ANNALS OF GEOPHYSICS, 69, 3, SY339, 2026; doi:10.4401/ag-9507
OPEN ACCESS

The Long-Term Legacy of the 1693 Val di Noto Earthquake: Emergency Management, Reconstruction, and Institutional Impact

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Article history: received November 30, 2025; accepted June 13, 2026

Abstract

The 1693 Val di Noto earthquake holds the record as the highest-magnitude seismic event to have occurred in Italy over at least the last two thousand years. The entire southeastern region of Sicily was severely damaged, and many important centers were completely destroyed. The subsequent emergency management and reconstruction processes have often been celebrated for their Late Baroque urban renewal and perceived as a positive turning point. However, this celebratory narrative has frequently overshadowed the social costs and the profound asymmetries of post-disaster management, as well as the actual relationship between pre- and post-catastrophe continuity and discontinuity. By analyzing the operational, legislative, administrative, and fiscal mechanisms through which institutions responded to the earthquake, this work aims to fill this gap within the vast scientific and historical literature. Specifically, it investigates a central contradiction: the stark contrast between an institutional response that proved highly effective in securing viceregal priorities and maintaining public order, and the widespread abandonment of the affected populations, who were largely left to rely on their own survival capabilities. Furthermore, this study aims to demonstrate that the indisputable legacy of the event cannot be exclusively confined to majestic palaces and new city centers, nor to the subsequent demographic or economic growth of some of the towns involved. The earthquake did not reset the history of southeastern Sicily; rather, alongside certain discontinuities widely discussed in the literature, it triggered an acceleration of ongoing processes and an adaptive reorganization of the ruling classes. It left a legacy of widespread socio-spatial marginalization among the affected populations, which predominantly reaffirmed pre-existing power dynamics and actively produced new vulnerabilities.

Keywords: Historical Seismology; 1693 Sicily Earthquake; Post-disaster; Reconstruction; Institutional Response; Social Vulnerability

1. Introduction

With the exception of historical seismology (Guidoboni and Ebel, 2009) – which, particularly in Italy, boasts a significant tradition – earthquake studies have not traditionally been prioritized by historians. A comprehensive overview of the reasons for this limited attention was provided by Bevilacqua (1996). Among various factors, he highlighted the general marginalization of nature in the historiographical analysis of human societal development, as well as the difficulty of incorporating earthquakes, and the abrupt discontinuities they entail, into the progressive vision that has long characterized the dominant historical narrative. Undoubtedly, a significant part of the reason lies in the exceptional nature of seismic events: unpredictable and unstoppable phenomena resulting from thousands or millions of years of subterranean processes, yet capable of obliterating centuries of human activity in mere seconds. This specific temporality, as noted by Parrinello (2015), is inherently difficult to frame within traditional historical narratives.

Whatever the reasons, the fact remains that, with few exceptions, the history of earthquakes was for a long time primarily known through local chronicles, which often consolidated a mythical image of the events and their protagonists, or through the invaluable work of seismologists. The latter, moreover, have frequently emphasized the importance of historical research in generating territorial knowledge related to seismic risk. This aspect is particularly relevant to the objectives of the present work: although the historiography of earthquakes has made significant strides in recent decades, many crucial themes surrounding individual seismic events remain yet to be explored.

This undoubtedly applies to the earthquake that devastated southeastern Sicily in 1693, an area at the time administratively known as the Val di Noto. Indeed, while the dynamics following this event have long been the subject of historiographical investigation, a review of the literature and primary sources suggests that several aspects warrant further in-depth analysis. For a long time, historiography has described the earthquake as a fundamental moment of rupture in the history of the affected area, characterizing it as a positive transformation brought about by effective emergency management and a swift start to reconstruction efforts, which triggered strong growth driven by the building sector. Dufour and Raymond (1992), arguably the most influential scholars to have studied the 1693 earthquake, contributed to this narrative. They emphasized the capacity of viceregal institutions, acting primarily through the General Vicar, Giuseppe Lanza, Duke of Camastra, to rapidly restore public order and local authorities, and to initiate reconstruction works in a relatively short time by mediating among various power groups.

This description, likely influenced by earlier historiography, certainly possesses many merits, but it also has notable limitations, especially when viewed from a different perspective. The long-term analysis of the earthquake and its subsequent reconstruction conducted by Condorelli (2011) had already challenged many of these assumptions. First and foremost was the "myth" of Camastra. The predominant and decisive role allegedly played by the General Vicar was downsized, primarily because his operational timeframe, which ended in 1695, was considered too brief to attribute to him a determining role in the area's future. This introduces another aspect critically identified by Condorelli: the relationship between continuity and discontinuity. In his view, the excessive emphasis the literature had placed on that specific period resulted in an inadequate interpretation of the actual role the earthquake played in the broader changes occurring within the Val di Noto. In fairness to the scholars who supported the earlier thesis, it must be acknowledged that the period between 1693 and 1695 not only saw the concentration of interventions necessary to manage the emergency, but it was also the time when initial reflections began on the urban plans that would subsequently be developed, albeit intermittently, throughout the following century. Some of these plans, as in the case of Catania, were even initiated during this very period. However, even regarding these specific years, as Condorelli once again noted, historiography had left many unresolved issues. While the immediate post-earthquake priorities set by institutions appear to have been well documented by historians, who viewed the achievement of these priorities as evidence of effective emergency management and a prerequisite for successful reconstruction, the same cannot be said for other crucial aspects. This is particularly evident concerning the reaction of the affected populations and the fate of the vast majority of survivors, of whom much of the historiography seemed to have entirely lost track.

As will be seen in the following pages, despite the progress made, a systematic reflection on some of these aspects is still lacking today. To fill this gap, our study unfolds from these core themes by addressing two primary research objectives.

First, we intend to investigate a central contradiction characterizing the immediate aftermath of the disaster. Specifically, we analyze the stark asymmetry between an institutional response that proved highly effective in securing viceregal priorities and the widespread abandonment of the affected populations, who were largely left to rely on their own survival capabilities.

Second, concerning the relationship between continuity and discontinuity and the long-term legacy of the event, this research aims to demonstrate that not only, as argued by Condorelli (2010), was there no direct correlation between the disaster and subsequent growth, but also that the earthquake did not represent a turning point from an economic, social, or political perspective. This is not to deny that changes occurred in eastern Sicilian society in connection with the event. Rather, we argue that these changes, with few exceptions, developed in continuity with ongoing trends. Moreover, they materialized in the forms we observe today largely due to a process of adaptive reorganization by the ruling classes in response to the new reality. We deliberately keep these initial remarks broad, as the subsequent sections will more precisely define these hypotheses by exploring the various affected areas, specifying which ruling classes are involved, and identifying the different ways in which this dynamic played out.

Before proceeding to the main analysis, however, it is necessary to clarify certain methodological aspects. First, the following study adopts a long-term perspective, framing the event and its consequences within a timeframe spanning from the early 17th century through the entire 18th century. During this research, it became evident that without such temporal depth, it is impossible to fully comprehend the extent to which the earthquake influenced subsequent developments. Second, in line with the anthropological, sociological, and historiographical literature that, since the 1970s, has begun to consider disasters as social, cultural, and political events rather than exclusively "natural" ones, the subsequent analysis will focus on the various facets of vulnerability. Certainly, an earthquake is a natural phenomenon; however, as established in the risk equation, its impact is not merely equivalent to the physical hazard. Rather, it is the product of this hazard combined with the exposure and vulnerability of buildings, infrastructure, and people, that is, the interaction between human action and nature. Clearly, when referring to the human component in this context, we cannot ignore that it is, in fact, determined by those who hold political and/or economic power, rather than by the population as a whole, even though a segment of the latter may, for various reasons, have played a role in the decisions made. Ultimately, therefore, the relationship we investigate is the one between the decisions of political institutions and nature. Finally, it is appropriate to specify that throughout this work, we have utilized the catastrophe as an "analyseur" (Loureau, 1970), acting as a revealer of a society and its institutions. To assess the earthquake's impact on society, seeking out the dynamics interrupted, triggered, or amplified by the event, we thus applied an inverse process. We did not start from the pre-earthquake society, but rather from the emergency management processes and the choices made by the ruling class in defining the criteria and logic of the reconstruction.

Following this analytical lens, Section 2 briefly describes the 1693 seismic event and its immediate destructive impact. Section 3 analyzes the emergency management phase, highlighting the asymmetric efficiency of the institutional response and the contrast between state priorities and the needs of the affected populations. Section 4 delves into the reconstruction process, exploring how the disaster accelerated the reconfiguration of local power relations through specific case studies of royal (demaniali) and feudal cities, alongside an evaluation of long-term economic and demographic trends. Finally, Section 5 draws the conclusions, synthesizing the findings.

2. The Earthquake

As outlined in the methodological premises, the starting point of this analysis is the earthquake itself. Its devastating effects, along with the subsequent responses of political institutions and local populations, serve as the primary lens through which to understand the complex societal context under investigation.

The destructive Val di Noto earthquake of 1693 (magnitude Mw 7.3), the most devastating event in the entire Parametric Catalogue of Italian Earthquakes (CPTI15; Rovida et al., 2022), arrived in a context of general fragility. At the time, Sicily was part of the Spanish Monarchy under the reign of the last Habsburg, Charles II (1665-1700), a period characterized by a profound geopolitical and economic crisis. The decline of Spanish military power, coupled with a drop in the influx of American silver, had led to a dizzying increase in fiscal pressure throughout the Crown's domains. Like the rest of the Empire, Sicily suffered severely from this economic stagnation and exorbitant taxation. This overarching imperial crisis was further exacerbated by the island's administrative and social structure, which was still heavily dominated by a rigid feudal system that structurally limited economic development and negatively impacted the overall well-being of the population.

It was upon this deeply vulnerable social context that the catastrophic seismic sequence struck. The sequence was notably long and intense. Aftershocks, even of strong intensity, were felt for over three years, at least until April 1696, and severely tested the resilience of the survivors (CFTI5Med; Guidoboni et al., 2018).

The first strong event, with a magnitude of Mw 6.2, occurred on January 9 around 21:00 GMT. Despite the difficulties encountered in distinguishing the effects, the overall picture of its macroseismic effects is well documented. The shock reached an epicentral intensity between degrees VIII and IX on the MCS Scale. Severe damage occurred in centers such as Augusta, Avola, Noto, Floridia, and Melilli, where many buildings collapsed. Severe damage and collapses also affected Catania and Lentini. The shock was also felt in Messina, Malta and Palermo. Between the first event and the second major one, at 08:00 GMT on January 11, another strong shock (Mw 4.4) struck the Val di Noto area, although without significantly worsening the situation.

The second massive earthquake, with a magnitude of Mw 7.3, occurred on January 11 at 13:30 GMT. The area affected was much larger than that impacted by the first earthquake. An area of 14,000 km² was completely devastated (Fig. 1).

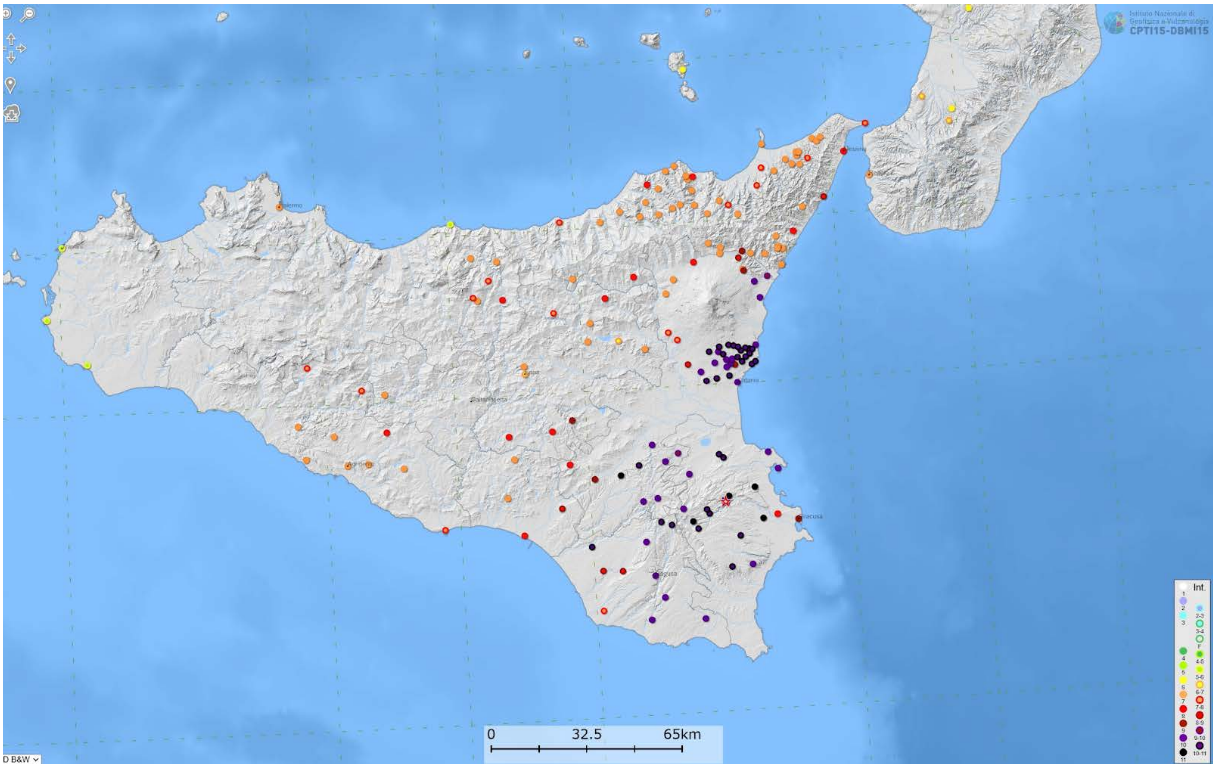

Figure 1. Map of macroseismic intensities of the January 11, 1693 earthquake (Locati et al., 2022).

