

17th IPHS Conference ▪ Delft 2016

HISTORY URBANISM RESILIENCE

VOLUME 02

The Urban Fabric

International Planning History Society Proceedings



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17th IPHS Conference, Delft 2016 | **HISTORY ■ URBANISM ■ RESILIENCE**
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The International Planning History Society (IPHS) is dedicated to the enhancement of interdisciplinary studies in urban and regional planning history worldwide.

The 17th IPHS Conference was held in Delft, The Netherlands, from July 17 to 21, 2016.

The conference theme 'History – Urbanism – Resilience' inspired contributions investigating a broad range of topics in planning history: modernisation, cross-cultural exchange, and colonisation; urban morphology, comprehensive planning, and adaptive design; the modern history of urban, regional and environmental planning more generally; destruction, rebuilding, demographics, and policymaking as related to danger; and the challenges facing cities around the world in the modern era.

Convenor

Carola Hein, Chair, History of Architecture and Urban Planning, TU Delft

This series consists of seven volumes and one Book of Abstracts. The seven volumes follow the organisation of the conference in seven themes, each theme consisting of two tracks and each track consisting of eight panels of four or five presentations. Each presentation comprises an abstract and a peer-reviewed full paper, traceable online with a DOI number.

Editor

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Design

Sirene Ontwerpers, Rotterdam

Editorial Assistance and Layout

Phoebus Panigyrakis, TU Delft

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ISSN 2468-6948 (print)

ISSN 2468-6956 (online)

ISBN 978-94-92516-09-1



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Endnotes

According to National Census Authority, India has a population of 1.252 billion. (2013)

India has suffered a loss of over INR 10 billion plus due to the adverse winter weather in January 2013 alone. (Saraswathy, 2013)

Aam Aadmi' - literal translation 'common man' - is a Hindusthani colloquial expression and the equivalent of 'the Average Joe'.

NDMA - National Disaster Management Authority, India

TERI - The Energy and Resources Institute, India

TERI, *Climate Proofing Indian Cities: A Policy Perspective*, March 2014, chap.1.

TERI, *Climate Proofing Indian Cities: A Policy Perspective*, March 2014, chap.2.

Shiraj A. Wajih et al., *Towards a Resilient Gorakhpur* (GEAG, ISET & Rockefeller Foundation, 2013), 05.

GEAG- Gorakhpur Environmental Action Group

Rana P.B Singh, *Urban Planning of the Heritage City of Varanasi (India) and its role in Regional Development*.

According to Census 2001, the city has a total population of 622701 with an average density of 4559 person/km.

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The black line represents historic, observed temperature from 1961-2000. The solid colored lines represent the biased simulations, the dotted lines the corrected simulations.

The solid coloured lines are the scenarios before bias correction. The dashed lines are the scenarios after bias correction.

This interview was quoted from a documentary film 'For a Safer Future- Insights on climate resilience from India' as an outcome of the research project on Mainstreaming Climate Change Adaption and Disaster Risk Reduction in Development Planning which was implemented in joint collaboration of 'Gorakhpur Environmental Action Group', 'Institute for Social and Environment Transition' and 'National Institute for Disaster Management'

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Stephen Tyler et al., *Developing Indicators of Urban Climate Resilience* (ISET: 2014).

Image Source

Figure 01: Indian Express, Digital Archive, <http://indianexpress.com/article/india/india-news-india/us-offers-assistance-for-chennai-flood-victims/>.

Figure 02: Gorakhpur Environmental Action Group(GEAG), *Rooting Resilience in Odds*, 06.

Figure 03: Illustrative diagram of river (source- author) & Photograph of Varanasi Ghats- Classical India, Digital Archive, <http://www.departuresandarrivals.travel/classical-india/>.

Figure 04: Illustrative diagram of city growth (source-author)

Figure 05, 06 & 07: GEAG Resource Centre, Digital Archive

Figure 08: Gorakhpur Environmental Action Group(GEAG), 2009: 3

Figure 09: Gorakhpur Environmental Action Group, Wajih et al., 2010: 23

Figure 10 & 11: Opitz-Stapleton, 2009

Figure 12: Amit Mitra, GEAG Resource Centre, Digital Archive

Figure 13, 14 & 15: GEAG Resource Centre, Digital Archive

Table Source:

Table 01: NIDM, *Disaster & Development*, 2013: 22

THE RECONSTRUCTION OF GIBELLINA AFTER THE 1968 BELICE EARTHQUAKE

Federica Scibilia

Universita degli Studi di Palermo

On 15 January 1968 a catastrophic earthquake struck the Belice Valley. In some cases in the reconstruction plans it was decided to abandon the old settlements and to build new ones in different places. Among these centers Gibellina was the most damaged and the town was built away from the old settlement in an area within Salemi, where the highway and the railroad converged, in an attempt to take away the new center from the isolation in which it had lived for centuries. For the reconstruction of the town a development plan was drawn up by the Institute for Social Housing Development (ISES). This Institute was assigned the task to elaborate the general plan, designed in an extensive urban model alien to the identity of the local population and it was responsible for the primary and secondary urbanization works. At the same time the earthquake was the pretext for experimenting with significant projects by famous architects and artists, who were called to intervene in the new center. This study aims going deeply into the case of Gibellina by analyzing its urban plan. Particular attention will be given to the comparison between the old and the new urban settlement.

