. The event has the opportunity to create new links with emergent grassroots environmental actors and to exchange knowledge and information with international movement actors engaged on strategies of waste reduction, see Document n.2 *What did the network of committees really do*, www.noinceneritori.org, 2006

new actors like the committee «Mamme No Inceneritore» enter the arena in 2015.

An analysis of the different level of generality and the cultural diversity of the groups mobilizing—from the local to the transnational level—and the type of claims—expressing general forms of opposition and alternatives to incinerating strategy—would exclude then the possibility to label the mobilization against the waste incinerator in Case Passerini with the «Nimby» acronym. On the contrary, it is necessary to focus more specifically on the relations among different actors composing the mobilization, to explain the openness toward an alternative cultural elaboration and a scientific support. Not exempt from conflicts among organizations, citizens and local institutions, the variety of actors involved in the one hand new experts mobilized in the public sphere as well as new publics in discussions previously domesticated into expert domain and institutional formats. Far from being self-evident and obvious, this mix gave further level of credibility to the movement.

Tab.6.2. Interaction Dynamics among Civil Society and Institutional Actors



4.2. Between Local and Global: Interactions between Experts and Environmental Networks in the 2000s

The campaign against the incinerator project in Case Passerini put in evidence how, on technically complex political issues, scientific organizations relates with political actors and citizens, and how the relation to expertise is necessarily intertwined with specific grassroots or institutional cultures at specific times. In this case, the actors mobilizing are not all newcomers, and the latent historical local activists belonging to the local environmental committees of the 1970s dispose of specific knowledge linked to the territory and the issue that is crucial for reactivating of new cycles of contention. Being protest not localized in a single local neighborhood—as shown previously, the oppositional front is indeed composed of citizens from all the Florentine Plane—alliances with broader environmental movements help in constructing a radical opposition to the forms of waste management expressed by incineration technologies as a whole. This level of generality is rooted in a long elaboration of a cultural alternative based on a qualified counter-expertise.

Scientists and doctors provide an important support for the anti-incinerator claims putting in evidence the unsolved sources of pollution and contamination while the diffusion of the «Zero Waste» movement allows us to propose radical alternatives to the incinerating strategy. In this sense, doctors and epidemiologist contributed to a traditional «oppositional» claim linked to «prevention» from sources of pollution, while the economists, agronomists and experts of waste management contributed in creating an alternative «propositional» claim, the «Zero waste» strategy.

However, differences in the characteristics and properties of the actors and groups need to be placed in specific times and understood in the processual context of shifting alliances and relations.

When the mobilization started, around 2000, environmental activism was facing a period of change due to the process of institutionalization of specific groups, while others were reinventing new grassroots forms of action. Specifically:

- 1) At the local level, the end of the 1990s represented a moment of latency for the historical citizen committees located mainly between the outskirts of Florence and Prato. Having been active in *the mobilizations against the old incinerator of San Donnino*—successfully ended in 1986²⁵⁴ – the citizen committees mainly reconverted on issues like the ordinary monitoring

²⁵⁴ The conflict around the incinerator plant active in San Donnino escalated dramatically after an accident in the 1980s. After a long contestation led by groups of spontaneous citizens' committee, the plant was closed in 1986. The specific type of pollution produced by the incinerator in San Donnino was visibly observable by local inhabitants in the form of a black dust on the balconies while at the same time visibly damaging the surrounding environment. The dioxin produced by the plant got deposited in the surrounding fields and intensively affected the local agriculture. For few years, the commercialization of local products was officially banned. Since then, the incinerator in San Donnino was assimilated to a tragic event in the collective memory of the citizens of the Florentine Plain. The mobilization contributed however in building

of the quality of air, the traffic reduction and the improvement of the natural landscape of the Florentine Plain. Local sections of environmental groups like WWF or expert-activists like «Medicina Democratica»²⁵⁵ were providing knowledge and resources to the committees arriving at the beginning of the 2000 with an important background of expertise, experiences and a social capital that can be reconverted in the new mobilization,

- 2) 2) the end of the 1990s is a moment of innovation in the scientific activism, with the emergence of the «International Society of the Doctors for the Environment» - an international scientific association founded by the initiative of various experts located in Pistoia and regrouping in a multidisciplinary organization different forms of highly academic expertise—from medicine, to biology, chemistry, oncology and other environmental sciences. Engaging on prevention of illnesses related to the environment, ISDE aims not only focuses at denouncing the hazards of industrial plants and waste incinerators, providing direct scientific support to patients organizations and citizen committees, as well as at influencing institutional health politics. Its aim is at the same time academic, with the goal at changing the agenda of research toward innovative «epigenetic» paradigms in medicine that stresses the importance of environmental variables in the emergence of illnesses and genetic degenerations.
- 3) 3) among the environmental groups in Tuscany—reflecting its broader national transformation—a new cleavage was emerging, since the Green Party was in national and local government coalitions and started reconsidering its anti-incinerator positions²⁵⁶. The

at least new ties among residents belonging to different neighborhoods and in diffusing knowledge and information concerning the potential risks linked to incinerators. A generation of activists grown on this wave of contention arrived at the beginning of 2000s with a higher level of alert concerning environmental and public health-related problems. (see Document n.3 – The story of the incinerator in San Donnino)

²⁵⁵ An association born in the 1970s with the aim of democratizing safety and health at work and intervening on the main sources of harms particularly produced in industrial factories, the movement organization «Medicina Democratica – Movement of Struggle for Health» was principally composed by doctors, engineers and technicians criticizing the link between business and medicine, particularly chemical productions, pharmaceutical interests and the lack of health on the job in big industrial plants (Ferrara, 2011). Mainly a group developed among experts and scientists close to the cultural area of the New Left, they explicitly pursue the goal of providing expertise for disadvantaged groups like factory workers or local communities affected by sources of pollution. Diffused at the national level through an informal coordination among experts-activists, «Medicina Democratica» do not dispose of high levels of material resources, privileging spontaneous and localized actions. The main characteristic defining the organization is its aim of «democratizing science» through a peculiar cooperation of different forms of expertise that tries to foster laypeople participation on technically complex issues like public health, epidemiology or environmental risks.

²⁵⁶ As an example, since 1993 the national environmental organization Legambiente was officially endorsing the new generation incineration plants, with the argument of their relatively less polluting potential with respect to the old ones («Il Tirreno», 28 October 05, see also Document n.4, *The role of Legambiente in the history of the incinerator*, 27 March 2006

<https://provinciadiprato.wordpress.com/2016/03/27/il-ruolo-di-legambiente-nella-storia-dellinceneritore/>).

Belonging to the first center-left national government in 1996, the Green party officially approved the strategy of incineration. Since then, the Greens in Tuscany follow the logics of the coalition at the local level and

institutionalization process invested some sectors of environmentalism that became less critical toward waste incinerators while at the same time producing the birth of new grassroots associations, like «Ambiente e Futuro» in 1996. Operating specifically in some Tuscan cities and inspired by some international experiences²⁵⁷ «Ambiente & Futuro» introduced in the Italian environmentalist scene a new agenda linked to the «Zero Waste Strategy», mainly proposing new scientific approaches for recycling policies and alternative systems of waste reduction. All along the 2000s, these successful practices—substituting the incineration technologies—were implemented in many Tuscan municipalities and in the whole country. This growth in numbers and in its public credibility made the proposals of the «Zero Waste» research center located in Capannori - a small village in Lucca - increasing its centrality in the anti-incinerator struggles at the national level. With its specific expertise, the «Zero Waste Italy» group helped to bridge local claims with broader global perspectives. Its visibility and partial institutional success helped spreading contention beyond its typically localized origins, in a typical «scale shift» (Tarrow & McAdam, 2005).

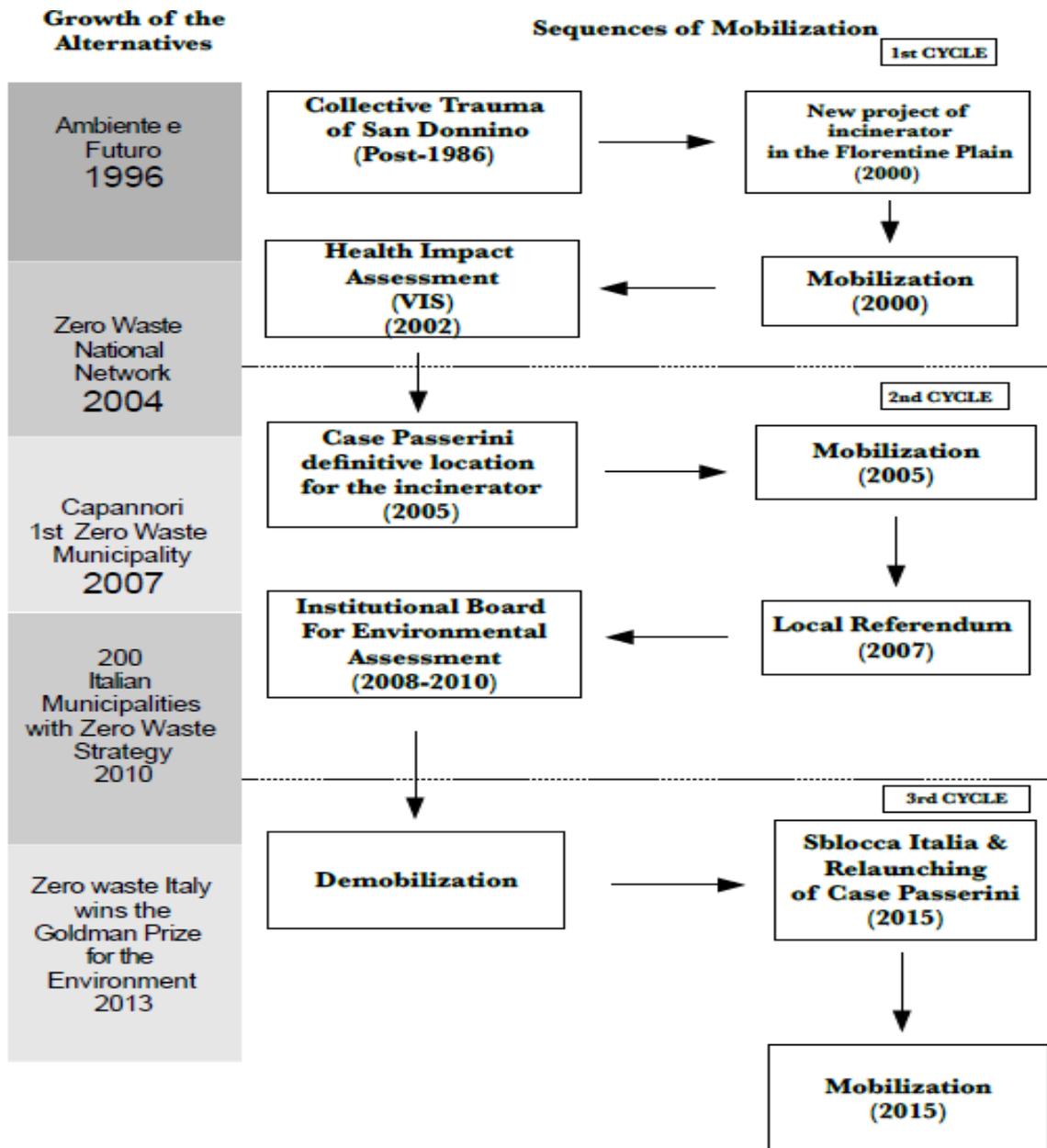
Although the protest against the incinerator in Case Passerini has been mainly conducted and claimed by local committees arisen in the Florentine outskirts, committees from the surrounding provinces of Prato and Pistoia as well as all the aforementioned political and scientific groups have played the role of allies, mobilizing in a common platform and sharing common resources and strategies. Spontaneous local committees have been defined as characterized by low resources and informal networks with low levels of organizational structure and coordination, for their local identity and goals for which they have been often accused of localism against broader public goods.

As actors expressing conflicts privileging a moderate repertoire of action (Della Porta & Andretta, 2001), they assume a hybrid feature between the interest groups and the social movements, between lobbying activities and participatory practices (Sebastiani, 2011). In this case, the articulation of their expertise, claims and forms of action have been fertilized by previous experience of local and transnational activism that have helped overcoming both purely oppositional and particularistic forms of actions.

they consider the incinerators a compromise for the reduction of wastes («Il Tirreno» 13 January 2007).

²⁵⁷ Indeed, the group «Ambiente e Futuro» is part of international networks like GAIA (the Global Alliance of Incinerators Alternatives) and has many links with internationally well-known research centers – like the Research Center led by the industrial chemist and world-wide known environmental activist Paul Connett in New York, explicitly elaborating an environmentalist agenda that focuses on alternatives to waste management. The international importance of the center is linked also to its historical director, Barry Commoner, world-wide known biologist and one of the icons of the global environmental movements.

Tab.6.3 Sequences of Mobilization and Growth of Scientific Alternatives



5. The Construction of Alternative Expertise

Expertise is necessary. But the people, I think, those that have been involved in this process—even the simplest one—know already today how to respond to any objection. And this is the fact that counts the most, because it is a contribution with a social and cultural connotation that remains beyond what will be the outcome of this story. There is a growth in terms of knowledge that is inestimable, and from the point of view of a social capital²⁵⁸

²⁵⁸ Interview with activist n.6

In the Florentine area, the committees can dispose of established networks of experts both at the university and in the public sectors—public health units, mobilized at different times, from the opposition to the old waste incinerator in San Donnino until the new cycle led by the group «Mamme No Inceneritore» in the 2000s. Specifically, the types of experts mobilizing can be summarized in four categories:

- 4) 1) experts and environmental activists linked to the international network «Zero Waste Strategy», bringing their knowledge of alternative industrial productions linked to recycling strategies, mobilizing with a frame linked to the paradigms of the «circular economy», and its alternative forms of economics and consumptions,
- 5) 2) expert–activists, mainly industrial chemists and doctors belonging to the movement organization «Medicina Democratica» providing a long tradition of activism that conceive technical and scientific activity as a support for citizens and populations, but also with members previously working at regional institutional agencies like ARPAT—(Agenzia Regionale Protezione Ambientale Toscana),
- 6) 3) doctors (mainly general doctors and pediatricians) belonging to the international network of «International Society of Doctors for the Environment», association born with the aim of institutionalizing the paradigm of the «epigenetic», and internationally active in the contestation of the industrial sources of pollution,
- 7) 4) groups of researchers (mainly engineers, natural scientists and epidemiologists) working at the scientific poles of the university of Florence and at the hospital Careggi, which campus is located exactly in the zone of the incinerator. While some of them are Florentine residents, others do not live in the zone but mobilize with the aim of improving the quality of the environment in the campus and with the aim of making their competences useful for the local populations. Some others collaborate with the Region on inquiries on the epidemiological state of Tuscany. Although they intervene from times to times into the debate, their intervention is sporadic, disconnected from a real mobilization process and privileging the individual critique of the project from online independent sources like blogs or alternative websites²⁵⁹.

²⁵⁹ Some conditions may explain this inhibition toward activism. One of the researcher of the National Research Center (CNR), engaged in data communication with a personal online platform called «Piana Sana» [Safe Plain] admitted how some colleagues were obliged by their own departmental rules at the Scientific Pole in Sesto Fiorentino not to conduct studies concerning the local environment for external actors that were not recognized by governmental institutions: «I think that it would be one of the missions of the CNR to make some communication for the civil society [...] There is some reluctance. Partly because we don't have much time, partly because some of us don't want problems. Because this causes you problems. The CNR finally is linked to the Minister, that is to the Government...and finally this became a political action [...] My director told me that if the Region gives us a task to make a study concerning the emissions of the

From this typologies, the composition of the expert actors involved in the mobilization against the incinerator is various, from national activists that gives to the mobilization a higher level of generalization until local activists mobilizing spontaneously with a specific grievance, from experts already engaged in specific movement organizations until established professors at the university with a much lesser inclination toward the explicit political engagement.

Tab 6.4. Components of the Mobilization against the Waste Incinerator in Case Passerini

	LOCAL	SUPRA-LOCAL
Organizations	Medicina Democratica	Zero Waste Italy ISDE
Spontaneous	Network of the Citizen committees of the Florentine Plane Committee «Mamme No Inceneritore»	

The variety of experts expresses a multiplicity of arguments composing the discourse of protest. It is however possible to summarize the claims in two categories: the risks to public health, and the economic unsustainability of the incineration strategy. The role of experts is central both for the production of knowledge and both for their capability to translate their technical expertise into political claims and goals. A focus on their specific characteristics allows us to link their professionalism with organizational cultures and consequently the way how they publicly engage and how they relate with civil society groups.

5.1. Politicization and Technical Expertise: the Expert–activists of «Medicina Democratica»

For many activists, the mobilization against the incinerator in Case Passerini constituted the second episode of a story that seemed to end in 1986, when the incinerator in San Donnino was closed. The committees were in a phase of latency around the end of the 1990s, but still meeting regularly in some social spaces of the neighborhood Brozzi, located at the outskirts of Florence, near the municipality of Sesto Fiorentino and the village of Peretola, at the «Casa del Popolo», or the Mutual Aid Society («Società di Mutuo Soccorso») in Rifredi. These places constituted social infrastructure where new participants get involved in the debates on the main local problems. The experts from «Medicina Democratica» always conceived their role of experts as necessarily linked to popular needs and public

incinerator, we do it. However, if the X committee ask you to measure something, we don't do it. We cannot enter into the meat grinder...the topic is subjected to manipulations. So the CNR intervene only if it's called by an institution. At the individual level, I have to tell you that I would love to have colleagues that participate, but we are very few», Interview with expert–ally, n.8

engagement, considering their role as organic to the work of citizen committees:

At the 334, in Brozzi, that is still nowadays the municipal library, everything started. I come from there. In the evening we met always there. We, the committees of the Plane, we met every Tuesday night for many years. It was a great commitment. [...] At the beginning we were a lot. But still, there, many conflicts, divisions started to emerge. [...] different visions of the world. There was a main division, mainly linked with activists that wanted to oppose the incinerator being part of the coalition in government at the local level. And this created problems with part of the activists that were for autonomous action²⁶⁰

However, even though the density of civic and political networks can be considered a positive condition for the development of collective action, this idea of being experts directly linked to a political goal was far from being exempted from conflicts crossing the borders between scientific and political stances, therefore giving rise to divisions and beaching. This testimony shows indeed how some political divisions were negatively affecting the capacity to produce a coordinated collective action and then the spread of a broader popular participation against the incinerator.

At the beginning of the 2000s these local dynamics were reproducing a more national political configuration. Political parties of the Italian radical Left—like «Partito della Rifondazione comunista»—were supporting the center–left coalitions that governed in 1996-1998 and, although with strong conflicts and moments of division, they sometimes tried to establish a dialog with Left-wing mainstream parties within the institutions (both at the political and local level). These strategies were however inevitably producing conflicts with more radical members of the party, pushing for more contacts and attention to social movements and spontaneous forms of political participation. At the beginning of the mobilization, in the early 2000, the strategy of entering the institutions constituted an option that part of the network of the citizen committees were favorable to choose. In this sense, parts of the citizens saw in the political parties in government at the local level—a center–left majority in all the concerned municipalities—a potential ally or interlocutor. This internal cleavage is not important for purely political reasons. The political culture linked to such activism directly (and negatively) affected the mobilization of experts. The experts from the movement organization «Medicina Democratica» were divided on the opportunity to collaborate with a local Left-wing coalition on environmental policies, and not providing unity on the front of counter-expertise. This cultural trait tells something about the nature of expertise on publicly relevant issues and the political risks it implies. Far from contributing to a purely technical or infrastructure choice,

²⁶⁰ Interview with expert-activist n.10

activists underlines how, in the case of the incinerator, “the issue has a highly political value”²⁶¹. Directly involving citizens’ everyday life—the quality of air and citizens’ public health—expertise deals in this case directly with issues that are not enclosed in a debate monopolized by technicians or experts.

The local expert–activists of «Medicina Democratica» are mainly doctors and epidemiologists working at local health units, monitoring sources of pollution and dealing directly with the state of public health and the environment. The form of politicization of medicine is however not only related to a professional culture. It is a more specific culture intersecting the forms of activism of movement organizations engaging for health on the job in the Tuscan factories in Florence, Prato and Massa Carrara in the 1970s. «Medicina Democratica» is a movement organization with a long story of activism among the working class movement, engaged on struggles for a healthy industrial environment and the defense of workers’ health. In this sense it has an important historical link with the culture of the New Left of the 1970s and the more autonomous trade unions²⁶². This hybrid «habitus» considers the professional attitude together with its direct political implications, considering science and health not as neutral activities but an outcome of socially determined interests that are far from being just purely scientific (Medicina Democratica, 1997). Therefore, the internal cleavages reproduce the typical divisions between more institutional and more radical sectors characterizing collective action in general.

