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Ecological and democratic crises in the history of Manfredonia, Italy

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Abstract: Ecological and democratic crises are known to be closely linked. In the history of Manfredonia (Italy), the relationship between them has been revealed as a complex set of dynamics: on the one hand, its environmental degradation determined mistrust in democratic institutions; on the other, during the years of the struggle against the Manfredonian petrochemical plant, the local environmental movement experienced significant democratic participation. To analyze the connection between environmental and democratic crises, the history of Manfredonia is examined by introducing some of the concepts elaborated by Environmental Justice. These are: its broad definition of the environment; the matter of democratic participation in the use of the territory; the issue of narrative injustice, which leads to the need to overcome mainstream narratives through participatory historical research. The research intends to enhance local knowledge, promote shared authority, and produce tools for the population to initiate their own democratic processes of participation.

Keywords: Ecological crisis, democracy, environmental justice, participatory history, Manfredonia.

Introduction

Ecological and democratic crises are, in general, closely linked. Environmental problems dictate new challenges for democratic institutions and for the theory of democracy itself. The vast literature on the subject illustrates how the Humanities have explored these issues from multiple perspectives and through various elaborate approaches.

Even a simple overview can register this matter's complexity. Studies about social movements – i.e., indigenous, early social forum movements born in opposition to the WTO, or recent climate strikes – have underscored how such organizations have repeatedly challenged consolidated democratic institutions by denouncing the interaction between the dismantling of local democratic powers, the attacks on social rights, and local/global ecological crises (*apud* Santos, 2002; Shiva, 2005; Ciervo, 2010; Santos, 2013; Shiva V. and Shiva K., 2019). At the same time, environmental movements have played a crucial role in redefining democratic processes (*apud* Della Porta and Diani, 2004; Podestà and Vitale, 2011; Bulsei, 2013). Different democratic practices have been theorized and subsequently undertaken in localized contexts, such as *le débat public* in France (*apud* Bobbio, 2010) or the *deliberative*

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democracy, implemented as a decision-making process in Turin (*apud* Bobbio, 2002). Grassroots movements, in turn, are active about environmental hazards and have been experimenting with citizen participation through laboratories for participatory democracy (*apud* Santos and Nunes, 2006). Finally, sociological studies have elaborated on the implications of the issue of uncertainty as a key component in environmental matters, and its connection with the role of communication and democratic participation (*apud* De Marchi *et al*., 2001).

Among other historical studies, Environmental History has significantly contributed to our understanding of the present global ecological crisis from a historical perspective. Through the dialogue with other disciplines and fields of historical research, it explores the relationships between human beings and the environment in their historical dimension (*apud* Armiero and Barca, 2004; Agnoletti and Neri Serneri, 2014). The debate on Ecological Economics issues (*apud* Martinez-Alier, 1990), furthermore, has led to the inclusion of natural resources as productive factors in the analysis – that is, as having active roles in the production of economic value. Meanwhile, economic production has also begun to be considered as a historical process of transformation of nature (*apud* Armiero and Barca, 2004).

In this view, the analysis of economic processes, including the relationship between energy use patterns and the Modern Economic Growth, as well as the history of urban-industrial systems, cannot be seen solely as the progressive history of unlimited economic growth, granted by unrestricted energy and natural resource consumption. Environmental and social costs should also be taken into perspective (*apud* Corona, 2004; Adorno and Neri Serneri, 2009; Barca, 2014a), seen as "the increasing number of ecological distribution conflicts around the world is ultimately caused by the changing metabolism of the economy, in terms of growing flows of energy and materials" (Martinez-Alier, 2018). With these premises, an environmental history of industrial development is also a history of the difficult relationship between the actors that cause pollution and the communities involved (*apud* Corona, 2004). Moreover, this kind of study can shed some light on the history of environmental movements and their political proposals, as well as on their contributions to democratic practices.

This paper aims to present the history of Manfredonia (Italy, Apulia region), where the fourth largest petrochemical plant in Italy was located. It seeks to analyze how the history of the community – which has recently suffered an environmental catastrophe due to this kind of industrial production (*apud* Malavasi, 2018) – evidences the link between the ecological crisis and democratic processes. This work also means to contribute to the discussion of the following questions: how can a historical study analyze social and environmental impacts of industrial settlements and help open up new fields of democratic participation and narrative justice by voicing popular resistance movements' agendas? How can history offer us the tools for re-appropriating the environment as a depositary of localized memories?

The present paper is based on a historical study developed as a part of the "Ambiente Salute Manfredonia" multidisciplinary project. Following a brief summary of the main facts of Manfredonia's history, to offer an overview to the reader, and an introduction on the "Ambiente Salute Manfredonia" project, the article will be structured into two main sections.

1. Participatory historical research in Manfredonia

In this section, I present the methodology adopted by the study and the steps that it has followed over time. I also discuss the aims of a participatory historical research such as this one: to give credit to local knowledge, promote shared authority, and provide the tools that enable a specific population to initiate democratic participation.

2. Ecological and democratic crises in Manfredonia

To analyze the connection between the environmental and democratic crises, Manfredonia's history will be presently examined through the lens of some concepts elaborated

by the field of Environmental Justice. These notions are: its complex definition of the environment itself - helpful for a broader comprehension of the Manfredonian ecological crisis' social impact; its stance on local identities' lack of recognition and on the matter of democratic participation in regards to land and natural resources use (both closely linked to experiences of environmental injustice); the issue of narrative injustice, strictly associated to democracy and environmental justice matters - therefore encompassing the importance of producing an alternative narrative for the community's history.

Manfredonia: the history of a continuous catastrophe

Manfredonia is a small city in Southern Italy (Apulia region). Its traditional economy was based on fishing, agriculture and incipient tourism until the late 1960s, when the Italian Government decided to set up the *Enichem* petrochemical plant (owned by the public oil company, ENI) just outside the city. The *Enichem* plant became operative in 1971, producing fertilizers and caprolactam. It employed some 1500 people, with another 600 workers hired by sub-contracting firms.

On the 26th of September 1976, a scrubbing tower for the synthesis of ammonia gases in the plant blew up, releasing at least 12 tons of compounds (containing arsenic) into the atmosphere. The leak's contents were revealed to the public only in the days following the explosion, and the seriousness of the accident was minimised by the plant's managers - in fact, when the arsenic cloud emerged, the director declared it was only water vapor. The complaint that the workers' factory committee addressed to the Mayor, however, would later reveal the extent of its dramatic polluting power.

Over the next few years, in addition to routinely unchecked pollution levels, several other accidents occurred, some of which seriously alarmed the local population. Especially notable was an ammonia leak in 1978 that caused mass evacuation from the city, as well as the release of ammonia, sulphur dioxide, and nitrous gases into the air in the following years. That is probably why, during the participatory historical research project, Manfredonia's inhabitants decided to describe their trajectory as a *continuous catastrophe*.

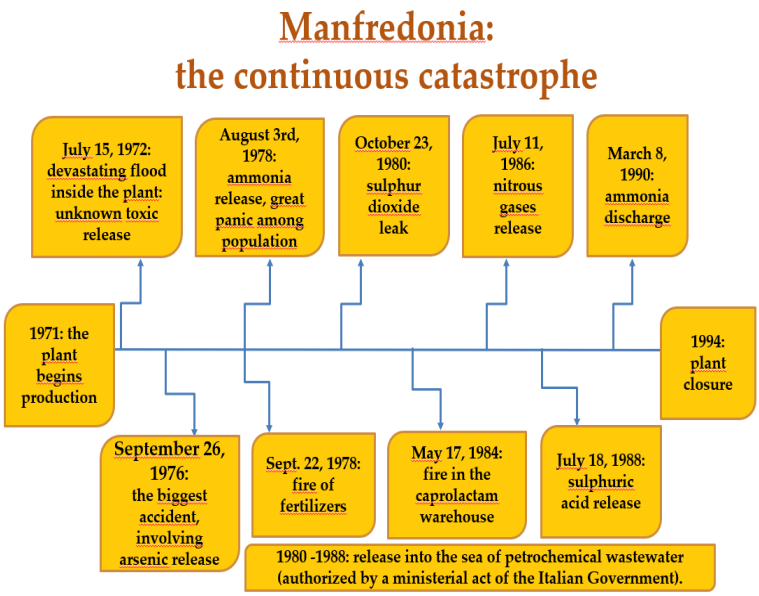

Figure 1 – Manfredonia: the continuous catastrophe

Source: the authors' own elaboration.