The most severe effects occurred in the southeastern zone, in the territories of the current provinces of Catania, Syracuse, and Ragusa (Table 1). Collapses and severe damage occurred to the north, as far as Messina and the Tyrrhenian coast, and to the south, as far as Malta. Widespread damage was observed in Reggio Calabria, Agrigento, and Palermo. Lighter damage occurred as far as the Aeolian Islands and in some centers of central-southern Calabria. It appears that the shock was felt as far as the Tunisian coast. The January 11 shock also generated a tsunami that struck various locations along the eastern coast of Sicily, from Messina to Syracuse. The tsunami was most devastating in Augusta, where waves peaked at roughly 15 m. In Catania, the sea first retreated from the beach for several tens of meters, dragging away some boats anchored near the shore; it then violently surged back onto the coast in multiple waves over 2 meters high, reaching as far inland as Piazza San Filippo (now Piazza Mazzini) in Catania’s historic Centre.

Table 1. Estimated devastation percentages for the 1693 January 11 earthquake (from Bianca et al., 1999).

Towns	Description of damage	Estimated % of devastation
Augusta	completely destroyed	100
Avola	completely destroyed and ruined	100
Buscemi	razed to the ground	100
Carlentini	completely destroyed	100
Cassaro	all in ruins	100
Ferla	totally devastated	100
Floridia	completely ruined	100
Francofonte	razed to the ground	100
Lentini	completely destroyed	100
Melilli	totally devastated	100
Mineo	completely destroyed	100
Monterosso	completely destroyed	100
Noto	completely destroyed	100
Occhiolà (Grammichele)	totally destroyed	100
Palazzolo	totally devastated	100
Sortino	completely destroyed	100
Siracusa	two parts of the town were totally devastated, the third part was severely damage	≈90
Acicastello	almost totally destroyed	≈90
Acireale	ruined, with less than a third of the houses left standing	>70
Buccheri	devastated with few houses left standing	≈90
Catania	almost totally destroyed	≈90
Chiaramonte	destroyed, only few houses left standing	≈90
Giarratana	almost ruined with the castle partially damaged	≈90
Militello	only 300 houses were left standing	≈90
Scordia	two parts were devastated, the third part was damaged	≈70

Towns	Description of damage	Estimated % of devastation
Vizzini	two parts were totally ruined, the third part was uninhabitable	≈70
Caltagirone	half of the town was razed to the ground, a quarter was damaged	≈50
Comiso	very little damaged	<50
Fenicia Moncada (Belpasso)	two third were in ruins	<70
Licodia	many houses in ruins	<50
Mascali	out of 300 houses, 140 were damaged and 35 did not suffer any damage	<50
Modica	half of the town destroyed	≈50
Niscemi	severely damaged	<50
Palagonia	the fifth part was destroyed	≈20
Ragusa	almost two third destroyed	≤70
San Michele	only few houses were ruined	<50
Scicli	mostly ruined with a few buildings left standing	>70
Spaccaforno (Ispica)	severely damaged in the third part	<50
Vittoria	only few houses were razed to the ground	<50

3. Emergency Management: Efficiency and Timeliness in Defense of Particular Interests

Moving beyond the sheer scale of the physical devastation described above, a close examination of the immediate institutional response is essential to critically verify the traditional historiographical interpretations of the 1693 earthquake. While the subsequent magnificent Late Baroque reconstruction has often fostered a celebratory narrative that overshadows the human tragedy and the unequal distribution of social costs, acknowledging these gaps does not mean denying the established facts regarding the emergency management phase. Despite the unprecedented scale of the catastrophe and severe logistical and economic difficulties, the initial reaction of the authorities was indeed remarkably timely. In less than a month, the Viceroyalty established a comprehensive framework for emergency management, articulated on two levels. On the ground, an operational level deployed General Commissioners (Commissari Generali), tasked with the removal and burial of corpses and maintaining public order against theft and riots, and Vicar Generals (Vicari Generali), deputed to provide local authorities with the initial impulse for recovery and to mediate between various power factions. Simultaneously, a liaison level was established in Palermo, comprising a civil and an ecclesiastical board. Furthermore, the Duke of Camastra swiftly restored city institutions where they had been decimated by the earthquake. In Catania, for instance, where only one member of the City Senate survived, he rapidly appointed new representatives from the local nobility to fill the vacuum (Boschi and Guidoboni, 2001).

However, while these administrative interventions attest to a certain organizational capacity and timeliness, they represent only one side of the coin. The affected populations, as a whole, were certainly not among the chosen priorities of the state. Many crucial aspects of human survival were consciously overlooked, yielding profound long-term consequences. A careful review of the correspondence between the Viceroy and Madrid in the months following the earthquake, preserved in the Archivo General de Simancas, where the undertaken measures are summarized, clearly reveals the true priorities of the Crown and exposes the stark asymmetry of the disaster response.

3.1 The Priorities of the Viceroyalty

Foremost among the priorities identified in the correspondence between the Viceroy and Madrid, which dictated both immediate interventions and the broader reconstruction framework, was military defense, particularly given the ongoing anti-French focus of the Crown. Consequently, a large portion of the available funds and initial relief efforts were directed toward this objective, a dynamic well documented in the existing literature. A few days after the earthquake, the Viceroy entrusted the military engineer Carlos Grunembergh with drafting a preliminary damage assessment and a provisional reconstruction plan for destroyed fortifications, with special attention to the strategic strongholds of Augusta and Syracuse (Boschi and Guidoboni, 2001). Simultaneously, as reported in a letter dated January 22 to King Charles II, economic subsidies were dispatched to maintain the garrisons (1,000 scudi to Catania, 125 to Syracuse, 125 to Augusta, and a total of 500 for Lentini, Acireale, and other unspecified locations). Furthermore, a subsequent update on February 5 confirmed that food supplies had arrived at the strongholds of Augusta and Syracuse as early as January 30 and February 1, specifically to halt the hemorrhage of deserting soldiers and restore the military chain of command.

The same February 5 dispatch highlights that the Viceroyalty's second priority, strictly connected to the first, was the management of internal order and the repression of unrest. The structures created for emergency management (the boards, the Vicars, and the General Commissioners) were deliberately designed not to address the humanitarian needs of the populations, but to rigorously manage public order and preserve the status quo. General Commissioners were deployed with the explicit mandate to repress thefts and riots. Similarly, the Vicar General, Giuseppe Lanza, Duke of Camastra, was granted an "open mandate" (nomina in bianco) as General Commissioner of the countryside, allowing him to directly appoint personnel and distribute soldiers to curb lawlessness. Tellingly, the rural barons were instructed to deal autonomously with their vassals and report to Lanza only regarding the burial of the dead and the procurement of resources to counter thefts.

The third priority was the rapid restoration of the administrative and fiscal apparatus. To fully grasp the nature of this response, it is essential to consider the political-institutional framework of the Kingdom of Sicily. Crucially for our argument, the fiscal apparatus was highly fragmented: revenue collection and expenditure were entrusted to multiple autonomous financial officials and local bodies rather than a single central treasury (Ligresti, 1997; Giuffrida, 2012). Furthermore, it is essential to remember that the territory was divided into royal (demaniali) and feudal cities and lands, each with complex and overlapping administrative layers (Benigno, 1993). This inherently complicated the relationship between the central tax authorities and local communities. To manage this complex system, the Spanish Monarchy relied on the traditional Aragonese "pact-based policy" (politica pattizia) (Benigno, 1990). Between the 15th and early 17th centuries, Sicilian cities had developed a broad culture of self-government, acquiring autonomy in selecting administrative bodies, imposing local taxes, and managing justice (Favaro, 2005). The Sovereign favored this mechanism of constant mediation with autonomous local elites to acquire consent and strengthen bonds of loyalty. This autonomy was not established in direct opposition to royal power, but rather in the shadow of it, heavily based on the defense of new and ancient privileges (Benigno, 1990; Giarrizzo, 1989). Consequently, the Sicilian Parliament often operated more as a clearinghouse for political tensions among the elites than as a tool for direct conflict with the Crown (Koenigsberger, 1971; Benigno, 2010).

Understanding this fragile balance of power – a central authority focused on military and macro-political control, forced to constantly negotiate with strong, autonomous local elites who managed the socio-economic life of the cities – is essential to evaluating the post-earthquake response. The disaster had decimated this ruling class and severely compromising the state machinery and threatening to shatter the institutional framework. Consequently, the repressive efforts to restore normalcy were accompanied by a swift reinstatement of the traditional elite. The Duke of Camastra, alongside the remaining operational apparatuses, rapidly filled institutional vacuums by appointing surviving members of the local nobility. Even the counting of the dead and survivors, one of the primary tasks entrusted to local authorities, was strictly functional to this demographic and fiscal reassessment.

The fourth priority was the relationship with ecclesiastical power and the reconstruction of church property. In this context, the closeness between the local clergy – who often acted as mediators with the government – and the nobility, became an element of immense strength for the Sicilian ruling class (Ligresti, 2010). Even because of this, the Viceroyalty expended maximum effort to support the clergy from the very first days, integrating religious figures into the emergency management framework. One of the two palatine boards was dedicated exclusively to this purpose, and Bishops were even identified as a potential Vicar General for the Val di Noto, though they ultimately declined. Despite significant friction, arising from the pressing demands of local bishops and their independent sourcing of aid from Rome, vividly illustrated by the Archbishop of Messina's report in March 1695, specific tax reliefs were rapidly introduced for the reconstruction of ecclesiastical assets. As confirmed by Viceroy Juan Francisco Pacheco, Duke of Uzeda, in a letter to Charles II on May 14, 1693, dedicated funds were carved out from the tax proceeds destined for local institutions to finance church rebuilding.

Given the high level of conflict between the Viceroyalty, local secular powers, and ecclesiastical authorities, we cannot speak of total success regarding relations with the Church, but the interventions carried out to secure the other priorities demonstrated an unquestionable efficiency. The defensive apparatus was swiftly restored, resolving the garrison crisis and averting potential external attacks or internal revolts. Despite initial chaos, public order was guaranteed through decisive repression, preventing the creation of power vacuums. This allowed for the rapid reorganization of the administrative and fiscal apparatus, which was preserved entirely intact beyond the provisional state of emergency. As can be observed, although emergency management was firmly centralized by the Viceroyalty in the immediate aftermath, its objective was precisely to rapidly re-establish the traditional autonomy and pact-based governance. Once the initial crisis passed, every branch of the administration, in both royal (demaniali) and feudal domains, returned to operating in form and substance exactly as it had before the earthquake. This approach ensured that the disaster did not cause an immediate rupture in power relations, paving the way for an adaptive reorganization that, as will be detailed in the following sections, maintained strong institutional continuity.

However, this undeniable institutional success was strictly limited to the survival of the state apparatus, the military, and the established social order. This top-down efficiency structurally relied upon a profound and systemic disregard for the basic survival needs of the affected populations.

3.2 The Affected Populations and Their Needs

In stark contrast to the efficient restoration of the state apparatus, the response to the needs of the affected populations reveals a profoundly different reality. For the Crown and the Viceroy, interventions concerning the citizenry were primarily linked to the assessment of the death toll and the burial of corpses to prevent the spread of epidemics. These operations were crucial for determining the resulting difference in tax revenues.