The idea of practicing a publicly relevant science for deprived groups, workers, citizens affected by forms of environmental pollutions or patients without access to some basic health-related rights implies for this types of «expert–activists» a strong emphasis on participation. The expert–

²⁶¹ Interview with activist n.6

²⁶² Although streams of literature in the social movements have stressed the importance of elements of novelty in the environmental movement (Melucci, 1987; Touraine, 1978; Offe, 1985), groups like «Medicina Democratica – Movimento di Lotta per la Salute» suggests to reevaluate elements of continuity with the working class movement (Barca, 2011). Born in 1970 after the events of the Italian “hot autumn” - a sustained series of episodes of working class contention between 1968 and 1969 - «Medicina Democratica» was constituted by doctors and academics in disciplines linked to the emerging sector of the public health (biometric, physio-pathology, toxicology, oncology, industrial medicine, psychology) that incorporated discussions about the nature of participation and the refusal of the delegation among the factory works council. Ideas of autonomy and participation elaborated in the working class movement – mainly in the group «Quaderni Rossi» led by Raniero Panzieri in the 1960s – were penetrating also among the new scientific professions populating the Italian factories. The idea of socializing knowledge between experts and workers experiencing directly the harmfulness of the working environment conduced to pioneering forms of co-production of medical knowledge. The paradigm of «prevention» was in this context conceived in opposition to previous conceptions of medical knowledge – epidemiology in particular – that were considering the professional activity as simply a task of counting and classifying forms of pathologies and mortality. This innovative way of practicing medicine was at the same time introducing a radical critique of the neutrality of science and technology (that was seen as the outcome of power asymmetries in capitalist society), while making a new relation between experts, doctors and patients and finally putting the paradigm of «prevention» first.

activists of «Medicina Democratica» aims at «democratizing science», producing research oriented to the needs of all these categories, through the direct organizations of collective arenas of discussions with experts and laypeople. This conception brings them to support spontaneous forms of action claiming for more controls on the environment, or for specific health-related needs. On this side, the mobilization of the 2000s saw the participation of actors that are in continuity with previous forms of activism, like the «old» working class movement (Centemeri, 2011). The «hybrid habitus» of expert-activists could indeed provide a twofold kind of resources, both at the intellectual level—knowledge of highly technical issues and its alternatives—and political level—capability to mobilize knowledge, and to organize assemblies or political platforms. In this case, it seems however that the political divisions within the groups—taking into account the opportunity of cooperating or not with the Left in power—were initially inhibiting the spread of a broader mobilization. The situation changed with the emergence of new groups in 2015—like the «Mamme No Inceneritore» - that excluded from traditional ideological debates, spontaneously mobilized with a specific goal, therefore triggering pragmatism and unity.

5.2. The Doctors for the Environment into the New Wave of Expert-Activism

Across the networks of experts supporting the local populations, the professional organization «International Society of the Doctors for the Environment» constituted a further scientific group. Born at the end of the 1990s at the initiative of a group of doctors in Pistoia, this international network—with the main headquarters in the center of Italy, between Emilia-Romagna and Tuscany—aims at stressing the importance of the environmental sources of pollution in modifying core aspects of human health. In this sense, their public engagement is related to the production of new paradigm emerging in the medical research field. ISDE put indeed a strong emphasis on scientific authority, an aspect that produced often cases of controversy and conflict with more political or lay actors. ISDE is indeed a proper research network that investigates the environmental conditions affecting human health through a multidisciplinary membership. This conception is indeed related to the study of the environment as a complex organism and its different forms of threats affecting multiple aspects of biological systems.

In this sense, the public engagement is the natural outcome of a scientific activity that gives them a specific position in academia first. The struggle among different scientific departments - mainly medical sub-disciplines like statistical epidemiology or pediatrics—anticipates the reasons for their public intervention:

ISDE was born for the initiative of doctors with the idea of creating a multidisciplinary coordination of experts that were supporting the idea that the quality of the environment is the prominent element of many growing pathologies across complex societies with industrial productions and many other sources of pollution. ISDE counts on doctors but also biologists and agronomists because the idea is that environment is a complex system and therefore it is not possible to reduce and analyze complex processes from the point of view of a specific partial niche, without looking at the interconnection across fields. You can see from many publications [...] that the role of forms of pollutions and toxic substances do not act directly on the body and the human life but are linked to the endocrine apparatus and in the development of cells. This happens in weaker subjects like children or even at the fetal phase. This has emerged from studies that we did in 2012 and that said that cancers were growing and we didn't know where they were coming from²⁶³

While some its members have multiple membership and belong also to the group «Medicina Democratica», there are several differences distinguishing the two organizations, both in terms of historical identity and social composition. While Medicina Democratica emphasized the aspect of «laypeople expertification» (e.g. workers experiencing directly toxic environment) and the democratization of science, ISDE put the importance of research evidence and scientific credentials first. The support to citizen committees against the incinerator in Case Passerini is indeed a consequence of a broader conception of their professional and scientific ethos rather than a political posture. Inevitably, ISDE contributed in enhancing the credibility of the mobilization. Moreover, The proximity of most of the members of the association—mainly settled in Tuscany and Emilia Romagna²⁶⁴—contributed in providing more resources to the growing movement. At the local scale, the proximity between the outskirts of Florence and Pistoia²⁶⁵ made possible a sustained exchange between the local groups. Although the birth of ISDE is related to the need to support citizens and patients with accurate and recognized scientific knowledge, the higher scientific credentials characterizing its members—most of them established professors engaged in academic research—played an ambivalent role in mobilization processes. Their academic status seems at the same time

²⁶³ Interview with expert-ally, n.11

²⁶⁴ At the same time, Tuscany and Emilia-Romagna are two of the main regions in the center of Italy that not only share similarities in terms of a traditional Left-wing territorial politics. The public corporation «HERA s.p.a.» - the main proponent of the incinerator - have in these territories almost a monopoly on the waste management, if compared with other regions where it operates. The relation between business and politics in these sectors is one of the main arguments of scientific movements claiming the importance of the environment in public health. These expert-organizations directly opposing incinerator strategies also contest the incinerators policies as the business of the mainstream Left-wing parties in power in these so called «Red regions».

²⁶⁵ In Pistoia, another local struggle against an operating incinerator plant in Montale gave rise to a sustained conflict in which hundreds of doctors mobilized with the population. When the mobilization in Case Passerini started, the networks of experts and activists within Prato, Pistoia and Florence were since the beginning exchanging resources like solidarity and information.

softening their tendency to be involved in heated politicized debates, or at least to be distinguished from the role of the core activists. It is the case in their relation with a group of grassroots environmentalists that exactly from Tuscany started introducing the idea of the «Zero Waste strategy». However, the diatribe concerned more their different views on the global problem of the incineration strategy rather than the specific mobilization in Case Passerini.

5.3. From Risk Opposition to the Alternatives: Bottom-Up Expertise and Empowerment in the «Zero Waste Movement»

Far from being a purely local event, the resurgence of an anti-incinerator front in Florence at the beginning of the 2000s is strictly linked to the transformation of the green activism in Italy and specifically in Tuscany. One of the key aspects of this new wave of activism concerns how different organizations and groups change their relation with scientific knowledge and culture. The relation with specific experts and scientific actors is indeed once again related to specific political cultures.

In Tuscany, «Ambiente & Futuro» is the main actor opposing waste incinerators in the 1990s. As a group of grassroots environmental activists refusing the pro-incinerator politics of the Green Party, «Ambiente & Futuro» struggled since 1995 against the construction on an incinerator project in Capannori (an industrial village at the outskirts of the city of Lucca), so putting the foundations of the rising «Zero waste» movement in Italy²⁶⁶. For several aspects, the role of the «Zero waste» movement is prominent in innovating the type of opposition to incinerators. While the medical and epidemiological arguments against the incinerator are indeed only oppositional, based on the risks of cancer-related illnesses, the Zero waste program propose concrete alternatives related to the recycling that can be implemented by local institutions and communities. This aspect played a role in augmenting the credibility of the movement all around Italy, linking the environmental issue with a discourse on the alternatives provided by the circular economy.

²⁶⁶ The rise of the movement all around the country quickly transformed a local and relatively isolated movement like the «Zero Waste» group of Capannori in the center of an international platform. From a dozens of small towns in 2007, the movement reached in a decade 272 municipalities, with more than 6 millions of Italian citizens undertaking a Zero Waste Strategy in 2017. Rapidly, Italy has become together with California – one of the countries where the «Zero Waste» strategy is at its most advanced state (Connett, 2013). While a city like San Francisco show the most advanced technological systems and the highest levels of recycling, the way how the Zero Waste movement spreads was entirely driven by institutional actors and parts of the trade unions. On the contrary, in Italy is considered world-wide paradigmatic for his grassroots expansion and for the use of more non-conventional or disruptive forms of protest like massive demonstration. This condition should be eventually further tested in relation with the typology of openness/enclosure of the entrepreneurial and political actors linked to the business of waste incinerators at the domestic level. However, concerning the specific case of the mobilization on Case Passerini, this growth in time and space has emphasized the centrality of the case at the national level.

However, since its birth the group had to face several obstacles within the same environmental movement. As an example, Legambiente—the most diffused national environmental organization—launched in the same years a political line named «scientific environmentalism», stressing the importance of environmental struggles conducted not only following «scientific evidence» but also providing scientific alternatives. On the specific issue of the waste incinerators, Legambiente denied their polluting potentials, comparing their emissions with those of a «normal industrial plants»²⁶⁷. Furthermore, «scientific environmentalism» means here implicitly a central importance given to experts and scientists in setting the agenda of environmental policies that in this sense assumed the features of a traditional top-down political process. In this conception—criticized by many community leaders and local activists—professional experts are considered to be the legitimate group that elaborates a platform co-producing with the professional staff a political direction that can be former post communicated to the public, and ultimately trying to avoid spontaneity, seen as a form of irrational and egoistic «Nimby» syndrome. On this point, the environmental organizations reproduce indeed the typical «technocratic paternalism» of the public understanding of science and technology (Bauer, 2007). These scientific conceptions and their link with the institutionalization process of sectors of the green movement explains then the conditions of emergence of the «Zero Waste» group. The intersections between political and scientific power is the key to understand also the consequent logics co-production of expertise and movements. If the Italian environmental organizations reproduce the scientific climate and the expert knowledge diffused in the Italian academia about waste incinerators, one of the key elements of the emergence of «Ambiente & Futuro» is the seek for alternative authoritative scientific evidence:

In 1995-1996 we perceived that on the one hand the population was against the incinerator, because they felt the danger, almost in a visceral way, but we have no support from the environmental organizations [...] Greenpeace was weak, WWF was a bit supportive but still blackmailable for its public management of the natural oasis, but honestly it was also not their domain. Legambiente was against us, the Green Party even aggressively against us. At that point we needed a part of the scientific world that can legitimate us. The risk was to be perceived like irresponsible opponents, a «Nimby», with all the difficulties to develop hegemony, to be credible. We immediately knew that credibility was decisive. At that point [...] through some people among the provincial network «Do not burn your future» that gather the Versilia and the Florentine Plain [...] we try to keep in touch with Barry Commoner²⁶⁸

In Italy, the isolation of the alternative scientific options to the incinerators pushed the activists

²⁶⁷ Document n.4, The role of Legambiente in the history of the incinerator, 27 March 2006
<https://provinciadiprato.wordpress.com/2016/03/27/il-ruolo-di-legambiente-nella-storia-dellinceneritore/>

²⁶⁸ Interview with activist n.14

of «Ambiente & Futuro» to look for international experts. The links with transnational organizations as GAIA (Global Alliance for Incinerators Alternatives) facilitated the knowledge transfer from the global to the local level. Through these networks, the Italian group got in touch with the CBNS (Research Center in Biology of Natural Systems) in New York, directed by Barry Commoner, and his assistant Paul Connett, professor of environmental chemistry at the St. Lawrence University, New York, and consultant for Greenpeace International. In 1996 the group «Ambiente & Futuro» participated in Amsterdam at the meeting organized by Greenpeace with the grassroots with the scope of extending the visibility and the resources of the local conflicts. These international meetings, extended the frame of the group that became part of the global network «Zero waste». Counting on this international authoritative expertise, the movement then started its activity of scientific translation and communication of works concerning alternative technologies and strategies diffused in the US scientific environmentalism. With this shift, the movement elaborated new capacities, overcoming an oppositional frame and possessing new credible alternatives.

These dynamics show how scientific literacy assumed a growing importance in this new wave of activism. While the incineration process was proposed as a top-down necessary technology produced by multi-utility enterprises and local administrations, the Zero waste strategy was introducing at the same time new scientific alternatives linked to a communitarian citizen participation in waste management. The «Zero waste» philosophy has to be understood with its stress on empowerment of the local communities and constant education of the population, considered as democratic alternative to the «technocratic» delegation to experts that the waste incinerator strategy defends:

There have been some insights and strategies, which have been well understood and well-aimed. The first was to connect the local struggles spread out across Italy with the international movements against incineration and toward zero waste. Before the 2009 Zero Waste International Alliance conference in Naples [which brought together experts, administrators, and activists who came from around Italy and also from Philippines, Thailand, India, the United States, Belgium, the UK, Bulgaria and Spain] we had brought other international experts to Italy. These included Rick Anthony, Eric Lombardi and Jeffrey Morris. Working with these organizations and international experts gave greater credibility to our initiatives. The second was to define the proper role of experts: they shouldn't replace communities and citizens, but rather—when willing—be there to serve their needs. I quote one of the metaphors that Paul often use to explain the true role of experts. He says effecting change is like a nail through a piece of wood. The expert can sharpen the nail, but you need a hammer of public opinion to drive it home. Over the last few years we have had a growing number of experts helping to sharpen the nail, and with the help of countless local activists we have produced

quite a hammer of informed public opinion to drive the message of zero waste home throughout Italy.²⁶⁹

The struggle of the Zero waste movement to create a credible opposition to incinerator was then an attempt at linking scientific alternatives—through the mobilization of experts—to popular action, directly involving the local communities into the new programs of waste management. Even though the relation is far from being linear, local administrations are seen as potential allies for the implementation of the «Zero waste» strategy. The typology of expertise required to oppose the incineration strategy involves on the one hand professional experts from a multidisciplinary spectrum—from environmental chemists to doctors, economists or agronomists—on the other hand the participation of the concerned communities:

The zero waste path combines a large vision of sustainability with local practical actions. We start with simple steps, which involve everyone. First, each citizen has to avoid the commingling of discarded materials, which makes “waste” (i.e., source separation). Second, these separated materials must be collected with well-organized door-to-door collection systems. These two steps act like capillaries feeding the separated materials into suitable plants for recycling and composting. In this way, a simple democratic starting point, which is also important for the planet, can simultaneously create jobs and stimulate the local economy. The other crucial step must be to involve production managers. It is with them that the industrial and distribution roles in the consumerist chain can be intercepted without too much controversy. The message that has to be addressed is that, while responsible and mature communities do their best to maximize resource conservation and minimize waste disposal, manufacturers and retailers must also play their part. As Paul [Connett, ndr] has said many times, communities have to tell industry that, “If we can’t reuse it, recycle it, or compost, industry shouldn’t be making it”²⁷⁰

If compared to other forms of «exclusive expertise», where professionals have the monopoly on the knowledge regime, the issue of the «Zero waste» strategy can be considered a space for «interactive expertise» where citizens and experts collaborate to the issue (Collins & Evans, 2007). Specifically, the «Zero waste» strategy aims at promoting not only a technical alternative but also a social one, an environmentally sustainable culture of the recycle and reuse of materials. Following this discourse, citizens, local administrations and industries are involved in their every-day practices in the construction of this alternative management, where goods are finally never transformed in wastes but reconverted in resources in a circular economic process. In this chain, the citizens can

²⁶⁹ Paul Connett, *The Zero Waste Solution. Untrashing the Planet One Community at a Time*, Chelsea Green Publishing, 2013, p.110

²⁷⁰ Paul Connett, cit., p.111

control their own behavior, assist and participate to the development of «good practices», taking part to the responsibility of a more environmental sustainable and economically more efficient process. If compared with the type of intervention of the doctors, where the denounce of the risks produced by the incinerators is purely oppositional and reproduce a top-down form of scientific communication, the «Zero waste» strategy is not only an alternative proposal, but it also disproves the technological determinism of the incineration solution, introducing a more participatory dimension to an issue with a high technological content. The growing impact of the «good practices» proposed by the movement on the local communities is concretely testable toward the end of the 2000. In 2004, the Zero waste strategy became the «National Network of Zero Waste». In 2007 Capannori became the first Italian municipality adopting the «Zero waste» strategy—on the model of American cities like San Francisco—while around 2010 already 200 municipalities all around Italy follow this path, with 4,2 millions inhabitants involved in this process (Ercolini, 2014)²⁷¹.

The growing wave of the «Zero waste» movement represents an important factor for the constitution of a credible alternative to incineration. With the birth of a new phase of contention in Case Passerini around 2013, its infrastructure is indeed available to assist local populations providing at that time a highly recognized leadership, established alternatives already implemented by local administrations all around the world and Italy together with «bottom-up» suggestions of improving participation and democracy in local communities. In this sense, the peculiarity of the expertise mobilized by «Zero waste» explicitly seeks popular empowerment and the development of not only community-based expertise, but emphasize how contributive expertise can be built through the

²⁷¹The story of Zero waste Italy is strongly related to the personal and political story of Rossano Ercolini, ex grassroots activist from the post-68 New Left movement organization «MLS – Movimento Lavoratori per il Socialismo» (an organization with a specific intellectual profile focused at the same time on strengthening autodidact intellectual debate within Marxism and on constructing hegemony on pragmatic solutions, saw among his members many activists that joined – with very diverse outcomes – the environmental movements of the following decades, and among them, the future member of the Legambiente and Italian Prime Minister Paolo Gentiloni). As an Italian teacher at the elementary school in Capannori, and later leader of the Italian Zero Waste movement, Rossano Ercolini assumed definitively an international recognition in 2013, with the assignment of the «Goldman Environmental Prize» and contributing in giving more credibility to the movement at the national level. At different assemblies organized by the «Mamme No Inceneritore» during the third cycle of mobilization, this shift in the broader public credibility of the Zero Waste strategy as a concrete and feasible alternative to the logic of incineration was proudly claimed by some doctors and activists accusing the local representatives and mayors for their prudence or skepticism. An intervention of a doctor during the global meeting of the Zero Waste movement at Villa Montalvo on November 29th, 2017, in front of hundreds of participants from all over the world, well summarize this shift: “I remember when, with Rossano, we were talking for hours, ten-fifteen years ago about the Zero Waste strategy, some evenings in assemblies with 2 or 3 persons in some Casa del Popolo...it was like being at Sorbonne, I thought...and now...”. The same argument was shared by a grassroots activist while criticizing the PD mayor of Campi Bisenzio, for embracing the Zero Waste strategy only recently: “When we were talking about alternatives...You were laughing. You were telling us: “So you bring an elementary school teacher to tell us how to find alternatives to the incinerator?” (Notes from Participant Observation n.7, recorded video also available on the website <https://www.facebook.com/mammenoinceneritorefirenze/>)

mobilization of «bottom-up» experts. This is particularly true for one of the main groups emerged in the third cycle of the mobilization in Case Passerini.

Tab.6.5. Types of Expertise in relation with Types of Activism

Type of Activism	Type of Expertise	
	Top-Down	Bottom-Up
Top-Down	ISDE	
Bottom-Up	Zero Waste Italy Medicina Democratica	Network of the Citizen committees of the Florentine Plain Mamme No Inceneritore

5.4. Expertise from Below: Lay-expertise and the Committee «Mamme No Inceneritore»

As we can see, the public relevance of the incinerator produced an amplification of the grievances that cannot be confined to technocratic or institutional arenas. Not only experts and political representatives are then concerned by the issue, but on the contrary growing sectors of civil society feel affected by the ultimately political choice. In this sense, the incinerator produced social grievances and triggered mobilizations involving a variety of «laypeople» or common citizens that asks not only for more information about the issue but also for public debates where to discuss the alternatives to the infrastructure. The political enclosure is in this case a condition that favored the spread of collective action seeking to activate autonomous arenas of discussion. In particular, the choice touches the sensibility of groups of young women living in the area of Brozzi-Peretola, in the outskirts concerned by the infrastructure. Being totally unaware about the issue, they have the first discussions out of the school areas, where they normally pick up their children:

In February 2015 a group of moms met to read a newspaper article concerning the construction of a waste incinerator. They met out of the school to comment the news. This was in Brozzi, where you have a real neighborhood life and it's easier to meet. It was during a child's birthday party that the moms have started discussing the issue and about their preoccupations. They decided then to organize an assembly at a local club in Peretola inviting someone belonging to the historical local committees [...] those of the Plain count almost 15 years of activity²⁷²

As we have seen, local social network are key conditions for the transmission of information and knowledge. If social capital is a key component to coordinate collective action, in this case it also played a role in opening the opportunities for the mobilization of newcomers. The group of women

²⁷² Focus Group with «*Mamme No Inceneritore*», n.12

decided to constitute a spontaneous committee called «Mamme No Inceneritore» with the aim of investigating the risks of the incinerator on the health of children, a social category particularly exposed to the polluting emissions of the waste incinerator. Although it was facing a moment of disengagement and latency, the Network of citizen committees of the Florentine Plain gave to the newborn committee the opportunity to meet epidemiologists and pediatricians of the university of Florence, the engaged doctors of «Medicina Democratica», ISDE and the key members of the «Zero waste» movement and to organize public meetings and assemblies where the issue of the incinerator is publicly discussed.

[...]Here, as «Mamme No Inceneritore» we were not born neither technicians nor doctors. Consequently, we have studied. And we have taken the data from the sources that publish these data.