In 1988, the citizens began to react, when three events led to a large strike against the petrochemical firm. These occurrences were: firstly, the decision of the regional government to allow the construction of an incinerator for industrial waste inside the plant; secondly, the legal action following the death of dolphins in the area, due to the release of industrial wastewater into the local sea, by ships financed by the *Enichem* factory;[2] finally, the Italian Government's decision to redirect the Deep Sea Carrier (a ship with toxic cargo that needed to be dismantled, originally destined for Nigeria) to Manfredonia's plant.

Mobilization and civic struggles began in September 1988 and continued for two years. During that period, the real extent of the pollution - until then unacknowledged by the population - was revealed. People shared information about the plant's production methods and significant opposition against the factory arose. Thousands of individuals belonging to different social strata got involved in the demonstrations.

Women played a crucial role in the struggle. For two years, the *Earth's Vestals (Vestali della Terra)* fought in defense of the environment and public health. The Citizen Women's Movement (*Movimento Cittadino Donne*) was made up of women with different social and cultural backgrounds; many of them were teachers, but housewives and shopkeepers also took part. Women organized a series of events called *University in the square (Università in piazza)*, aimed at spreading environmental and democratic awareness among the locals.

The environmental movement that resulted from such struggles, the *Movimento Cittadino di Manfredonia,* would achieve some remarkable results. The first of them was stopping the arrival of the Deep Sea Carrier, named the *Ship of poisons (Nave dei veleni)* by locals. The construction of an industrial incinerator within the plant was stopped as well. The popular movement also led to the establishment of a Ministerial Commission in 1989, whose purpose was to enquire about pollution in Manfredonia. The opposition to the petrochemical firm, however, would generate deep conflict within the community and families, creating division between the movement's activists and workers worried about losing their jobs.

In addition to the environmental organization, Manfredonia had another crucial experience of working-class environmentalism. It was the case of one of the plant's workers, Nicola Lovecchio, whose illness had been caused by his job in the *Enichem* factory. Lovecchio inquired about the pollutants used in the plant and, thanks to the information he collected together with his oncologist, the plant's managers were put on trial in 1997. The trail revealed that many workers like Nicola were dying at the time due to the chemical products used inside the factory. The massive arsenic contamination thanks to the accident in 1976 and the continuous dissemination of arsenic and other pollutants during the production process came to light. Nevertheless, all the plant's managers were acquitted, since the origin of the arsenic present in the workers' blood – that is, whether it was due to the petrochemical pollution or to other factors – could not be proven. On the contrary, the Judge presiding over the case would state that such elevated arsenic levels could rise from an excess of shellfish consumption.[3]

Deep contamination and pollution, despite affecting both the population and the environment on such a considerable scale, continued even after the plant's closure in the early 1990s. Most of the petrochemical plant has been dismantled since then, but no real clean-up activity has taken place. Arsenic, hydrocarbons, industrial toxic waste and other heavy metals remain in the soil and in the groundwater to this day, with serious impacts on the environment

2 Enichem had been authorized to the release by a ministerial act of the Italian Government for eight years.

3 Tribunale ordinario di Foggia-Sezione distaccata di Manfredonia, Sentenza, 5/10/2007.

and on local health (*apud* Gianicolo, Vigotti *et al*., 2016). After the plant's closure, a second industrialization process was undertaken. Public funding financed new pollutant industries, which would also be dismantled after a few years. It was Manfredonia's "second colonization" (Di Luzio, 2003), and it left the region in worse conditions than before. This kind of industrialization process, together with the *continuous catastrophe* generated by the plant and the lack of an actual environmental clean-up, led to a silencing of the community's democratic requests and the negation of their right to have a say in Manfredonia's future.

The research project "Ambiente Salute Manfredonia"

The historical study under discussion is part of the participatory project in environmental epidemiology "Ambiente Salute Manfredonia". From 2015 to 2017, a multidisciplinary team of epidemiologists, physicists, one sociologist, and one historian worked on the research project together with local institutions and citizens. Previous epidemiological studies on the local population's health conditions had produced unclear results, seen as they had been carried out in a brief span after the accident - after all, the latency period for diseases caused by arsenic is of more than twenty years (*apud* De Marchi, 2018). In 2015, the Mayor decided that another epidemiological study should begin, but locals regarded the project with suspicion and skepticism. The community had little confidence in the city's institutions, which had not worked well enough in the past to adequately protect their health and natural environment. Moreover, in Manfredonia, epidemiological studies' scientific outputs tended to assume precedence in terms of economic and political power, even when their results were relatively uncertain (*apud* De Marchi, 2018).

Providing scientific answers, thus, would not be sufficient in Manfredonia's case. It was necessary to share them with the local population. Therefore, the "Ambiente Salute Manfredonia" research project[4] was planned as a participatory study, with the citizens' active involvement and a continuous dialogue between citizens and researchers (*apud* De Marchi, Biggeri *et al*., 2017). The community was engaged in discussing the entire research protocol, including epidemiological issues. Researchers, together with citizens (associated through the "Manfredonia Citizens' Committee") and local institutions, debated both the different scenarios the study could produce and their health policy implications in public meetings. Citizens were also systematically involved in the collection, interpretation, and analysis of data and results.

The relationship between local people and experts needed to be reframed, and consequently the scientific knowledge produced by these experts was continually questioned. The group of citizens engaged in the project produced results jointly with researchers in an "extended peer community" (*apud* Funtowicz and Ravetz, 1993; De Marchi, 2018). On the other hand, researchers explained to citizens that, in all fairness, their viewpoints were not neutral, and that different perspectives could emerge among the experts.

In this study, the Humanities worked alongside epidemiology and environmental physics. History supported the other disciplines by framing the epidemiological data within a temporal context, retrieving local knowledge, and contributing to the understanding of the region's socio-economic dynamics in all their complexity. The historical study produced a collective narrative of Manfredonia's history, shared through periodical discussions with the Citizens'

4 The project was financed by a contract signed in January 2015 between the National Research Council (CNR), the Manfredonia Municipality and the Local Health Unit (LHU).

Committee, as will be described in the following pages. The definition adopted to describe the environmental crisis suffered by this community was that of a *continuous catastrophe* (*apud* Malavasi, 2018).

Participatory historical research in Manfredonia

Historical studies have recently contributed to the understanding of Italy's industrial impact by focusing on its environmental, social, political, and cultural implications. These analyses have uncovered the economic and political stakeholders involved in industrial development (industry, governors, local institutions called to rule) and have also explored the consequences of industrialization on the daily lives of workers and citizens, registering their reactions to pollution. Scientific research projects planned in polluted territories are sometimes obliged to face settings marked by widespread mistrust in science. In these contexts, science is often viewed as being distant from the population's needs and, in the worst cases, as colluding with the industrial and political powers. If considered from a historical perspective, this view can be generalized and applied to a broader scenario, that is, of all or most historical processes concerning industrial development in the Western world. In fact, historical science has often produced a dominant narrative on industrial development that ignores the citizens' experience and emphasizes economic progress without taking its social and environmental costs into account (*apud* Barca, 2011b).

Such considerations bring up the question of how one should produce history about the environmental impacts of industrial settlements on communities and popular resistance movements. One proposal could be that of making history *with* the polluted communities and not only *about* them. The historical research in Manfredonia followed this framework, and thus sought to involve citizens and give credit to their knowledge and memories. At the same time, citizens' expertise has been contextualized within the socio-economic dynamics of the industrialization process devised by Italian capitalistic growth – which, many times, led to significant consequences for both the environment and human bodies.

Citizens' participation in the historical study was achieved through four steps:

1. The retrieval of local knowledge and of people's memories. Citizens involved in the study (Manfredonia Citizens' Committee) took part in the interviews and then used their contacts to find a wider network of people, also available and wanting to be interviewed.
2. The collecting and sharing of documents and pictures kept in their homes.
3. A collective definition of categories and keywords to offer a shared interpretation of that historical process.
4. Participative discussion regarding the study's outcomes in public debates open to the whole community.