The sums made available for the relief of the wounded, the burial of corpses, and the sustenance of survivors were scarce: a letter from the Viceroy dated January 20, 1693, mentions 1,600 once to be distributed among Syracuse (500), Augusta (500), Catania (400), and Carlentini-Lentini (200), while on February 19, another 1,000 were assigned to Noto, Mineo, and Augusta. As of that date, the debt contracted by Barrafranca, Butera, Mazzarino, and Santa Maria di Niscemi to bury the dead and shelter the survivors amounted to 449 once. Furthermore, 1,000 once were assigned in March 1693 to the Duke of Camastra, so that he could provide relief in the cities struck by the earthquake. As we shall see, Camastra's intervention in this regard, although always very limited, seems to have concentrated mostly on Catania, where he was based.

Other measures undertaken related to this aspect concerned some temporary tax reliefs, over which various conflicts arose between local powers and the Viceroyalty, as indicated in the Viceroy's letter of February 19, 1693. The same context saw the failed reopening of the Mint (Zecca) of Palermo, officially ordered by the Decree of the same date; however, as the Deputation of the Kingdom (Deputazione del Regno) pointed out to the King, the Mint had already been closed for years, complicating the situation. Finally, as the Viceroy's letter of February 19 confirms, the funds moved directly to the Val di Noto (Catania and Syracuse) to facilitate silver exchange; few people, certainly not the neediest, benefited from it.

Consequently, the various surviving local powers or neighboring ones, including ecclesiastical authorities, took charge of the populations' needs. It is not rare to find in the sources episodes of bishops and priests engaged in material, as well as moral, support for the populations; and we know, as mentioned – specifically in the Viceroy's letter of February 5, 1693 – that a mandate was given to the lords of feudal areas to take care of their own vassals and the displaced persons from nearby areas. Realistically, however, especially in the hardest-hit cities, the populations fended for themselves.

Evidence of the scant support provided to the population by institutions at all levels is well described by the analysis of temporary housing, what we can call barracks (baracche) or huts, in which the population affected by the earthquake lived for months or even years, sometimes developing an internal market of sales, rentals, and craft and commercial activities.

The Duke of Camastra spent more than 130 once to build barracks in Catania for his Secretariat and the garrison soldiers. He had another lodging built in Syracuse, where he stayed briefly, while in the other cities of the Val di Noto, where he was only passing through, the expenses of his stay were borne by the local authorities. These interventions marked the beginning of the construction of shantytowns. In Catania and Syracuse, the first barracks were built as early as February 1693, coinciding with Camastra's presence and enjoying some Viceregal aid. In the rest of the affected area, however, barracks were not started in this phase, demonstrating the absence of any coordinated intervention by the Viceroyalty. In Noto, for example, construction did not begin before spring, and in Occhiolà, by summer, most inhabitants were still lodging in straw huts, caves, or other makeshift shelters (Condorelli, 2011).

The heterogeneity of these structures, which could be large and comfortable or tiny and useful at most as shelters from the rain, is also a prime indicator of the lack of centralized planning, even by local authorities. The latter were indeed engaged in the construction of barracks, but these were strictly limited to structures of public interest, such as administrative seats, tribunals, military barracks, and churches. For the rest, individuals built their own shacks according to their economic possibilities and without following any organized scheme. The most indigent, unable to find building materials, were abandoned to their fate, ending up living in caves near the cities or remaining without any shelter, a common condition, for example, for many children and youths left orphaned by the earthquake (Condorelli, 2011).

As will be detailed in the subsequent section, this construction pattern, founded on private initiative and reflecting stark social inequality, would also form the basis of the permanent reconstruction of the cities. Institutions took care of public interest buildings; confraternities and religious entities handled churches and ecclesiastical property; and each family, depending on its own means, dealt with its own dwelling. An emblematic case in this regard is that of Catania, where religious and civil institutions, together with the wealthiest families, began reconstructing their palaces as early as 1694, while thousands of citizens continued to live for years in shacks (Boschi and Guidoboni, 2001). The fact remains that even beyond the immediate emergency phase, the poor and the general welfare of the affected population were never prioritized.

The issue becomes even more controversial when viewed from the perspective of charitable institutions, Opere Pie, and the ensemble of civil and religious entities providing material aid and support to the needy. Regarding these entities, which were largely destroyed or heavily damaged, it appears that no specific measures were taken by central institutions. Furthermore, they assumed no centrality regarding local powers or the clergy. While it is reasonable to argue that entities belonging directly to ecclesiastical assets benefited indirectly from the general resources directed toward the Church, the documentary void surrounding civil entities is telling. In the vast documentation recounting the Viceroyalty's reaction to the catastrophe and the subsequent reconstruction, there is a marked scarcity of provisions, debates, or considerations regarding orphanages, hospitals, and similar institutions. The only concrete measure is found, once again, in Catania, where Lanza was located, with a provision allocating a mere 16 once for the construction of a few shacks as a "House of the Poor." Meanwhile, no measures were undertaken for those in the numerous other cities under his jurisdiction; they were abandoned to themselves or to the eventual, often inadequate, assistance of local authorities, which was limited primarily to food support (Condorelli, 2011). Among these few references, documents concerning the city of Caltagirone – specifically the Vicar General's Ordinance of March 12, 1693 – reveal that Opere Pie were explicitly excluded by the Duke of Camastra from the 20% tax deduction destined for the reconstruction of city churches. It is highly probable that similar measures were adopted in other local contexts. Furthermore, documentation from Caltagirone highlights a conflict between the City Senate and the Commandery of the Order of Saint John (Commenda Gerosolimitana). As detailed in the Viceroy's letter to the Jurors of Caltagirone dated September 7, 1699, the Commandery was denied the tax exemption provided for Opere Pie, despite actively providing various forms of assistance to the neediest.

Beyond these scarce references, there is no evidence of targeted interventions to ensure the functioning of these entities. Attempting to reconstruct the issue through other sources, the case of the San Marco Hospital in

Catania is highly significant. Built in the late 14th century by the will of local authorities and the citizenry, it was completely destroyed in 1693 (Santoro, 2020). In the following years, the hospital was temporarily housed within religious structures that were less affected or quickly rebuilt. However, its reconstruction on a new site began only thirty years later, in 1724 (Boschi and Guidoboni, 2001). Crucially, the work was financed and promoted by a private citizen, Niccolò Tezzano, a doctor from Catania already known for having participated in the construction of a makeshift hospital immediately after the shock (Santoro, 2020).

What emerges from these indications is that hospitals and institutes for the care of the sick and poor were not an urgent matter for the central institutions of the Viceroyalty. As with the broader management of the affected populations, responsibility was shifted entirely onto local powers and private initiative, operating in perfect continuity with the past. Just as in the Middle Ages and throughout the rest of the Modern Age, in Sicily, despite the earthquake, the care of the needy remained the business of the Church and local communities, with rare and often merely formal interventions by Royal and Viceregal authorities.

In terms of emergency management, the institutional response therefore operated through a strict dual track. The attention and efficiency directed toward the restoration of state power, military defense, and public order were counterbalanced by a near-total abdication of responsibility toward the needs of the populations and the most vulnerable groups. Consequently, social vulnerability was not merely exposed by the earthquake but actively exacerbated by the adopted policies, leading to a deepening of inequalities. While an earthquake of this magnitude might theoretically suggest a 'ground zero' that temporarily equalizes different social groups forced into makeshift shelters, the state's deliberate neglect from the earliest stages of emergency management caused the immediate reconfiguration of pre-existing disparities. The decision to leave the construction of temporary shacks almost exclusively to the economic means of individuals is a stark example of this.

4. Reconstruction: Spatial Reconfigurations, Power, and Vulnerability

Having analyzed the emergency management phase and verified the profound asymmetry characterizing the immediate institutional response, this section shifts the focus to the subsequent reconstruction processes. To address the remaining research questions – the relationship between continuity and discontinuity and, above all, the long-term legacy of the earthquake – it is essential to investigate these rebuilding efforts by focusing on the profound interconnection between space, power, and society. This requires examining the rationale behind the different urban strategies adopted (such as rebuilding in situ versus relocation), understanding how and by whom these choices were dictated, and assessing the tangible effects they produced on local power balances, as well as on the broader social, economic, and political development of the cities.

Before closely analyzing specific cases, it is necessary to clarify a fundamental element regarding the Val di Noto reconstruction: while the Viceroyalty successfully centralized control to satisfy its immediate macro-political priorities during the emergency phase, the initiation of the reconstruction marked a decisive shift of initiative to the individual cities. The extreme variability of the urban solutions adopted is further proof of the deeply rooted autonomy preserved by the local communities, operating in perfect continuity with the pre-earthquake dynamics. The cities of Noto, Avola, Occhiolà (present-day Grammichele), Giarratana, Sortino, Biscari (Acate), Monterosso, and Fenicia Moncada (Belpasso) were rebuilt in entirely different locations. Some settlements, such as Scicli, Buscemi, and Ferla, abandoned unsafe peaks or slopes and were moved downstream to the plateaus or valleys below. Ragusa, instead, was practically split, with the creation of a new settlement alongside the old one. All other centers were rebuilt where they previously stood. For some, such as Catania, a new urban plan was drawn, taking into account what remained of ancient structures alongside new requirements. In other cases, such as Lentini, after an initial attempt to change the site, interventions were limited to slightly rectifying the layout of some streets, while most cities, such as Syracuse and Caltagirone, were rebuilt following their original plans (Dufour and Raymond, 1994).

Crucially, for those communities that opted for a total change of site, the complex criteria guiding the abandonment of the old location and the identification of a new one were never dictated by unilateral impositions from above. Rather, they were determined by the intricate relationship between the cities and the Viceroyalty. In accordance with the traditional pact-based politics, the central government operated by orienting and ultimately authorizing these choices through the mediation of the Vicar General, but it never imposed a relocation without the consent of the city. Conversely, the cities – their economic elites and political institutions – attempted to exploit the post-disaster conjuncture to maximize their own territorial and economic advantages. The Duke of Camastra had to mediate this complex process until 1695, ensuring that the local modalities of rebuilding aligned with the Viceregal imperatives of restoring defensive positions and rebooting the fiscal system. Subsequently, this role reverted to the Viceroy. As established in the previous section, the Viceroyalty swiftly reactivated local powers where necessary; once the immediate crisis subsided, these institutions resumed functioning exactly as they had before.

An emblematic case of this delicate negotiation and the inevitable path of compromise is Lentini. As reported in the Viceroy's letter of April 30, 1693, the city initially refused to rebuild on the designated new site. Given the complications of rebuilding upon the rubble, they proposed merging with neighboring Carlentini, founded in 1551 by Viceroy de Vega. However, considering Carlentini's fiscal privileges, which would otherwise have been automatically extended to the new inhabitants coming from Lentini, causing a loss of royal revenue, this hypothesis quickly convinced the Viceroy to mediate for reconstruction on the old site. As confirmed in the correspondence of May 26, 1695, interventions were strictly limited to modifying the layout of some thoroughfares, perfectly illustrating how spatial reorganization was resolved through mutual institutional compromise.

Also regarding the definition of urban plans and the modalities of reconstruction, such as techniques and building materials, the predominant role belonged to the cities, operating well beyond the initial impulse provided by the Viceroyalty. This local autonomy fostered a notable synthesis: on the one hand, an innovation in urban plans that absorbed the spatial and architectural knowledge of other contemporary European cities; on the other, the maintenance of traditional construction techniques, as described by Casamento (1995). Crucially, a significant role in shaping these new urban plans was played by elements that, in modern terminology, we might define as disaster governance or risk mitigation. This awareness was the primary reason behind the design of wider streets and large squares, as well as the decision to avoid constructing overly tall buildings. However, the major limitation of these mitigation efforts was that such spatial choices, while formally adopted, were often implemented exclusively in the central areas of the cities, effectively nullifying the broader safety goals, a critical socio-spatial dynamic that will be explored further in the following subsections.

From a legislative perspective, the reconstruction processes operated firmly within the existing legal framework rather than relying on a new revolutionary legislative corpus. Local authorities guided the spatial reorganization by frequently citing traditional norms, such as the Prammatica of King Martin (which in the 15th century decreed the modernization process of the medieval city) and the Privileges of Toledo and Maqueda (which laid the foundations for urban planning activities in the second half of the 16th century). Despite this general reliance on established laws, specific ad hoc regulations were necessarily introduced to allow the practical realization of the approved urban plans. These specific measures, such as norms regarding land expropriation, tax relief, and debt management, will be better developed in the following subsections.