The meetings have both the scope of deepening the knowledge concerning the impacts of the incinerator and the possible alternatives, reopening an arena that was apparently closed after years of mobilization. Although experts have a central role in publicly communicating scientific evidence and data, as well as criticizing official data and institutional agencies of environmental protection, the citizen committee gave since the beginning a new importance to the dimension of self-education and personal empowerment. Furthermore, the intervention of laypeople played a role in amplifying the arguments against the incinerator, through the organization of public events like demonstrations, concerts, social dinners and recycling laboratories in which activists and experts show the scenarios of the zero waste economy.

The social events have the capacity to create new frames and symbols that mobilize citizens and laypeople, grabbing the attention, and activating a citizens movement. Most of the participants get interested in the issue after having attended events where the scientific aspects of public health and environmental protection are introduced through highly emotional collective events like demonstrations and concerts:

I've started to get deeply interested about the issue after the demonstration on 11 April 2015, that made me knowing the problem in its urgency. [...] I was absolutely not informed and I started getting interested and studying the documents participating in the meetings with the experts. It has been surely a learning experience²⁷³

The mobilization of laypeople gives not only a broader popular dimension to a debate that was confined to a technocratic arena composed only by local administrators and technicians. More

²⁷³ Interview with activist «Mamme No Inceneritore», n.15

spontaneous actions like demonstrations and sit-in, as well as the communication of events through the web technologies and social media have the capacity to create opportunities for new actors to join the mobilization and to create new consensus. If the intervention of professional experts from various disciplines has the important function of giving credibility and authority to the mobilization, the participation of laypeople helps constructing a broader constituency within public opinion and endorsing the alternatives to waste incineration. In the mobilization process, the women of the committee «Mamme No Inceneritore» resuscitated a mobilizing potential that was blocked by ideological conflicts characterizing the old expert–activists. As one of the old expert–activists admits:

As committees we were tired [...] the Mamme entered with a new energy, also with the social networks [Facebook, ndr], we were also a bit old. They are also very organized, they call me and they give me already the dates when there are events [...] they organize me everything [...] and they are competent when they talk.

They [Mamme No Inceneritore] have been smart in trying to keep in touch with us, because we already did our own path [...] they didn't refuse us saying: "Oh, they are always the same," so they have learned from us [...] but now they are even more advanced [...]²⁷⁴

If the old groups were also inhibited both by their internal cleavages and by the institutional enclosure showed at different steps by the local and regional administrators, the newborn committee has the ability not to ignore the work produced by the previous activists. In this regard, the «Mamme No Inceneritore» were successful in gathering the knowledge and resources from the previous actors, while at the same time framing the issue in a new transversal discourse that attracted broader sectors of the public opinion. If in its first phase the mobilization was characterized by a collective research of information and authoritative knowledge about incinerators and their alternatives, establishing new relations among experts, old and new activists and activating learning processes, a further step concerned the organizations of public events and meetings to communicate all the knowledge accumulated about the incinerator project and its alternatives.

The meeting between the newborn committee «Mamme No Inceneritore», the professional experts and international environmental activists shows how expertise is not necessarily an obstacle to public participation in technical and scientific issue. Participation of laypeople activated from a direct concern or specific interest—a threat for the surrounding environment, the children's right to public health—can positively stimulate learning processes, although specific professional cultures considering science as a participatory activity and a public good play a consistent role in triggering

²⁷⁴ Interview with expert-activist n.10

these mechanisms, as the Zero Waste network clearly show. Participation and expertification are in this sense two sides of the same coin. Motivation is a more important condition for expertification rather than high levels of scientific credentials. In this case, laypeople participation have consistently played a role in activating experts as the case of «Medicina Democratica» attests. Moreover, experts can be subjected to political inhibition both for their excess of scientific attachment—deontological or academic distance from politics (ISDE)—and both for their excess of political attachment (Medicina Democratica)—their involvement in political dynamics. The development of a citizens movement that actively asked for expertise without posing ideological boundaries is a further complementary condition that stimulate knowledge-making and its broader diffusion.

5. Claims and Types of Actions

The analysis of the variety of actors composing the anti-incinerator front gives us the opportunity to identify how knowledge is linked to specific types of claims and ultimately actions.

Our case suggests that a «technocratic model» giving a total monopoly to scientific and technical knowledge in the mobilization process is partly disconfirmed. Not only there was no full overlap between scientific status and political leadership. In some cases, experts need to be mobilized by external actors—citizen committees or movement leaders—as both the networks of the committees and the «Zero waste» movement attest. An important component of the experts mobilizing have a hybrid status, belonging indeed to movement organizations—like the doctors of «Medicina Democratica», «ISDE» or the economists and chemists of the «Zero Waste» network—and can consequently be considered «expert-activists». Independent researchers and scientists working at the local Scientific Pole—without organizational structures or networks - do not play relevant role in the mobilization processes, and their intervention is limited at providing data and information or disseminating individual scientific critiques through web sources or personal blogs. In this case, the contribution of «expert-allies» is relatively limited or absent for the development of a collective counter-expertise. Parts of the experts joining the oppositional front—no matter the scientific disciplines or profession—gets recruited not only through the professional channels, finding in the public engagement the natural consequence of more general professional grievances—like the marketization of medicine or the subordination of scientific research to private business. Many experts gets involved in the mobilization by getting attracted by the charisma or the vocational ability of expert-activists that are at the same time movement leaders, as this doctor suggest:

I was working at a clinic in Peretola where I had some patients that were living close to the area of the old incinerator of San Donnino. One day I even had a colleague that

was collecting some signatures for a petition. At the hospital he was scolded by his head physician, so he asked me to help him, or even to lead these initiatives. But I refused, I was not interested. However, finally I casually arrived one day at an assembly led by Paul Connett in 2002 in Florence. He talked about the incinerator. You know, Paul Connett has great communicational skills, he always says that you have to amuse when you're struggling [laugh]. This was the spark, the flash. From there I decided to join the assemblies at the Library 334, I started studying these things.²⁷⁵

If some sectors of applied natural sciences are useful to construct an authoritative opposition to the waste incinerator project, the scientific skills need the competences of activism to be transformed in a political proposal. In this regard, political and organizational skills have a prominent weight in creating the conditions for the involvement of expert-allies that traditionally rejected a direct link with activism. Conflicts of leadership arose now and then between movement organizations like «Zero waste» and «ISDE» concerning broader strategies and platforms—whether to accept the «Zero waste» strategy or to substitute it with an alternative «Total Recycling» platform and frame—were partly solved by the more spontaneous popular committees like «Mamme No Inceneritore», which avoided being involved in broader political divisions and brought the mobilization back to its more concrete and practical objective, facilitating cooperation and the constitution of a united front.

In this sense, the political goal proposed by the citizen committees was less involved in scientific or theoretical disputes, privileging pragmatic objectives.

The collaboration with experts was oriented not only to criticize environmental pollution and the lack of evidence provided by the institutional monitoring agencies—like ARPAT (the Regional Agency for the Environmental Protection of Tuscany)—but toward the creation of an alternative system from below:

The authorization [of the incinerator plant] has been given by para-political institutions. The scientific assessment that has been done [VIS] says that there's a clear lack underestimation of the risks for public health. They have been bypassed only with forms of compensation and monitoring systems.²⁷⁶

²⁷⁵ Interview with expert-activist n.10

²⁷⁶ Activist from the committee «*Mamme No Inceneritore*», in *Incinerator: Pro and against*, broadcast, LadyRadio, Florence, 12 April 2016

When we met the president of ARPAT, an old colleague, her answer was, in my opinion, disconcerting. She almost said that it is useless to locate new air monitoring control units because politicians don't care about them. For me this is the signal of a [civic] defeat for ARPAT. ARPAT should not worry about what politicians think. ARPAT is an agency, so if these estimations are gathered by politicians or not, this is not ARPAT's problem. Not producing data, they contributed in being responsible for the actual situation. There is a gap between the scientific knowledge of the technical agencies and politicians. If this is explicit, I don't know, and I don't care. However, the problem is real, and we should try to fill this gap²⁷⁷

The recognition of the ambivalent boundaries between production of scientific evidence, its political demand and use has been one of the main claims of the mobilization at its different phases. If in the first phase between 2000–02, the network of citizen committees of the Plain reacted to the choice of a new waste incinerator with the demand for an independent evaluation (introducing one of the first experiences of Public Health Evaluation, «VIS» in Italy), the institutional interpretation of the results was perceived as instrumental. The distrust toward the delegation of decisions to boundary agencies—at the borders of science and politics—like ARPAT doesn't produce a distrust toward science in general but gives rise to a need for independent expertise. Direct actions were undertaken to contrast the manufacture of fake environmental assessments, accused of having distorted monitoring by placing air control units in areas relatively few sources of pollution and in periods when pollution intensity was light—near natural parks, or during holidays. The successful crowdfunding initiative proposed in 2016 by the committee «Mamme No Inceneritore» concerning the purchase of air control units [*centraline*] is indeed oriented toward the construction of an alternative monitoring system, where citizens could autonomously assess the levels of pollution. In this sense, one of the goal is to liberate scientific knowledge from both its technocratic and political confinement, and to socialize it, as it was expressed by the leader of «Zero Waste Italy»: «The solution is not technological, but social».²⁷⁸

Finally, the popular participation of citizens, laypeople in the mobilization against the waste incinerator project integrated the lack of credible expertise at the institutional level—as a consequence of the political enclosure—but also the inhibition of parts of the scientific actors due to their resistance toward direct and explicit activism. Traditional actions undertaken by experts and activists like the legal recourse, meetings and agreements with the municipality augmented in credibility with

²⁷⁷ Interview with expert-ally, n.8

²⁷⁸ Rossano Ercolini, intervention at the assembly organized by the committee «*Mamme No Inceneritore*» at Cinema Grotta, Sesto Fiorentino, 25 January 2016

the growth of public events like the massive demonstrations between 2014 and 2016 and with new actors entering the arena.

6. Conclusions

From this first reconstruction we can affirm that the salience of the technological alternatives to the waste incinerator favored the diffusion of a high level of mobilization. However, the technological factor cannot be considered the sole factor for the spread of mobilization, and it had to be mediated by social capital and the presence of similar conflicts. Indeed, far from being a local and isolated case, in the mobilization around Case Passerini, networks of transnational activism played an important role, mediated by the local knowledge of the citizen committees.

At different cycles, diverse typologies of experts were involved, playing a prominent role in the mobilization (see Tab.6.3). While during the first and second cycle doctors and epidemiologists mobilizing against the risks of the incinerators were dominant, the first cycle saw the presence of the alternative economists and experts of waste management. The diversity of professional expertise involved expanded the credibility of the movement but it also triggered specific conflicts linked to the various organizations as well as to different expert cultures.

Political conditions like the absence of real opportunities for popular consultation and participation also played a role in expanding popular grievances, amplified by specific environmental factors like the overlap of center-left political majorities at the local and regional level. As other studies suggest, political enclosure tends to produce mobilization from below (Caruso, 2015), but a variety of movement infrastructure from the local (citizen committees) to the transnational level (Zero Waste movement) are necessary to orient the protest toward the proposal of alternative solutions. This case confirms then the importance of social capital for mobilization, while also showing how social capital is frequently an outcome of mobilization (Edwards, Foley, Diani, 2001). All these conditions are necessary for the development of a counter-expertise. Citizen committees did not reject the waste incinerator project on the basis of irrational or emotional postures, as some of the Nimby declinations in the literature suggest (Dear e Taylor 1982; Dear 1992; White e Ashton 1992; Wolch e Dear 1993; Takahashi 1998; Wolsink, 1994;2006; Wynne-Edwards 2003).

Principally, emotions like the fear for health risks or environmental contamination have stimulated the seek for more rationality. The worries and fears linked to the risk do not impede the seek for rational solutions, but on the contrary they are conditions that triggered the mobilization process. Both laypeople and experts are equally subjected to this conditions, although they dispose of different resources (knowledge, cultural habits, social capital). As an example, to oppose the waste incinerator, the spontaneous citizen committee «Mamme No Inceneritore» started a process of

collective research of the alternatives from the concerns linked to potential damage of children health. This dynamic is common to the foundation of the expert-organization «ISDE», born to give an answer to the worries of some doctors linked to some suspicious cancer-related illnesses emerged in Pistoia and Forlì, two cities near waste incinerators plants. The choice of mobilizing alternative experts and expertise confirms the distrust toward the economic and political use of scientific evidence—the delegation of scientific assessment to technocratic structures—like regional agencies or enterprises like HERA s.p.a. - but at the same time it confirms the trust toward forms of science and technology linked to a different conception of social utility and environmental sustainability. Citizens skepticism is linked to the partisan use of science and its para-political feature, and the movement seeks the collaboration with scientific actors that gives value to participatory practices, trying to fill a knowledge and a democratic gap.

The scientific authority given by the medical habitus produced some frictions with some sectors of activism—the former criticized for their tendency toward professional élitism, the latter accused to stretch complex things into emotional arguments—but they are residual if considered from the point of view of potential obstacles to the specific mobilization processes.

In line with evidence emerged from other inquiries (Cech, 2014), natural scientists and engineers do not play important roles in the mobilization, while doctors—specifically, epidemiologists and pediatricians—gives a consistent contribution. The most active part is played by doctors of «Medicina Democratica» and experts from the «Zero waste» movement. While the first category are more prone to denounce forms of pollution, the second one has a real program of alternatives that develops through the time scale of the mobilization and became the more and more credible all around the world in the 2000s, augmenting the credibility of the «Zero waste» strategies. Both organizations stresses the importance of participation and empowerment of local communities and single citizens—i.e., the importance of a science practiced with the «subjectivities» (patients, citizens of the territories) for «Medicina Democratica» - creating a frame that favor the expansion of popular participation and expertification processes. Activism and political competences favored these types of expertise diffusion, while the lack of these skills by independent natural scientists and engineers working at the local scientific Pole played a role in confining their cognitive resources to individual intervention. Triggering expertise diffusion and expertification processes, mobilization and activism do not simply produce social capital, but also cultural capital. In the case of the experts from the «Zero waste» movement, cultural appropriation and empowerment through knowledge are key factors for environmental awareness triggering an expertification processes of activists.

Even individuals with average levels of cultural capital are able to support autonomously anti-incinerator positions. Indeed, the activists of the «Zero waste» movements got publicly recognized as

experts from waste management and recycling after decades of sustained mobilizations in the environmental grassroots. On the short-term, citizens of the «Mamme No Inceneritore» with no previous knowledge about the issue are able to conduct public debates against the managing director of the proponent enterprises.

In sum, a parallel with the other Florentine case is necessary, to compare the logics of expertise in movements. Contrary to the No Tunnel–TAV that assumed the features of a more restricted hybrid research collective, where activists and experts are not able to create a larger arena of participation, the citizens movement against the waste incinerator assumed the features of an enlarged hybrid research collective where experts, activists and citizens. The mobilization against the waste incinerator project in Case Passerini can be considered a case where the complexity of the technological factor do not constitute an obstacle for citizen participation, giving rise to both internal outcomes like expertification processes and external outcomes like the renegotiation of issues confined to a technocratic arena.

7. Chronology

July 2000 Florence. Political proposal of creating an incinerator in the ATO6 (Territorial Agency for the center of Tuscany)

January 2001 Florence the local committees asks to the council member for public health of the municipality of Florence an epidemiological inquiry for the emissions of the old incinerator. The same year a team of scientists started the Environmental Health Impact Assessment (VIS)

October 2001 Florence. Demonstration organized by the local committees of Prato, Florence and Pistoia in the outskirt of Florence (from Peretola to the neighborhood Le Piagge)

March 2002 Florence. Within the European Social Forum the coordination of the local committees organized a series of workshop on the Zero Waste Strategy

June 2002 Florence. Demonstration against the Incinerators in Piazza della Signoria, center of Florence, 56 doctors sign a document that underlines the risks of the new generation incinerators on environment and public health

September 2004 The coordination of the local committees organized a conference within the 3rd Regional Conference on Wastes with the chemist prof. Paul Connett, world-wide expert and promoter of the Zero Waste Strategy

August 2005 Florence. Interpreting the results of the Environmental Health Assessment (VIS), the ATO6 declared that Case Passerini, in the municipality of Sesto Fiorentino, is chosen for the localization of the plant

October 2005 Florence. Huge demonstration in Osmannoro and Campi Bisenzio

October 2005 Prato. Demonstration

October 2005 113 doctors sign a document against the incinerator, underlining its hazards for endocrine, reproductive and immunity system

December 2006 Florence. Demonstration of the coordination of the local committees against the forms of waste incineration

January 2007 Pistoia. the Green party in Pistoia and Prato declare that wastes are a problem, not a resource and they approve the strategy to build an incinerator

Mai 2007 Pistoia. An accident at the incinerator of Montale provoke the diffusion of dioxins all around the plant

November 2007 Florence. 173 doctors sign a document concerning the health-related risks of the new incinerator project, the Region replied with a document of the Scientific Committee leaded by the oncologist Umberto Veronesi that denied the hazards linked to the incinerator.

November 2007, Florence. Local referendum in Campi Bisenzio (35 000 inhabitants) about the incinerator project. 13 000 citizens vote and 84% declare their opposition to the project. Local

politicians dismiss the importance of the consultation given the low level of voting turnout.

March 2009 Florence. Beppe Grillo's political meeting in Florence before the elections for the municipality. He denounced the economic crisis in Prato and the regional incinerators strategy, citing the Zero Waste Strategy of Capannori (Lucca)

February 2011 Prato. The council member of Prato, Florence, Pistoia declare their determination to build the new incinerator in Case Passerini

March 2011 Prato. The local committees of Prato, Florence and Pistoia oppose the decision of the municipality to enlarge the new airport of Florence-Peretola, stressing the attention on the levels of pollution of the Florentine Plain

February 2012 Florence. the local committees of Prato, Florence and Pistoia propose an alternative waste plan based on the Zero Waste Strategy. The alternative plan would be more environmental friendly, would abolish health-related risks and would create new job positions.

March 2012 The judge sentenced the management of the incinerator of Montale for environmental contamination caused by the accident in 2007. WWF, environmental organizations and local citizen committees gets reimbursement and compensations.

February 2015 A group of young mothers located in Brozzi-Peretola (Florence) organizes in a committee «Mamme No Inceneritore» to relaunch the opposition to the incinerator in Case Passerini

April 2015 Florence. Demonstration of the local committees against the incinerator in Case Passerini and the enlargement of the airport Florence-Peretola. 2000 citizens demonstrate, leaded by the Goldman prize for ecology, Rossano Ercolini, leader of the Italian Zero Waste Strategy Association.

July 2015 Florence. Committees, experts, and proponents meet the mayor of the municipality of Florence and discuss about the environmental policies in Florence

Mai 2016 Florence. National demonstration organized by the local committees with the participation of the national networks of civil society organizations and committees against the incinerators and for the Zero waste Strategy.