Collecting interviews was the first step taken to scrutinize the citizens' experience and engage them. The method of Oral History was utilized. Its tradition of bottom-up history (*apud* Portelli, 2007), focused on the lower classes, and interactive history (*apud* Bonomo, 2013) - consisting in dialogues between historians and the people interviewed - provided theoretical frameworks for building a collective historical narrative. Stories of individuals' recollections bring to light unknown events and tell us about the unique way they were experienced, allowing us to understand their meaning and relevance as perceived by the locals. In many of the interviews I did in Manfredonia (mostly ones with women), for instance, a family dimension of the story came to light. In several cases, interviewees highlighted the deep impact that the series of industrial accidents had on their relatives and the high state of alarm in which they had to live for a time. Another interesting issue that arose was that of collective subjectivity: women, more than men, referred to the environmental movement using the plural pronoun

"we". Very often, they linked this collective dimension of their activism to some kind of dynamics inside their own family.

Giving credit to the citizens' knowledge of their own history has allowed us to discover previously undisclosed facts. When researchers came to Manfredonia for further epidemiological investigations, only the arsenic accident was known to them. They would subsequently uncover a long chain of other accidents suffered by the community that had not been divulged. Likewise, women's role in the history of their community was undervalued and not spoken about until now. Women's view on the region's development, with their different perspectives of the future, had also not been taken into account in the previous accounts of Manfredonia's history.

Besides enhancing the contents of each autobiographical story, discovering unknown episodes, and bestowing relevance on people's memories about their local history, the interviews also have the potential to highlight the manner that each tale assumed while being told. In Oral History, it is essential not only to hear what is being narrated, but *how* (*apud* Bonomo, 2013). The way an episode is remembered is in itself a historical source because it demonstrates the importance it assumes for the interviewee. The time of narration is equally important in understanding subjective meaning (*apud* Portelli, 2007). During each interview, more time would be devoted to describing something that the interviewee judged to be truly vital.

For example: Manfredonia's episode of ammonia release in 1978 had generated great panic among the population at the time. During the sessions, it was often narrated in great detail and with big displays of emotion. People described their fear, the chaotic mass exodus from the city, their feeling of being "like mice in a trap", as they said. Contrarily, the fire at the caprolactam's warehouse, in 1984 – not necessarily a less serious incident, but perceived to be so at the time – had mostly been removed from memory. The only person that described it in detail was a former fireman who had worked inside the plant to contain it. This was probably due to his perception of the severe menace the fire had posed to the city (in fact, at the time, three big chlorine tanks had risked exploding).

Besides the interviews, the citizens' participation was achieved through their engagement in collecting documents and pictures kept in their homes. Thanks to their help, it was possible to retrieve leaflets and other types of non-conventional literature, which are quite helpful to the historical re-enactment of the local environmental movement. The content of these documents was discussed with interviewees, especially when the written sources contradicted their memories and points of view about controversial topics.

Citizens played a crucial role in the definition of analytical categories during the participatory study. They gave a collective interpretation to the historical process. Keywords were shared during debates and in the diachronic reconstruction of events; the terms employed in this narrative, such as *to swallow the damage*, *continuous catastrophe*, *forbidden city*, *university in the square*, *agora*, *earth's vestals*, *liveable development*, *institutional deceit*, *removal* (cf. *infra*), came out during the interviews and in the debates with the Citizens' Committee.

Outcomes were often discussed during the meetings with the Citizens' Committee and in public meetings in the City Hall, with a broad citizen quorum (also supported by online streaming). A crucial tool in this assemblage was the creation of the project's website, seen as storing documents on the website and sharing videos of public debates allowed citizens to participate more actively.

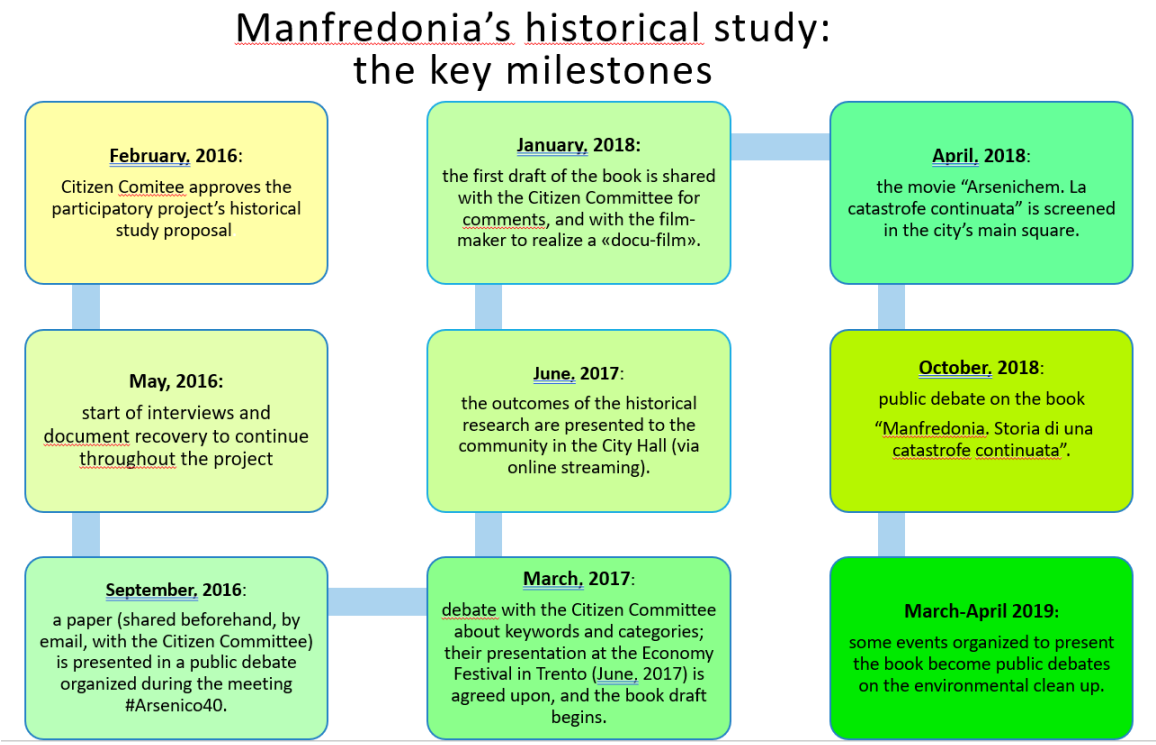

Figure 2 – Manfredonia´s historical study: the key milestones

Source: the authors' own elaboration.

All these activities allowed Manfredonians to produce their own version of their community's history. As I will argue in the following pages, the continuous catastrophe suffered by them had been removed from the mainstream narrative of Italian industrial development. Through this kind of "environmental justice storytelling" (Houston, 2013), citizens engaged in the project could find a way to communicate what it meant for them to live near a petrochemical plant and the impact they had suffered in their everyday lives for many years. They could also spread their own awareness of the pollution produced by the industry and its effects within the community, passing it on to new generations.

Furthermore, a participatory historical study needs to divulge its results by adopting multiple channels of communication. If shared in content and format, the output is considered a collective work. The collective reconstruction, and the project itself, were recounted in different ways: sometimes through articles (*apud* Vigotti and Mangia, 2015; Porcu, 2015; Biggeri, Vigotti et al., 2015; Biggeri and Porcu, 2015; Gianicolo, Mangia *et al.*, 2016; Malavasi, 2016), books (*apud* Malavasi, 2018), and in one occasion, even a documentary-film made by an Italian filmmaker. These contributions have acted as tools for organizing collective memory events. During the week of functions organized for the fortieth anniversary of the arsenic accident (in September 2016), for example, collective narrative building arose in the course of different debates about the community's history and its relationship with the petrochemical plant. A whole day was then dedicated to this, involving schools and a theatre performance over the women's movement. Another important episode was the screening of the documentary-film "Arsenichem. La catastrofe continuata", which took place in the City Hall Square.

Some of the public events organized during the last year to present the book written on this piece of research[5] eventually became occasions for public debate about the region's environmental clean-up, engaging people who were previously less involved in such issues. A few ex-workers also took part, and their presence was considered by environmental activists to be essential.