Keywords

earthquake, reconstruction, Belice, urban planning.

How to Cite

Scibilia, Federica. "The reconstruction of Gibellina after the 1968 Belice earthquake". In Carola Hein (ed.) *International Planning History Society Proceedings*, 17th IPHS Conference, History-Urbanism-Resilience, TU Delft 17-21 July 2016, V.02 p.313, TU Delft Open, 2016.

DOI: <http://dx.doi.org/10.7480/iphs.2016.2.1245>

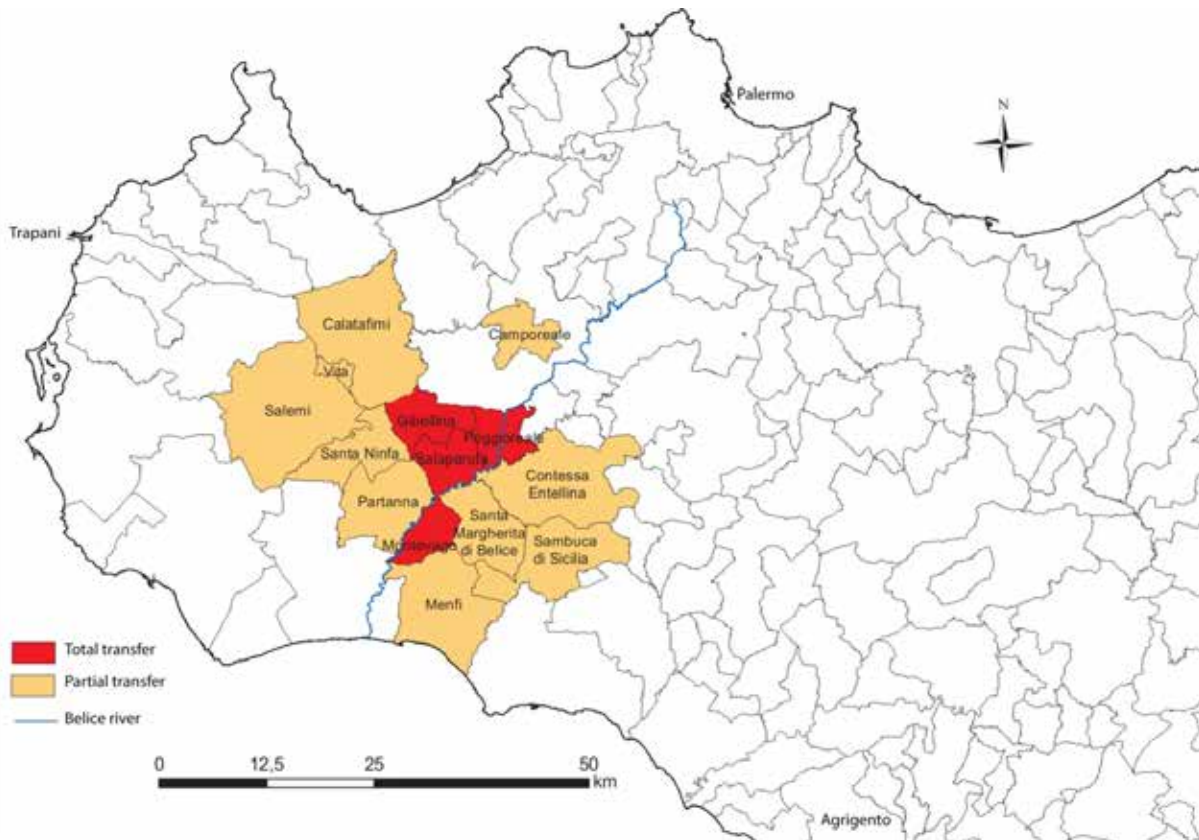


FIGURE 1 The fourteen centres of the Belice Valley struck by the 1968 earthquake

INTRODUCTION

On January 15 1968, there was a catastrophic earthquake, which struck a vast area of western Sicily in the provinces of Agrigento, Palermo and Trapani, including, to varying degrees, fifty municipalities. The damage was massive and mainly located in the fourteen centres of the Belice Valley, which had a poor, mainly rural economy, where the buildings were typically modest and characterized mostly by materials and construction techniques of poor quality. In these centres, the destruction caused by the earthquake brought about radical changes in the urban structure, and in some cases the abandonment of the original historic centres. In fact, in the centres mentioned, local strategies put in place after the earthquake were based on new construction in urban centres, rather than the reconstruction of the existing areas (fig. 1). There were plans to give up the old settlements, raze them and build new ones in different places, often located at a considerable distance from the original sites, resulting in a physical separation of the inhabitants from their roots. In