June 2016 In the administrative elections in the municipality of Sesto Fiorentino, the candidate of the alternative Left signs an agreement with the Zero Waste. At the second ballot he finally wins the elections against the candidate of center-left

8. Annex

8.1. Interviews

- 1) AB, Expert–ally, Full Professor of Bio-medical Statistics, University of Florence, Department of Applied Statistics “G.Parenti,” Florence, September 21th, 2015
- 2) BB, Expert–activist, Retired Environmental Expert (Industrial Chemistry) for the oil-industry Carapelli and Institutional Expert at ARPAT (Regional Agency for Environment Tuscan), Member of Medicina Democratica, Florence, November 4th, 2015
- 3) BT, Expert–activist, Geologist, CNR researcher, Member of «Mamme No Inceneritore», March 8th, 2016
- 4) GC, Spokesman of the Committees for the Defense of the Territory in Prato, March 18th and April, 26th, 2016
- 5) MU, Teacher and Activist, Former Representative of the Local Municipality at Sesto Fiorentino, February, 15th, 2016
- 6) CT, Lawyer, Member of «Network of the Committees of the Plain», Florence, March, 21th, 2016
- 7) VN, Teacher and Activist, Member of «Network of the Committees of the Plain», Sesto Fiorentino, March, 23th, 2016
- 8) LB, Activist «PianaSana», Researcher in Geotechnical and Atmospheric Engineering, Department of Physics, National Research Center, (CNR), March on 22th, 2016, Scientific Pole, Via delle Idee, Sesto Fiorentino
- 9) MG, doctor pediatrician, member of ISDE—Doctors for the Environment, unrecorded interview, Sesto Fiorentino, April 4th, 2016
- 10) GG, Doctor and Psychotherapist, Member of ISDE—Doctors for the Environment and «Medicina Democratica», March, 14th, 2016
- 11) PG, Oncologist, President of ISDE—Doctors for the Environment», Member of Medicina Democratica, Florence, April 27th, 2016
- 12) «Mamme No Inceneritore», Focus Group, Brozzi, March 8th, 2016
- 13) «Medicina Democratica», Focus Group, Piazza Baldinucci, June 3th, 2016
- 14) RE, environmental activist, president of «Zero Waste-Italy», June 22th, 2016
- 15) F, Member of the committee «Mamme No Inceneritore», Florence, June, 22th, 2016
- 16) B, Member of the committee «Mamme No Inceneritore», Florence, June, 24th, 2016
- 17) S, Member of the committee «Mamme No Inceneritore», Florence, June, 20th 2016

8.2. Participant Observations

- 1) 21 October 2014 Congress “History of Public Health in Italy” - ISDE - Medici per l’Ambiente, Palazzo D’Accursio, Bologna (with the presence of Ramazzini Institute, Medicina Democratica, ISDE) <http://www.medicinademocratica.org/wp/?p=2029>
- 2) 29 April 2015, Seminar “Evaluation of the Health Impact” Michelangelo Bolognini Grant—Department of Medical Statistics—University of Florence, (presence: Medicina Democratica, Prof. Annibale Biggeri, Dr. Giancarlo Sturloni (SISS Trieste), Kathleen Ruff (Activist, International Joint Policy Committee of the Societies of Epidemiology, IJPC-SE) <http://www.medicinademocratica.org/wp/?event=seminario-borsa-di-studio-michelangiolo-bolognini-sulla-valutazione-di-impatto-sanitario>
- 3) 20-21-22 November 2015, National Congress of Medicina Democratica, Villa Ruspoli, Piazza Indipendenza, Florence, (entirely recorded)
- 4) 25 January 2016, Assembly on the Incinerator Project in Case Passerini, organized by Mamme No Inceneritore, Cinema Multisala Grotta, Sesto Fiorentino (in presence of Prof. Annibale Biggeri, Dr. Gian Luca Garetti, Dr. Mauro Paganini, Rossano Ercolini, founder of Zero Waste Italy, Don Daniele Bani, Members of the Doctors Order Pistoia and the Committees Against the Incinerator in Montale)
- 5) 11 March 2016, Assembly «Is the Incinerator so Far?», Local Parish San Luca Al Vingone, Mamme No Inceneritore, Massimo Paganini (Medicina Democratica), Rossano Ercolini (Zero Waste Italy) 21:00-23:00h
- 6) 4 April 2016, Citizens Assembly on the Incinerator project, Cinema Grotta, Sesto Fiorentino, organized by Mamme No Inceneritore (presents: Zero Waste Italy, Medicina Democratica, ISDE, Network of the Committees of the Florentine Plain)
- 7) 27-28-29 October 2017, International Meeting of the Zero Waste Communities, Villa Montalvo, Florence, with Paul Connett (chemist, founder of the Zero Waste Strategy), Rossano Ercolini (President, Zero Waste International) Joan Marc Simon (President Zero Waste Europe), Ruth Abbey and Rick Anthony (Zero Waste USA), Jack Macy (Zero Waste, San Francisco County) and more than 100 mayors from all over Europe, 9:00-19:00h

8.3. Sources

Documents:

- 1) Networks of the Committees of the Plane, *Dossier Incinerator*, September, 2012
- 2) Document, *What did the network of committees really do*, www.noinceneritori.org, 2006

3) Document, *The story of the incinerator of San Donnino twenty years ago*, 2006

4) Document, *The role of Legambiente in the history of the incinerator*, 27.03.2006

<https://provinciadiprato.wordpress.com/2016/03/27/il-ruolo-di-legambiente-nella-storia-dellinceneritore/>

Coalitions at the Regional and Local Government					
Tuscany	2000-2005 Center-Left Martini	2005-2010 Center-Left Martini II	2010-2015 Center-Left Rossi	2015 - Center-Left Rossi II	
Florence	1999-2004 Center-Left Dominici	2004-2009 Center-Left Dominici II	2009-2014 Center-Left Renzi	2014 - Center-Left Nardella	
Sesto Fiorentino	1999-2004 Center Left Barducci II	2004-2009 Center-Left Gianassi	2014-2015 Center-Left Biagiotti	2015-2016 Commission	2016 - Alternative Left Falchi
Campi Bisenzio	1999-2004 Center-Left Chiti II	2004-2007 Center-Left Alunni	2007-2013 Center-Left Chiti III	2013 - Center-Left Fossi	
Veneto	2000-2005 Center-Right Galan II	2005-2010 Center-Right Galan III	2010-2015 Center-Right Zaia	2015- Center-Right Zaia II	
Venice	2000-2005 Center-Left Costa	2005-2010 Center-Left Cacciari II	2010-2014 Center-Left Orsoni	2013-2014 Commission	2015 - Center-Right Brugnaro

Tab. Coalitions at the Regional and Local Government

Legend: Red=Alternative Left

Rose= Center-Left

Blue= Center-Right led by Forza Italia

Green= Center-Right led by Lega Nord

White= Commission

FLORENCE

	TUNNEL TAV	WASTE INCINERATOR Case Passerini
TEMPORAL EXTENSION of the MOBILIZATION	2006 – ongoing	2000 – ongoing
TYPE OF PROBLEM	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> >Infrastructural Impact >Geotechnical > Economic (Public Costs) </div> <div style="width: 30%; text-align: center;"> < Public Health </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <Public Health <Environmental (Natural Pollution) > Public Health (Genetic Illnesses) </div> <div style="width: 45%; text-align: center;"> >Economic circular economy Zero waste strategy </div> </div>
ALTERNATIVE PROJECTS	Yes Surface Station, Alternative existing railways	Yes Zero Waste Srrategy (EffeCorta, Critical consumerist practices and Alternative Recycling Systems)
LOCATION	Diffusion Campo di Marte, Ex Macelli, Historical Center of Florence	Concentration Florentine Plain (Outskirt Prato, Florence, Pistoia)
COMMITTEES	No Tunnel Tav	1-No Inceneritori, 2-Coordinamento Piana, 3-Mamme No Inceneritore, 4-Piana Sana
CIVIL SOCIETY ASSOCIATIONS	1-Per Un'AltraCittà 2-Italia Nostra 3-IDRA	1-Per Un'altra Città 2-Ex-Emerson local squat 3-Zero Waste Italy
EXPERT NETWORKS	Engineers, Uni Florence Architects Economists	Doctors, Medicina Democratica Doctors, ISDE Doctors, Uni Florence
POLITICAL ALLIES	Alternative Left at the Municipal and Regional Level Civic List «Un'altraCittà»	Alternative Left at the Municipal Level
POLITICAL ADVERSARIES	Region National Government (Bipartisan)	Region
PROPONENTS	Ferrovie dello Stato, Nodavia (Coopsette), RFI ItalFerr	Quadrifoglio HERA Group

Tab.5. Synthetic Scheme of the Mobilization Processes

Legend: > major salience of the issue

< minor salience of the issue

VENICE

CRUISE SHIPS		M.O.S.E.		
2004 – ongoing		1988 – 2013		TEMPORAL EXTENSION of the MOBILIZATION
>Infrastructural Impact > Security Risks (population and urban proximity) > Environmental (Air Pollution; Landscape)	<Economic (Public costs of environmental depletion)	>Infrastructural Impact < Natural (Biodiversity) <Environmental (Death of the Lagoon)	> Political Corruption (MOSE System, hidden exchange between political parties and Consorzio)	TYPE OF PROBLEM
Yes Different Dock, New station connected with the city center through small steamboat		Yes Alternative Floodgate Rebalancing Works		ALTERNATIVE PROJECTS
Diffusion (Historical Center of Venice)		Diffusion Venetian Lagoon (Lido, Malamocco, Chioggia)		LOCATION
NO Grandi Navi Citizen Committee		NO MOSE Permanent Assembly		COMMITTEES
1-Italia Nostra 2-Eco-Institute Alex Langer 3-Ambiente Venezia 4-Social Laboratory Morion		1-Italia Nostra 2-Eco-Institute Alex Langer 3-Ambiente Venezia 4-Social Laboratory Morion		CIVIL SOCIETY ASSOCIATIONS
Urban Planners, IUAV Venice Cà Foscari Economists Hydraulic Engineers, University of Padua		Urban Planners, IUAV Society Principia Hydraulic Engineers, University of Padua		EXPERT NETWORKS
Alternative Left		Ecopacifists – Greens/Dove		POLITICAL ALLIES
Municipality (Majority PDL)		Region (Government: PDL) National Government (Left Prodi /Right Berlusconi)		POLITICAL ADVERSARIES
Autorità Portuale Cruisers Association		Mantovani S.P.A. Consorzio Venezia Nuova Autorità Portuale		PROPONENTS

CHAPTER 6

Conclusions: Contentious Politics by Other means— Grassroots Environmentalism and the Politics of Expertise in Italy

1. Expertise Mobilization: Its Potentials and Limits

Generally speaking, expertise played an important role—contrary to the advocates of a purely political and relativistic approach—but in the case of infrastructure projects analyzed it does not predominate the political process, as a technocratic approach would suggest (Brint, 1990). Evidence shows that in the four cases analyzed, expertise often assumed the traits of “politics by other means” (Latour, 1991), resembling the interests, values and discourses of the actors demanding and producing it. As an example, in the No Tunnel–TAV mobilization the citizens mobilizing found allies in experts with “academic credentials”—engineers and urban planners—at the University of Florence to criticize the project, while the expertise of the proponents of the Tunnel TAV were all internal to the enterprise Trenitalia, s.p.a.. The types of experts mobilizing on the side of the committees were all professional experts with permanent positions, mainly at the University of Florence but also in a few cases in the private sector. We observed differences among them—i.e. between those belonging to movement organizations (the WWF, Per Un Altra Città, or national networks of citizen committees against other technological projects all around Italy) and those mobilizing on a single, politically controversial issue who were potentially professionally exposed due to their relations with public authorities. However, to mobilize and enter in the arena, experts were stimulated by the demands of civil society actors, and in the specific case of the No Tunnel–TAV mobilization, by a group of retired rail-workers with both previous experience in the railroad sector and trade union membership.

Through all the controversies, the use of expertise multiplied and differentiated the issues at stake (Sarewitz, 2004). As an example, in the No Tunnel–TAV controversy, the parameters of contention expanded over time, exceeding the initial limited set of arguments (“economic progress”, “modernization”, “technological competitiveness”, and so on), to increasingly embrace broader matters, such as the risk to the *cultural* heritage in Florence, the *economic* sustainability of the project financed with public budgets, the *democratic* absence of real instruments of participatory or deliberative democracy (in a region like Tuscany where these tools were introduced with a pioneering regional law in 2007). Even

in the other Florentine case, the mobilization against the waste incinerator project in the neighborhood Case Passerini, experts were mobilized by a coordination of citizen committees that had previous evidence of the risk of the incinerator to public health. Therefore, the mobilization explicitly pushed for new scientific assessment of the environmental risks (the VIS, Public Health Impact Assessment) to be undertaken. Even in this case, expertise stimulated by social demands finally integrated existing documents and decisions of the institutional technical commissions with further evidence, to reopen a debate that had been confined to technical and institutional arenas.

The same applies to the two cases concerning Venice. The controversy surrounding the MOSE produced a debate in which both sides accused the others' experts of being partisan rather than technical. Here, when the proponents accused in 1997 the VIA Commission (Environmental Impact Assessment) to be biased by the double membership of its experts (experts but also somewhat close to the arguments of environmental activists at the national and regional level), citizen committees emphasized the conflict of interest between private enterprise and engineers working at the infrastructure project. The technical aspects of the project played an important role in inhibiting the spread of a broader citizen mobilization, at the same time mixing with broader claims concerning suspects of *corruption* (increase in public costs), *environmental risks* and *lack of transparency* in decision making. With the cruise ships in Venice, however, the multiplication of claims was clearly a consequence of the growth in the visibility and intensity of a popular mobilization. No independent study existed on the electromagnetic and polluting emissions of the cruise ships, as well as on the modification of the foundations of the Lagoon. This saw a demand for proper research in the form of sustained collective action by the committees. This in reaction to the Port Authority, which maintained a consistent pro-cruise ships position that saw the production of studies and discourses that would only emphasize the supposedly positive economic impact.

Following then the hypothesis of expertise as "politics by other means", in the MOSE and cruise ships controversies not only did the reciprocal accusation of a partisan expertise emerge clearly (Collingridge & Reeve, 1986), but in the discourse of the movements there was a widespread recognition of how the expertise used by the *Consorzio Venezia Nuova* (the proponents of the MOSE) and the Port Authority assume the traits of a commodity, a good reflecting the traits of the demand (Weingart, 2003).

1.1. Conflict and Processual Expertise

In the four campaigns, expertise and authoritative knowledge do not emerge as “fixed entities” but were the result of a process—a conflictual one, as it turns out, contrary to functionalist or institutionalist theories that deny the value of conflict in triggering knowledge processes (Lewanski, 2008). While uncertainty and lack of clarity characterize all the technologies at stake—making expertise and knowledge more important in the development of the mobilization—in all the cases experts had insufficient knowledge about the issue at stake. This revealed the limits of abstract expertise. The experts learned about the issues while socializing with new actors and laypeople during the mobilization process. This reflects what has been defined as “expert ignorance” (Rayner, 2013), as well how the specific knowledge of expertise is strictly related to zones of ignorance regarding other factors composing the issue (political demands, the non-scientific interests at stake, and so on). In the No Tunnel–TAV case, one of the engineers mobilizing to critically study the project confirmed his surprise at discovering technical mistakes or inaccuracies that had been framed as politically suspicious by the citizens and activists. The counter-expertise on the geotechnical risks of the Florentine high-speed train tunnel would have not existed without the interests of a group of laypeople (local residents and citizens with previous militancy in the trade unions). The elaboration of technical alternatives was then the outcome of a process of “recruitment” of new experts with other competences and affiliations.

In the No MOSE mobilization, the borders between allies and adversaries shifted depending on the specific dynamics of demand and supply of expertise. In 2005, a few experts exited from the team of experts of the *Consorzio Venezia Nuova*, in conflict with the scientific director, whom they accused of proposing a highly inefficient technical system of mobile gates. This decision brings them to interact with the critical experts from the «No MOSE Permanent Assembly» and the citizen committees contesting the project unveiling extra-scientific dimensions (the existence of potential corrupt transactions). This shift has the effect at creating a broader acknowledgement of the problem of the costs and the subordination of expertise to politics as correlated to potential corrupt practices between enterprises and politics. At the same time, the entity of hidden political transactions—unknown to the same citizens and activists—was confirmed when the magistrates intervened in 2014. In this case the elaboration of a hybrid claim—technical inefficiency

caused by corrupt transactions and hidden interests—is an outcome of the shifting interactions among coalitions of actors through the mobilization process.

The idea of alternative projects for the transit of the cruise ships emerged after a peak in civic protests and demonstrations addressing the problem of sustainability of the Lagoon, giving rise to a set of alternatives from the Port Authority as well as from independent experts and political parties. Before 2003, the terms of the debate were confined to a discussion about the economic opportunities provided by the cruise ships for the city, with an argument monopolized entirely by the experts from the Port Authority.

Even though variation in terms of opacity or clarity mattered in terms of inhibition or expansion of the mobilization, uncertainty was a constant factor in all the cases analyzed. The political issues at stake are indeed unveiled after a process of contention that, while translating the most technical aspects into politically salient ones, increased their visibility and publicity. Without social pressure, all these issues would have been confined and silenced in technical and institutional arenas without opening a public debate or giving rise to citizen mobilizations. The cruise ships case is on this point paradigmatic. In 2014, seven alternative projects aiming at solving the problem of the transit of the cruise ships were presented by a variety of actors—a team of independent architects, the municipality, one of the political parties, a private multinational (Duferco), the Port Authority, an expert–activist close to the “No Cruise Ships” committee, and even an autonomous private citizen. However, the only ones considered and broadly discussed in the media were the ones representing the Port Authority (the most powerful actor) and Duferco, since a great part of the No Cruise Ships committee—at that point mostly expressing the position of the left-wing environmental association *Ambiente Venezia*—evaluated its project of a floating off-shore port as the only one preserving an equilibria between environmental sustainability and occupational stability. In this case, the support of a social movement contributed in increasing the credibility of an alternative project vis-à-vis the others.

1.2. Expertise Between Scientific and Political Networks

If expertise is then the outcome of a process of collective thinking triggered by the mobilization of actors with different logics, interests and worldviews, a fundamental aspect to be analyzed is the entity of the networks through which knowledge is constructed and shared. The relations between specific expert networks and their peculiar forms of activism are important to find intersections with purely activist organizations and with purely

academic institutions or common citizen associations.

Even though all the four mobilizations have a clear local origin, most of the key actors in all of them belong to broader sectors of activism at the regional, national or even international level. So it is for experts. Far from being purely local, they are on the contrary frequently recruited for their academic credentials and recognized status (at the regional, national or international level). This “symbolic” aspect of recognition is a fundamental source for the credibility of the movement (Cozzens, 1990). The majority of the experts recruited by the movements or mobilizing and providing expertise to the citizen committees are indeed mainly professionals with mainstream academic credentials and holding permanent, secure positions in universities. One could say that they are recruited for two key aspects defining their professionalism: recognized skills and scientific status.

Internet and communication allow sharing expertise—much easily than in a pre-internet era - and at a broader level (regional, national, international networks), so that small and peripheral conflicts can recruit experts from the center (and this is the main logic behind both regional networks of citizen committees, in Tuscany and in Veneto). This means that in many cases “local” is just the place where conflict takes place, a local trait of a broader network of activism, where participants exchange resources and test common hypothesis. This means that they elaborate a common movement culture; they recognize their problems are not only local as in the No Tunnel–TAV in Florence or the No Cruise Ships committee in Venice, that periodically gather and mobilize with many other local committees contesting infrastructure projects like the No TAV Val Susa, the Southern committees against the Bridge on the Straits of Messina and so forth. So it is for experts that do not belong simply to isolated neighborhoods or cities affected by a random infrastructure project but they most of the time belong to broader “epistemic communities”: experts associations like Medicina Democratica or movement organizations or hybrid professional networks at the national and international level, like the ISDE or Zero Waste. In this sense, the level of contention is in most of the cases not purely local but involves broader levels (the State, the European Union, international institutions like the Unesco). Therefore, claims and controversies show an articulation of local and global dimensions. In the No Incinerators mobilization in Case Passerini, expert advice was initially provided by established expert–activists organizations like Medicina Democratica or recent ones like the International Society of Doctors for the Environment. The growth of a transnational movement like «Zero Waste» had however a fundamental impact. The importance of a key local section of the

movement in Capannori (near Lucca, Tuscany) that brought to the public recognition of their leader Rossano Ercolini (awarded of the global Goldman prize for the environment in 2013) provided further credibility to alternatives like the Zero Waste strategy. In the No Cruise Ships committee in Venice, the expert-activists of the IUAV contributed in elaborating an alternative project—an off-shore port for the transit of the ships—and the multiplication of alternative projects saw citizen committees choose also whether to support a single project or simply lobby at different levels (environmental commissions, the municipality) without choosing a specific alternative but only monitoring the regularity of the procedures. In all the cases analyzed, the movements mobilizing recognized the importance of professional expertise, and they strongly preferred independent professional research to the expertise produced by the Port Authority since it was strongly linked to the interests of the cruise ship business groups.

In all the four cases, mobilizing experts not only expressed a “specific” grievance against the project, but also a broader criticism toward the type of knowledge produced by academia and its relations with business power. Here is how, in different conditions, respectively an expert-activist of the No MOSE Permanent Assembly and one of the spokesman of the Zero Waste movement organization justified their criticism toward the role of contemporary scientific institutions:

[Expert 1] The academic world is neither better or worse than in the past. Even the engaged experts [some expert-activists of the No MOSE Assembly, I can mention, they were even in the past [in the university] minoritarian. Well, right, the issue is that they are disappearing, maybe for seniority [their retirement]. [...] Personally, I haven't thought in terms of career, I've never done something for the career [...] “the school” was this one. Even the old ones, [the big names among the expert-activists, almost nobody arrived to be a full professor. They've been disadvantaged for their public exposure, because they were prickly, already in the 1980s. These people were critical toward the official political culture, even the leftist one, while the majority of the professors were organic to the political parties. Even on the MOSE. Here there has been a serious acquiescence from the university. Particularly for the double conditioning. The financial corruption and also the entire research on the Lagoon, that was linked to the Water Magistrate. All the

technical expertise and competence was controlled by the *Consortio*.²⁷⁹

[Expert 2] I work at a school, so I don't say that the school shouldn't be funded. I say that it is necessary to start a stronger discourse on the independence from lobbies. I understand that the university—which is without money—needs the pharmaceutical, chemical, energy industries. But then with what results? You become a disciplined soldier of the establishment instead of doing free research. Or you do it for those sectors for which you get funded. Communities are permanently excluded, that means that public health, environmental health, common goods, the durable resources do not attract investments at research universities.²⁸⁰

Even though these two statements refer to specific mobilizations, they summarize claims that are supported with similar arguments in the No Tunnel–TAV mobilization. Only in the movement No Cruise Ships, was the critique of university is less present, since its target was the Port Authority.²⁸¹ The common aspect is however the critique of the corporate power to set the agenda of science that, while producing privatized and business-oriented research, clearly ignores and threatens public goods (public health, the environment, the quality of life of the inhabitants, cultural heritage). Though the grievances touch specific issues, the single issues of the mobilizations (the MOSE, cruise ships, the Tunnel–TAV, the Waste Incinerator) are in this sense also part of a broader discontent linked to what is perceived as a lack of representation for publicly oriented science in contemporary scientific institutions and dependence of the latter on private power.