The retrieval of a community's narrative, by acknowledging the conflicts experienced in the past and not hiding a 'divided' memory that is still alive (*apud* Foot, 2009), has generated democratic discussions on the possibility of a social and economic recovery that is compatible with the region's environment and its people's wishes. The participatory project as a whole also produced important epidemiological results for bettering health conditions and the serious pollution levels in Manfredonia (*apud* Gianicolo, Vigotti *et al*., 2016). The work on collective memory and the *continuous catastrophe,* in turn, revealed how the damage suffered has remained unrecognized until now. It has opened - as has also happened in other communities (*apud* Centemeri, 2011a) - a democratic request for changes in management policies that concern the community's future. Finally, through public debate and the local committee's resistance, unsolved pollution-related issues were voiced by the local press and eventually reached the regional government, thus initiating a political democratic process that is paramount to discuss environmental decontamination in Manfredonia and take action.

Ecological and democratic crisis in Manfredonia

Manfredonia: an Italian case of environmental injustice

The participatory historical study herein described has revealed the unknown history of Manfredonia's environmental catastrophe and the important experience of the local environmental movement. In order to analyse the relationship between ecological and democratic crises in this case, we choose to refer to some of the concepts elaborated by Environmental Justice theory - notably, its social definition of environment, the issue of the lack of recognition of local identities, the matter of participatory injustice, and the relevance of narrative injustice.

Environmental Justice (EJ) has highlighted how, overall and over time, economic growth has determined an unequal distribution of both environmental goods - in other words, access to natural resources - and damage. In fact, social and environmental costs have repeatedly been charged to marginalized people. Unequal exposure to pollution is due to unequal power, class, ethnicity, and gender relations (*apud* Martinez-Alier, 2009; Martinez-Alier *et al*., 2016; Temper *et al*., 2018; Purdy, 2018).

Beginning in the U.S. during the 1980s (*apud* Martinez Alier 2002; Armiero 2013; Purdy 2018), the discussion on Environmental Justice has recently reached European countries, where it is perceived and analysed in terms of social categories rather than in racial and ethnic terms (*apud* Pasetto *et al*., 2019). In any case, in both its global, regional, and national dimensions, the Environmental Justice Movement (EJM) has evidenced how communities affected by industrial pollution are, not coincidentally, also the weakest ones in terms of economic, social, and cultural resources (*apud* Martinez-Alier, 2009; Scholsberg, 2013).

5 Malavasi, Giulia (2018), Manfredonia. Storia di una catastrofe continuata, Milano: Jaca Book.

The Environmental Justice Movement has broadened the concept of the *environment*, generally defined as the space of everyday life "where we live, work and play" (Scholsberg, 2013). Its social definition includes institutions, built settings, and the social allocation of resources (*apud* Purdy, 2018). It refers to a space that includes both human and non-human nature and where the barriers between individuals and communities are removed (*apud* Scholsberg, 2013).

Moreover, we can consider the notion of environment as embodying a space for human relationships, as a space where a community's memories are collected (*apud* Allegretti *et al*., 2013). Studies on environmental and social movements have also introduced the concept of *place*, defined as "the ensemble of relations and practices between the natural and the social words, at the levels of body, home, habitat and community" (Escobar *et al.*, 2002). The *place* is where environment, ethnicity, and culture converge.

This social notion of environment implies that one of the reasons for the unequal distribution of environmental risks and goods is the establishment's lack of recognition of both individuals and communities in their cultural and social identity. External actors, such as companies or the national government, often impose a use for a specific territory and its natural resources that is radically different from the traditional habits of the local community, in turn deprived of the possibility of playing a role in the decision making processes. As Martinez-Alier wrote,

> social mobilizations over resource extraction, environmental degradation, or waste disposal are not only about the distribution of environmental benefits and costs (expressed in monetary or non-monetary valuation languages); they are also about participation in decision making and recognition of group identities. (Martinez-Alier 2018)

The lack of recognition of local cultural identities caused by environmental injustice in Western industrialised countries is analogous to that of the non-Western world, in which communities' identities are particularly close-knit to collective rights and to the notion of *territory* - understood as "a collective of spaces, human groups (including both the living and their ancestors) rivers, forests, animals, and plants" (Santos *et al*., 2007: xx). Among non-Western populations, the exploitation of natural resources by outside forces tends to make their worldviews on their relationship to territory and land quite explicit. After all, the defence of local identity is the manner through which they demand that their collective rights and control over their land and natural resources be acknowledged. This follows an alternative perspective to the western capitalistic view of the relationship between humans and the environment (based on the idea of industrial growth and the right to property). Therefore, environmental impact over these groups assumes not only a socio-economic dimension, but also an epistemic one, given its denial of local viewpoints, values, and practices, especially with regards to the relationship between a given community and its home (*apud* Santos *et al*., 2007).

Societies suffering from environmental injustice in Western countries can also be considered through this perspective. A large industry's arrival or dangerous waste dumping in a certain region are perceived by the local population not only as something that dismantles the local traditional economic sectors but their relationship with their own territory as well. The erasure of local identity is sometimes seen as a process similar to that of colonization, a mechanism of exploitation of natural resources imposed by external actors like industrial companies and national governments.

Local identities' lack of validation leads us to the subject of political participation, part of the broad concept of justice assumed by the EJ. With the inclusion of racial and social factors into the 'environmental injustice' category, EJ proposes a pluralistic notion of justice (*apud* Scholsberg, 2013) that considers, on the one hand, the unfairness in the unequal distribution of

environmental damages and benefits among individuals or population groups belonging to different ethnicities and/or socioeconomic status; on the other, the mechanisms and processes through which this "distributive justice" (Purdy, 2018) is created and sustained, including the involved communities' recognition and participation (*apud* Scholsberg, 2004).

Communities suffering from environmental injustice have often been deprived of democratic participation. Their role in making crucial decisions about the location of industrial plants, on how to manage industrial productions, and more generally about the whole development of their land is systematically denied by large companies and national governments. This increases the impact on the people in question, already affected by both environmental contamination and the degradation of their territory's socio-cultural dimensions (*apud* Pasetto *et al*., 2019).

These dynamics have produced "ecological distribution conflicts" in the past and continue to do so in the present; they result in various social conflicts generated by environmental injustice (*apud* Martinez-Alier, 2018). In the face of this scenario, communities often reclaim their close relationship to their lived-in environment and want to be protagonists in potential political actions towards finding a remedy for the suffered damage (*apud* Centemeri, 2011a; Centemeri 2011b). Moreover, they often fight to be engaged in the politics of valorisation of the community's environmental and cultural heritage. In this perspective, the lived-in environment takes on a historical, cultural, and social connotation. "Participatory justice" arises as another crucial topic in the struggle for environmental justice (*apud* Scholsberg, 2013).

Studies on the processes determining environmental injustice scenarios underline a few recurrent aspects. Firstly, in the contaminated areas, the inhabitants were not properly recognized as stakeholders with the right to participate in the decision-making processes concerning the use of the land and its development. On the contrary; communities are generally poorly informed about the potential impacts of the pollutant productions. Furthermore, environmental injustice (related to decision-making processes) often leads to the choice of locating environmentally burdensome industries in disadvantaged areas (*apud* Pasetto *et al*., 2019). The relationship between communities that have suffered environmental injustice and the democratic matter of participatory justice is quite clear: "groups of people have been historically excluded or marginalized by the institutions—at all scales, from the local to the global—which are responsible for developing policies and taking decisions changing environmental conditions of the areas where they live" (Pasetto *et al*., 2019: 998).

This exclusion of local communities from the decisional processes holds consequences for peoples' health as well. As the eminent epidemiologist Michael Marmot has examined in his research about health inequalities' social determinants, community empowerment is always necessary to improve a people's physical and mental health. The population needs to have control over the fundamental choices on their material well-being conditions, about their life and about the decisional processes regarding to the social and political dimension of their community (*apud* Marmot, 2016).