To fully frame the analysis of the specific case studies presented in the following pages, a final, crucial element regarding the reconstruction must be addressed: the relationship between political and religious institutions, economic elites, and the population. In defining these power dynamics, Piazza (2012) identifies two distinct types of social structures operating in southeastern Sicily during the post-1693 reconstruction phase. The first is a vertically pyramidal type, where a restricted oligarchy decisively shaped the new urban plan according to its own specific needs. The second model is based on social groups that were more balanced politically and economically; this latter framework, as is easy to intuit, proved to be highly conflictual, with competing factions vying for control over the spatial reorganization.

4.1 The Case of Catania

Catania exemplifies how a traditional power structure managed to dictate the urban logic of a new city plan designed upon the rubble. Applying a modern analytical lens, the rebuilt Catania was effectively conceived as a dual city (Vanhellemont and Pauly, 2015), a space characterized by a rigid spatial division between the wealthy center and the impoverished peripheries. This spatial organization resulted from a process initiated immediately after the earthquake. The Viceroy, the Duke of Uzeda, dispatched military engineer Grunembergh to survey the defensive walls and induce the population to rebuild the city in situ, concurrently sending the Vicar General, the Duke of Camastra (Boschi and Guidoboni, 2001).

By May 1693, the activity of civil and religious institutions had been fully restored. On May 8, a session of the City Council, composed of representatives from the most prominent families and craft guilds, began discussing the reconstruction in the presence of the Senate and the Vicar General. The local Church deliberated on these same matters shortly thereafter. While it is debated whether the final city plan had been fully drafted by that exact moment, it was certainly ready by the end of 1693 (Boschi and Guidoboni, 2001).

The immense physical labor began in 1694 following a crucial document: the Resolution of the Senate and the Ecclesiastical Body of April 18 (Fichera, 1925). This resolution effectively established a localized state of exception. It theoretically subordinated private property, including previously untouchable ecclesiastical assets, to the needs of the new master plan and mandated the cancellation of all mortgages, census rents, and outstanding debts burdening the collapsed buildings. Crucially, the resolution dictated that families must bear the cost of rebuilding their own dwellings. It introduced a draconian rule obliging those without sufficient resources to sell their land at an agreed price, granting wealthier neighbors the right to forcibly acquire adjacent parcels if the original owner could not rebuild within the scheduled timeframe. To further regulate the spatial reorganization, a differentiated cost of land was introduced, making areas around the central Platea Magna (the current Piazza Duomo) significantly more expensive. Supported by rigorous appraisals that evaluated land, useful structures, and rubble materials separately, this centralized planning translated into the rapid clearance of debris and the realization of a hierarchical orthogonal grid (Fig. 2). This new design was perfectly aligned with modern European urban visions (Fichera, 1925).

Central to this new vision was the integration of what, in modern terminology, we might define as disaster governance or risk mitigation. To prevent the repetition of massive casualties during future seismic events, specific safety regulations were incorporated into the master plan, dictating minimum widths for main and secondary streets and establishing large open squares.

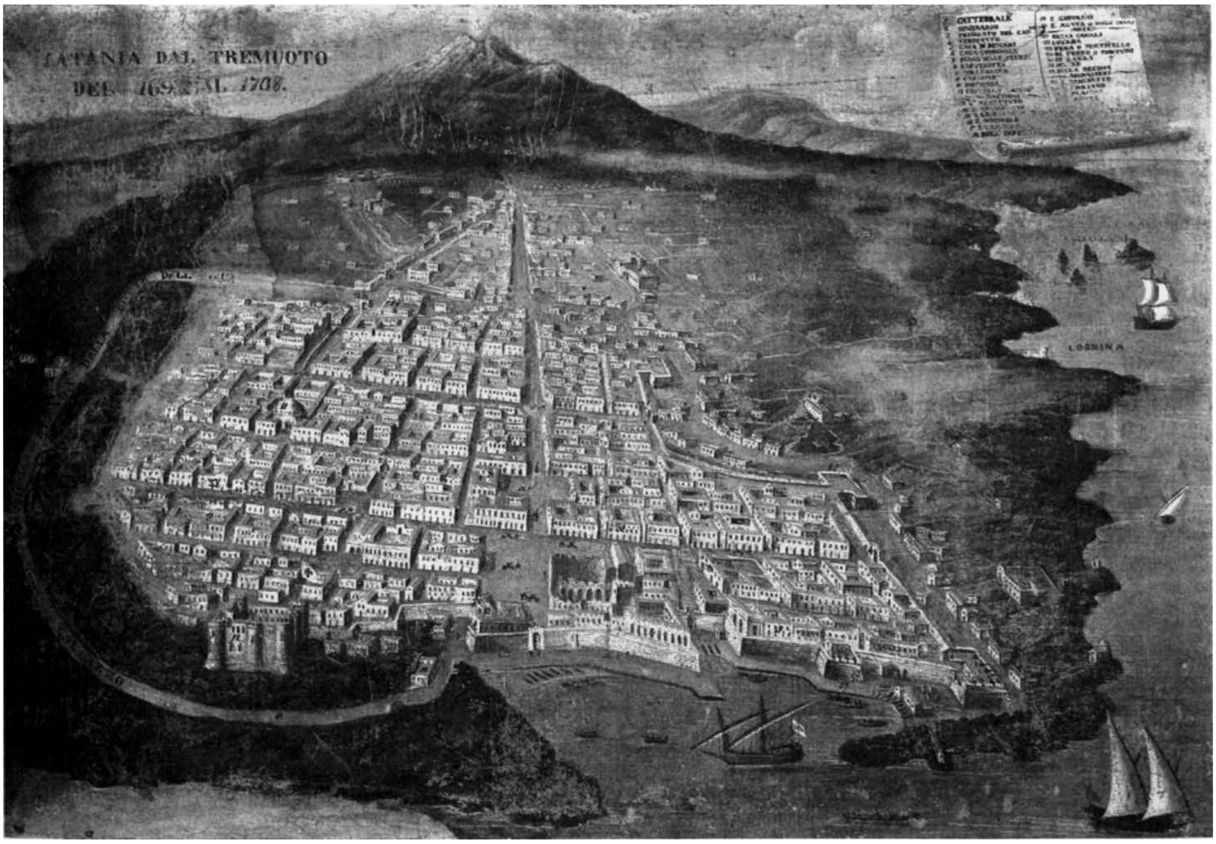

Figure 2. Catania in 1708 partially reconstructed (Brydone, 1773).

However, the execution of this plan was far from a frictionless, top-down process; rather, it was heavily compromised by fierce competition among local elites. As documented by Scaglione (2012), the theoretical regularity of the geometric grid proved impossible to maintain perfectly. Property boundaries frequently deviated from the intended logic to accommodate the explicit desires of large landowners, particularly aristocratic families and religious orders, who vied for spatial dominance by constructing enormous palaces and monasteries in their preferred locations (Fig. 3). Ecclesiastical institutions, both secular and regular, actively participated in this competition, benefiting from their wealth, targeted fiscal exemptions, and provisions allowing them to utilize the revenues of pious bequests (legati pii) for five years (Longhitano, 1989).

Ultimately, the most severe consequence of this elite-driven reconstruction was the fate of the poorest citizens. The combination of forced land sales and differentiated land costs officially sanctioned the dispossession and spatial expulsion of the lower classes from the city center. Pushed toward the peripheries where land was more accessible, the popular classes settled in temporary shantytowns erected in 1694, which often evolved into permanent settlements. Built autonomously by the inhabitants throughout the 18th century, these new peripheral neighborhoods relied on substandard materials and replicated the medieval urban model of narrow streets and semi-private internal courtyards (Boscarino, 1966). They entirely disregarded both the geometric plans of the center and, crucially, the disaster governance regulations regarding street dimensions designed to mitigate seismic risks (Condorelli, 2011). By forcing the poor into unregulated housing, the reconstruction policies transformed socio-economic marginalization directly into a renewed physical vulnerability.

In conclusion, Catania demonstrates that the disaster did not trigger a genuine rupture in the city's power structures or socio-political hierarchies. The Viceregal intervention during the emergency phase swiftly restored institutional functioning, and the subsequent reconstruction process kept fundamental power dynamics completely unaltered, leaving the city firmly dominated by the clergy and traditional noble families. While the earthquake inevitably brought physiological changes, these occurred strictly within the established framework. The underlying societal structure was not overturned by the catastrophe; rather, its exclusionary dynamics were actively reinforced and physically cemented into the new urban fabric.

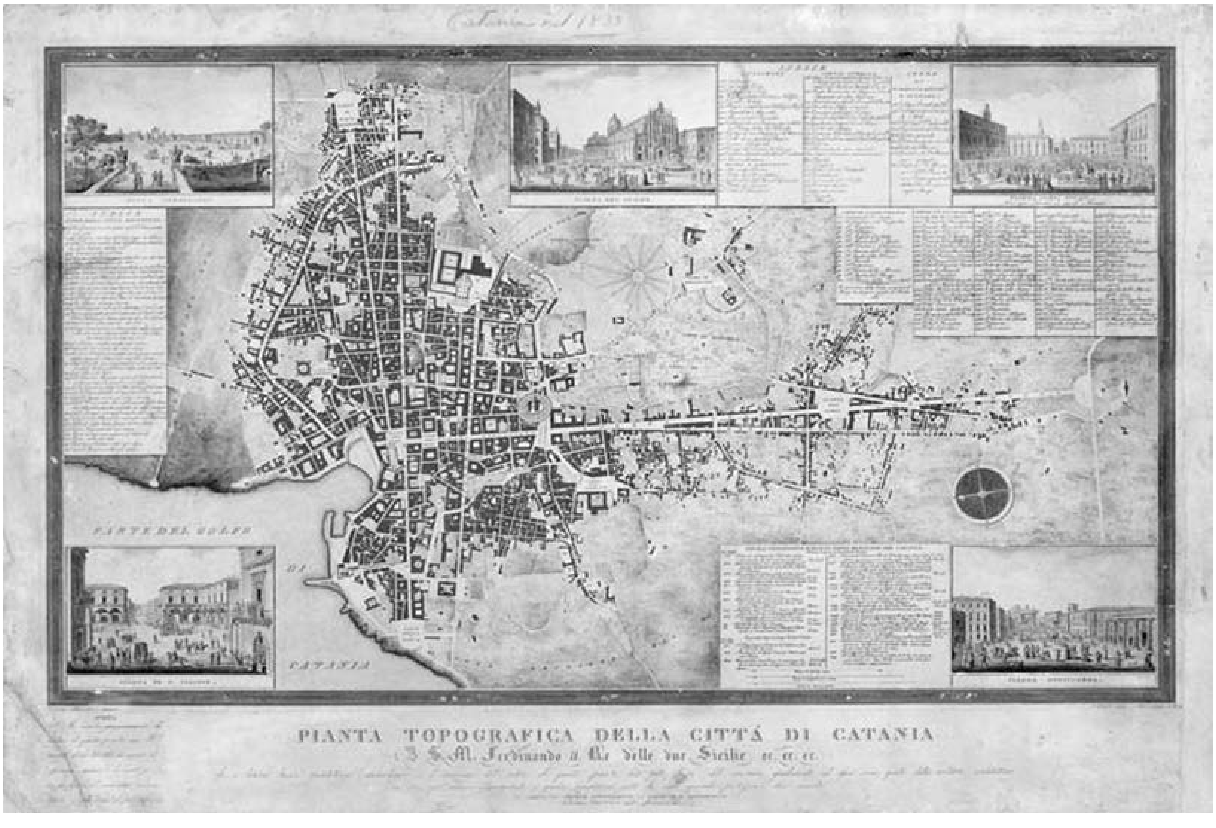

Figure 3. S. Ittar, Topographical plan of the city of Catania, Paris, (ca. 1832), copperplate engraving (Scaglione, 2016).

4.2 The Case of Noto

In contrast to the vertically pyramidal model seen in Catania, the case of Noto (Fig. 4) perfectly illustrates the highly conflictual reconstruction modality identified by Piazza (2012). Here, the spatial reconfiguration was not dictated by a united oligarchy but rather became the battlefield for a fierce economic conflict between competing elite factions. The complexity of Noto's reconstruction, characterized by fierce local conflicts and profound spatial reconfigurations, requires an analytical gaze capable of looking beyond the mere aesthetic result, as recently demonstrated by interdisciplinary approaches combining archival research and archaeological excavations (Guzzardi and Luminati, 2022).

At the time of the earthquake, Noto was a city in an economic crisis due to heavy Viceregal taxation and the progressive abandonment of its two main productive activities: wool and leather processing. In the aftermath of the earthquake, amidst a desolate landscape of rubble and victims, the reaction was not particularly swift.