particular, of the fourteen municipalities affected by the most extensive reconstruction, only Gibellina, Montevago, Poggioreale and Salaparuta were classified as subject to full transfer, because of the substantial percentage of damage to the housing stock. The towns of Calatafimi, Camporeale, Contessa Entellina, Menfi, Partanna, Salemi, Sambuca, Santa Margherita, Santa Ninfa and Vita, on the other hand, underwent partial transfer programs.

This article specifically aims to examine the plan for the new centre of Gibellina, in the province of Trapani, highlighting its peculiarities through a comparison between the characters of the old and the new urban settlement.

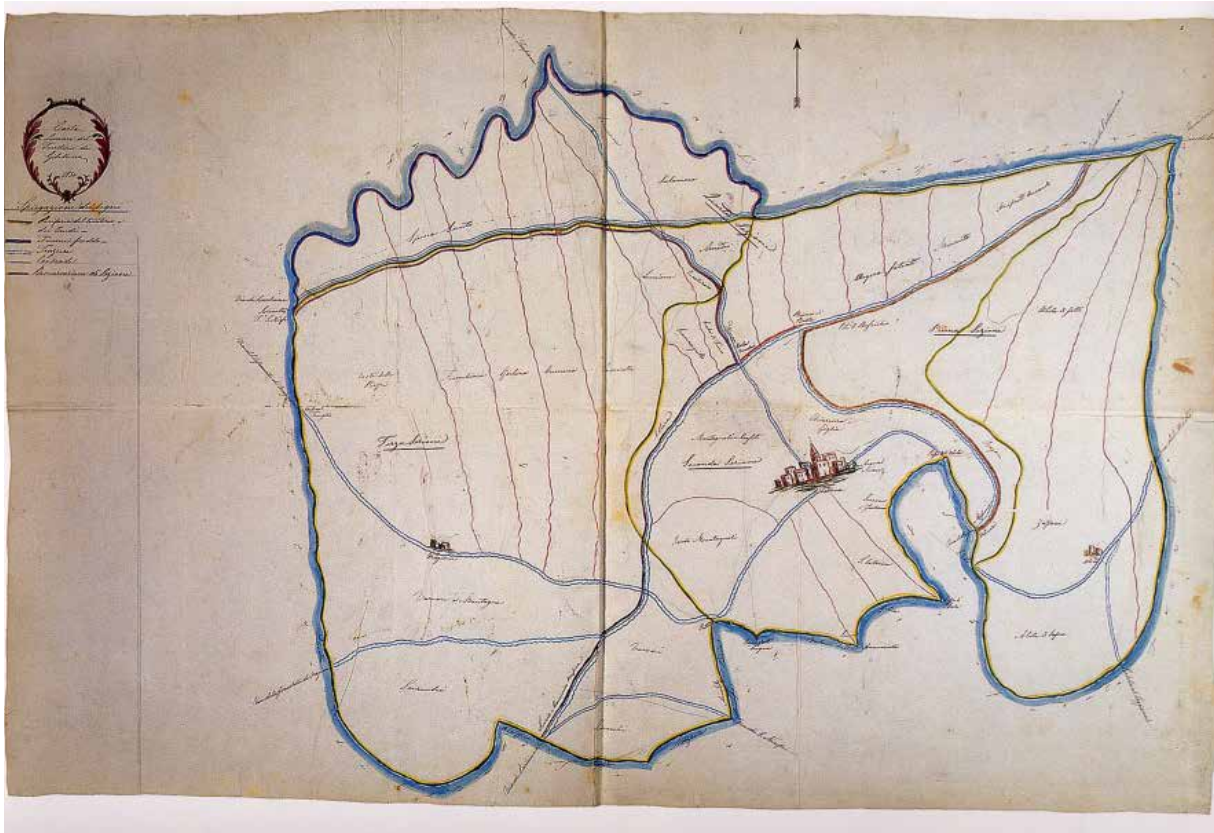


FIGURE 2 Old Gibellina. Plan of the territory, 1850.

CHARACTERISTICS OF THE SOCIO-ECONOMIC CONTEXT BEFORE THE EARTHQUAKE

Like the many other small rural towns in the hinterland of Sicily, Gibellina was a marginal area in the social and economic context on a regional and national level, and was affected by a considerable degree of economic depression. The population, which was 6,005 inhabitants in 1967, subsisted on an agricultural type economy, based on the production of cereals, carried out with backward methods that were inadequate for any kind of large scale production. The only other activities were the small family run craftsmen's workshops for producing essential goods. Isolation was made worse by poor transport links with the towns on the coast, caused by an inefficient road system, in the context of a more general state of decay of the infrastructures of the hinterland of the island¹.