1.3. Expertise, Movements, Structure and Identities

In the four cases analyzed, expertise is more linked to pragmatic goals than an expression of specific cultural identities or alternative scientific conceptions. Expertise is mobilized for practical purposes—assessing the risks of a waste incinerator, or the level of air pollution

²⁷⁹ Expert–Activist (Interview VENETO, n.8 – n.b.: for all the interviews cited in this chapter, see the relative number on the list in the Methodological Appendix)

²⁸⁰ Expert–Activist from the «Zero Waste» movement, Interview TUSCANY n.25

²⁸¹ Even though activists are well aware that the President of the Port Authority has been not only an influential professor of economics but also President of the local Cà Foscari University. Moreover, experts-activists and allies knew that his networks of experts at the Port Authority – and previously as a mayor of Venice during the key moments of the political debate on the MOSE – was partly founded on previous trusted scientific relations cultivated at the university.

produced the cruise ships, the geotechnical risks of the Tunnel TAV, and so on—rather than being based on cultures of science.

As an example, the definition of “scientific environmentalism” elaborated by the established, mainstream environmental organization Legambiente is criticized for its ambivalence:

A qualitatively bad leap is the so-called «*scientific* environmentalism». Legambiente in 1993 comes out with a brochure in which they say that incinerators do not pollute more than a *normal* industrial plant. How scientific is it to define an industrial plant as *normal*?²⁸²

Rather than following ideals of scientific neutrality, movement actors recognize how science enters specifically in the political arena. In this sense, if science is recognized as the expression of a specific political or public culture, the critical movements analyzed express a normative stance in conceiving it as a practical tool that should be oriented by communitarian needs, enhancing the opportunities for a collective awareness of common problems and their alternatives. This holds particularly true in the movement against the waste incinerator in Florence. Here, the discovery by several local citizens of the Zero Waste alternative stimulates new spontaneous forms of collective action and the organization of public events—conferences and assemblies—to explore the opportunities of door-to-door waste gathering and alternative recycling systems. Even in the movement against the cruise ships in Venice, the critique was directed toward a partisan expertise entirely monopolized by interest groups like the Port Authority, rather than science in general. Indeed, the main claims are directed toward the omission of many of the advices expressed by the Environmental Assessment Commission (VIA) and how its role is ordinarily bypassed by the Port Authority and the institutional representatives.

This specific use of expertise in a contentious process consequently changed the relations among experts and activists. Both groups were transformed by this encounter. New rising collective identities are single-issue (Mamme No Inceneritore; No Tunnel–TAV; No Cruise Ships committee; NO MOSE Permanent Assembly), specific and oriented toward a defined goal. These collectives, then, privilege technical information rather than ideological approaches, confirming a trend that has been assessed in other cases suggesting the advent of a growing pragmatism in contemporary social movements (Pellizzoni, 2014). These

²⁸² Expert-Activist from the «Zero Waste» movement, Interview TUSCANY n.25,

specific identities are clearly reflected also in the organizational form: partial and specific, temporally and spatially limited.

In Florence, the spontaneous group *Mamme No Inceneritore* (Mothers Against the Incinerator) expresses indeed the need of representing the rights of children, being the most group most exposed to the risks of the emissions of the incinerator (e.g. developing cancer-related illnesses 20–30 years hence), and being non-voters (lacking political representation). The members of the No Cruise Ship committee in Venice distinguished their discourse from broader environmental speculation (“We are a committee focusing on the cruise ships, not on the development model”, as one of the leaders stated²⁸³). All the mobilizations analyzed were characterized by low ideological boundaries, although specific political conditions produce different impacts. In Venice, the strong connection between left-wing activists and representatives of the radical left in the local government produced a greater presence of a left-wing activists in the most active citizen committees, in some cases producing tensions and shifts among the different components. In general, although none of the committees claim any ideological membership, the mobilizing potential of activists of the left provided key intellectual and organizational resources for the mobilization. In the No Tunnel–TAV in Florence, a good component of the experts and activists are also associated with the civic group *Per un'altra città* culturally linked to the local alternative left.

These aspects introduce a further general puzzle for environmental mobilizations: the importance of the mobilizing potential of the left for a type of collective action that has no clear ideological affiliation.

2. Which Experts?

In the search for knowledge, citizen committees resort principally to professional expertise (with professional/academic credentials). Alternative expertise is conceived internal to the academic field, with experts—mainly in the form of expert–activists—cultivating a specific form of innovation oriented toward specific values (environmental-friendly technologies) or promoting conceptions of a publicly-oriented science versus a business-oriented science. Even though it aims at providing real evidence, scientific expertise is intrinsically linked with peculiar ethical and political inclinations. In the first case, the Zero Waste Movement founds its action on the research streams on the alternative forms of waste recycling initiated

²⁸³ Activist from the local squats and spokesman of the No Cruise Ships committee, Interview VENETO n.12

by Barry Commoner's Research Center in NYC in the 1970s. In the second case, organizations like ISDE or Medicina Democratica promote the idea that the mission of epidemiology "is not to count how many people die, but to prevent illnesses".²⁸⁴ Green experts in Venice relate their technical intervention supporting the local citizens to a general conception of research working "on real problems, discussed together with the *subjects* (workers, citizens of a neighborhood and so forth)"²⁸⁵ in line with a post-1968 New Leftist politicization of science. Even the experts linked to the Eco-Institute of Veneto—one of the main actors mobilizing against the MOSE—are professional experts with positions at the local University Cà Foscari or the Institute of Architecture IUAV. The main experts mobilized by the No Tunnel–TAV committees are all established professors in the Faculty of Engineering and Urban Planning at the University of Florence while the epidemiologists of ISDE in the conflict around the incinerator are also established professors at local universities.

Contrary to "Nimbyist" assumptions, in all the cases analyzed, social movements often criticized the dubious links between science and institutions rather than science in general, but in searching for alternatives they believe in the practical value of professional expertise for better (and more democratic) solutions.

Another variation concerns the way experts mobilize. To make sense of a common variation among the four cases, an analytical distinction has been traced between what can be defined *expert-activists* and *expert-allies*. For *expert-activists* I defined expert actors with a historical engagement in contentious politics (in committees or movement organizations) and relating their specific intervention with a philosophy of public engagement. Here is a reflection from a typical expert-activist figure in the No MOSE mobilization in Venice describing his way of practicing the profession (urban planning):

I am someone that was born [culturally] in 1978, working on problems conceived on the ground and building alternatives with the people . It was called at that time—it lasted for six or seven years—*Urbanistica Democratica* [Democratic Urban Planning]. All the books, journals, newspapers [...] we started doing these types of things already when we were teachers in a experimental high school, Massari. Planning alternatives from neighborhood to neighborhood—the so-called outskirts—using the 6 years

²⁸⁴ Document n.5, *ISDE and Environmental Epidemiology*, Zedig Editore, Milan, 2013

²⁸⁵ Expert Activist, Interview VENETO, n.9

of the school cycle—linking the teaching activities with the struggles in society from 1977–78 until 1985. Afterwards, the same thing, with the same method continued at the university. Within the university, all the research I directed was based on studies done to give answers to these questions. Nothing was a game. Everything started from the demands of the land and to give answers to real needs, real demands. This type of working philosophy had begun with *Urbanistica Democratica*, then it became after 1985 the work of the Greens, until 2000. The Greens experience was born through the contacts we got in Europe, with the German and Dutch Greens, studying the struggles for the environmental regeneration of Amsterdam and the alternative mobility in Germany. Everything started from real needs. [...] This is the method with which I grew up, a way of living actually, because it takes up 100% of your life. [...] But the method was basically to learn how to be able to tell very complex things to the worker in a two-page leaflet. [...] Talking with them you understood the problems and then you translated them in a leaflet [...] always after the dialog with the working-class leaders.²⁸⁶

For *expert-allies*, I defined experts mobilizing as newcomers in arenas of contention focusing on the single-issue aspect of the mobilization. Here's an example of how an expert-ally (in geotechnical engineering) justifies his intervention for the No Tunnel–TAV in Florence:

The TAV has become for me something like [...]someone who engages in charity or in the Red Cross, a sort of voluntary activity. Although you have lots of work to do, you find the time, the will to go once per week to spend a night, to do the stretcher bearer, these things. As for me, I found few hours per week, not more, to read all the documents, and I read lots of them. Every time I read a document I analyzed it posing my critical observations; I did this keenly, because it is my sector, geotechnical engineering.²⁸⁷

The two justifications vary significantly in the meaning associated to the engagement and in their relation to either the single issue and the broader political profile of their profession. However, while this distinction is important to understand the different properties and

²⁸⁶ Cit., VENETO, n.9

²⁸⁷ Interview with No Tunnel–TAV engineer, n.13

motivations of the experts at the individual level, the lack of visible conflicts among them tells us something about the nature of the mobilizations and how expertise shapes the nature of the process, involving actors on a practical goal and so privileging the pragmatic pursuit of the outcome on identities.

2.1. Variations in Disciplines or Professions

It is partly true that the pragmatic aspect of the mobilizations required specific experts for specific project (e.g. to understand the Tunnel–TAV in Florence or the MOSE in Venice, activists need to consult or recruit urban planners and engineers, while for the Waste Incinerator citizens need doctors and environmental economists). However, it is only through a processual approach that we can understand how citizens’ pressure modifies the issues at stake, introducing new problems and looking for multiple sources of expert knowledge. The mobilization against the incinerator in Case Passerini is at the beginning only focused on the risks of the polluting emissions, while the growth of the Zero Waste movement produced a shift in the discourse at the beginning of the 2000, and so introducing a stronger frame related to the alternative recycling systems—and then new experts entering the arena, like economists or agronomists. Finally, the claim of the alternative management of production-consumption-recycling became more salient partly substituting the discourse on the cancer-related risks of pollution. A similar dynamic took place in the No Cruise Ships committee where the studies of the Port Authority initially minimize or deny the environmental impacts of the ships through the mobilization of a pro-growth argument (“Data show that the ships produce jobs and stimulate economic benefits for the city”²⁸⁸). The growth of the movement in the public sphere attracted independent economists and urban planners that produce alternative studies on the costs of the cruise ships for the city. Joining the mobilization, these experts from the local Cà Foscari University elaborate new studies that contradict the argument of a positive relation between cruise ships and local economic growth, introducing further indicators showing a limited impact of occupations produced by the sector on the municipality of Venice as well as showing the environmental costs of the cruise ships that almost equal the economic benefits.²⁸⁹

At a more analytical level, summing the number of experts mobilizing in the different mobilizations it is possible to draw some hypotheses concerning “disciplinary”

²⁸⁸ AD of the Port Authority, *La Nuova Venezia*, 2 June 2012.

²⁸⁹ Document n.4, White Book on the Lagoon, the Port, the Cruise Ships Gigantism. Why the Cruise Ships should stay out of the Lagoon, August 2014.

variation in the type of engagement. Engineers tend to be more likely expert–allies, while urban planners and doctors are more likely to engage as expert–activists. This seems to confirm how professional habitus plays a role in producing a set of dispositions toward public engagement (Bourdieu, 1980). A discipline like urban planning is more likely to question social and human aspects related to city planning and interaction with inhabitants, making its expertise more likely to adopt a “democratic mission” that meshes technical issues with broader political implications. This is much more difficult to find in engineers, who in several interviews preferred to distinguish their role as specifically focused on the technical “objective” aspects of the issue. This comparative variation between the attitudes of the urban planners and engineers was similar in the No Tunnel–TAV and No MOSE mobilizations. Most of the urban planners collaborate with environmental organizations or have memberships in civil society associations, while engineers tend to be less involved in non-professional activities.

Tab.7.1 Professional Experts and their Relation to Technical—Political Engagement
(Variation in terms of Disciplinary Affiliation)

Experts	Activist (Political Engagement)	Allies (Technical Support)	
Urban Planners	6 (4V + 2F)	2 (1V+1F)	8
Engineers	1(F)	9 (3F+6V)	10
Doctors	3 (3F)	1 (1F)	4
Economists	-	1 (1V)	1
Natural Scientists	3 (1V+2F)	5 (5V)	8
TOT	13	18	31

Legend: V=Venice; F=Florence

Although hypothetical explanations for this variation reside in the contextual conditions related to the specific mobilization process, it is possible to relate the relative attitudes—political vs technical engagement—to different professional constraints. Indeed, even if working in the private sector is a prerogative of urban planners as well, engineers are much more related to the private demand of consultancy compared with urban planners. This is how an engineer of the «No Tunnel–TAV» committee—more sensitive toward engagement, but still demarcating his work as «different from activists—tried to make sense of the

«habitus» of his colleagues:

Engineers, especially those in academia, are in general reluctant to be involved in public actions, especially if they have political implications. I would say, in the worst case, this comes down to personal interest, more or less conscious, to first pinpoint the most fruitful way to be employed as a *super partes* expert. In the best case, it reflects a genuinely felt fear of entering cultural terrain that the engineer is simply not familiar with. The culture of engineering basically lacks the language of society or politics, at least as is used in the public domain. I was struck once something a lawyer said about one of his colleagues to me, not knowing that I was an engineer: “He interprets law like an engineer”. It was clear that he was referring to the lack of wide historical and social knowledge that allows the law to be interpreted as it should be. From my long experience in engineering, if compared other professional categories, engineers present themselves, so to speak, at a *natural state*. They are less sophisticated, and culturally less informed. In general, they are too absorbed by their “mystique” of the field, that sees the engineer as a practical, impartial man, with a neutral, objective, aseptic language. They are not aware that neutrality is an illusion—both at the technical and scientific levels—and moreover in large-scale infrastructure projects technical and political issues are always intertwined. But thank God there are always some exceptions²⁹⁰

On the contrary, urban planners—both in the Tuscan or Venetian cases—mainly showed a previous collaboration or even held positions in the public administration—rather than the private sector—with often regulatory tasks. In this case, the risks of mobilization—in terms of professional repercussions—explain the tendency of engineers to expose themselves on politically relevant technical issues (Cech, 2014). However, on this point, the case of MOSE showed how resistance by some engineers was possible—as the exit of a team of engineers of the MOSE from the *Consorzio Venezia Nuova* testifies. The international status and professional autonomy of their credibility made the expression of dissent possible, even though a proceeding was started by the «Consorzio» against them.

These evidence seem to support the thesis of the importance of the boundaries of a

²⁹⁰ Expert-Ally, Interview TUSCANY, n.12

scientific field (Bourdieu & Wacquant, 1992; Epstein 1996). A scientific field like urban planning, characterized by large interdisciplinary connotations at the border with human and social sciences is then more likely to be politicized and “invaded” by laypeople participants if compared with a field dealing with purely technical or abstract issues at stake (domain entirely dominated by experts).²⁹¹

2.2. Participation of Laypeople and the Expertification Processes

In none of the cases experts have a totally prominent role in creating the conditions of the mobilization. This happens only through the alliances and links with citizens’ organizations and committees, and so with activists. This confirms the importance of the local laypeople contribution in the political emergence of the issue (Irwin, 1995; Fischer 2000).

This is quite clear in the case of the cruise ships in Venice, where in 2004 a variety of singular experts (and even private citizens without specific professional expertise) produced different proposals for the transit of the cruise ships but almost none was given consideration by the local authorities without the collective support of citizens or civil society actors. Both in Florence and Venice, there was a clear variation in terms of citizens’ and newcomers’ participation in the mobilizations, depending on the «opacity/clarity» of the issue. Two opaque cases like the MOSE and the Tunnel–TAV are clearly described by the participants as characterized by low levels of participation (as previously mentioned in the paragraph 1.1.). The technical inefficiencies of the system of mobile gates to prevent Venice from the exceptional high water flows as well as the geotechnical risks of the underground high-speed station in Florence are not easily translated in publicly salient issues triggering participation. Natural factors are less salient than human risks like cancer-related illnesses affecting children and populations in the mobilization against the waste incinerator, as well as the polluting and electromagnetic emissions of the cruise ships (or the risk of an accident in the historical center of Venice) has a bigger impact in triggering the mobilization than the erosion of the foundations of the Venetian Lagoon.

²⁹¹ This variation resembles what Collins and Evans (2002) in their typology of relations expertise and publicity have defined “interactive expertise”, or how, on hybrid objects—both technical and «experienced» by ordinary subjects like a territory, a medical treatment and so forth—laypeople and experts contribute in the shaping of expert knowledge, providing different sources of awareness of a problem and so influencing not only its problematization but also integrating lack of experts.

Moreover, I argue that participation is positively correlated to expertification. On this point, the NO MOSE mobilization is considered a negative case, where the actors mobilizing were mainly activists with previous political experience or professional experts. The same applies for the No Tunnel–TAV in Florence. In both cases, just few laypeople–activists with specific characteristics become expert of the issue. This is related to what can be considered a process of «conversion of competences» (Boltanski, 2012). Individuals with long-term experiences in movement organizations or previous experience of activism dispose of a set of knowledge allowing to problematize the issue and engage in a learning process through the sustained interaction with experts.

This explains how a railway worker with a long experience in the autonomous trade unions in the sector can easily become the spokesman of the «No Tunnel–TAV» committee, not only mobilizing experts in the issue—so asking them specific problems to be solved and alerting them in the issue—but also being able to represent the committee engaging in technical debates with geotechnical engineers and urban planners in the public arena (on TV and radio transmissions, or in meeting with the institutional experts from the municipality). The same holds for the mobilization against the MOSE where one of the main representatives was a worker in the industrial area of Porto Marghera with previous experience in the workers’ struggles for occupational health and safety in the 1970s. He was able to adapt this experience and knowledge to the MOSE in the 2000s.

Furthermore, the phenomenon of expertification also varies in the time dimension. Two different levels of expertification seem to emerge from the analysis of actor involvement in different cycles of contention: the first at the more or less early stages (the campaign) and another in the long term (different campaigns or long-term activism on different issues). The first case is clear in the local movement *Mamme No Inceneritore* in Florence between 2014–16. Here, a series of participants without previous experience of activism or scientific credentials were in touch with experts in medicine and activists of the Zero Waste movement to begin researching the key implications of the incineration strategy and its alternatives. As one of the interviewees said as the conversation began: “Since we were not doctors, we started studying”²⁹²). Secondly, the long-term activism of the Italian leader of Zero Waste saw him accumulate a set of knowledge—through the scientific exchanges with the experts from Barry Commoner’s Research Center in NYC—that were

²⁹² Document n.6, Activist of from «*Mamme No Inceneritore*», in *Incinerator: Pro and against*, broadcast, LadyRadio, Florence, 12.04. April 162016.

recognized with the Goldman prize (a sort of Nobel prize for the environment) in 2013, which enhanced in the end the public credibility of his arguments. The spokesman of the No Tunnel–TAV in Florence became an expert of the issue through sustained interaction with engineers and urban planners from university the of Florence but his previous *long-term* engagement in the autonomous trade unions of the railway workers provided him with a set of knowledge that allowed him to «problematize» the issue and trigger the mobilization process (recruitment of the experts, study of the issue, formalization of a political critique). A similar dynamic applies to some activists of the No Cruise Ships committee that reconverted sets of knowledges from previous experience of activism, thus having the resources to participate and to raise a voice in a technical arena.

Still, for expertise to emerge successfully, organization matters. On this score, the relations among experts and movement organizations can be delicate. In the No MOSE and NO Cruise Ships movements, new and old generations of activists culturally linked to the radical left provided important organizational resources to amplify expert arguments and to maintain public attention on the issue, although their strong identities and repertoires of action risked undermining the credibility of the mobilization for a broader consensus-building among common citizens. At a certain point, the escalation in confrontational tactics produced indeed tensions with the moderate components and consequent exit phenomena of citizens' components. Different forms of lay expertise in terms of local and situated knowledge (in the four cases, knowledge of a territory or a neighborhood) played an important role in defining an issue as “critical” and worth being discussed at a broader political level. The studies on the environmental impacts of the cruise ships (in terms of public security, polluting emissions, sea waves etc.) are stimulated by common citizens through videos and photos monitoring the transits and finally composing dossiers that get discussed in the media and at the institutional level, creating the space for supportive or contrary scientific interventions and so stimulating further debates on previously unexplored issues, like the balance between costs and benefits for the local economy.

3. Conclusions

The mobilization processes that I have analyzed allow us to draw some preliminary conclusions on the logics of “contentious expertise”.

At a general level, the environmental mobilizations express discontent toward what

looks like a lack of democratic representation and control of technological projects. Local authorities appointed on general electoral programs—with probably relatively few lines dedicated to waste incinerators or high-speed trains—deliberate on issues that have consequences for entire communities and across various generations. The dearth of representativeness is exacerbated by two aspects characterizing the private actors in a national legislative system, like the Italian one, which is deprived of tools of deliberative democracy. The economic interests of the stakeholders necessarily imply an absence of interest in democratic transparency and discussion of the projects with the concerned citizens and affected communities. The various cases analyzed disconfirm that public mobilizations are purely oppositional and based on irrationality, purely abstract, naturalistic values or fears about technology. In many cases lay-expertise rises up as a source of distrust toward the institutional science, denouncing that both the container—scientific monitoring agencies or proponents' expertise—and the contents—scientific evidence—are biased by broader political and economic interests. For these reasons, citizen mobilizations reject their role of passive public recipients of a top-down knowledge transfer, and their action assume the form of «counter-publics». Specifically, Italy is therefore a paradigmatic case where mobilizations assume the traits of alternative arenas of knowledge elaboration, or «dissensus conferences» (Hess, 2011; 2015).