Luminati (1997) describes the events well, reporting that only on February 15, 1693, did the Captain of Justice (Capitano di Giustizia), Antonino Impellizzeri, convene a civic council to discuss the issue of reconstruction. The choice, contested only by Impellizzeri, favored relocation to a range of sites characterized by the fact that they were not feudal property and, therefore, less expensive. This initial fracture highlights the deep conflict between two opposing aristocratic factions. On one side, the traditional nobility (represented by Impellizzeri) fiercely defended the old mountainous site, as their wealth was historically tied to traditional highland productions. They also enjoyed the broad consensus of the lower classes, who were deeply rooted in these traditional economic activities – a popular support that would later become evident in the 1698 "referendum". On the other hand, a new, emerging aristocracy (led by the Landolina family) strongly advocated for moving the city toward the plains and the sea. Their primary goal was to increase the value of their own estates and fully exploit new, highly profitable agricultural productions, such as wheat, rice, and hemp (Ligresti, 1992).

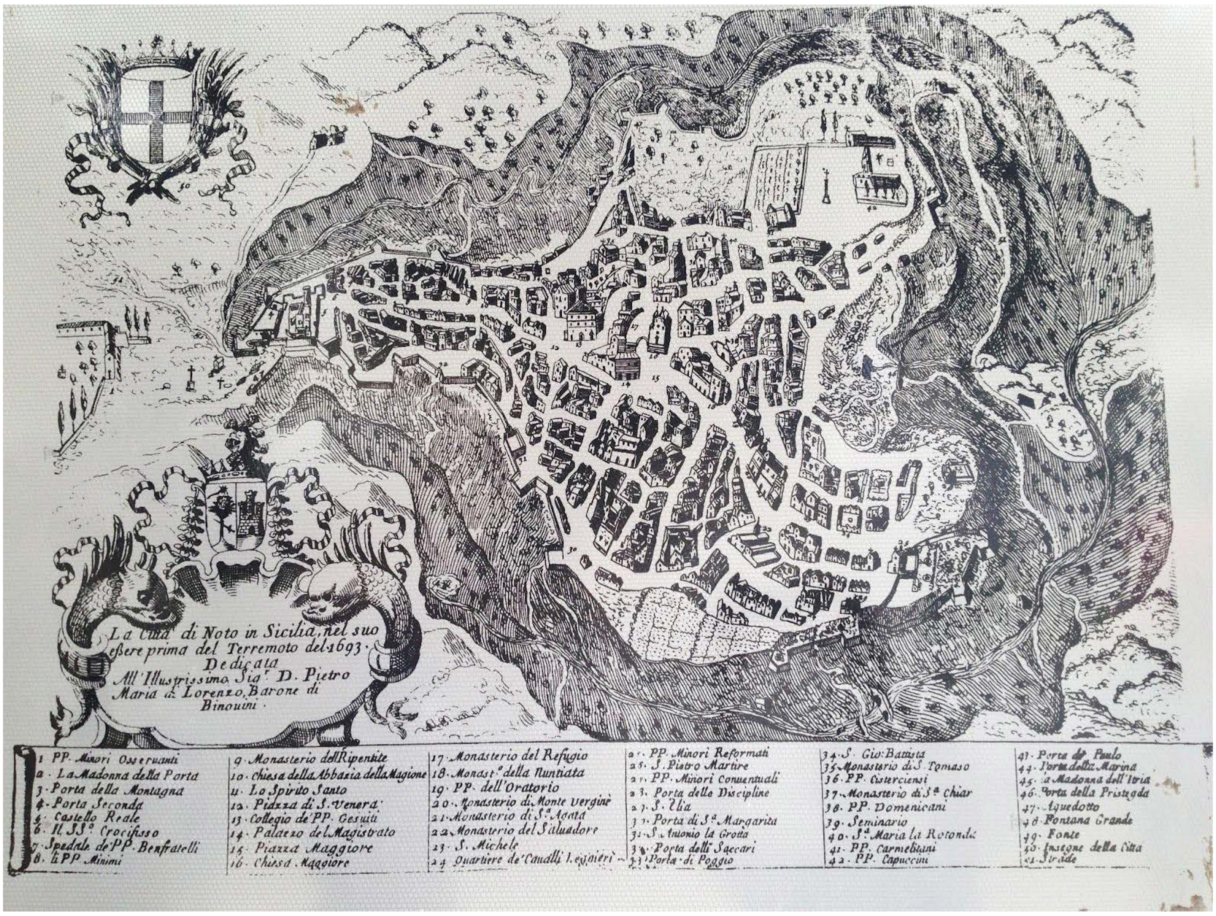

Figure 4. Map of the ancient city of Noto.

However, the subsequent impasse was condemned by the Vicar General. On February 24, he dismissed the local authorities and appointed new civic officials, testifying to disagreements regarding choices that were agitating the citizenry. The Vicar favored reconstruction on the old site, but the crisis affecting industrial activities and the almost continuous shaking of the ground (the seismic sequence ended in 1696) induced fear and pushed toward more radical choices and, above all, toward choices ensuring that the lands selected for the new site would produce substantial economic advantages for Noto's most important families. The hegemony of the new aristocracy over the relocation process is unequivocally demonstrated by the post-earthquake fiscal policies. Under the political dominance of the Landolina faction, the tax burden (gabelle) was systematically weaponized to penalize the old economy and protect the new one. Taxes were exclusively imposed on traditional goods – such as wine, meat, cheese, cured meats, and legumes (the so-called gabelle del grosso e sottile) – along with the Scannaia tax on livestock slaughter. Conversely, the agricultural products tied to the estates of the new nobility (wheat, rice, and hemp) were strategically exempted (Dufour and Raymond, 1990).

Surprisingly, however, after the decision was made, no preparatory activity was carried out for opening the reconstruction sites. This new "extravagant" behavior (as the Viceroy himself defined it), according to Luminati (1995), was linked to further internal conflicts among landowners, some of whom saw a risk to rice cultivation in the chosen area (Meti), which was banned near inhabited areas for health reasons (Fig. 5).

The dramatic turn of events that resolved the issue was brought about by the Commissioner appointed by the Vicar General, Judge Giuseppe Asmundo, who, on June 30, 1693, ordered the transport of the silver ark containing the body of Noto's patron saint, San Corrado, to the new Meti site. This gesture sealed the definitive choice of the site and opened a complex affair regarding the allocation of lots. This process would drag on for many years, seeing the formation of a large group of citizens determined to return to the ancient site of Mount Alveria. In 1698, members of the traditional nobility managed to impose some of their own Civic Officials (Giurati), who drafted a memorial for the return and appealed against the relocation (Ligresti, 1992). The Viceroy even decided to hold a popular "referendum" (a general consultation), which ended with a clear victory for the lower classes and the peasantry, who overwhelmingly voted to return to their old city with 481 votes in favor and 266 against (Gallo, 1970). The opposing Landolina faction reacted by accusing the supporters of the old site of having used violent and unorthodox methods (Dufour and Raymond, 1990). Given the growing tensions, the issue was reopened with new consultations, and the 1699 elections for the giurati were suspended. A new consultation – this time restricted solely to the nobility –

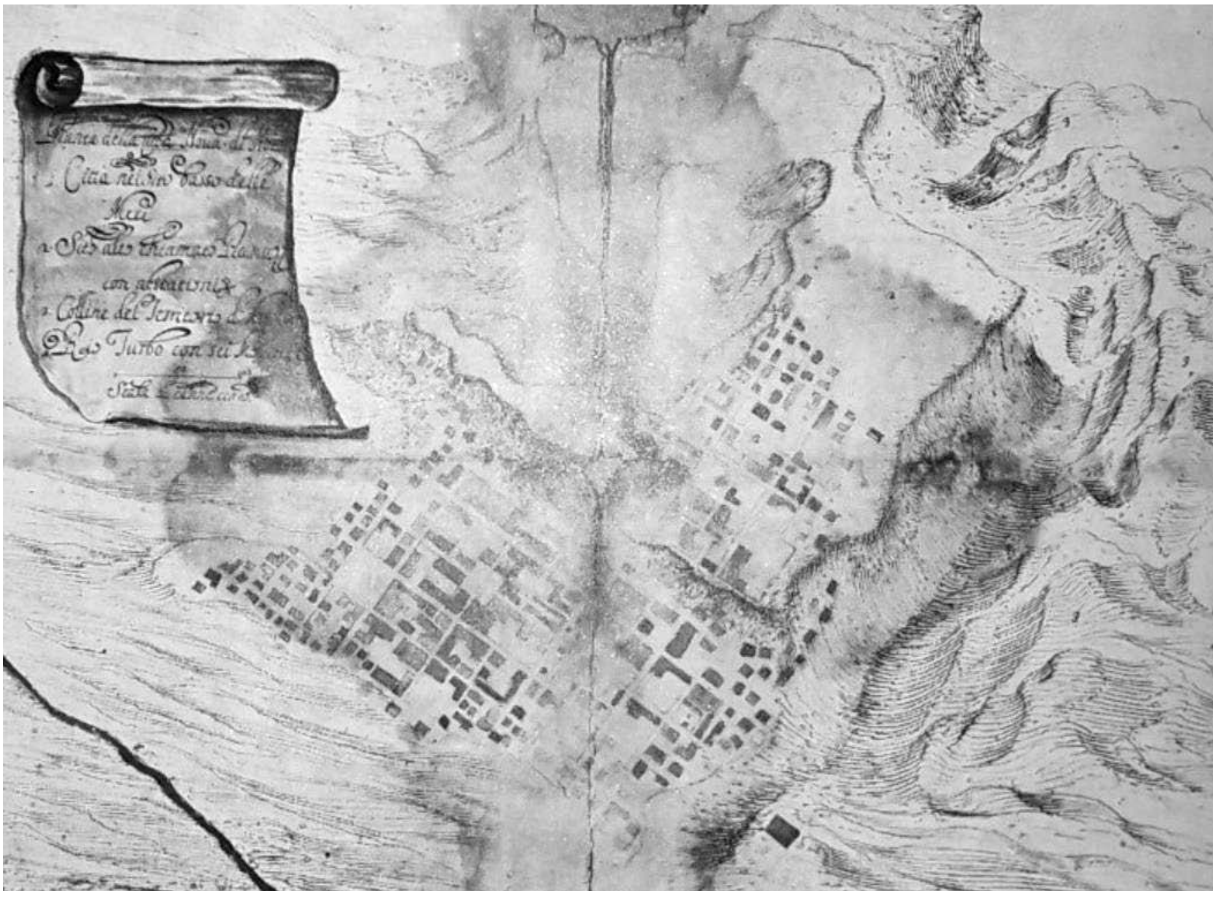

Figure 5. Plan of the new city of Noto drawn up in 1699 by Giuseppe Formenti (Dufour and Raymond, 1990).

overturned the popular will with 19 votes in favor of the new site and 12 for the return (Ligresti, 1992). This bitter dispute dragged on until the final deliberation of the Viceroy on March 8, 1700. Through this decree, the Viceroy essentially granted the population the liberty to choose between continuing to live in the ruined ancient site or completing the constructions already begun in the new location.

It is interesting to note that this measure represents a sort of surrender of central power in the face of the confusion of conflicting local interests. It perfectly illustrates the limits of the Viceregal authority, which, in line with its traditional pact-based policy, ultimately had to step back and leave the final resolution to the local dynamics of power. Consequently, by leaving the population free to choose but providing no financial aid to clear the rubble and rebuild, the Viceroy effectively ensured that an ironclad alliance between the new aristocracy and ecclesiastical interests prevailed. This alliance executed a systematic and highly speculative parceling of the new urban land to the benefit of the wealthiest and most aggressive social classes (Guzzardi and Luminati, 2022). It would then fall to the civic council of Noto, on April 12, 1700, to close the matter by preventing any funding aimed at clearing the roads leading to the old city, thus opening the chapter of Noto's reconstruction on the new site. Finally, in 1702, the new Viceroy, Cardinale Giudice, acknowledged the situation as now irreversible, definitively sealing the fate of the new Late Baroque city.

Within this protracted political maneuvering, where opposing factions sought to steer reconstruction toward their specific interests, we can clearly distinguish the consolidation of new power structures triggered by the earthquake. What emerges unequivocally is that the site choice and subsequent urban planning were driven by the economic interests of a new, "mixed" dominant class, formed by the strategic convergence of the emerging nobility, the secular clergy, and the upper bourgeoisie. This social reconfiguration is physically crystallized in the city's new urban plan. Notably, some of the older, traditional noble families disappeared from the most prestigious central areas (surrounding the Mother Church), replaced by members of this newly empowered bourgeoisie. A paradigmatic example is the Nicolaci family, wealthy tuna industry entrepreneurs, who, between 1693 and 1698, aggressively acquired lots adjacent to the city center, eventually occupying an entire block to build the imposing Palazzo Nicolaci di Villadorata (Fig. 6).