Besides the enrichment of the notions of justice and environment and its emphasis on democratic participation, Environmental Justice also challenges the elitist framework of scientific expertise in favour of popular participation and grassroots movements (*apud* Purdy, 2018), notably in the field of popular epidemiology (*apud* Martinez-Alier, 2018; Brown, 1992). This approach is linked to the PNS's (Post Normal Science) redefinition of expertise, broadened to include the experience of an "extended peer community" (Funtowicz and Ravetz, 1993) - a principle at the basis of the "Ambiente Salute Manfredonia" project (*apud* De Marchi, 2018). Through this frame, the history of Manfredonia is seen as an Italian case of environmental injustice, which makes it possible to underline some key aspects of the local connections between environmental crisis and democracy.

One of the features revealed by this community' history is the social dimension of environmental matters determined by petrochemical production - above all, the occupational or employment blackmail suffered in a disadvantaged area. The Italian government planned the development of an area enduring extreme poverty and emigration through the installation of a heavily pollutant plant. The factory based its economic competition on the deep consumption of natural resources and on the process of externalizing such environmental costs to the community, instead of claiming responsibility for them. In Manfredonia as well as in other Italian areas, the "economic miracle" (*apud* Crainz, 1996) largely based its own growth on the exploitation of an extensive low-cost labour pool (*apud* Castronovo, 1975) and on public funding to guarantee big companies'[6] investment in Southern Italy. The petrochemical plant - the fourth largest in Italy - was included in the "industrial development poles plan" (*apud* Cerrito, 2010; De Benedetti, 2013; Ginsborg, 1989), but, as in many other similar Italian cases, it did not generate autonomous economic growth in the area. It was a so-called "cathedral in the desert", not allowing for any kind of local sustainable development but only exploiting the land and its inhabitants. It was abandoned when it no longer produced economic profit.

Clearly, we can define Manfredonia's industrialization as an Italian case of the "path of least resistance": a pollutant plant located near a community with small political power, weak social and economic conditions, thus potentially less resistant to the project's implementation (*apud* Armiero, 2013; Schelly and Stretesky, 2009). As in other industrialization cases, the local economy's transformation from agricultural (with an important fishing sector) to heavily industrial had serious impacts on the natural environment and altered citizens' perspective of their surroundings. The natural world, which at first offered livelihood and as such needed to be preserved, became detached from economic security. After all, financial stability was now linked to a safe and well remunerated job in the factory.

Collecting the memories of the plant's workers made it possible to understand their point of view. Many of them had left Manfredonia some years before the factory's inauguration to find a job in Northern Italy or abroad. With the opening of the *Enichem* plant, they were able to come back to Manfredonia – be it from Germany, or from "that hellhole that was Mirafiori's production line" (as declared by an ex-worker during the interview).[7] Meanwhile, both national and local politicians as well as ENI managers presented industrialization as the only policy with potential to solve the age-old poverty issues of Southern Italian regions. In fact, in a famous speech, the then ENI manager Enrico Mattei talked about "the hopes of petrochemical industry", emphasizing how it could guarantee full employment for the poorest regions (Mattei, 1960).

It cannot be denied that, thanks to the plant, Manfredonia did achieve its economic miracle. This is exemplified by the rise of a local working class, which was proud to have reached such a standard of living, previously unavailable to them - the achievement of a new status, «pride of workers-clothes drying in the sun» (Di Luzio, 2016). This sense of fulfillment, however, was based on a toxic trade, that is, work in exchange for (a silent and invisible) illness. As Stefania Barca has highlighted, the petrochemical plant "sublimated corporate and State promises of universal wellbeing and liberation from illness, hunger, scarcity and toil, while the pervasiveness and persistence of their disruptive effects over living systems was long hidden or denied in public discourse" (Barca, 2014b: 537). Only in the following years would the cost

6 Public funding guaranteed for the big companies', both private and public, like Enichem.

7 Mirafiori was the main FIAT plant in Turin.

the community had had to pay be revealed. The workers were the first ones to physically suffer from the chemical pollution.

Since the start of production, the combination of occupational blackmail, daily pollution, and externalisation of industrial costs (charged to the surrounding natural and human environment) has determined a process of "slow violence" for the community (*apud* Nixon, 2011). This violence was responsible for the catastrophe, together with the harsh violence of the arsenic release in 1976 or the other accidents. The role of occupational blackmail in Manfredonia, in turn, was paramount in the creation of environmental injustice, given that the labour/environment conflict arose as a "cultural and political construct" (*apud* Barca, 2014a: 3). In other words, even if the plant workers physically suffered from the effects of such polluting production, they did not seem "to have the right to be environmentalists" (Barca, 2014a: 21). In fact, when the environmental struggle against the plant began, the blackmail caused recurring conflicts among activists and workers - friction deliberately imposed to protect the company's interests. As an example, in 1989, when the judicial authority prohibited the release of petrochemical wastewater into the sea thanks to environmental action, the industry - which had never planned a sustainable treatment of such waste products - interrupted caprolactam production and threatened to fire more than 500 workers.

The political and social effects of this blackmail via employment were thus very deep. Blackmail denied employers the right to work without having to die; it denied many citizens - especially the plant's workers - the right to fight for a clean environment to live in; finally, it caused divisive disputes within the community, and reduced the political agenda of workers' organizations, unions and local communist party (even if not without internal disagreements), for the single purpose of safeguarding existing jobs.

The blackmail also had a pervasive cultural impact which has remained to this day, by producing a double narrative about the relationship between the plant and the community. After all, from their perspective, many ex-workers consider great economic development to be the crucial result of industrialization, not dramatic pollution as argued by environmentalists. This partisan perspective was also based on the recruitment policies adopted when the petrochemical plant started its production. Local institutions and the region's Catholic Party (Democrazia Cristiana) - strengthened by its close link with the national deputies in the Italian Government - managed the plant's employment policy by means of political cronyism: a chapel in the centre of the city, for example, was considered by citizens to be a job centre. This kind of dynamic determined latent antagonism within the population and to this day is considered by some citizens as the primary cause for the conflict that would explode between workers and environmentalists. Inevitably, the ex-workers' point of view was linked to job opportunities, to the great changes the industry had brought to their way of life, and thus to a disavowal of the plant's deep pollutant impact.

The workers' perspective should, however, be contextualized. In Manfredonia, industrial workers did not experience the period of struggle that had occurred during the Seventies in other Italian industries (mostly in Northern regions), where a widespread workers' movement, in defense of health and the environment, had been developed inside the factories and eventually started to involve communities at large. In Manfredonia, the workers were not aware of the petrochemical production's considerable risks; they received no information on the production's hazards, and there were no controls whatsoever regarding safety or the correct use of personal protective equipment. In the weeks after the arsenic accident, in fact, hundreds of workers were employed to clean the arsenic dust without any kind of protection, as stated by the public prosecutor during the trial that followed (thanks to the inquiry of Nicola

Lovecchio[8]). Consequently, whereas in other chemical plants like the *Enichem* in Ravenna, a strike in 1968 had wholly stopped production in the fight against worsening environmental conditions, the Manfredonian scene saw only a couple of sporadic strikes regarding safety matters without amounting significant participation. Unlike other factories – such as the one in Castellanza (near Milan), where the workers' struggles led to a renewal of production processes – *Enichem's* managers kept workers obsolete, unaware and unsafe. It was an administrative style that would cause severe accidents, such as the fire in the caprolactam warehouse.

Notwithstanding the low level of awareness among these workers with regards to the environment and safety inside the plant, a few years after the end of the popular environmental struggles a remarkable experience of "working-class environmentalism" (*apud* Barca, 2012) occurred in Manfredonia. Nicola Lovecchio (head of the filling-unit for fertilizer production), with the support of his oncologist doctor, Maurizio Portaluri, led a tenacious enquiry to find out more about the chemical products the workers had to deal with and their association to the workers' health conditions. Thanks to his enquiry, the public prosecutor ordered further inspections and put the plant's managers on trial. For the first time, the situation of workers dying due to chemical contamination - "*Enichem*'s ghosts" (*apud* Di Luzio, 2003) - became visible. The acquittal, however, did not acknowledge the damage on their health; it was, as said by Lovecchio's wife, a case of "suspended justice". Nonetheless, the trial was determinant for many ex-workers to become aware of the injustice they had suffered, strongly reaffirm the need for health protection in the work-place, and outspokenly defend the right of every worker and citizen to full dignity.