Hence, a first outcome concerns the form that expertise assumes in this regard. Its knowledge function, as a tool of clarification, is indistinguishable from its political and then democratic function. No type of expertise emerges without a social demand. The intervention of singular experts doesn't affect the debate, and specific expertise assumes relevance only in light of the collective actors promoting their legitimacy. Expertise in social movements like the «No MOSE and No Cruise Ships» in Venice as well as the «No Tunnel TAV and No Incinerators» in Florence is the outcome of a network linking needs and knowledge of lay-actors, scientists, activists (Eyal, 2013). For the scope of collective action, expertise is not a property owned or held by any individual. In a relational rather than linear way, professional scientists are first mobilized to produce authoritative knowledge that then in the second instance is translated into claims, frames and organized into a collective demand. Every participant—an expert, an activist, a citizen—contributed from his or her partial sector (administrative, environmental, political, scientific) to a collective process of knowledge construction and political representation.

To conclude, the entanglement of the conceptual tools of contentious politics and

sociology of expertise seems to suggest important paths for the reciprocal analysis of knowledge processes and collective action. In their way of putting together different forms of knowledge, broader social needs, and challenges toward the established co-production of scientific and political authorities, social movements can resemble what has been defined as a “collective intellectual” (Bourdieu, 2001). In this scenario, rather than being an individual property or skill, expertise is better understood as the outcome of a collective process of knowledge production and therefore definitively exposed to dynamics of democratic accountability and legitimation as much as to its tensions and conflicts.

Methodological Appendix

Notes On Contentious Fieldwork

Workin' in the field
'til you get your back burned
Workin' 'neath the wheels
'til you get your facts learned
Baby, I got my facts
Learned real good right now

Springsteen, B., *Badlands*, in
Darkness on the Edge of Town, (1978)

1. The Genealogy of a Scientific Problem, the Life of a Research Project

Given his intrinsic immersion in the social world, and his necessarily a priori conditioning with values and beliefs, no serious social scientist conceives his research in a vacuum or gets involved in it from a neutral setting (Mills, 1959). In addition to a necessary phenomenological «epoché» that suspends any relation to specific values, personal judgment or ideological bias concerning the social phenomena under investigation (Weber, 1904:2011), every social scientist should take seriously the analysis of his «self». As Pierre Bourdieu reminds us, a social scientist should not however misunderstand any necessary analysis of the conditions producing his ontological and epistemological choices with any unfaithful *a posteriori* description (or celebration) of self (Bourdieu, 2006).

The idea of this specific research initially originated from an experiential puzzle mixing real sentiments and intellectual needs concerning the life and logics of social movements, as well as a passionate general interest in the possibilities and limits of their critical capacity to invent new participatory practices and expand public discussion on new issues. The ruse of reasoning wanted that I started to be puzzled by mass local mobilizations much before a professional involvement in a Phd program – and without even knowing I would have later engaged professionally on it. It dates back to the end of 2005 when, while being active in the student movement of the Faculty of Sociology at the University of Trento,

I was surrounded by the images of the contentious events involving the «No-Tav» movement in Val Susa near Turin and the closer contestations of the MOSE in Venice.

Although I was interested in various social movements and collective action, I started seriously engaging with the issue only after a training mainly in sociology of knowledge and expertise at the EHESS in Paris, trying to understand what was going on in mobilizations in which discourses were apparently obscure and focused on the economic forecasts of the circulation of commodities on the new high-speed train, the likelihood of the sources of depleted uranium to pollute the environment, the presence of asbestos, the lack of efficiency of the old railroad track and so forth. Further elements to develop such political and scientific interests emerged from fieldwork I conducted in the framework of another project involving citizens mobilizations against the chemical risk in the industrial site of Porto Marghera, one of the key and paradigmatic locations for the Italian working class and environmental movement. Even though the field was far from being purely technical – as the interaction dynamics between the State and the local citizens in Val Susa escalated into verbal and physical violence show – I was puzzled by the novelty of the relation that movements and activists entertained with non conventional actors like professional experts. But if experts were probably playing a prominent role – and partly, as this research shows, I was wrong – how then was democracy possible?

The main questions driving this research were then not at all purely abstract, neither really conceived in the standard logic of a career track, nor even conceived in the quiet sphere of the academic routine. They rather expressed the lived anxieties and the intellectual concerns of that political and biographical moment. In this regard, the type of questions I have posed since the beginning and the answers I have tried to give still aimed at reflecting the complexity and rigor of real events and real processes, though trying to trace back few particular dynamics that I found markedly relevant to some general tendencies.

Properly, before presenting the Weberian question of the relation between engagement and distance, vocation and profession, the epistemology of social and political sciences raises the issue of why a researcher decides to engage in trying to answer to some problems instead of others, or why (s)he selects a sociological or political question among all the others available in a quite messy but rich social and political world. This is probably the most constitutive part of the sociological habit and identity of the researcher and it has inevitably moral and political implications. This concerns the persons which the researcher aims to talk with, the specific set of problems and perspectives that a field has elaborated and eventually also the type of answers affecting a possible interpretation/intervention on

the social world.

While Max Weber in his classic essays (1919) reminds us how similar are the tensions defining what is good or bad in the (social) sciences and in politics, it would be quite difficult for any sincere and professional researcher not to consider the political relevance of some of his/her scientific approaches and outcomes. The outcomes of a rigorous sociology, however, quite rarely confirm the initial political or moral passions of the researcher. Quite often, social scientists must deal with «discomfiting truths» (Brint, 2005).

For a number of reasons – and especially at its early stage of academic institutionalization – engaging in a topic, a research field, a theoretical approach means also struggling for its legitimacy and its right to exist, and this demands much more effort than the defense of arguments in an ordinary regime of «normal» science (Kuhn, 1962). It was only through the exchange with a broader community of scholars and colleagues that I indeed found the capacity to defend my research questions and objects. The main confirmation of the salience and the importance of the problems I initially wanted to investigate came out during one of the first interviews I had with one of the key green activists of the Venetian Network of Citizens Committees. Arrived at the office of one of the main local environmentalist association in a small city near Venice, I was still reluctant to expose my ideas and the puzzles of my research, fearing that someone engaged in real mobilizations might have judged them «academic» - an adjective that is sometimes unfortunately used as a synonym for «irrelevant».

Surprisingly, my decision to confess that I was puzzled by the role of experts in environmental mobilizations had an immediate enthusiastic reaction from him, that to me sounded like one of the most positive confirmations that what I was doing was really salient and judged as a serious issue by someone engaged every day on a series of strategies, tactics, relations, thinking that dealt realistically and problematically with it. The almost three hours of conversation that followed represented one of the longest interviews – and one of the richest – I have ever conducted in my far from limited fieldwork experience. I came home with two bags full of old newspapers, fliers and dozens of books. I suddenly had a rich spontaneous database on Venetian environmental mobilizations. It took me almost one year to pinpoint and compare all the information contained, the actors mentioned, the events and dynamics synthesized in that initial meeting. As well as to reflect about how to deal with the ethical implications of a researcher that needs some distance from his object to fulfill his work even when it meets the immense spontaneous trust and generosity of this

interviewee.

2. Political Ethnography as a Contentious Field

To answer the type of questions I posed, the scale of observations I chose, involving interaction among citizens, activists and experts, this research has mobilized the rich toolkit of political ethnography. As Tilly (2007) suggests «to the extent that politics actually consists not of big structures and prescribed roles but of dynamic, contingent interaction among persons, households, and small groups, political ethnography provides privileged access to its processes, causes and effects» (p.248). Mainly based on three years of intensive fieldwork, this research mobilizes multiple methods. It is nowadays important to relate the immense data availability with the increasingly new techniques of data gathering – although mainly oriented toward a logic of quantification of social phenomena – and compare the evidence emerged from the variety of approaches. This is what I tried to do with this work, at one condition. The choices here made are strictly aware that theory and method are two steps of the same process or, so to say, that the choice of the method intrinsically defines the existence of the social object itself (Abbott, 2001; Bourdieu, 2001).

In so doing, I tried to combine the existing datasets (as explained in detail in Chapter 2) with the analysis of both mainstream and alternative media reports, ethnographic observations at events and meetings organized by the committees and associations, in-depth and semi-structured interviews. All the relevant evidences I tried to collect were however oriented by a precise conception of the phenomena I wanted to investigate, that were *mobilization processes*, individual and collective actors which properties and actions are reflexively involved in personal relations and events as well as constrained by external conditions reciprocally evolving in time. This way of conceiving my unit of analysis was closer to recent pragmatist definitions in which mechanisms are conceived «as chains or aggregations of actors, problem situations, and habitual responses always with the possibility, greater in some circumstances than others, that a novel way of responding to a problem could emerge for any of the actors involved, potentially altering the workings of the mechanism». In this sense actors «inhabit worlds of meaning» and the mission of the researcher is to «grasp how the relevant individuals understand the situations before them and act on those understandings, helping thereby to enact the mechanism» (Gross, 2009, p.369). This underlying logic is clearly similar to that which seeks to explain the complexity of the phenomena called «mobilization processes», presupposing «robust description and

explanations of their operations» (Tilly, 1999).

The study of mobilization processes entails, however, different levels of complexity. As Pizzorno (2001) asserts, the researcher is hardly ever at the right place at the right moment, where and when an important event happens, like the departure of the caravels or the execution of King Louis XVI. In the attempt to make sense of social facts and processes, the social scientist always deals with a level of abstraction from reality and, so to speak, he is rarely caught observing directly the phenomena (s)he wants to explain. In the specific case of this research, I was at the same time lucky in finding myself in the right place, Florence – and at a quite short distance from the other place of this fieldwork, Venice – even though the «founding events» of the so called «new environmentalism» happened around 2007, just few years before this research was properly designed. By a twist of research fate I spent almost the first year and a half of the Phd in trying to find maps on environmental conflicts, creating rankings and formalizing hypothetic correlations among datasets created by the Ministry of the Environment on environmental pollution and cases of contentious all around the country without even knowing about the existence of the «new environmentalism» and the Tuscan centrality.

Comparing various sources – like in-depth studies of the most visible cases, evidences from institutional and private datasets – but above all interviewing key grassroots environmental activists at the national level allowed me to clarify my research design. I started investigating areas where environmental mobilizations were relevant, and I even started conducting fieldwork in the industrial area of Livorno and Rosignano – that showed many similarities with the industrial area of Venice – to finally abandon it after I realized that the most relevant dynamics I wanted to investigate were happening «at home» in Florence. Protest campaigns were more temporally limited on infrastructural projects rather than on industrial plants and their issues were more homogeneous, allowing therefore to test specific hypothesis in the reasonable amount of time and resources that an individual Phd research gives. This partly explains also the relative accessibility of the fieldwork in Tuscany, and why participant observations in Florence were relatively more abundant than in Venice.

Apart from the discussions I periodically had with my supervisors and with friends and colleagues at COSMOS in Florence concerning my emerging problems, I conducted the fieldwork alone, trying to introduce myself as a researcher which properties and attributions changed depending on the situation. I was sometimes a «sociologist», or a researcher in «environmental conflicts», in «social movements», in «environmental movements» or «participatory processes on big infrastructural works» or a «political scientist».

The shades I gave to these definitions were neither purely strategic nor entirely authentic. Often, they were a way to access the fieldwork with the right degree of appropriateness. Investigating a topic that is the object of huge contention is not at all an easy task since conflicts – from the most trivial to the most dramatic – traverse not only competing and cooperating actors but also definitions themselves. Even though the degrees of complexity depend on the type of questions a researcher wishes to pursue and the choice of method that follows, propositions and verifications in the scientific field of contentious politics are far from being based on «brute data». The study of mobilizations necessarily deals with the interpretations and «self-definition» of actors as processes themselves depend on their active practice and interpretation (Taylor, 1984, Calhoun, 1998).

It was quite clear since the earliest stage of this research that data were not autonomous from their use on the public sphere and at the political level, as the database of the Nimbyforum or the Network of Tuscan Committees testifies. Investigating a field that was quite new to me, like the specific typology of environmental mobilizations in Italy was not always an easy task. The specificities of the conflicts and their local configuration gave me a quite external position to properly investigate the variety of actors involved. However, several times I got involved in uneasy situations, where interviewees were asking about my identity, why I was interested in posing some types of questions and for which purpose I was conducting this work. Once, I was even confused with a member of the «Nimbyforum» - so then, a representative of the proponents – while other times I was specifically asked to specify what the European University Institute stood for, and what position it had about infrastructural policies. In those cases, I learned how to honestly communicate my autonomy but still I understood that interviewing is by no means an obvious and symmetric relation and that it always needs to be contextually justified.

Finding information on many burning issues was a hard task. When you deal with huge interests linked to the realization of a waste incinerator as well as to the collective trauma that it represents for many actors that experienced cancer-related illnesses, the discourse of the interviewee becomes hard to be quietly and neutrally recorded and selected just as a useful resource for completing a Phd thesis. Emotions and beliefs are disruptive also for the researcher involved in a mission that has «only scientific» goals.

While trying to make sense of the MOSE I dealt with a case that was described by the main journalists as the peak of a new Venetian «Tangentopoli», with special commissioners substituting the entire direction of the «Consorzio Venezia Nuova», the

mayor of Venice obliged to resign²⁹³, the Ministry of Environment, the top management of the main enterprises involved in one of the biggest scandals concerning the management of the big infrastructures in Italy. That said, I was conducting research on a quite delicate ground, where sometimes activists explicitly asked me not to record or cite specific statements and declarations. The same happened for some key figures of the environmental activism in Veneto like Don Albino Bizzotto that, as the magistrates discovered while inquiring on the procurements of the large-scale infrastructures, was spied by some key actors composing the so called «dome» behind the infrastructural projects, since his highly symbolic actions like the hunger strikes out of the construction sites of the high-speed track Pedemontana or the «Earth Epiphany» - mobilizing thousands of common citizens - were overtly disturbing the «Venetian system» of corruption²⁹⁴. Even in this case, I learned not only how to deal with anxiety but also how reductive it is to treat ethnographic data with logics of brute accumulation.

Not all the documents or events analyzed are equal. This holds also for interviews. When I decided to interview Albino, I thought I already had a clear map of the Venetian field of environmental mobilizations and I faced the meeting we fixed at the headquarters of the eco-pacifist association «Beati Costruttori di Pace» in Padua with the calm enthusiasm and the naivete of a young researcher that thinks to know exactly which questions he should ask. The expected format was a 1h long semi-structured interview. The meeting with Albino lasted an entire afternoon. It consisted in accessing the archives and offices of the associations, getting all the main documents and around 200 contacts of actors mobilizing in the Venetian Network of the Citizens Committees. In the meanwhile, I was invited for lunch with his team of volunteers – that in the meanwhile were working hard in the offices to help immigrants to get much more important documents than mine. Finally, it ended joining him with a delegation the following day to attend a spontaneous sit-in out of the Regional Council in Venice to contest the new law on soil consumption. It's difficult to contain such figures in the protocols of our surveys and sometimes it is probably more useful to have assimilated Max Weber's foundations – in this case, the notion of charisma – rather than the canons of a good methodological handbook. In cases like this, data are closely linked to a necessarily ethical posture to conserve and respect the opinions of the actors, let

²⁹³ Although, when my fieldwork finished the tribunal found him not guilty, see «La Repubblica», 14.09.17

²⁹⁴ See «Il Mattino», 28.03.15

<http://mattinopadova.gelocal.it/regione/2015/03/28/news/pedemontana-fermate-don-bizzotto-1.11135679>

aside the time and knowledge that they dedicate, without any reward and obligation, to researchers engaged in pursuit of the cold glory of social sciences.

As it is well explained by the specific literature and shown in the 4 cases analyzed, the variety of the individual and collective actors composing local environmental mobilizations allows to explore the topic with a quite «externalist» approach, collecting diverse positions and representations of a process. The profile of the members of structured associations like Italia Nostra, the militants of the local squats or the experts-activists of Medicina Democratica or ISDE varies in terms of age, social status, resources and political attitudes. This is evident in their presentation of self as well as in the environment where I met them. The ethnographic evidences surrounding the talks and the discourses I recorded were extremely important to understand several contextual and symbolic levels concerning the analytical definitions and distinctions I tried to formalize later on. In this sense, interviews were valuable not only as «official statements» but also as ethnographic sources.

The sympathy I had with most of the activists, citizens and experts helped me to stay at ease in most of the situations and in going deep in my research, although there have been cases in which both the distance and closeness to the object provided some risks. Once, invited to a national assembly of an expert-activist organization, I was asked to briefly intervene on my topic – and later, even to join the organization – since the board was interested in the research I was conducting. This happened while quite conflictual motions on the renewal of the direction of the organization were about to be discussed. In my intervention, what I thought was only a realist – and a bit enthusiastic – account of the environmental mobilizations in Italy was instead read by one of the most critical part of the organization as a defense of the current board. I was then involved in a little heated controversy with a small group of activists that dealt more with slightly physical conflicts rather than methodological ones.

Sometimes «perplexing situations» can turn dangerous, even though my fieldwork was not what can be traditionally defined «at risk» and this was more an exception than the routine. A «trusted informant» is anyway one of the most important resources for dealing with the most ironic or dangerous sides of ethnography. In both sites – Venice and Florence – I had the fortune to count on a couple of people more or less directly involved in the mobilization processes with a deep knowledge not only of the actors and events I wanted to investigate but also with a specific knowledge of what I was probably doing²⁹⁵. Their

²⁹⁵ At the same time, I quite often encountered epidemiologists, urban planners or experts of waste with a background in social sciences, philosophy of science, sciences and technology studies that

availability and generosity were even more invaluable since while they were providing information only for passion and understanding, they were trying to suspend themselves from judgments related to their positions in the field. I fear I can't measure how their fine scientific ethos positively contributed to the development of my research.

3. Gathering and Working with Qualitative Data

Interviewing means engaging in a reflexive process in which also my personal characteristics, from the most directly observable – my age, sex, geographical origin – to the most indirect ones – spontaneous sympathy, presentation of self, political opinions – played a role in shaping the type of interaction with the interviewee and his/her characteristics.

With my relative young age, I was most of the time interviewing much older people, with decades of political experiences of activism at various levels. I had quite often the impression that some of the key questions and hypothesis I was posing during this research had already been faced – even though with different approaches, motivations and goals – by the same citizens, activists or experts I was interviewing. Interviews looked sometimes very similar to a clarifying dialogue – trying to make sense of a problem while discussing it overtly with the concerned actor – even though I never explicitly faced or communicated my research in those terms. However, the interactions with individuals directly concerned with the rigor and complexity of real processes were essential to test and select relevant dynamics from irrelevant ones or, to use a more methodologically technical language, distinguishing between trivial and logically compelling hypothesis (Small, 2009).

As an example, the same activists mobilizing on the MOSE in Venice or the Tunnel-Tav in Florence were constantly engaged in trying to solve puzzles that were quite similar to those I tried to face in my research, like “Why is it that difficult to mobilize citizens on such an important issue? Why are they mobilizing so massively in the Florentine Plain and not here (e.g., against the TAV)?”. This and other questions were at the core of the research I was

were able to judge the perspective from which I was conducting my research. This depended at various degrees on either the specific culture of activism – the implicit critical epistemological program of expert-activists organizations like «Medicina Democratica» or «Zero Waste» reading their intellectual roots as opposed to the Neo-Positivism of other politically moderate expert-organizations – or directly the specific intellectual conception of expert work in academia that, e.g. some doctors adopted, considering literacy in contemporary sociology of science as necessary for the full and aware pursuit of medical practice. In some cases, the debate among some schools of critical urban planners reproduces the same cleavages inside Marxism between spontaneity and organization, or inside environmentalist cultures between de-growth and sustainable development.

conducting and confirmed me the relevance of some research paths over the others.

In line with Peirce (1903) and Dewey's (1927) conception, this work shares the assumption that social movements are processes of collective inquiry, in which actors are involved in a process of knowledge construction in collaboration with others. Even though my socialization on the fieldwork with people with high degrees of education and intellectual skills could suggest that I was inhabiting a quite common environment, at the same time, the interviews were to some extent asymmetric, in a sense that the level of knowledges and political experiences of the mobilizations that the various actors possessed were the outcomes of decades of daily studies of contents, strategies, frames. In addition to the previously mentioned characteristics, I often felt therefore «ignorant». For the level of knowledge of the territories and the history of their communities, in many cases, activists and citizens can be defined as sort of living archives of the «civic imagination» (Baiocchi, Bennet, Elizabeth, Corder, Taylor Klein, Savell, 2014).

4. Data Collection, Sources and Techniques of Analysis

The main corpus of this work is based on new data produced through an intensive ethnographic fieldwork consisting of in-depth and semi-structured interviews, passive, covert and inobtrusive observations of interactions, as well as the analysis of documents produced by the main citizens committees and civil society associations involved. This dataset, consists of 58 Demi-Structured and In-Depth Interviews, 3 Focus Groups (= 3 398 min = 56, 64 hours) entirely recorded and, in cases concerning on-line communication (mainly e-mail exchange or chat), saved in the form of written documents. The 20 Participant Observations have only been partially recorded but most of them are available on the main websites or specific channels dedicated on platforms like Youtube.com or social media like Facebook (as specified below in the specific appendix).

Furthermore, 5 Files have been specifically created regarding the media coverage of the 4 issues: 1) 'LexisNexis – TAV.odt.' (1538 pages), 2) 'Tunnel Tav – Media Coverage.odt.' (48 pages), 3) 'Case Passerini Incinerator Media Coverage.odt' (156 pages), 4a) 'Mose Repubblica.odt.' (78 pages) + 4b) 'No Mose Media Coverage.odt' (124 pages) 5) 'No Cruise Ships Media Coverage.odt' (311 pages).