Conversely, while the new elites monopolized the most prestigious central areas, the artisans and less well-off classes were relegated to the periphery of the new city in its final urban layout, just as in the case of Catania.

Figure 6. Palazzo Nicolaci di Villadorata, Noto. Photo by Urban (CC BY-SA 3.0).

Even in this case as well, rather than a rupture in the political and social framework, the earthquake acted as an accelerator of ongoing processes, leading to the definitive triumph of a new nobility that was already on the rise before the disaster.

4.3 Feudal Cities

After exploring the reconstruction processes and power dynamics of the two major royal centers struck by the 1693 earthquake, Catania and Noto, the analysis must necessarily turn to the feudal cities. Due to the traditional autonomy of Sicilian cities, extracting rigid generalizations across the multitude of feudal centers in the Val di Noto is complex; each place developed its own unique trajectory. However, by applying the theoretical framework proposed by Piazza (2012), it is possible to clearly identify the same two macro-models of institutional response, vertical and horizontal, within the varied feudal landscape. This approach allows us to verify whether the post-earthquake changes constituted genuine ruptures in the established order or merely the affirmation of ongoing trends within entirely unaltered structural foundations. Even more so than in royal cities, local power dynamics definitively dictated the spatial reconstruction in feudal areas.

A dynamic similar to that of Catania, characterized by vertical decision-making devoid of conflict at the onset of reconstruction, developed in feudal centers where the local lords faced no significant opposition. This occurred either because competing entities were absent or because there was a complete convergence of interests regarding top-down choices. Lords of fiefs such as Fenicia Moncada, Avola, Occhiolà, Biscari, and Giarratana did not passively endure the catastrophe. On the contrary, they seized the earthquake as a strategic opportunity to implement what Ligresti (1992) defines as a veritable "corporate restructuring" (ristrutturazione aziendale). This involved a radical spatial reorganization of their fiefs, and of their workforce, aimed at increasing their economic power, an operation that would have been difficult to legitimize under normal circumstances. Crucially, in this context, site changes were not dictated by the pursuit of greater safety in the event of future earthquakes; rather, settlements were relocated to make them more profitable, prioritizing agricultural and commercial optimization.

A paradigmatic example of this vertical model is offered by the foundation of Grammichele. Following the destruction of the ancient village of Occhiolà, the local lord, the Prince of Butera, did not merely rebuild but immediately decided to found an entirely new settlement to maximize the agricultural potential of his territory. Authorization from the Viceroyalty arrived only after the fact, when the rigorous and rational hexagonal urban plan had already been laid out, and the free allocation of land to requesting families had begun (Ligresti, 1992).

However, this apparently benevolent policy must be carefully contextualized. While the assigned lots were indeed distributed free of charge, the actual construction of the houses remained the strict responsibility of private citizens; therefore, allocation was contingent upon having the immediate financial resources to begin building. Furthermore, this "free" allocation was far from an act of civic solidarity; rather, it was a structural necessity. The fief's wealth depended entirely on the physical presence and labor force of its inhabitants; thus, granting land to retain the surviving peasantry was the absolute prerequisite for any economic recovery. In this context, the new urban space became a direct instrument for the affirmation of feudal power. The radical relocation and the imposition of a highly controlled, geometrically perfect hexagonal plan allowed the Prince to visually and physically assert his absolute dominance over the territory. Unlike the chaotic peripheries of Catania, the reconstruction here took place in an orderly fashion within a rigorous project and under the supervision of specially appointed master builders. This spatial perfection, however, was not aimed at collective well-being, but was strictly functional to the "corporate restructuring" of the fief, ensuring that every spatial choice ultimately served to increase the Lord's profits.

Unlike the case just analyzed, in other feudal contexts, it is possible to trace dynamics that, returning to Piazza's framework (2012), can be situated within the horizontal and conflictual model already observed in Noto, albeit with due caution. These conflictual dynamics were typical of less hierarchized communities where economic wealth was more evenly distributed and where authoritative institutional figures capable of concentrating consensus were lacking (Piazza, 2012).

In places where this dynamic was evident – such as in the centers of the vast County of Modica, Palazzolo Acreide, and other realities, regardless of the decision to relocate the settlement or not – a singular mode of clash intensified, visible in different forms even in previously explored cases: the aggregation around parishes and confraternities that vied for privileges and recognition through what Piazza (2012) defines as the "war of parishes" (Guerra delle Parrocchie). The conflict, which materialized in the architectural competition to build the most beautiful – and consequently, the most important – church, represented the tangible manifestation of the emerging segments' (the new aristocracy and the bourgeoisie) need to assert their rise in the eyes of the city, attempting to impose a new local hierarchical order.

In some cases, these conflicts remained essentially confined to clashes between religious confraternities seeking to assert their prestige and social standing within the community. In Palazzolo Acreide, for example, the *Sanpaolesi* (devotees of St. Paul) and the *Sansebastianesi* (devotees of St. Sebastian) faced off. Attracted by rich religious privileges, they built two churches without respecting the obligation to first wait for the reconstruction of the Mother Church. The *Sanpaolesi* would prevail after many years (in 1790), creating a splendid new facade for the church dedicated to "their" saint, with the precise aim of overshadowing even the Mother Church, thus establishing themselves in the eyes of everyone as the richest and most powerful confraternity.

Similarly, in Modica, the *Sangiorgiari* (devotees of St. George) and the *Sanpietrini* (devotees of St. Peter) clashed. Here too, after a complex affair that unfolded until 1761, one of the two factions (the *Sangiorgiari*) prevailed, realizing one of the most splendid and majestic churches in Eastern Sicily (Fig. 7).

Figure 7. The *Duomo* of San Giorgio, Modica (photo by Davide Mauro).

In other cases, however, the conflict between confraternities went far beyond mere architectural prestige. It represented a profound clash between different segments of the city's elites vying to dictate whether to rebuild on a new site or remain in the old one, ultimately seeking to assert their spatial centrality as a direct manifestation of their political and economic power. The most striking example of this dynamic occurred in Ragusa, where the horizontal "battle" was more complex than elsewhere, transforming into an actual spatial clash. The two factions were divided between the ancient historical city perimeter, dominated by the followers of St. Giorgio, and the area developed around the 16th century, inhabited by peasants and bourgeois leaseholders who, having grown wealthy over time, had aggregated around the parish of St. Giovanni. After the earthquake, some "secessionists" of the Sangiovannari faction attempted to found the new Ragusa on the Patro plateau, while the Sangiorgiari and part of the Sangiovannari intended to remain on the old site. A monumental new church dedicated to San Giovanni was erected on the new settlement (whose site was recognized in 1695 by the Viceroy, although a new decree reunified the two centers as early as 1703). In this case too, the Sangiorgiari group ultimately reaffirmed its prestige: in 1738, they entrusted the design of their splendid new church to Rosario Gagliardi, the undisputed protagonist of Sicilian Late Baroque architecture.

The plastic representation of social conflicts offered by the "war of parishes" does not, however, exhaust the scope of the tensions that exploded during the reconstruction processes. The centers of the County of Modica, like those just observed, represent a particularly fruitful case study in this regard. The County, owned by the Enriquez family, was a legally unified entity as a fief, but contained several cities within it where substantial local powers had already developed. In this context, the Lord's actions after the earthquake were entirely devoid of any governance; instead, they focused essentially on recovering tax revenues and restoring the administrative apparatus, inevitably clashing with various local pressures. It is no coincidence that the burden of political and spatial decisions was abandoned precisely to the various local ruling groups, creating a power vacuum that triggered the explosion of internal conflict described thus far. Furthermore, this top-down disengagement meant that the entire cost of reconstruction fell on the shoulders of private citizens and local institutions. Due to a lack of targeted investments, the Lord failed to exploit the earthquake as an opportunity for a centralized "restructuring" of his fief. Ultimately, this absence of intervention acted as a powerful accelerator for pre-existing political trends, unintentionally accentuating the tendencies towards autonomy of the various municipalities and strengthening the local elites instead (Ligresti, 1992).

Summing up this concise, albeit partial, reconstruction of the power dynamics established in the feudal domains, we can confirm that, despite macroscopic differences from place to place, decision-making processes followed two macro-directions. As with the royal cities, reconstruction was sometimes characterized by strong vertical decision-making by feudal lords, with varying degrees of popular involvement but lacking significant social conflict, and at other times by horizontal, internal clashes between different segments of the ruling classes, wherein ecclesiastical institutions played a crucial role.

A common thread firmly uniting these two models is the constant tension toward the self-representation of power and wealth by the elites, or by those factions in open competition to maintain or increase their social status. All this unfolded within a horizon where state power was gradually fading, for historical reasons inexorably linked to the slow decline of Spanish rule in Sicily. In the feudal centers, this viceregal weakness is evidenced by the ability of certain Lords to transform the tragedy into an opportunity to strengthen their grip on the territory. Many of the measures undertaken would certainly not have been approved by the Viceroyalty in normal times and acting autonomously while requesting royal authorizations only after the fact was a rare practice. The earthquake thus emerged as a grand window of opportunity to realize aspirations that had been gradually maturing within the fiefs.

Compared to the royal cities, however, it is imperative to note a different specific weight of local populations in the post-earthquake decisions of many feudal areas. This difference can be attributed not only to the smaller spatial and demographic scale of feudal centers but also to the different economic interests that bound the Lords to the citizens: the wealth of the fief essentially depended on their physical presence and labor force. It is no coincidence that the feudal lords' primary concern was to retain the survivors, granting aid in the form of loans, tax exemptions, or land lots, to even attract new inhabitants. It is equally significant that, in the majority of the analyzed feudal contexts, the obligation to rebuild houses at one's own expense did not produce the dramatic fracture in timing, spaces, and building quality recorded in royal centers (such as the emergence of degraded peripheries in Catania).

However, this was not the result of civic benevolence. Beyond the reduced scale of the settlements, the free distribution of lots and the strict top-down control over new construction were managerial tools of the fief-as-an-enterprise. These factors prevented a definitive spatial segregation of social classes and the proliferation of disorderly buildings because absolute spatial control was necessary to efficiently govern the workforce. A dynamic that perfectly illustrates the specific weight of the population, acting as the exception that proves the rule, occurred in Avola. Here, the Duke of Terranova received a request to rebuild on a new site directly from the inhabitants, who had built a makeshift camp on the plain (Dufour and Raymond, 1987). Yet, this rare bottom-up initiative was accommodated and institutionalized by the Lord solely because it perfectly converged with his own economic ambitions: the chosen site was incredibly favorable for trade along the route between Syracuse and Modica, close to the sea. Thus, the population's will was validated and viceregal authorization was sought ex post facto only because it maximized the fief's commercial profitability.

In any case, as with the royal cities and despite the greater popular involvement observed in certain instances, the analysis of feudal realities does not reveal any significant political ruptures. The earthquake seems to have acted, once again, as a powerful accelerator of dynamics already underway, such as the rise of certain bourgeois segments or the autonomist drive of local ruling classes. No structural transformations are recorded in the operating methods of institutions or in relations between social groups. Fiefs, just like royal cities, changed by adapting or strategically exploiting the emergency, but always remained anchored to a systemic scaffolding that was not altered in its substance.

Even the higher number of relocations to new sites compared to royal cities does not represent a rupture, but rather the narrative of a profound continuity: it reflects the traditional dynamism of Sicilian fiefs, which had already been the protagonists of the foundation of dozens of new towns across the island between the mid-16th and mid-17th centuries.

4.4 Economic and Demographic Processes

Having analyzed the reconfiguration of power relations and spatial hierarchies in the Val di Noto, it is evident that the 1693 earthquake did not trigger a profound institutional rupture, but rather crystallized and accelerated pre-existing political dynamics. This rigid institutional continuity finds a perfect correspondence – and its underlying causal explanation – in the analysis of long-term macroeconomic and demographic trends. Moving beyond the immediate emergency phase to examine the economic fabric and population trajectories across the 17th and 18th centuries allows us to definitively test the classic historiographical narrative. As the data will show, the immense building effort of the reconstruction did not function as an automatic engine of general economic rebirth; instead, it largely mirrored and amplified the structural trajectories of growth or stagnation that were already firmly underway before the disaster.