In other instances, Manfredonia's story reveals the underlying connection between the local and global dimensions of environmental issues. An example of this was the struggle against the *Ship of poisons* Deep Sea Carrier. The ship's toxic charge, destined for *Enichem* to be dismantled, was originally destined for Nigeria, the same as other ships transporting toxic waste produced by several European chemical companies. When Nigeria and other African countries rejected it, however, the ship and its contents made the headlines in many Italian newspapers. Journalists said that public opinion should be aware of the serious damage European companies were causing to the African people. The Deep Sea Carrier case revealed the global dimension of weaker communities' deliberate economic exploitation; it was a concrete example of what Ron Nixon would later on write about the World Bank's plan to export rich nations' garbage and toxic waste to Africa (*apud* Nixon, 2011).

The parallel with the exploitation of Italy's social and economic inequalities for the benefit of toxic pollution distribution is clear. The industrialisation process pursued in Manfredonia, in fact, was not an isolated case in the country. In the Seventies, many industrial districts were established in the Southern portion of the country, resulting in similarly devastating politics and depicting a sort of self-colonization process within Italy itself (*apud* Poggio and Ruzzenenti, 2012). This analysis was confirmed by Manfredonia's citizens, who often said in the interviews carried out during the study: "we have been colonized, we have had to *swallow this damage"*.

After the plant's closure, the *continuous catastrophe* and its violence did not stop. Without a real clean-up of the area where the petrochemical plant had been active, the community suffered, as it suffers to this day, the violence of such devastating production. Workers and locals must deal with the pollutants' effects on their bodies - as proved by an increasing number of deaths (*apud* Gianicolo, Vigotti *et al*., 2016) - besides having their natural environment

8 Procura della Repubblica-Tribunale di Foggia, Proc. N. 7031/2000 R.G.N.R., Memoria a sostegno della requisitoria.

ruined. In 2016, data from the Ministry of the Environment stated that 18% of the land was cleaned up as regards the soil, and 0% as regards groundwater.[9] Such lack of environmental remediation has determined the reality of an entire community, "frozen" in a polluted area and missing opportunities for environmental and social regeneration.

The continuous catastrophe: democratic crisis and democratic participation

Communities struggling against industrial pollution often experience widespread mistrust in democratic institutions. Called by these communities to provide solutions to the environmental crisis, representative institutions repeatedly fail in adequately protecting people's health and the environment, in building new paradigms of growth compatible with healthy living, and in opening up spaces for political participation. In Manfredonia, the connection between the ecological crisis and democracy is complex. On the one hand, mistrust in democratic institutions was very deep in the past, and it still is; on the other, during the years of struggle against the petrochemical plant, part of the community experienced a real, renewed form of democratic citizenship.

Regarding the former, we can assert that, besides the path of least resistance, the community suffered many episodes of *institutional deceit* – the exact words employed by citizens during interviews. Presently, we can only provide some examples to clarify this statement. The first instance of institutional deceit was that of the decision over the plant's location. The land of Manfredonia was originally part of an area destined for touristic development (Comprensorio turistico del Gargano) by the National Government in 1966. Several legal limitations had thus been enforced in order to protect that ecosystem and its historical and cultural assets. However, after the discovery of methane in the subsoil, just one year after the government's ruling (1967), the planning for the area was completely remade. It became destined to be an industrial district, hindering any kind of environmentally friendly-type development. Moreover, the plant was installed in the outskirts of Manfredonia (less than two kilometres from the city centre) but formally within the administrative border of another small town 18 kilometres away, Monte Sant'Angelo. The new plan for Manfredonia had serious consequences, since the Italian law on industrial production (*Testo Unico sulle Leggi Sanitarie*) ruled that the power to intervene in the protection of public health was a prerogative of the Mayor of the city where the industry was located. Manfredonia's local government consequently held no power over the factory, while Monte Sant'Angelo showed no real interest in intervening. This had long-lasting effects: even in the days following the arsenic accident in 1976, Manfredonia's Mayor Michele Magno would struggle to enter the plant in order to assess the damage caused by the explosion.

If we consider the regional powers involved in this specific case – that is, the regional government of Apulia and some of the regional agencies responsible for environmental and public health protection – their management was marked by the total absence of control over the situation. They did not act adequately to verify the industrial activity and to ensure environmental safety. As the Ministerial commission assessed in 1989,[10] they did not inspect the industrial emissions present in the air or in the sea. They also complied with some of

9 Ministero dell'Ambiente e della Tutela del Territorio del Mare-Direzione generale per la Salvaguardia del Territorio e delle Acque, S.I.N. Siti di Interesse Nazionale. Stato delle procedure per la bonifica, giugno 2016.

10 Ministero dell'Ambiente – Servizio prevenzione degli inquinamenti e risanamento ambientale, Relazione della Commissione tecnica per la verifica del rischio, della sicurezza e della compatibilità ambientale e sanitaria dello stabilimento Enichem di Manfredonia con le città di Manfredonia e di Monte S. Angelo e con il comprensorio territoriale interessato, Roma, 24 luglio 1989.

Enichem's requests, as in the case of the authorization granted for the industrial incinerator. Furthermore, during that same period, a huge argument between the judicial authority (Pretura di Otranto) and the National Government arose over the Ministerial permission to release industrial waste into the sea. The National Government eventually granted *Enichem* the rights to discard, causing a serious threat to the environment and marine fauna.

Moreover, during the trial started in 1997, thanks to the enquiry of Nicola Lovecchio, the institutions which had not acted to ensure public health betrayed citizens and workers yet again. People felt hurt by the trial's outcome, which did not hold the managers responsible for the damage suffered by the *Enichem* workers. At the same time, local institutions withdrew from the trial in exchange for the compensations the industry offered. Many locals felt deceived by their representatives and most developed a resigned view of democratic participation.

Besides *institutional deceit*, information also played a crucial role in terms of dynamics between ecological matters and democratic participation in Manfredonia. One of the dramatic aspects of the big arsenic release incident was how the plant's director had actually denied the contamination, initially only informing citizens about water vapor releases. It was only the factory committee's complaint to the Mayor that would later disclose the pollution's real dramatic extent. In summary, the lack of information offered to the community had been intentionally pursued by *Enichem*'s management since the start of production in the early 1970s.

It is essential to note that, during that same period, the people of Manfredonia had risen up against a naphta-powered electrical plant project, planned by the ENEL (Electricity State Company). Contrarily, very few voices opposed the petrochemical firm's installation, despite the fact that the City Council expressly and openly criticized its location near the city. The main reasons for these contrasting approaches were, firstly, the higher rate of job opportunities offered by the petrochemical plant (a strategy which we have defined, in this paper, as occupational blackmail), and secondly, that whereas news of the electrical plant's environmental impact was widespread, there was no awareness among citizens of the serious risk posed by petrochemical production. In fact, in their accounts of this portion of history, citizens described the *Enichem* plant as *a forbidden city*, a place on which they had no information about.

As previously stated, the silence around the petrochemical plant's effects on public health affected the general population as well as plant workers. They physically suffered from the contamination of chemical pollutants, and in many cases – as with Nicola Lovecchio – the plant's management and medical personnel said nothing about the inflicted harm (*apud* Di Luzio, 2003; Barca, 2011a; Barca, 2012). The lack of information suffered by Manfredonia's population was condemned by the European Court of Human Rights as a result of the judicial action started by the Citizen Women's Movement's complaint.[11] Not by chance, the spread of information about petrochemical production would be one of the environmental struggle's main tasks.

This consideration leads to the second part of the present analysis, which focuses on the connection between the ecological crisis and democratic participation in Manfredonia. In addition to the crisis of representative institutions, this community also experienced an important period of democratic participation when the great popular movement *Movimento Cittadino di Manfredonia* rose up in defense of the local environment and people's health. As

11 In 1998, the Italian State was condemned for the violation of Article 8 of the European Convention on Human Rights, concerning the right to respect private and family life. European Court of Human Rights, Case of Guerra and Others v. Italy (116/1996/735/932), Judgment, Strasbourg 19.02.1998.

mentioned earlier, the triggering event was the *Ship of poisons* coming to *Enichem*. In September 1988, Manfredonia's population reacted against the Italian Government's decision regarding the ship, protesting the serious threat it posed for the community (naturally already affected by several petrochemical-related accidents). For four days, the whole city – women and men, fishermen, teachers, doctors, the entire middle-class population, as well as plant workers – protested in the streets, broke into the City Hall, and paralyzed the city.