I have created a specific archive with the ethnographic notebooks and the lists of the main actors involved in this study. The two websites of the Venetian and Tuscan Networks of the Citizens Committees (see the Appendix below) easily allowed me since the beginning

to pinpoint the main environmental mobilizations and the main actors involved. This facilitated direct communication with the activists and experts. The characteristics of the issues at stake and the data available on on-line platforms contributed in giving me a plural and heterogeneous picture of the actors and cultures, avoiding self-selection due to media overrepresentation of specific groups or bias produced by traditional snowball procedures and the quite natural self-centeredness that the involvement in real activism occasionally produces in the mind of actors – let aside issues of sympathy/antipathy or presence of clear political conflict.

Interviews have been always recorded with the explicit approval and permission of the interviewee. This permission – usually recorded at the beginning of the interview – allowed me to exploit one of the oldest and most efficient ethnographic techniques: taking immediate notes. The specific notebooks containing the written snapshots collected during the interview were almost always referred to the specific timing of the file and helped me in easily and carefully tracing specific and relevant statements that I wanted to analyze and cite. Recording interviews allows to have a solid source to correctly interpret statements at various steps of the research and in light of the knowledge cumulated over a long period of time (two to three years). In this regard, after watching several times videos posted on-line regarding the same event I attended, participant observations have sometimes proved to be wrong in suggesting hypothesis or interpreting speeches, discourses or interactions among actors. In these cases, I agree with pragmatist sociologists suggesting that a rigorous technique of recording field notes «increase the resistance of the phenomenon to our interpretations» (Tavory & Timmermans, 2012).

The sites where ethnographies have been conducted, as well as the main cases here studied, have been reported as real ones. All along the research I have several times considered the opportunity to change the whole work with fictitious names as some contemporary ethnographic works do (Pacewicz, 2016). Partial anonymity has been however maintained for actors involved in conflictual dynamics regarding also legal proceedings or in situations in which statements could negatively affect professional or personal integrity. This work shows how, for many experts, public exposure is linked to several risks and costs. Therefore, I have preferred to maintain a level of anonymity for some specific actors while also giving the opportunity to an external scientific reader to get the source of the interview, its specific details and properties. Eventually, this work can give the opportunity to an interested public to use parts of this dataset for further scopes of research.

The complexity and the depth of data have been synthesized in tables and maps that should help the reader to get a picture of the main dynamics investigated. Concerning the Tables and Schemes personally elaborated, I have tried to intersect a more static and dynamic approach to the mobilizations. While the tables summarizing the main positive/negative factors of mobilization concerns all the 4 cases analyzed, I have elaborated a «dynamic» synthesis of the cycles of contention detecting the main interaction dynamics involving power-holders and challengers and their relation to a specific growth of technical alternatives. In this case, only the Chapter 3 regarding the «No-Tunnel-Tav» doesn't have its own «dynamic» table. This is due to the specificities of a «case of opacity» in which, as the same activists justify, the more visible repertoire of large demonstrations have proved to be limited, and mobilization strategies brought toward other more silent type of actions, more properly linked to counter-expertise and the elaboration of technical alternatives. If compared to the other «case of opacity» - the mobilization against the MOSE (from 1997) – the mobilization around the «Tunnel-Tav» is much shorter (from 2006) to detect phases or cycles. The main events constituting the two Venetian cases have been summarized in a dynamic scheme, preferred to a simple list of chronological events at the end of the chapter.

1. INTENSIVE FIELDWORK

58 Demi-Structured and In-Depth Interviews,

(10 unrecorded; 6 electronic questionnaire)

3 Focus Groups

[= 3 398 min = 56, 64 hours (recorded)]

+20 Participant Observations

1. TUSCANY

INTERVIEWS (36)

Institutional Experts for Participation

1) RL, Independent Authority for Participation, Tuscan Region, Professor of Public Policy, University of Bologna, September 8th, 2014 (unrecorded)

2) MM, Ex Guarantor for Participation, Tuscan Region, Professor of Public Administration, University of Florence, January 28th, 2016 (1h03min02sec)

3) AF, Managing Director, Office for Participatory Politics, Tuscan Region, February 11th, 2016 (36min52sec + 3min03sec+25min01sec)

Institutional Representatives – Political Parties

1) TF, Regional Councilman, Independent Left, October 27th, 2015 (1h11min31sec)

2) AM, Ex-Regional Councilman charged for Urban Planning, (*Assessore Regionale*), Professor of Urban Planning, IUAV University, Venice, 5 April 2016 (1h26min28sec)

3) GP, Founder of the Tuscan Green Lists, Director of the LEF Press – Libreria Editrice Fiorentina and of the Italian section of “The Ecologist”, Palazzo Pucci, Florence, 29 June

2016 (56min45sec)

Activists and Experts involved in the Main Local Environmental Mobilizations

1) AB, Expert-Ally, Full Professor of Bio-medical Statistics, University of Florence, Department of Applied Statistics “G.Parenti”, Florence, September 21th, 2015 (58min52sec)

2) BB, Expert-Activist Retired Environmental Expert (Industrial Chemistry) for different enterprises (ex. Carapelli) and at public agencies, ARPAT (Regional Agency for Environment Tuscany), Member of «Medicina Democratica», Florence, November 4th, 2015 (1h21min17sec)

3) IA, Expert-Activist, Researcher in Urban Planning, University of Bologna, Member of “Per Un’Altra Città” and ReTe – Tuscan Network for the Defence of Territories – October 27th, 2015 (1h13min20sec)

4) PP, National Activist, Ex-Senator for «Italia dei Valori», Emeritus Professor of Geography, University of Florence, San Casciano Val di Pesa December 15th, 2015 (1h18min09sec)

5) PB, Emeritus Professor of Urban Planning, President of ReTe – Tuscan Network of the Committees for the defense of territory, Tavernelle Val di Pesa, December 16th, 2015 (1h42min40sec + +37min58sec + 14min57sec)

6) CG, Environmental Activist, Emeritus Professor of Geography, University of Siena, Member of the ReTe – Tuscan Network, San Casciano Val di Pesa, December 16th, 2015 (1h03min35sec)

7) GG, Expert-Activist, Doctor and Psychotherapist, Member of Medicina Democratica and ISDE, Florence, 14 March 2016 (32min06sec)

8) PG, Oncologist, Former President of ISDE – International Society of Doctors for the Environment, Member of Medicina Democratica and founder of the “Total Recycling Strategy”, Florence, 26 April 2016 (unrecorded)

9) RR, Oncologist, Founder and President of ISDE – International Society of Doctors for the Environment, 3 May 2016 (semi-structured – electronic interview)

1) No Tunnel Tav

10) TC, Retired Railway Worker, Member of Independent Transport and Mobility Trade Union – COBAS, Spokemen of No Tunnel Tav Committee, Florence, January 28th, 2015 (53min21sec + 1h02min30sec)

11) GP, Expert-Activist, Urban planner, Professor at the Faculty of Architecture, university of Florence, March on 8th, 2016 (36min03sec)

12) TC, Expert-Ally, Professor of Geotechnical Engineering, University of Florence, February on 5th and 17th, 2016 (6min57sec phone interview + semi-structured electronic interview)

13) MP, Expert-Ally, Private Engineer, Perini & Puggelli Associates, Scandicci, Florence, February on 10th, 2016 (1h01min38sec)

14) AZ, Expert-Activist Engineer and Urban Planner, Professor of Infrastructural Engineering, University of Florence, February on 6th, 2016 (1h1min08sec)

15) RBG, Expert-Activist, Architecht, Ex-Member of «Partito della Rifondazione Comunista – PRC», Retired Professor of Urban Morphology, University of Florence, Florence February on 8th, 2016 (1h06min48sec)

16) VA, Expert-Ally, Engineer, ex-Ferrovie dello Stato, Florence, February on 15th, 2016 (unrecorded)

17) MM, Expert-Ally Professor of Urban Planning at University of Florence, February on 11th, 2016 (unrecorded)

2) No Waste Inceneritor in Case Passerini

- 18) BT, Expert-Activist, Geologist, CNR, Member of the committee «Mamme No Inceneritore» Florence, March, 7th, 2016 (unrecorded)
- 19) GC, Spokesman of the Committees of the Florentine Plaine in Prato, April, 26th, 2016 (open electronic interview)
- 20) MU, Teacher, Founder of the Committees Against the Enlargement of Airport Peretola, Ex-Citizens Advisor for Sesto Fiorentino, February, 5th, 2016 (unrecorded)
- 21) CT, Activist, Lawyer, Member «Coordinamento Comitati della Piana», Florence, March, 21th, 2016 (1h14min13sec)
- 22) VN, Teacher and Activist «Coordinamento Comitati della Piana», Sesto Fiorentino, March, 23th, 2016 (31min30sec)
- 23) LB, Expert-Activist of the online platform «PianaSana», Researcher, Geotechnical and Atmospheric Engineer, Department of Physics, National Research Center, (CNR), March on 22th, 2016, Scientific Pole, Via delle Idee, Sesto Fiorentino (1h05min05sec)
- 24) MG, Expert-Ally, Pediatrician, Member of ISDE Pistoia, Sesto Fiorentino, Cinema Grotta, April, 4th, 2016 (personal conversation, unrecorded)
- 25) RE, Goldman Prize for Ecology, Leader of the Zero Waste Movement – Italy, ex Regional Representative for the Greens, June, 22th, 016 (1h17min36sec)
- 26) BB, Expert-Activist, Chemist, Member of Medicina Democratica, Institutional Expert for the Recycling Plan in Sesto Fiorentino, 10th June 2016 (1h11min10sec)
- 27) SM, Member of «Mamme No Inceneritore», June, 20th, 2016, on-line opened questionnaire,

28) FB, Member of «Mamme No Inceneritore», June 21th, 2016, on-line opened questionnaire

29) BB, Member of «Mamme No Inceneritore», June, 24th, 2016, on-line opened questionnaire,

30) MF, Anthropologist, Activist and Member of the Research Center “Zero Waste” Capannori (Lucca), Italy, June, 16th, 2016 (on-line exchange)

31) Paul Connett, Chemist, Founder of the «Zero Waste» movement, Florence – Villa Montalvo, October, 29th, 2017 (unrecorded)

32) Rick Anthony, President of «Zero Waste» International - San Diego(CA), Florence – Villa Montalvo, October, 29th, 2017 (unrecorded)

33) Jack Macy, Coordinator of City and County of San Francisco Department of SF Environment, Florence, Villa Montalvo, October, 30th, 2017 (unrecorded)

FOCUS GROUPS

1) Medicina Democratica Firenze, Headquarter, Piazza Balducci, Florence, June, 3th, 2015 (1h27min35sec)

2) Comitato San Salvi – Casa del Popolo Andrea Del Sarto, Florence, October, 3th, 2015 (1h25min47sec)

3) Mamme No Inceneritore – Sesto Fiorentino, Florence, March, 8th, 2016, (2h11min28sec)

ETNOGRAPHIC OBSERVATIONS

1) 21 October 2014 Congress “History of Public Health in Italy” - ISDE - Medici per l'Ambiente, Palazzo D'Accursio, Bologna (with the presence of Ramazzini Institute, Medicina Democratica, ISDE) <http://www.medicinademocratica.org/wp/?p=2029>

- 2) 29 April 2015, Seminar “Evaluation of the Health Impact” Michelangelo Bolognini Grant– Department of Medical Statistics – University of Florence, (presence: Medicina Democratica, Prof. Annibale Biggeri, Dr. Giancarlo Sturloni (SISS Trieste), Kathleen Ruff (Activist, International Joint Policy Committee of the Societies of Epidemiology, IJPC-SE) <http://www.medicinademocratica.org/wp/?event=seminario-borsa-di-studio-michelangiolo-bolognini-sulla-valutazione-di-impatto-sanitario>
- 3) June 2015, Municipal Commission on Public Health – (consiglio comunale, comune di Livorno) (in presence of Medicina Democratica; Prof. Annibale Biggeri, Oncologist; Metal-Worker Union Representative; Municipal Council Member for Public Health, Municipality of Livorno)
- 4) 14 November 2015, Assembly of the Tuscan Network of the Committees for the Defense of the Territory, Teatro dell'Affratellamento, Florence
- 5) 20-21-22 November 2015, National Congress of Medicina Democratica, Villa Ruspoli, Piazza Indipendenza, Florence, (entirely recorded)
- 6) 25 January 2016, Assembly on the Incinerator Project in Case Passerini, organized by Mamme No Inceneritore, Cinema Multisala Grotta, Sesto Fiorentino (in presence of Prof. Annibale Biggeri, Dr. Gian Luca Garetti, Dr. Mauro Paganini, Rossano Ercolini, founder of Zero Waste Italy, Don Daniele Bani, Members of the Doctors Order Pistoia and the Committees Against the Incinerator in Montale)
- 7) 5 February 2016, Assembly of the Society of Territorialists, Palazzo Fenzi, Via San Gallo 10, 10:00 – 17:00
- 8) 5 February 2016, Assembly on the Urban Mobility, Parterre Piazza della Libertà, COBAS, Network of the Citizens Committees, «No Tunnel Tav» Committee, ATAF, 21:00 – 00:00
- 9) 9 February 2016, Assembly on the Airport, Camera del Lavoro CGIL Borgo dei Greci (in presence of: Regional Experts, Consorzio Bonifica – Environmental Remediation Consortium, Network of the Tuscan Committees, Legambiente, Rectorate of the University of Florence, Municipalities of Campi Bisenzio (FI), Calenzano (FI), No-Tunnel Tav, No

Aeroporto Committees)

10) 1 March 2016, Organizational Assembly of the «No Aeroporto» Committee Sesto Fiorentino, Villa San Lorenzo (Sesto Fiorentino)

11) 5 March 2016, «Aeroporto Parliamone» Institutional Town Meeting, Participatory Event organized by the Municipalities of Calenzano, Campi Bisenzio and Sesto Fiorentino, CNR, Polo Scientifico, 9:00-13:00

12) 11 March 2016, Assembly «L'inceneritore è così lontano?», Local Parish San Luca Al Vingone, Mamme No Inceneritore, Massimo Paganini (Medicina Democratica), Rossano Ercolini (Zero Waste Italy) 21:00-23:00h

13) 25 March 2016, «Aeroporto Parliamone», Institutional Town Meeting, Focus Groups on the Issue «Economic impacts of the Airport and on its transport system», participatory event organized by the municipalities of Calenzano, Campi Bisenzio, Sesto Fiorentino, Poggio in Caiano, Art Studio, Events, Calenzano, via Garibaldi 7, 9:00-13:30h

14) 2 April 2016, «Aeroporto Parliamone», Institutional Town Meeting, Focus Group on «Economic Impacts of the Airport and on its transport system», Scuderie Medicee, Poggio in Caiano, 9:00-13:30h

15) 4 April 2016, Citizens Assembly on the Incinerator project, Cinema Grotta, Sesto Fiorentino, organized by Mamme No Inceneritore (presents: Zero Waste Italy, Medicina Democratica, ISDE, Network of the Committees of the Florentine Plain)

16) 26 May 2017, «No Tunnel-Tav» Committee Social Dinner for Self-Funding and Assembly, Circolo Lippi, Florence, 19:00-23:00h

17) 27-28-29 October 2017, International Meeting of the Zero Waste Communities, Villa Montalvo, Florence, with Paul Connett (chemist, founder of the Zero Waste Strategy), Rossano Ercolini (President, Zero Waste International) Joan Marc Simon (President Zero Waste Europe), Ruth Abbey and Rick Anthony (Zero Waste USA), Jack Macy (Zero Waste, San Francisco County) and more than 100 mayors from all over Europe, 9:00-19:00h

2. VENETO

INTERVIEWS (18)

1) Main Local Environmental Activists and Experts

- 1) MB1, Environmental Activist, Ex-Deputee of the Green Party, Trento, December, 5th, 2016, (1h14min36sec + 55min19sec + 19min47sec)
- 2) DAB, Spokesman of the Venetian Network of the Committees for the Defense of the Territory, Member of «Beati Costruttori di Pace», Padua, June, 21th, 2016 (49min14sec)
- 3) SB, Contemporary Historian of Venice and Mestre, Marghera, February, on 2th, 2015 (1h32min28sec)
- 4) MB2, President of the Eco-Institute «Alex Langer» Local Environmental Activist, Ex Deputee for the Greens, Mestre, February, 2th, 2015 (2h53min17sec)
- 5) FR, Engineer, Ex-Member of the Regional Environmental Agency (ARPAV), Member of «Medicina Democratica», Mestre February on 2th, 2015 (57min31sec)
- 6) DV, Chemical Researcher, Ex-Technician at the Petrochemical Site – Montedison, Mestre, July, 22th, 2016 (50min44sec)

2) No Mose and No Cruise Ships

- 7) e 8) CG, Expert-Activist, Ex-Member of the Environmental Impact Evaluation (VIA) Commission, Researcher in Urban Planning and Mobility at IUAV Venice, July, 12th, 2016
7) telephonic interview=(53min59sec) 8) face-to-face interview in Venice=(3h09min25sec)
- 9) SB, Expert-Activist, Full Professor in Urban Planning, IUAV, Venice, Representative of the National Commission for the Safeguard of Venice, Ex-Member of the Green Party in Venice Venice, (2h03min26sec)

10) CG, Expert-Activist Architect, Ex-Member of the Italian Communist Party, Member of the Association «AmbienteVenezia», Venice, June, 13th, 2016, (1h21min26sec + 21min06sec)

11) ST, Journalist and Activist, Spokesman for the «No Cruise Ships» Committee, July, 12th, 2016 Venice, (1h47min38sec + 6min32sec +23min25sec)

12) TC, Activist, Spokesman for Centro Sociale Morion, Member of the No Mose Permanent Assembly and the «No Cruise Ships» committee, Venice, July, 13th, 2016 (1h16min03sec)

13) LM, Activist and Spokesman for the association «Ambiente Venezia», Ex Trade Unionist at the Petrochemical Site, Venice, September, 4th, 2016 (unrecorded)

14) MV, Expert-Ally, Retired Full Professor of Urban Mobility, IUAV Venice, Ex Member of the Environmental Impact Assessment (VIA) Commission, Venice, September, 7th, 2016 (1h07min06sec)

15) BT, Expert-Ally, Retired Full Professor in Economics, University Cà Foscari of Venice, September, 6th, 2016, Venice, (1h12min39sec)

16) LD, Archivist and Activist, President of the Venetian Section of the Association «Italia Nostra», Venice, September, 7th, 2016, (57min18sec)

ch.

17) AZ, Expert-Ally, Industrial Hygienist, Retired Professor of Ecology at the University Cà Foscari, Venice, Ex-Member of the Environmental Impact Assessment (VIA) Commission, Venice, September, 6th, 2016, (1h22min42sec + 8min07sec)

PARTICIPANT OBSERVATIONS

1) Gaia – Environmentalist Fair dedicated to Alex Langer, Mestre, PalaPlip, September, 26th, 2015, 09:00 – 18:00

2) Press Conference organized by the Network of the Citizens Committees for the Defense of the Territory and the Environmental Associations after the vote of the Regional Council of the Law on Soil Consumption Venetian Regional Council, Palazzo Ferri Fini, 09:00-12:00, Venice, July, 22th, 2016

3) Assembly and Organizational Meeting of the Regional Networks of the Citizens Committees for the Defense of the Territory, Padua, Headquarter of the association «Beati Costruttori di Pace» February, 27th, 2016, 14:00-18:00

2. MEDIA ANALYSIS AND DOCUMENTS:

List of Newspaper and Relative Files elaborated and analysed

1) National Newspapers analyzed with «Lexisnexis»:

La Stampa <http://www.lastampa.it/>

Il Corriere della Sera www.corriere.it

1) File 'LexisNexis – TAV.odt.' (1538 pages from 2010 to 2016)

2) National Newspapers consulted

La Repubblica <http://www.repubblica.it/>

Il Manifesto <http://ilmanifesto.info/>

Il Fatto Quotidiano <http://www.ilfattoquotidiano.it/>

Altreconomia – Rivista di Informazione Indipendente <http://www.altreconomia.it/site/>

1. TUSCANY

Activists On-Line Platforms at the Regional or City Level

PerUn'AltraCittà (cultural association and political laboratory)
<http://www.perunaltracitta.org/>

Tuscan Network of Committees for the Defense of the Territory («Rete Toscana dei Comitati per la Difesa del Territorio») <http://www.territorialmente.it/>

1) No-Tunnel Tav Florence Appendix

While the mobilizations around the «Tunnel-Tav» project in Florence emerged around 2006, the following chapter finds its evidences on data gathered through an intensive fieldwork carried out between 2014 and 2016.

Before starting the fieldwork, an exploratory phase has been dedicated to the analysis

of the debate concerning the TAV (*Treno ad Alta Velocità*= High Speed Train) at the national level using the online databank LexisNexis, comprising news from the Italian «Corriere della Sera» (from 2010) and «La Stampa» (from 1988). The dataset concerning the last one was particularly useful since it included the section for the city of Turin, so covering the main «No-Tav» case at the national level, the movement located in Val di Susa (in the province of Turin) contesting the Turin-Lyon and constituting both a symbolic and a real center of coordination for the Italian local movements.