According to a classic historiographical interpretation, the immense post-1693 building effort represented a definitive positive turning point for eastern Sicily. However, as previously observed, a combination of recent studies and a long-term perspective on the trends spanning the event reveals a profoundly different reality. To understand why the reconstruction did not generate a uniform economic miracle it is essential to first contextualize the broader economic situation that characterized the island's fabric long before the earthquake struck. The severity of the fiscal pressure and the economic recession affecting large parts of Sicily in 1693 is emblematically illustrated by a letter sent by the Deputation of the Kingdom (Deputazione del Regno) to the King immediately after the earthquake, preserved in the State Archives of Catania, Caltagirone Section. In this missive, the Deputation recounts how the reasons for the economic difficulties, which predated the earthquake, lay not only in fiscal pressure but also in bureaucratic delays and the increase in duties desired by the royal power. These factors had progressively driven away foreign merchants, the traditional buyers of the Sicilian agricultural surplus. This collapse in trade had generated such impoverishment that making the payment of taxes (gabelle) became difficult, drastically reducing the presence of silver currency. The economic life of the Kingdom was often reduced to the use of copper coins or a barter system. This sharp increase in fiscal pressure had deep roots, likely dating back to the transformation of the donativi from voluntary and temporary measures into ordinary contributions between the late 15th and early 16th centuries. During this period, the numerous military conflicts in which the Spanish monarchy was engaged, alongside the development of the state apparatus, required a systematization of tax revenues. Extraordinary and temporary taxation shifted towards ordinary taxation, leading to the emergence of a long-term public debt structure (the soggiogazioni in Sicily, parallel to the juros in Spain).

For our argument, however, the critical increase in fiscal pressure to consider is that of the first half of the 17th century, coinciding with the Thirty Years' War and the spread of famines and plagues. This increase was caused by new donativi introduced in 1612 and 1642-45, and by the proliferation, as the Deputation recounted in the aforementioned missive, of new taxes on the main goods of the Sicilian economy, such as wheat, silk, and oil, as well as on the export of goods (Ligresti, 1997). One of the most disruptive consequences of this increased tax burden, although it must be framed within the context of a long-term recessionary crisis affecting the entire Mediterranean area, was the severe indebtedness of the administrations of the royal cities. Forced to manage mounting debts, these cities were compelled to sell parts of their territories. This triggered a vast process of re-feudalization through which the Monarchy, while imposing itself on local institutions as never before, was forced to deprive itself of a significant part of its patrimony and fiscal resources.

In the second half of the century, there were no further significant increases in the tax burden, but the general crisis was superimposed upon a political and socio-economic system that multiplied its negative effects. The city's ruling classes had retreated into the defense of ancient and new privileges, distancing themselves from public activity and from the Monarchy, which was increasingly incapable of finding the economic and political resources required to reform the system. At the same time, while strategic economic sectors struggled to compete with the emergence of new actors and the birth of an increasingly broad and interconnected market, the economically stronger social groups adopted an orientation geared towards acquiring state annuities, fundamentally limiting investments in the modernization of the productive system (Ligresti, 2010). All this marked the beginning of an irreversible crisis of consensus for the Crown and unprecedented political conflict, which ultimately exploded in the revolts of 1647 in Palermo and 1674-1678 in Messina. In this fractured and highly polarized context, the earthquake of 1693 and the necessary reconstruction inevitably represented a titanic challenge.

Although the reconstruction certainly contributed to an increased demand for labor and investment, it is also true that the outcome in terms of economic growth varied drastically from case to case and seems to mirror trends already in progress. While cities like Catania flourished economically during the 18th century, cities equally destroyed and rebuilt in situ, like Lentini, or rebuilt in a new location, like Noto, did not share the same fate.

Catania had already represented an exception among Sicilian cities during the 17th century. Despite the eruption that destroyed many territories between Mount Etna and the city center in 1669, the 17th century was a period of economic and demographic growth for the Etnean capital. The sale of many hamlets (casali) outside the walls at the beginning of the century – which in other Royal cities signaled a worsening crisis – in this case caused strong inward migration due to the increased tax burden on inhabitants living in those areas. This inward migration increased further after the eruption and the destruction of many territories surrounding the city (Condorelli, 2009).

Furthermore, the city's economy was significantly driven by the growth of the manufacturing sector, particularly after the Messina revolts of 1674-78 (Laudani, 1997). Messina, until then the sector leader, began a long decline that favored the growth of Catania, despite the latter being hit by tax increases required by the Viceroyalty to support troops stationed to quell the revolt (Boschi and Guidoboni, 2001). The reconstruction certainly strengthened this trend, with an undeniable increase in the role of the construction sector, but, as noted by many scholars, it did not alter its substance.

Crucially, however, this economic "flourishing" was not synonymous with widespread collective well-being. The massive influx of laborers fueling this demographic boom had a direct spatial consequence: it physically populated and expanded the chaotic, unregulated peripheral areas of the city. Thus, the economic momentum of Catania directly fed the social segregation and the renewed seismic vulnerability of its lower classes.

Demographic data provide the definitive quantitative proof of these divergent trajectories. The two shocks of January 9 and 11 caused the death of over fifty thousand people, killing more than half the population in cities like Catania. However, even in this case, it appears that in the medium-to-long term, ongoing demographic trends were not altered.

Catania, which had begun a significant process of demographic growth at least from the mid-17th century and was likely the city with the highest number of victims, resumed growth shortly after, reaching previous levels well before the middle of the century, when it resumed exponential growth rates that remained constant throughout the 1700s (Ligresti, 1992). This growth, directly connected to the economic development of the territory, is even more significant when compared to the demographic and economic decrease in the same period of Messina (Fig. 8), the largest city in Eastern Sicily (Ligresti, 2002).

Remaining faithful to the interpretation of the earthquake as a positive turning point, the reason could be linked to the fact that during the 1693 earthquake, Messina did not suffer damages comparable to those in the Catania area; thus, it did not benefit from the momentum of reconstruction and had been heavily penalized by the revolts it had led. Following this reasoning, however, all cities hit by the 1693 earthquake and destroyed as much as or more than Catania should have experienced the same fortune as Catania (Fig. 9).

However, cities already in economic and demographic stagnation like Lentini (damaged perhaps more than Catania and rebuilt in situ) or Noto (rebuilt in a new location) saw neither their economy nor their population grow, remaining stable throughout the 18th century (Condorelli, 2010). In the case of Noto, this demographic stagnation perfectly resolves an apparent paradox. The relocation of the city generated enormous agricultural wealth for the new local nobility. Yet, this wealth was hyper-concentrated. The highly profitable economy enriched a few elite factions but did not create a diverse manufacturing sector or attract masses of laborers. Noto's demographic stagnation proves that the reconstruction primarily enriched the elites without generating genuine, widespread urban development. A similar reasoning can be extended to the feudal cities (Fig. 10).

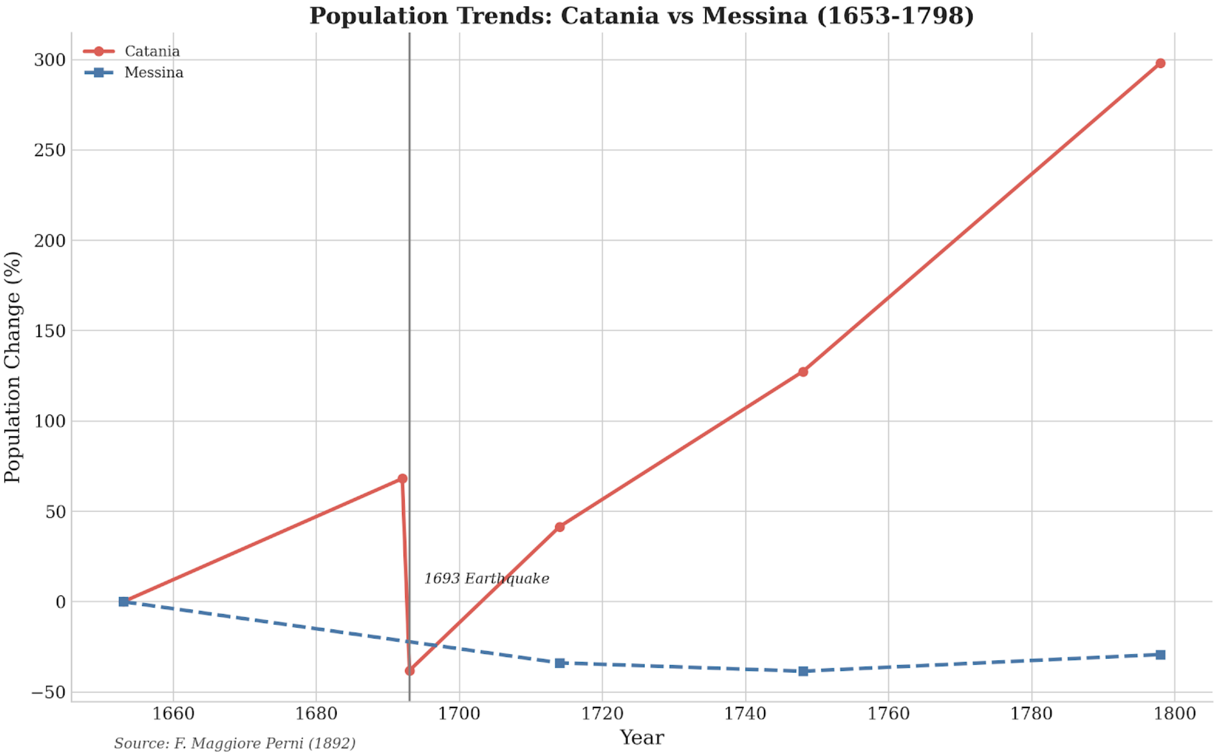

Figure 8. Population Trends of Catania and Messina (1653-1798).

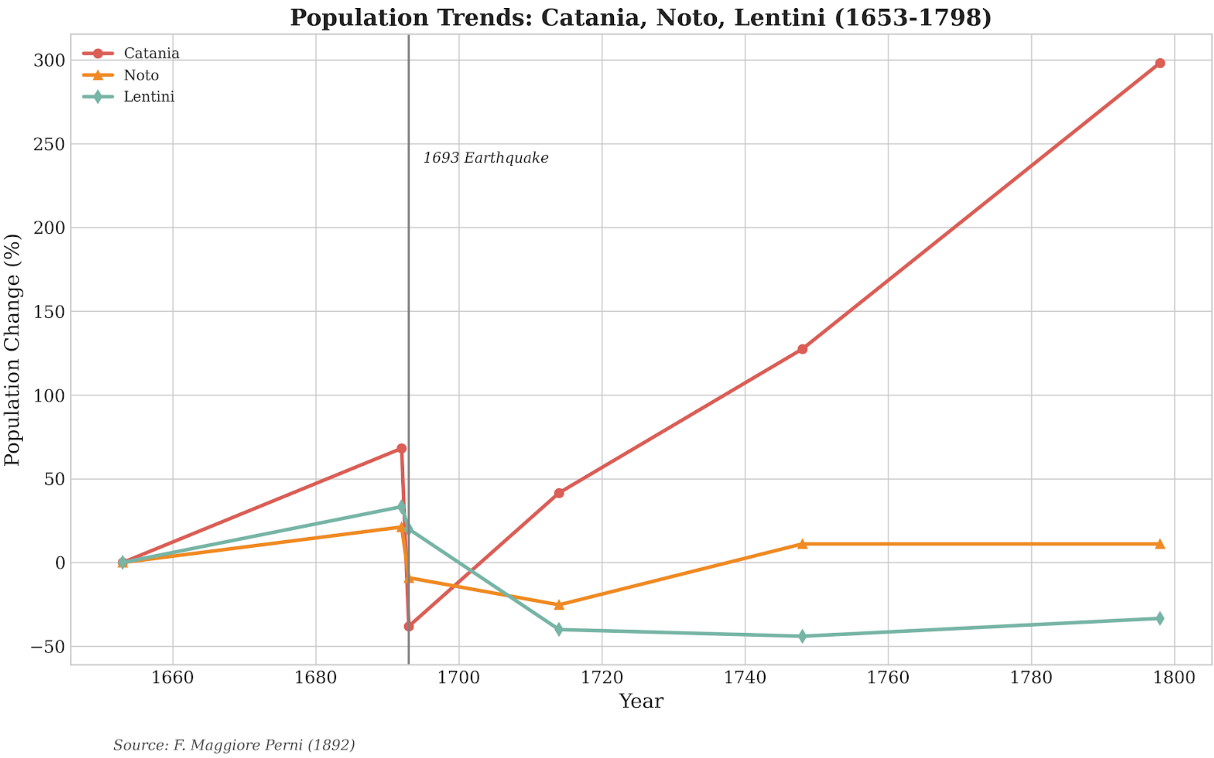

Figure 9. Population Trends of Catania, Noto, and Lentini (1653-1798).