After those early insurrectional days, the struggle became more political. For the following two years, citizens met in Manfredonia's main square every evening - the tents in Giovanni XXIII Square are considered a local symbol of democratic participation even today. The petrochemical production processes were examined in detail to understand how hazardous they were for people's health and the environment. The movement then produced leaflets, press releases, posters, and dossiers to spread information among citizens. These activities determined an alteration in the movement's style of operation. It had begun by opposing the *Ship of poisons* and would subsequently start paying attention to the petrochemical plant's hazards. In the initial period, plant workers and their unions took part in the popular movement. When it started demanding the plant's closure, however, occupational blackmail spoke louder, a dissention that led to deep conflict between the workers and environmental activists.

During the two years of struggle, the movement organized many events in the city's streets. Besides occupying the City Hall Council to obtain the Mayor's support, it assembled some big demonstrations; one of the largest ones involved more than 40.000 citizens walking to the factory gates (a remarkable turnout, seen as Manfredonia had only about 60.000 inhabitants at the time). People's participation, the creation of shared knowledge, and the citizens' pressure on local institutions to have a voice in planning their territory's future were the basis for the population's reclaim of their democratic rights. The environmental movement asserted the community's prerogative to re-establish the relationship with its land in renewed terms, seen as the petrochemical plant had changed that interaction completely, by imposing a territory and natural resource use that was radically different from the community's traditional habits, also depriving them from the possibility to participate in decision-making processes.

The term employed by citizens to describe this reconstructed place of participation was *agora*. During the interviews, they highlighted the transversal participation of different social groups in their daily activities and in the large rallies - fishermen, artisans, teachers, local traders, environmentalist associations like Legambiente and WWF, professional associations and different social organizations (such as Acli, linked to the Catholic church, or Anffas, which worked with disabled people). Civil society had played an important role in Italian society, and it does so until this day (*apud* Ginsborg, 2007). Local parties were also involved in the Citizens' committee, not without internal contradictions.

The women's movement played a crucial role in the struggle. Connecting women with different social and cultural backgrounds, the Citizen Women's Movement was a real innovative social actor, able to draw attention to the great risk of living near the plant. Given their tireless activity, they were named *Vestali della Terra* (Earth's Vestals). These women demanded the acknowledgement of the community's identity and history, struggling against a kind of production that had destroyed local cultivations (hundreds of secular olive trees had been cut to build the plant, for example) and polluted the soil, the air and the sea. One of them wrote a little tale at the time that would become very popular among the activists: in it, the *Enichem* plant was described as a giant squid looming over the city against which the founder of the city, King Manfredi (the symbol of the population mobilized in the struggle), had drawn his sword.

Studies focusing on the role of women in environmental movements have underlined the peculiar approach they assume in terms of the link between the natural and the social dimension

of existence. Their "politics of place" very often consider the physical place as a "continuum between body, home, community and land" (Escobar *et al.* 2002). In this pluralistic view of political action, the environment is understood as the result of natural, economic, political, and social relations, all of them intrinsically connected to the issues of justice and quality of life. Therefore, women's environmental movements have often considered economic profit and productivity as secondary to daily life, peace, and ecological sustainability (*apud* Harcourt and Escobar, 2002). In their "political action of place", women, "as members of the so-called "third actor" in the modern *polis* – civil society – have criticized the traditional economic development model on the grounds that it ignores the environment and people's needs" (Harcourt and Escobar, 2002: 10).

In the case of Manfredonia, this mass female involvement in the environmental struggle was surprising. Quite unexpectedly for the Southern Italian society of the 1980s, women achieved a double liberation. The first was the conquered freedom of the women themselves, who changed their traditional role in their respective families by leaving their houses and meeting every evening in the main square to study petrochemical production and disseminate information among citizens. In their narrated memories, this social activism was not without conflict within their families, but was nevertheless remembered as a period of great liberation (what they had made happen was, in their own words, a *University in the square)*. Many of the interviewed women, for example, remember Graziella, a tireless activist and fighter; once, in a public meeting with a national deputy talking about the industrial plant, she had walked right in the centre of the debate and shouted: "Be very careful what you say: we attended our University in the square!".

At the same time, women promoted their territory's liberation from a productivity-based development program exploiting people and the environment. The women of Manfredonia condemned the national silence surrounding the terrifying living conditions of the locals and, as a result, had to deal with the national media describing their protests as "mass hysteria" (cf. *infra*). From a holistic point of view, they brought to light the petrochemical plant's incompatibility in economic, environmental, and psychological terms with the web of relations that made up that community. The Citizen Women's Movement proposed a gender analysis of economic growth that highlighted the relationship between social groups and the natural world through the key of power and domination (*apud* Armiero and Barca, 2004). They overthrew this framework by focusing on the idea of *care*, extended from the family to the whole community, as well as on the notion of *liveable development (sviluppo vivibile)* founded on the defense of life above any economic interests.

Furthermore, Manfredonian women pointed out how what they were proposing was radically different from the idea of sustainable development - a notion that implies some kind of compromise with economic requirements. In their eyes, life, not economic profits, should be the *root* of development. Within their reasoned view, we can find the idea of "social reproduction", a concept of procreation that is extended beyond the individual to brace the whole community and the natural world (*apud* Schlosberg, 2013). Their struggle against the plant experienced some important moments, such as a great demonstration with thousands of women in 1988. During their strong-willed fight, they gave speeches in the Italian Parliament and in the European Parliament in Strasbourg and won the judicial action taken to the European Court of Human Rights[12]. The revolutionary role of these women, reinforced by the will to tell

12 European Court of Human Rights, Case of Guerra and Others v. Italy (116/1996/735/932), Judgment, Strasbourg 19.02.1998.

their own story, guaranteed a context in which a participatory research like the one undertaken by "Ambiente Salute Manfredonia" was possible.

Manfredonia and narrative injustice

According to recent studies, the history of industrial development in the West has been led by a progressive mainstream narrative about the relationship between energy patterns and Modern Economic Growth - which emphasizes the increase in energy consumption, mineral technology and private property, but either silences environmental and social costs and global environmental inequalities (*apud* Barca, 2011b) or reduces them to inevitable costs for the whole of society. In the early 2000s, a new narrative of the history of human development introduced the notion of Anthropocene to describe the new geological epoch of the Earth's history that we now live in. The Anthropocene is the 'Age of Man': the human species, *anthropos*, represents a force so powerful that it determined the end of the Holocene, a 12.000-year period of relative climatic stability on Earth. We are a force so mighty as to change the natural equilibrium of the ecosystem, as happened with worldwide economic growth in the last seventy years (the Great Acceleration of the fossil fuels global system) (*apud* Crutzen, Stoermer, 2000).

Nevertheless, some analysts argue that this narrative does not allow for the contextualization and historicization of *whom* the *anthropos* really represents; it does not pay attention to

> the different subjectivities produced through social and environmental histories, that is, distinguishing between the human groups that have benefited from exploiting earth's resources and other human beings for profit, and the human groups that have borne the brunt of ecological and social despoliation. (Di Chiro, 2018: 528)

This narrative, thus, renders "invisible the underlying systems driving earthly destruction and exploitation that certain humans created, and that other humans powerfully resisted" (Di Chiro, 2018: 528). Similarly, Environmental Justice argues that the mainstream historical narrative on modern technological development systematically ignores the ethnic, class, and gender oppression determined by that economic model. EJ has emphasized this mindset especially in reference to the exploitation of the human labour of African peoples through slavery and the dispossession of indigenous peoples through colonialism; however, he has also evinced comparable dynamics with regards to marginalized communities that have to suffer the negative externalities of the industrial fossil-fuel-based economy (*apud* Di Chiro, 2018).