The dataset has been gathered into a .pdf file consisting of 1538 articles that were selected through a research on specific key words and that allowed to detect the articles concerning common initiative linking the Val di Susa movement with the Florentine one. However, the specific study of the Florentine debate on the «Tunnel-Tav» has been conducted on the local section of the Italian newspaper «La Repubblica – Firenze». The data have been summarized in a .pdf file containing 48 on-line articles appeared between 2010 and 2016.

As it is explained in detail in the chapter, given the symbolic centrality of the city of Florence in the Italian political system and the importance of the infrastructure at stake, at some points the debate gets a media coverage also at the national level. Important inquiries on the Florentine case appeared on national TV programs with specific inquiries like «Report» on Rai3 (29/09/2001), or a constant coverage on newspapers like «Il Fatto Quotidiano» and finally with specific analysis on magazines like «Altreconomia» (n.178, January 2016).

The debate on the media has had an explorative function to detect the discourse around the «Tunnel-Tav», the main actors involved and specifically the main critical actors mobilizing in opposition to it. The main phase of the fieldwork consists of documents produced by the committee, participants observations at public meetings and most importantly 12 in-depth interviews conducted specifically with 2 representatives of the regional authority for participation and the main representatives of the committee (experts, leaders and grassroots activists). 5 public meetings have been attended where the Tunnel-Tav project was analyzed, followed by collective discussions among experts, activists and citizens concerning technical alternatives, political actions and strategies.

Many among the members of the committee are involved in other public controversies concerning the city on a variety of problems, from public health and pollution, to urban regeneration and transports, until more general activism focused on environmental protection of the landscape or the historical heritage. For these reasons, I have attended also

some meetings concerning general territorial problems, as it is the case of the assemblies of the Tuscan Network of the Committees for the Defense of the Territory held in Florence almost every 6 months, or events concerning experts and professionals working specifically on territory, like the meetings of the Italian Society of the Territorialists.

The website of the «Comitato No-Tunnel Tav Firenze» (<http://notavfirenze.blogspot.it/p/il-comitato.html>) contains several documents, debates and videos concerning its activities. 16 .pdf documents consisting of fliers summarizing claims and actions, scientific reports and alternative projects have been analyzed, together with books and other publications elaborated by the members of the committee. Finally, subscribing the specific online newsletter of the committee, I was almost daily updated about the media coverage of the debate, since activists are monitoring its evolution and makes wide use of the newsletter to discuss strategies and actions. In this sense, I got a good overview of the controversy and the main claims discussed and elaborated by the activists. A specific Facebook page (<https://www.facebook.com/Comitato-No-Tunnel-Tav-Firenze-186144961421699/>) has been regularly consulted, consisting of weekly uploads documents and videos summarizing the activities of the committee.

1.1.) Media Analysis:

La Repubblica – Firenze <http://firenze.repubblica.it/> from 2006 to 2016

2) File: 'Tunnel Tav – Media Coverage.odt.' (48 pages)

1.2.) No Tunnel Tav Websites and Newsletters

<http://notavfirenze.blogspot.it/p/per-saperne-di-piu.html>

<https://www.facebook.com/Comitato-No-Tunnel-Tav-Firenze-186144961421699/>

notavfirenze@gmail.com (Daily Newsletter of the Florentine «No-Tunnel Tav» Committee consulted since 2014)

1.3.) No-Tunnel Tav Documents

- 1) Alternative Project of «Firenze Novella» Station
- 2) Proposal of a Surface Transit for the High Speed Train – Technical Relation of the Alternative Project by the Technical Group for the Study of the Tunnel, No Tunnel Tav committee, Italia Nostra – section of Florence, Citizens committees of the Florentine area
- 3) Graphical sketches of the Proposal for a Surface Transit of the High Speed Train
- 4) Tunnel with High Speed Train Station - critical elements concerning the realization of galleries with one tunneling machine by Perini&Puggelli Ingegneri Associati
- 5) Environmental Damages of the Project by Teresa Crespellani, full professor of engineering at the University of Florence
- 6) The Tunnel Tav and its current problems by Alberto Ziparo, full professor of Engineering and Urban Planning and Roberto Budini Gattai, Urban Planner, University of Florence
- 7) High Speed Railway. The Florentine Node. Analysis and Perspectives by Alberto Ziparo, Antonio Fiorentino, Roberto Budini Gattai, Giorgio Pizziolo, Vincenzo Abbruzzo
- 8) Flier, «The alternative project and the political omissions», by No Tunnel Tav committee
- 9) Flier, «TAV in Florence: comparison between the two projects», by No Tunnel Tav committee

1.4.) New Data Gathered on the Fieldwork (see under the section INTENSIVE FIELDWORK, paragraph 1.TUSCANY)

12 Interviews + 5 Participant Observations at Events Organized by the Committee (n.4,8,9,16)

2) Waste Incinerator Case Passerini Appendix

The campaign against the waste incinerators in the Tuscan Region and particularly the Florentine Plain among Florence, Prato and Pistoia significantly started in the early 2000s and is still ongoing.

The mobilization of the «Mamme No Inceneritore» has reached a certain level of visibility at a broader national level around 2015 with articles on alternative monthly magazines like «Altreconomia» (176/2015) and it has been partly covered on a special episode of the national program «Report» (16.11.2014) dedicated to the business of waste management in

Italy. The investigation carried out by these journalistic works has given me the opportunity to develop and elaborate hypothesis that I have used for my autonomous work of sociological analysis.

The mobilization process can be analytically divided in three cycles: the rise of the mobilization and the birth of the spontaneous network of the citizens committees of the Plain in the early 2000s, the protest events around 2005 contesting the misrepresentation of the Health Impact Assessment (VIS) and the massive relaunch of the mobilization by the spontaneous citizens group «Mamme No Inceneritore» around 2015. To summarize the political debate on the incinerator project I have manually selected all the articles of the local sections of the national newspaper «La Repubblica» and the local news «Il Tirreno». These two sources have been further integrated with the online news «Piananotizie.it» reporting dynamics specifically regarding local politics in the Florentine Plain. The file contains 142 press articles between 2000 and 2016.

While this media analysis detected the main actors, events and issues at stakes in the controversy, the main data concerning the mobilization have been gathered through an ethnographic fieldwork consisting of multiple secondary sources (websites of the citizens committees and organizations involved in the campaign, proponents as well as of the concerned municipalities) and the creation of new sources like ethnographic observations during public events (demonstrations, assemblies, conferences and civic debates).

Both the website (<http://www.mammenoinceneritore.org>) and the Facebook page of the citizens group contain a wide and varied set of sources reporting activities like petitions, assemblies and demonstrations (videos, photos, interviews, fliers).

In almost 2 years of intensive fieldwork, I've attended 14 events organized in the heat of the last cycle of protests emerged between 2015 – the first meetings launched principally by the newborn group «Mamme No Inceneritore» - until the national demonstration against the Incinerators held in Florence in May 2016. Initially, the participation to the national congress of key experts-activists organizations like «Medicina Democratica» (a three-day national event held in Florence in November 2015) as well as to scientific events concerning the democratization of public health related professions helped me in getting a general idea of the main debates concerning the main issues at stake, the key expert actors involved and their different level of politicization.

While I was immersed in the study of the mobilization against the incinerator in Florence, another similar conflict in the area emerged. The enlargement of the Airport Peretola-Florence was indeed raising new risks and problems in the same area where the

incinerator project was localized. This apparently diverse issue added new grievances that in many ways contributed to unveil many problems concerning the incinerator, like the increase and multiplication of sources of pollution as well as the impossibility to compensate the area with a new park. The four ethnographic observations conducted at informatory events organized by the municipalities of the Florentine Plain as well as the reunion of the citizens committees against the new airport has been indeed useful to shed light on the incinerator projects, even though this new case has not been included in the present work.

The most important aspects of the actors' intentions and motivations, their reconstruction of the events and their claims have been investigated through: 8 in-depth interviews, 2 focus groups, 4 on-line semi-structured questionnaires, and direct personal conversations or specific e-mail exchanges. The interviewees have been selected for their role of leadership in the different organizations or groups mobilizing, their specific area of expertise, and the representativeness of different scientific and political views on the issue.

2.1.) Media Analysis:

La Repubblica – Firenze <http://firenze.repubblica.it/> from 2010 to 2016 (14 pages)

Il Tirreno <http://iltirreno.gelocal.it/> +

PianaNotizie.it <https://www.piananotizie.it/> = from 2000 to 2016 (142 pages)

3) File: ' Case Passerini Incinerator Media Coverage.odt' (156 pages)

2.2.) Websites and Newsletters

National and International Movement Organizations

Gaia, Global Anti-Incinerator Alliance

<http://www.no-burn.org/>

Global Recycling Network

<http://www.grn.com/>

Zero Waste Italy – Research Center in Capannori

<http://www.rifiutizerocapannori.it/rifiutizero/>

International Society of the Doctors for the Environment

<http://www.isde.it/chi-siamo/>

Medicina Democratica

<http://www.medicinademocratica.org/>

Local Networks, Citizens Committees or Associations

«Mamme No Inceneritore» Committee

<http://www.mammenoinceneritore.org>

<https://www.facebook.com/mammenoinceneritorefirenze/>

Network of the Citizens Committees for Public Health in the Florentine Plain

<http://pianasana.it/> ; <http://www.pianasana.org/>

Network of the Citizens Committees of the Florentine Plain

<http://www.noinceneritori.org/>

Newsletter <https://mentelocaledellapiana.wordpress.com/> (newsletter consulted from 2014 to 2016)

Institutional sites:

Department of the Environment - Tuscany

<http://www.regione.toscana.it/cittadini/ambiente>

ATO – Toscana Centro – Tuscan Organization for the Waste Management

http://www.atotoscanacentro.it/servizi/notizie/notizie_homepage.aspx

ARPAT – Agency for Environmental Protection – Tuscany

<http://www.arpat.toscana.it/>

Entrepreneurial actors

QThermo

<http://www.qthermo.it>

Quadrifoglio

<http://www.quadrifoglio.org/lay100.php?IDCategoria=368>

Hera S.p.a.

<http://www.gruppohera.it>

2.3.) Documents produced by the Citizens Committees

- 1) Networks of the Committees of the Plane, *Dossier Incinerator*, September, 2012
- 2) Document, *What did the network of committees really do*, from www.noinceneritori.org, 2006
- 3) Document, *The story of the incinerator of San Donnino twenty years ago*, 2006
- 4) Document, *The role of Legambiente in the history of the incinerator*, 27.03.2006
<https://provinciadiprato.wordpress.com/2016/03/27/il-ruolo-di-legambiente-nella-storia-dellinceneritore/>
- 5) Document, *ISDE and Environmental Epidemiology*, Zadig, Milan, 2013
- 6) Radio Program, *Incinerator: Pro and against*, Broadcast, LadyRadio, Florence, 12.04.16

2.4.) New Data Gathered on the Fieldwork (see under the section INTENSIVE FIELDWORK, paragraph 1. TUSCANY)

17 Interviews + 2 Focus Groups (n.1,3) + 6 Participant Observations at Events Organized by the Citizens Committees (n.1,2,5,6,12,15)

2. VENETO

Activists On-Line Platforms at the Regional or City Level

Websites

Regional Networks of the Committees for the Defense of the Territory

<http://www.eddyburg.it/>

Venetian Network of Citizens Committees for the Defense of the Territory

<http://comitativeneto.altervista.org/>

Eco-News – Regional News on the Territory and the Environment

<http://www.eco-magazine.info/>

Journals and Reviews

1) *Gaia. Ecology – Non-Violence – Appropriate Technologies*, Bimonthly Magazine (consulted from 2015 to 2017)

2) *Tera & Aqua*. Bimonthly Magazine of the Eco-Institute of Veneto «Alex Langer» (Consulted from 2015 to 2017)

Documents of the Regional Network

1) Dossier, *We are Earth – Veneto to live (Water, Earth, Energy Air)*, October 2014

2) Flier, *Toward the Demonstration: No Big Infrastructural Works – No Soil Consumption. For Democracy, Public Goods, for the Right to Breath, Work, Live in Veneto*, October 2013

3) Document, Don Bizzotto, *Audition at the Regional Council on Soil Consumption*, Venice, 13 October, 2015

4) Document, *Contribution of Don Bizzotto for the Ministry of Environment Galletti*, Padua, 3 August 2015

5) Document, Regional Network against the Big Infrastructural Works, For the Defense of the Territory and the Public Goods, *You Too*, Padua, 3 July 2014

6) Document, *Earth Charter. A Brief History*, Beati Costruttori di Pace

7) Press Communiqué and Document, *Resize, Conserve, Restore, Cultivate, Redistribute*, (with an annexed List of 170 Civic Associations and Committees supporting and 45 Political and Union Organizations), Padua, 15 August 2013

3) No Mose Mobilization Appendix

The data for the study of the mobilization against the MOSE have been personally collected through a media analysis of the case at the local and national level, and an intensive ethnographic fieldwork. A unique file on the MOSE case has been created with articles appeared on the local newspaper «La Nuova Venezia» between 2003 and 2014 (124 pages); the national newspaper «La Repubblica» from 1988 to 2014 (28 pages); and through the search engine «LexisNexis», regarding the news appeared on the national newspaper «La Stampa» from 1997 to 2014 (38 pag.).

A consultation of the website of the main proponent «Consorzio Venezia Nuova», the local institutions (Municipality of Venice, Veneto Region) has provided useful evidences that have been compared with a main fieldwork carried out in Venice between 2015 and 2017. The fieldwork consists of 3 participant observations at meetings of the local environmental activists, or the citizens committees: 1) the national event of «Gaia», the bimonthly magazine of the Eco-Institute «Alex Langer» of Mestre, one of the center of the grassroots environmental networks in Italy, 2) an assembly of the Regional Network of the Venetian Committees for the Defense of the Territory led by Don Albino Bizzotto at the eco-pacifist association «Beati Costruttori di Pace» in Padua, 3) a press conference organized by the Venetian Network at Palazzo Ferri Fini, the Regional Council of Veneto.

These observations have been integrated with the documents produced by the committees. A Facebook account called «Archivio Ambiente Venezia» gathered almost a thousand photos, documents and newspaper articles concerning the main environmental conflicts in Venice gathered by the local association «AmbienteVenezia». The local independent press «Corte del Fontego» have produced several essays on the main environmental problems concerning Venice and few specifically on the MOSE that have been consulted.

The membership to the local bimonthly magazine «Gaia» and «Tera&Acqua» gave me the possibility to monitor between 2015 and 2017 the main debates on the Venetian environmentalism and to detect the key actors. The website of the Venetian Regional Network of the Committees for the Defense of the Territory

(<http://comitativeneto.altervista.org/>) provided all the documents and videos (uploaded on YouTube channels) concerning the main assemblies and reunions of the citizens committees, allowed me to map the main groups and organizations mobilizing, and to understand the debate. The regular consultation of the website <http://www.eddyburg.it/> with its online archives gave me dispose of publications of experts of urban planning, engineers, scientists and intellectuals involved in the debate concerning the territory and the environment. Gathering information and articles specifically focused on infrastructural and environmental policies gives an account of the actions and initiatives of the networks of committees and activists, complementing mainstream sources or newspaper.

The main corpus of the fieldwork is composed of 14 in-depth and semi-structured interviews with the main actors involved in the mobilization – experts, activists, members of environmental associations – belonging to the key environmental organizations composing the «No Mose Permanent Assembly».

3.1.) Media Analysis:

La Repubblica <http://www.repubblica.it/> from 1988 to 2014

4) File 'Mose Repubblica.odt.' (78 pages)

La Nuova Venezia <http://nuovavenezia.gelocal.it/venezia> from 2003 to 2014

5) File: 'No Mose Media Coverage.odt' (124 pages)

3.2.) Websites and Newsletters

Main Proponent

Consorzio Venezia Nuova <https://www.mosevenezia.eu/>

Activists online platform

Online Archive «AmbienteVenezia» (including 2449 Documents and Photos from 1996 to 2016)

<https://www.facebook.com/lagunambiente001av/>

3.3.) Documents produced by the Citizens Committees and Associations

- 1) Meeting minute Commission IV, Municipality of Venice, Discussion on the ARCA project, 13.07.2005
- 2) Facebook Archive on the Lagoon (articles and documents gathered by Luciano Mazzolin on Cruise Ships and MOSE)
- 3) ARCA Project <http://archivio.eddyburg.it/article/articleview/2070/0/178/>
- 4) Special Laws for Venice <https://www.regione.veneto.it/web/ambiente-e-territorio/legge-speciale>
- 5) Article, *On the Mose in Venice: Breaking Equilibria*. In *Verde Ambiente* 5/2002
- 6) Dossier, *Venice and its Lagoon, A possible equilibria*, n.376/2001
- 7) Article, *The works for MOSE are abusive*, in *Tera e Aqua*, July-August, 2005
- 8) Petition, *Suspending the Works on the MOSE*, 2005
- 9) Flier, *Eliminating the High Water is Possible. Already existing Solutions in Venice*, Committee Save Venice and Its Lagoon

3.4.) New Data Gathered on the Fieldwork (see under the section INTENSIVE FIELDWORK, paragraph 2.VENETO)

14 Interviews + 3 Participant Observations at Meetings and Events

4) No Cruise Ships Appendix

The mobilization against the cruise ships has been mainly investigated through a preliminary analysis of the issue on the main national and local newspapers and then explored in-depth through an intensive fieldwork held in Venice between 2015 and 2017. Through the research engine «LexisNexis» I have analyzed the main articles published on national newspapers like «La Stampa» and «Il Corriere della Sera». On a dataset of 1569 articles from the early 2000s concerning environmental problems in Venice, 26 were directly focussing on the cruise ships.

While this first exploratory phase allowed me to check its relevance and to detect the main actors at the national level, the main part of the investigation has been conducted on articles emerged on local sections of «La Repubblica» and the local Venetian newspaper «La Nuova Venezia». A .pdf file composed of 311 pages containing all the articles between

2000 and 2016 have been created, constituting the main corpus of the media analysis. As in the previous MOSE case, the online archive «Archivio Ambiente Laguna Venezia» of the local environmental association «AmbienteVenezia» collecting thousands of documents, selected articles and photos of the mobilization have been consulted, together with the «No Grandi Navi» Facebook account that collects daily events, declarations and updates (videos, photos and articles) concerning the citizens committee against the Cruise Ships.

Other websites specifically focused on urban and territorial problems have been consulted, like: 1) «Eddyburgh» linked to a traditional Left-wing environmentalism, 2) the archives of the Eco-Institute «Alex Langer» and the numbers of the bimonthly magazine «Gaia» and «Tera&Acqua», linked to the eco-pacifist Greens.

All these sources have been triangulated with books and essays published directly by the actors involved, and specifically: 1) the «Corte del Fontego» local press, linked to citizens' initiatives defending the Venetian cultural and environmental heritage – and close to the local section of the conservationist association «Italia Nostra», 2) the drafts of the alternative project of a floating offshore port (elaborated by Boato, Di Tella, Giacomini, Vittadini), 3) the study of the economy of the cruise ships conducted by independent experts (Fabbri&Tattara) as well as on the offshore ports (Bologna).

The main part of the fieldwork has been composed of 1) 3 ethnographic observations at the assembly of the Venetian Regional network of the committees, a local event organized by the environmental associations, and the «No Cruise Ships» citizens committees, 2) 14 in-depth interviews with the main actors (activists, experts, citizens) representing different positions in the citizens mobilization.

4.1.) Media Analysis

La Nuova Venezia <http://nuovavenezia.gelocal.it/venezia> (from 2003 to 2016)

6) File: 'No Cruise Ships Media Coverage.odt' (311 pages)

4.2.) Websites and Newsletters

Activists and Committees

Online Archive «AmbienteVenezia» (including 2449 Documents and Photos from 1996 to 2016)

<https://www.facebook.com/lagunambiente001av/>

<https://salviamovenetia.wordpress.com/>

Facebook Group of the «No Cruise Ships Committee»

<https://www.facebook.com/search/top/?q=comitato%20nograndinavi>

<https://www.facebook.com/lagunambiente001av/>

Proponents

Port Authority – Venice

<https://www.port.venice.it/it/autorita-portuale-di-venezia.html>

4.3.) Documents produced by the Citizens Committees and Associations

- 1) «No Cruise Ships» committee, Press Communiqué, *Maxi-Cruise Ships out of S.Marco basin!*, 11 July 2011
- 2) Alternative Project, *Avamposto Galleggiante Bocca di Lido. Terminal Passeggeri*, 2013-2015
- 3) Venetian Network of Committees for the Defense of the Territory, *No Big Infrastructural Works – No Soil Consumption. For the Democracy of Common Goods and the Right to Breath, Work, Live in Veneto*, Padua, 11.11.13
- 4) Tattara, B., Fabbri, G., *White Book on the Lagoon, the Port, the Cruise Ships Gigantism. Why the Cruise Ships should stay out of the Lagoon*, August, 2014
- 5) Document sent to the Ministry of Culture and Tourism, Infrastructures, and Environment, 9 October, 2015
- 6) Document, *Memo on the Assembly. Executive Project of an artificial island at the Portsmouth of Lido*, 13 May, 2004
- 7) Article, *Cruise Ships? Out of the Lagoon of Venice*, in *Tera & Aqua*, February-March, 2015

4.4.) New Data Gathered on the Fieldwork (see under the section INTENSIVE FIELDWORK, paragraph 2.VENETO)

17 Interviews + 3 Participant Observations at Public Events and Meetings

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