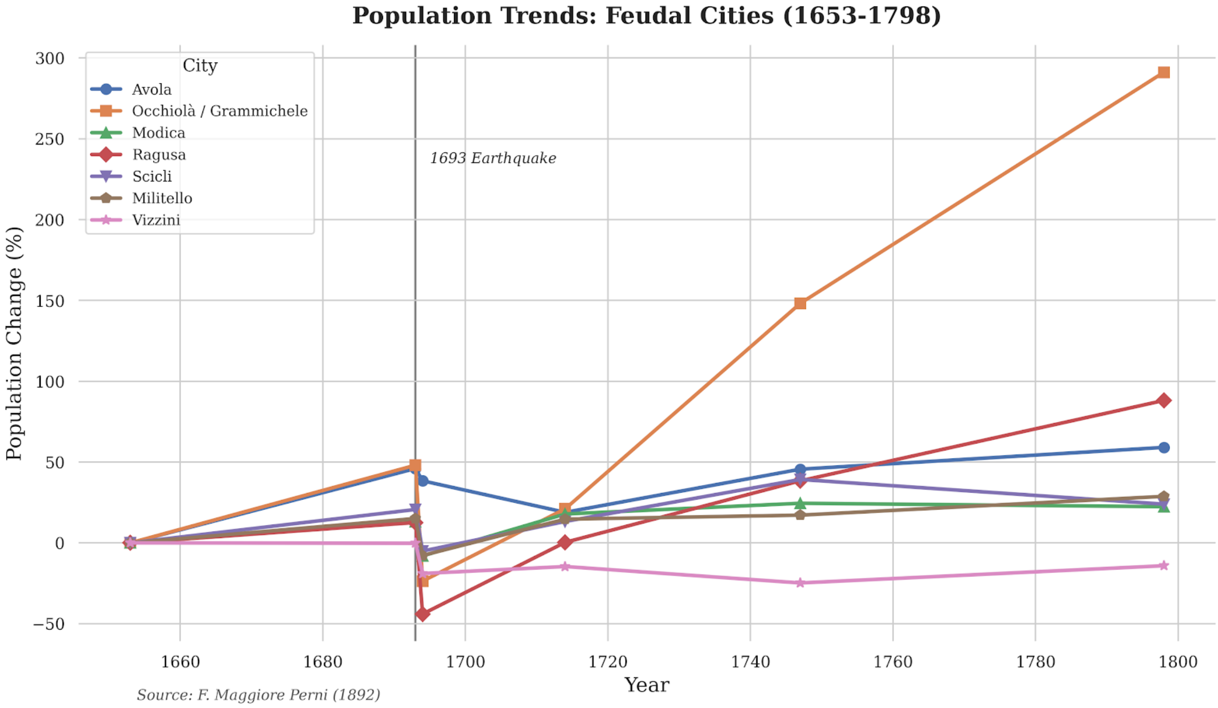

Figure 10. Population Trends in Feudal Cities (1653-1798).

In these contexts, where the core of economic development was fundamentally tied to agriculture, the relationship between demographic curves and economic growth is even more compelling.

Although all the analyzed centers were destroyed by the earthquake and subsequently rebuilt (either in situ or relocated to a new area), they followed profoundly different developmental trajectories. Contrary to the traditional narrative that attributes an automatic “positive turning point” to the reconstruction, these trends often move in perfect continuity with pre-earthquake tendencies. The most evident cases are certainly those of Occhiolà/Grammichele, in strong expansion before the earthquake and capable, much like Catania, of prolonging its growth throughout the 18th century. However, as previously established, this demographic success was no civic miracle; it was the direct, calculated result of the Prince of Butera’s “corporate restructuring,” where strict spatial control successfully retained and multiplied the required workforce. On the opposite end, Vizzini, which, similarly to Noto and Lentini among the royal cities, was stagnating before the catastrophe, remained so throughout the following century.

It would be incorrect, however, to argue for a rigid determinism wherein the post-earthquake period exclusively and mechanically replicates previous trends. The landscape is multifaceted, and in some cases, such as Avola, the lively expansion prior to 1693 was not matched by an equally staggering growth in the subsequent century. More generally, in the years following the catastrophe, the fiefs almost always managed to return their populations to pre-earthquake levels, but despite their undeniable dynamism, they rarely managed to increase them dramatically. Even more crucially, it seems they never succeeded in doing so in the absence of solid, long-term dynamism that had already been initiated during the 17th century.

Ultimately, long-term economic and demographic processes fully confirm the political-institutional analysis: the 1693 earthquake acted predominantly as an accelerator of ongoing structural trends, whether positive or negative, while in other contexts it failed to significantly alter the long-term destinies of the communities.

5. Conclusions

The flowchart in Fig. 11 provides a synthetic analytical framework to explicitly address the research questions posed in the introduction – specifically regarding institutional efficiency, the governance of reconstruction, and historical legacy of the 1693 earthquake.

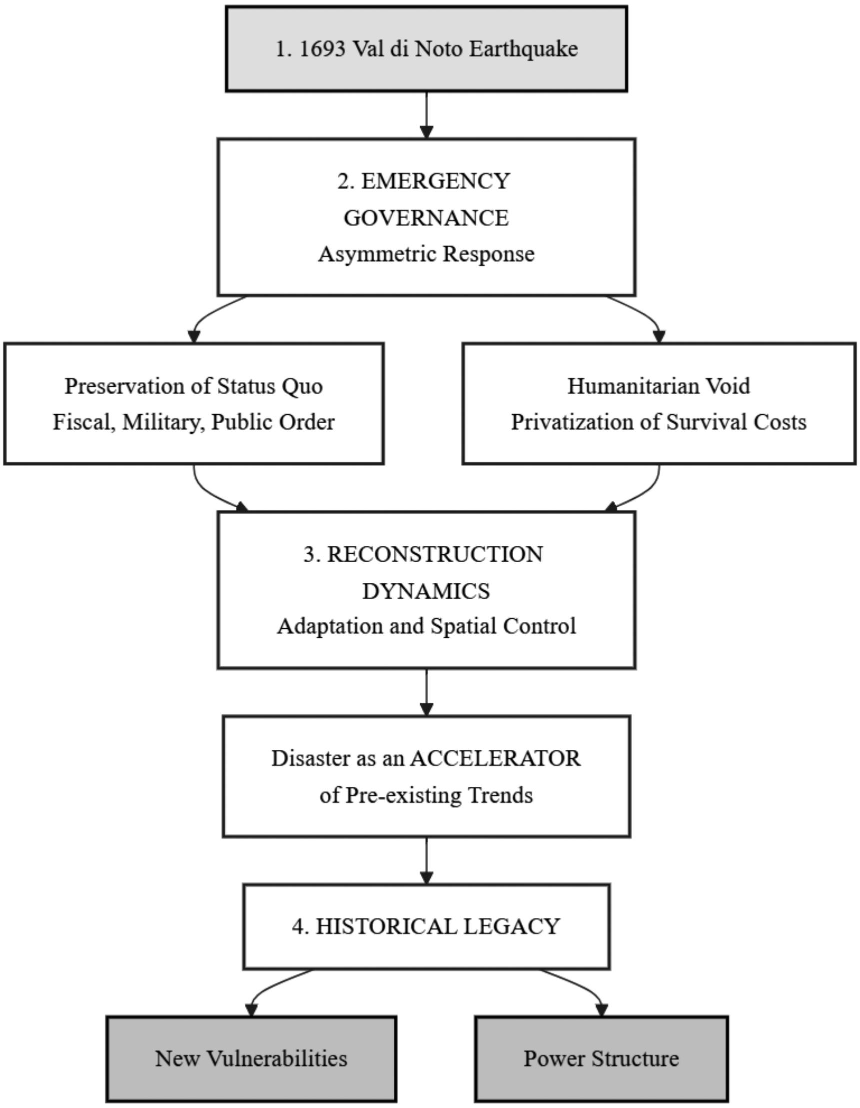

Figure 11. Conceptual flowchart.

The flowchart in Fig. 11 provides a synthetic analytical framework to explicitly address the research questions posed in the introduction – specifically regarding institutional efficiency, the governance of reconstruction, and historical legacy of the 1693 earthquake.

This legacy, as demonstrated, extends far beyond the churches, palaces, and myths entrenched even within a segment of the historiography. It is profoundly different from the idealized rupture capable of changing the destiny of southeastern Sicily for the better.

Looking beyond this architectural surface reveals an emergency response characterized by a strictly asymmetric efficiency. The State proved highly capable of rapidly restoring local administrative apparatuses for fiscal continuity, violently repressing dissent to maintain public order, and securing military strongholds. Yet, this bureaucratic efficiency was entirely functional to viceregal priorities perfectly aligned with the past, systematically neglecting the immediate humanitarian needs of the populations. As evidenced by the severe lack of financial support for hospitals and charitable institutions (Opere Pie), the Viceroyalty simply adapted its pact-based model of government to the new catastrophic scenario. Its primary objective was to maintain the political status quo, ultimately delegating the financial and material burden of survival to the private sphere.

This same logic of political adaptation and self-preservation permeated the cities and local elites in the subsequent reconstruction processes. The physical tabula rasa did not trigger radical social transformations or the sudden rise of new classes. Instead, local urban elites – in both royal cities and feudal centers – exploited the emergency to consolidate their dominance through the physical control of urban space. Consequently, the earthquake functioned primarily as a powerful accelerator of pre-existing economic and demographic trends. Whether it fueled the manufacturing expansion and inward migration in Catania, facilitated the aggressive agricultural land speculation that drove the relocation of Noto, or enabled the strict "corporate" spatial regimentation of feudal towns like Grammichele, the disaster strengthened ongoing trajectories without fundamentally altering their structural substance. The parallel demographic and economic stagnation of heavily damaged centers like Lentini and Vizzini definitively proves that the reconstruction effort did not serve as a mechanical engine for widespread urban rebirth.

Ultimately, the combination of these asymmetric emergency interventions and elite-driven reconstructions generated stable, long-term vulnerabilities. The rhetorical solicitation of the Viceroy – expressed in a letter to the community of Lentini dated June 21, 1695, but reflecting a general directive for the entire Val di Noto: "taking care that no distinction is made between nobles and citizens" (cuidando de que no se distingan nobles y ciudadanos…) – was destined to remain completely theoretical. In practice, the systematic privatization of reconstruction costs, coupled with the local elites' absolute disinterest in anything that did not increase their own wealth and prestige, produced severe spatial segregation. In many cities, such as the emerging "dual city" of Catania, the poorest segments of the population were systematically marginalized into precarious, self-built peripheral neighborhoods (baraccopoli). This explosive intersection of social inequality and geo-engineering fragility nullified many initial attempts at rational urban planning, structurally increasing the seismic vulnerability of the newly rebuilt cities.

The true, enduring legacy of the 1693 earthquake, therefore, was not the birth of a more resilient or modern society, but the rigid consolidation of established power structures and the physical manifestation of their underlying inequalities. Empowered by their strategic management of urban spaces and anchored to unchanged economic dynamics, these local elites emerged from the rubble stronger than before, successfully guiding the area's political transitions from the Spanish Empire well into the Bourbon era. Consequently, the celebrated Late Baroque architectural triumph of the Val di Noto must be understood as more than just a symbol of post-disaster recovery; it is a lasting monument to the resilience of the ruling classes – a resilience achieved by embedding socio-economic disparities directly into the urban fabric, thereby perpetually renewing the seismic and spatial vulnerability of the marginalized populations they governed

Data availability statement. The historical documents analyzed in this study are preserved in the Archivio General de Simancas (AGS), the Archivio di Stato di Palermo (ASP), and the Archivio di Stato di Catania (ASC). Specific shelf marks and collocations are detailed in the References section under "Archival Sources".
Seismological data regarding the 1693 earthquake parameters and microseismical intensities were obtained from CPTI-15 v4.0, DBMI-15 v4.0, and CFTI-5Med. Demographic data used for the charts are derived from Maggiore Perni (1892) and Ligresti (2002) and are available in the cited literature.

Acknowledgements. The authors would like to thank Elena Faraci, academic tutor of the PhD dissertation of C.M., and Lorenzo Coccoli, academic supervisor of the master's thesis of M.M., for the fruitful discussion about the relationships between disasters and institutional response. The authors are also grateful to the Department of Political and Social Sciences of the University of Catania for its support of this research.

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