



## **DisComPoSE - Disasters, Communication and Politics in Southwestern Europe**

Report of the DisComPoSE seminar *L'acqua: risorsa e minaccia. La gestione delle risorse idriche e delle inondazioni in Europa dal Medioevo all'Età contemporanea (Water: resource and threat. The management of water resources and floods in Europe from the Middle Ages to the Contemporary Age)*

held on 10<sup>th</sup> January 2020  
at Scuola Superiore Meridionale, Largo San Marcellino 10, Naples

Organized by Elisabetta Bini, Diego Carnevale and Domenico Cecere (University of Naples Federico II)

In collaboration with the project *DECIVE- DEaling with the Collective Interest in the Early modern Europe – A comparative analysis of urban water supplies administration in Southern Italy and France in 17<sup>th</sup>-18<sup>th</sup> centuries* (STAR 2017 - co-funded by Compagnia di San Paolo and University Federico II)

### Chairs:

Daniela Luigia Gaglioti (University of Naples Federico II)  
Giovanni Muto (University of Naples Federico II)

### Speakers:

Michele Campopiano (University of York)  
Giacomo Bonan (Goethe Universität Frankfurt)  
Gaia Bruno (University of Naples Federico II)  
Gerrit Jasper Schenk (Technische Universität Darmstadt)  
David Gentilcore (University of Florence Ca' Foscari)  
Lavinia Maddaluno (Warburg Institute/I Tatti)  
Giacomo Parrinello (SciencesPo Paris)  
Gennaro Varriale (University of Naples Federico II)

After the welcome and introduction by Diego Carnevale, Elisabetta Bini, and Domenico Cecere, Professor Giovanni Muto opened the first session talking about the historiographical tradition on the culture of risk. He also highlighted studies on related topics like the water supply system and the use of urban mills (a resource that does not have any production



costs, but only transport costs, and is strictly connected with the history of the city). Literature on this theme was produced around the nineties, and culminated in the 2008 congress *La civiltà delle acque tra Medioevo e Rinascimento* (published by Olschki). Economic historians have addressed the problem, especially in reference to the medieval period.

The first presentation was by Gerrit Jasper Schenk, and it was focused on floods in the Swiss area during the 16th century. An example is the St. Mary Magdalene's flood which occurred on 22<sup>nd</sup> July 1342, around the feast day of St. Mary Magdalene, followed by other floods in the sixteenth century. Schenk wonders how climate change affected these catastrophic events in Switzerland, especially during the period 1538-1584. He concluded with several issues related to popular narratives generated by the floods, with some examples of *topoi* that these narratives have provoked, like the one of the ark of the flood that appears in different flood representations, with the introduction of children in cradles that could be read as a sign of hope.

Michele Campopiano dealt with the Po Valley and the Rhine Valley in the Middle Ages and early Modern Age. He presented an analysis of the management of water resources that allowed us to understand the central importance that they had for shopkeepers and merchants of the city. He proposed a comparison with four case studies: Reggio Emilia and Turin compared with Cologne and Strasbourg. In the first case, several *statuti* reveal that the Municipality entrusted the maintenance of the canals to the local communities and in the 16<sup>th</sup> century a specific commission was set up. Reggio was a city controlled by the Este family, as well as Turin, where the Achaia family controlled the management of the mills and dams, entrusting them to private individuals.

After the coffee break, Lavinia Maddaluno gave her talk on Early Modern Marseille. The east area (where the aqueduct is located) developed from 1666, and later, in 1669, the city was equipped with a port. In this period the city also expanded demographically (75 thousand inhabitants are documented in 1694). The management of the water depended on the Municipality of Marseille, which regulated the public use of water supply, cleaning and maintenance, and the distribution of water resources in the community, as evidenced by the handwritten and printed resolutions that are kept in the municipal archive of Marseille, together with an interesting report on the state of the fountains by Pierre Chaulier dated 1694. The report also lists the names of citizens who used the fountains to supply water. In conclusion, the study of the management of the water resources allowed us to realize the central importance that they had for citizens at that time.

Gaia Bruno followed talking about the water management in Palermo between the seventeenth and eighteenth centuries. The city was located on an aquifer, and it was part of the *Conca d'oro*, but there were also two torrential rivers (Gafarro and Kemonia) that ran through the city, buried during the urban reform to avoid flooding. An ancient and complex hydraulic system called *castelletti* of Arab origin distributed the water from the aquifers through terracotta pipes and it was conserved in jars which were distributed to citizens according to a precise regulation. The owners were different, since in addition to the Municipality there was private property, such as for the Lucchesi Palli family. The municipal archive of Palermo, where copious documentation is kept, unfortunately in a very problematic state of conservation, still conserves a group of 4 paintings commissioned by the Municipality to show citizens how water was distributed. The legislative discipline of the modern age dates back to the 16th century, in particular to the *prammatica* of the viceroy Marco Antonio Colonna dated 1582. The water supply could be entrusted to private



providers through different schemes, such as cession, franchising, temporary licences, almsgiving or by *gabella*. The water supply was also reported in matrimonial gifts, as attested by notary documents. According to the scholar, this was a management that responded to the logic of particularism at least until the eighteenth century, when an attempt was made to introduce a reform in the concession of water and to regulate the allocation of this resource. But only in 1851, a Palermitan agent, Vincenzo Mortillaro, was appointed and the water reform was assigned to him.