Concurrently, EJ-type analyses have enlarged the notion of space to the sphere of narrative: stories produced by polluted communities are "'spaces' in which environmental justice struggles play out and become public knowledge […]. The imaginative spaces of environmental justice are where the historically and spatially uneven politics of pollution intersect with personal and geographical imaginations" (Houston, 2013: 420). For these communities, the possibility of telling their own history is also crucial to highlight matters generally not considered by the official narrative. Environmental degradation, contamination, and toxicity often are associated with invisibility and marginalization. These groups suffer not only from environmental impacts and harmful consequences on their health, but are also often rendered invisible in public imagination, being defined as "shadow places" (*apud* Houston, 2013). The effects of this invisibility also impact these communities' future:

> the associations of environmentally degraded places with shadows, invisibility and an absence of public responsibility create conditions for further environmental injury. […] Their status as already degraded [zones] makes them desirable sites for continued hazardous land use. (Houston, 2013: 420)

As a result, storytelling can offer an alternative narrative of the history of a polluted community, producing practices of resistance and redevelopment of the local territory. Some studies in Environmental History have offered an alternative narrative to the dominant one on industrial development. This alternative history underlines the connections between models of production, human beings - both in their social dimension and as physical, living bodies - and the biosphere, telling "a counterstory of the age of fossil fuels, which incorporates the point of view of places, bodies, labour and environmental justice" (Barca, 2011b: 1313). Through this perspective, the real costs to humans, nature, culture, and places are included within the narrative of European industrial development. Likewise, the permanence of environmental damage - like the kind produced by petrochemical production - becomes a critical issue in the historical enquiry regarding industrial development, which consequently has to begin taking into account the "environmental violence" (*apud* Barca, 2014b) perpetrated by this kind of production.

The inclusion of environmental violence within the analysis of industrial development can alter its perception and thus reveal its connection to a "narrative violence" (*apud* Barca, 2014b). This other form of violence suffered by polluted communities refers to the politics of silencing information about the effects of production on health and the environment and to removing communities' histories of environmental violence. The communities affected by environmental injustice very often also suffer from "narrative injustice" (*apud* Barca, 2014b). As we have said, the experience of citizens is not taken into consideration by the mainstream narrative or version. Their story is denied, or narrated by others, without giving the citizens a voice or considering their point of view. In many other cases, their complaints about the unsustainability of this toxic development is reduced to the economic growth's collateral damage.

On the contrary, a counter narrative can develop from the perspective of the people and communities suffering environmental exploitation - in other words, by adopting practices of storytelling among them. As analyzed in other contexts of environmental crisis, storytelling practices can be "resilient, resistant, reciprocal, regenerative" for a group (*apud* Di Chiro, 2018). Therefore, alongside the issues suggested by environmental justice, the history of industrialization in Manfredonia should also refer to the concept of narrative justice, which underlines the necessity to voice local memories in order to produce a collective narrative (*apud* Centemeri, 2011a).

In the case of Manfredonia, there was not only a complete lack of information and a silencing of the disruptive effects caused by the petrochemical production, but also an actually falsified narrative that was perpetrated by the media. The mainstream narrative of industrial growth was largely accepted, and the local voices that were arising at the time against petrochemical plant were harshly criticized. An article written by one of the time's most important Italian reporters, Giorgio Bocca, arouses indignation among citizens even today. In his article about the citizens' struggle against the *Ship of poisons* and the plant, Bocca defined the environmental movement as a case of mass hysteria, seen as there was no evidence, he argued, on the risks involved in petrochemical production. Furthermore, this Southern city had simply been unable to overcome its cultural backwardness towards industrial progress, and the citizens' movement, in which a large number of women took part, was repeatedly described as irrational and unreasonable (*apud* Bocca, 1988). The article, published in one of the most important Italian newspapers, *La Repubblica*, distorted the movement's perspective, while framing the public energy company ENI in a wholly positive light (*apud* Bocca, 1988). Not by

chance, Manfredonian women reacted to this by organizing a huge demonstration, in which they wore white tissues over their mouths as a symbol of their "denied word".[13]

During the following years, Manfredonia also suffered from another type of narrative injustice that can be defined as a *historical removal*. Its history, so heavily affected by the effects of the *continuous catastrophe* and the arsenic accident, is not well-known in Italy like other similar disasters (e.g. Seveso). The *European directive on the major-accident hazards of certain industrial activities* is widely known as the "Seveso directive", without any mention to Manfredonia, even if it was enacted six years after the Seveso and the Manfredonia accidents, that had occurred in 1976, three months apart from each other.

This represents a national *historical removal*, which involves both institutions and the media. There were three fundamental reasons for this: firstly, the difference between a factory located in a Northern region, near Milan, as was the *Icmesa* plant in Seveso, and the one located in a Southern, peripheric area. Secondly, *Icmesa* was a multinational company, while in Manfredonia, *Enichem* was a public company, owned by ENI, in turn linked to the national government and the Ministry of *Partecipazioni Statali*. The third reason for the difference in coverage was the incidents' immediate effects on public health: the dioxin explosion in Seveso produced the rapid and dramatic result of chloracne, while the arsenic explosion in Manfredonia did not cause such a visible or immediate massive consequence on public well-being. As such, the news of all other accidents in Manfredonia never reached a wide public.

Besides the national *removal*, Manfredonia's catastrophe also generated one within the local community, in the form of many people refraining from speaking about *Enichem*. One reason for this is the aforementioned friction present among the citizens, which had arisen in the past in relation to occupational blackmail. Secondly, the *removal* is due to the intolerable amount of suffering and health problems that citizens often suspect could be related to the petrochemical production. Telling its own story and organizing events to discuss these past and present events, however, could be a way for the community to voice their different opinions, regain democratic spaces, re-appropriate the environment as a place for collecting local memories (*apud* Centemeri, 2011a), and bridge the gap in the national mainstream narrative.

Conclusion

As Donna Houston has argued, "Environmental Justice storytelling is a practice that can give insight into what it means to live with and transform environmental crisis" (Houston, 2013, 433). A similar practice of storytelling was conducted with citizens within the participatory research project "Ambiente Salute Manfredonia". This study made it possible to value local knowledge and highlight what it meant for Manfredonian people to live near a petrochemical plant as well as to suffer what they called a *continuous catastrophe*. The citizens engaged in this participatory research found their own words to describe their history and subsequently shared them with the whole community, overcoming the historical removal of the catastrophe Manfredonia has suffered in terms of environment and community health.

In this story of environmental injustice, the social impact of this kind of economic colonization has been revealed - notably the path of least resistance that determined the localization of such a pollutant production and the occupational blackmail imposed to the community, which generated a deep conflict between workers and environmentalists. Telling this story after more than twenty years and enhancing the democratic experience of both the

13 Interviewees own description.

environmental movement and Nicola Lovecchio's working-class environmentalism made it possible to open new spaces of dialogue among the citizens.

In Manfredonia's history, the close link between ecological crisis and democratic crisis has been revealed as a complex set of dynamics. On one hand, the environmental degradation determined mistrust in democratic institutions, and the local environmental injustice appeared to be closely linked to the issue of participatory injustice, which prevented the community from playing a determinant role in the decisional processes about the use of its land and resources. On the other hand, during the years of the struggle against the petrochemical plant, the local environmental movement experienced a real, renewed form of democratic participation, in which women played a crucial role.

Telling the story of Manfredonia also made it possible to highlight local requests for environmental redevelopment. Through public debate and the local committee's resistance, its unsolved pollution-related issues appeared in the local press and reached the regional government, initiating a political and democratic process. In April 2019, the general managers of the regional agencies for Environment and Health came to the city to meet its citizens and discuss how to start a democratic process for the environmental clean-up. This process is not without its difficulties and setbacks, and the local committee constantly remains vigilant, trying to maintain pressure on the different institutions involved. In the meantime, the committee also seeks to build connections with other local environmental movements (in particular, the ones active in Taranto), and has recently opened a "Citizens' house for the environment and health".

The local committee's work has given rise to the recognition of the community's efforts to obtain the rights in order to decide about its own future and its land. In other words, Manfredonians are working to build an active community that is able to spread consciousness about its prerogative to make decisions involving the social and political dimensions of everyday life. As a result, this research project has become a *history in action*: people's memories about their fight against industrial pollution in Manfredonia has led to acts of resistance, beginning the process towards mitigation and sharing this local experience with other groups.

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