The debate of these two sessions began with some reflections by Carnevale on the unpredictability of events to justify the deficiency of previous intervention to avoid disaster. Schenk replied that in some cases the presence of preventive measures can be determined, but it was clear that there was a deficiency of political action. Regarding the case of Marseille, he reflected on the fact that the location of paper and tanning industries (which are large consumers of water) is strategic, because they were close to the aqueduct. Then, there is the still open topic of the scale of the case studies analysed by Campopiano, or the open topic concerning the dichotomy of public and private property, at that time when the concept of ownership was not as clear and defined as it is today. Muto continued the debate, reflecting on the importance of sources and on the topic of the plurality of powers (central, local, private, etc.) and on how it has sometimes generated conflicts between the parts that deal with management. He asked Schenk to explain which sources he had used for his investigation. The scholar replied indicating the sources adopted. Other observations by Muto focused on the fact that cartographic sources are important, but most of them are paintings, that instead offer numerous descriptive elements, which must always be read and contextualized because they are not always real but the result of the artist's invention. Cecere wondered if actions had also been found aimed at weakening some of the players at stake in the management of water resources.

Gennaro Varriale opened the third session, talking about the management of water resources in Early Modern Valencia. The Turia river, in ancient times called Guadalaviar (white water in Arabic), today is hijacked, after the last flood during the Franco regime. However, the reconstruction and hijacking plan is not contemporary, but is based on the seventeenth-century hypotheses developed following the flood of 1616 which concerned a large area of the western Mediterranean. That year the municipality founded the *Junta de murs i valls*, an institution composed of 3 experts, 6 jurors, 1 *racional* (administrator) and the mayor. A part of the *annons* revenues was destined for this organization of medieval origin. After the flood of 21-26 October 1570 the local feudal lords entrusted the arrangement of the dry area of the mills, which had flooded, to the *obreros*. In September 1581, as a consequence of variations in the Little Ice Age, several other floods destroyed the Valencian rice fields. The royal bridge (towards Castile) and the sea bridge were rebuilt, as shown in the Mancelli map of the city dating 1608. In July 1589 another flood occurred. The municipal *Junta* made a "task force" to arrange the first interventions. This institution was the only one of the ancient regime not to be suppressed in the Bourbon era, because its usefulness was recognized. However, already at the time of Philip IV, a new entity had been set up dedicated exclusively to the river, which attested to a participation also by the royal house in water management.

David Gentilcore focused his presentation on the Murattian statistics, promoted in 1809 by Joachim Murat and elaborated by the *intendenti* of the kingdom. It offers a picture of water resources through the several provinces of the kingdom. The situation appears very varied, because the infrastructures of the different territories that are described were



different, from cisterns to aqueducts. The opinions of the *intendenti* are mainly negative, because they criticize the bad state of conservation and the neglect of the premises. There is also information about the diseases produced by stagnant waters, like gout and malaria.

The fourth session started with Giacomo Bonan's talk on the management of the Piave River at the end of the 19th century. He described the genesis of the creation and development of the oligopoly in 1917, in conjunction with the creation of Porto Marghera. Among the sources, many are kept in the Civil Engineering Archive of Belluno and in the Enel Archive of Naples, very important to study the water management in this period. After the Vajont tragedy (9<sup>th</sup> October 1963) there have been several investigations on the Società Adriatica di Elettricità (SADE), the institution that built the dam.

Giacomo Parrinello ended the day with a speech on the Po river and the reconfiguration of water management from 1800 to 2000. At the end of the 19<sup>th</sup> century a project was started: it was based on extending irrigation in the Lombard area using the Cavour canal. Several proposals were presented, to convert the land to agriculture in a dry area with few water resources, among which the Eugenio Villoresi project. In 1868 there was a heavy flood in Ticino, which led to the suspension of the Villoresi project for the construction of a dam, and the creation of a commission. The water company resolved the problem. Reflections on the issue of the decisive interdependence in the balance between resource and risk also led to a redistribution of risk for local communities. The contingency of the 1968 flood contributed to the reconsideration of the dam which from a resource had become a risk. The dam was built in Sesto Calende in the fascist era.

Many reflections occurred during the final debate. First, Dr. Alessandro Tuccillo asked Varriale for more information on the letter of Philip II to the pope regarding the request of the local clergy to obtain exemption from taxes. Varriale suggested checking the correspondence of the *nuncio* in Madrid with the secretary of state in Rome, and also in Consejo de Aragón's archive. Varriale said that the pope accepted that there would be no exemption, but introduced a representative of the cathedral clergy in the commission in 1602. Campopiano wondered who owned the Valencian mills and which are the most important Arab documentary sources. Varriale replied that they should belong to noble families. Dr. Davide Boerio addressed to everyone more questions on the methodology of this research topic, and on the circulation of knowledge of these engineers and specialists who managed water. Varriale answered by indicating the studies of Alicia Cámara. Muto recalled the importance of local communities between the sixteenth and seventeenth centuries, especially in the administration of fiscalism. This knowledge became inadequate between the eighteenth and nineteenth centuries, when technical engineers took over, but according to Parrinello there was no disappearance, because in some communities they continued to exercise a certain weight in addition to the experts who were called on account of their expertise. Schenk proposed taking into account also the role of nature as an actor who, together with the other actors of society, participates in the regulation of water, as the case of the Ticino flood shows. The debate continued on the key role of engineers and on social knowledge. In the Milanese context, the figure of the engineer is from the 16<sup>th</sup> century. Carnevale spoke of the paradigm of the strength of doctors in the Murattian era, who enjoyed greater authority than in the past. Bini asked Gentilcore to explore the issue of water vocabulary and he answered by talking about a close relationship with the medical vocabulary.