The economic depression had a direct effect on social conditions, which were characterised by a widespread state of instability and low levels of literacy. There was no plan for real development in the area, as a result of the historically recorded lack of commitment to the Southern regions of Italy by the government.

The population had a somewhat limited income and there was a high level of unemployment. The main alternative was immigration, which involved large parts of the active population, but did not produce an appreciable easing of the pressure on local resources or an improvement in economic conditions, but rather a decline in the work force available in the area, which was made up of an aging population.



FIGURE 3 The “Cretto” by Alberto Burri in the Old Gibellina area.

THE URBAN LAYOUT AND THE ARCHITECTURAL EMERGENCIES OF THE OLD CENTRE

The original urban centre stood on the right side of the Belice Valley, in a fairly inaccessible position. The built up area was clearly separated from the surrounding countryside (fig. 2). Unlike many towns of the Belice Valley, whose configuration before the 1968 earthquake is well documented, trying to reconstruct the appearance of Old Gibellina, is a daunting task. The reasons for this are the lack of documentary and iconographic sources available, the scarcity of monumental architecture, and, finally, because the surviving ruins have become the site of a work of contemporary art, the Cretto by the artist Alberto Burri (fig. 3).

The urban identity of the old centre was mainly defined by religious buildings, which were not monumental, and small modest residential constructions, simple from the point of view of typology and materials used, and characterized by a strong uniformity.

By combining the little documentary data and the rare iconographic documentation (graphic and photographic)², it has been possible, at least partially, to recreate an image of the town and to evaluate its structure from an urban and architectural point of view.

According to local historian Baldassarre Ingoglia, the origin of Gibellina dates back to the Arab era, as suggested by the place names and the etymology of the name Gibellina itself³. However, the lack of references to the existence of Gibellina in the accounts of Arab travellers and in maps from that time would suggest that this is not the case, although the existence of a hamlet at that time cannot be ruled out. Although the origins of the town have not been established with any degree of certainty, its existence at the end of the fourteenth century can be confirmed. It was during this period that Manfredi Chiaromonte had a castle built on one of the five hills surrounding the territory of Gibellina, in a fiefdom called Busecchio, where the first settlement appeared.

The foundation of churches and monasteries of the mendicant orders, mainly by the Morso family - an aristocratic dynasty that attained the barony of Gibellina for the first time in 1498, with Giovanni, but only held the feud continuously from 1548 onwards, with Antonino⁴ - gave a new structure to Gibellina, and also resulted in some choices relating to the urban layout.

The layout of the main roads, called Via delle Corse (after Via Roma) and Via Umberto I, was defined by the placement of the convents of the Franciscans, Carmelites and Augustinians at each corner of an ideal triangular shape, in line with a recurring pattern in the arrangement of buildings of the mendicant orders. The convent of the Franciscan, with the church of San Francesco (started in 1570 and destroyed in the 1850s), was located in the north of the town in the place then occupied by the Di Lorenzo Palace, in a street with the same name; the convent of the Carmelites, with the adjoining church of the Carmine, both dating from the fifteenth century, were located east of the castle; finally, the Augustinian monastery, with the church of San Nicolò, both founded in 1619 by Antonio Morso, were located in the western part of the town.

Via Umberto I, the main city street in the north-south direction, separated the town into two areas, acting as a dividing line between the old centre, located to the east around the ruins of the castle, and the new expansion areas to the west (fig. 4).

This street, together with the axis of Via delle Corse, situated in a position almost at right angles to the previous one (east-west), and the other road layouts that were almost parallel to it, divided the town into six districts: Santa Caterina, Pizzo di Corte and Acqua Nuova in the eastern part (the oldest), which were characterized by an apparent incoherence, with roads whose layout was more closely related to the orographic characteristics of the land, and Sant'Antonio, Zubbia and San Nicolò in the western part (of more recent construction), whose road layout was later to become the location of the houses of the nineteenth-century middle classes. The construction areas were arranged along variable parallel lines based on the urban sectors, creating a rather complex overall system. The old urban fabric located to the east, which took shape between the 16th and 18th centuries, was characterized by well-cut and rather wide roads and three squares (Matrice, Market and Garibaldi). Matrice Square, which the Mother Church looked out over, was the fulcrum of the entire urban system.

The only architecture of a certain value of which an iconographic documentation remains was the Mother Church. The date of its foundation is uncertain, but the building, initially dedicated to Purgatory, was restructured several times between 1540 and the eighteenth century. In addition to the Matrice and the churches of the mendicant orders, there were also some seventeenth and eighteenth-century churches⁵.

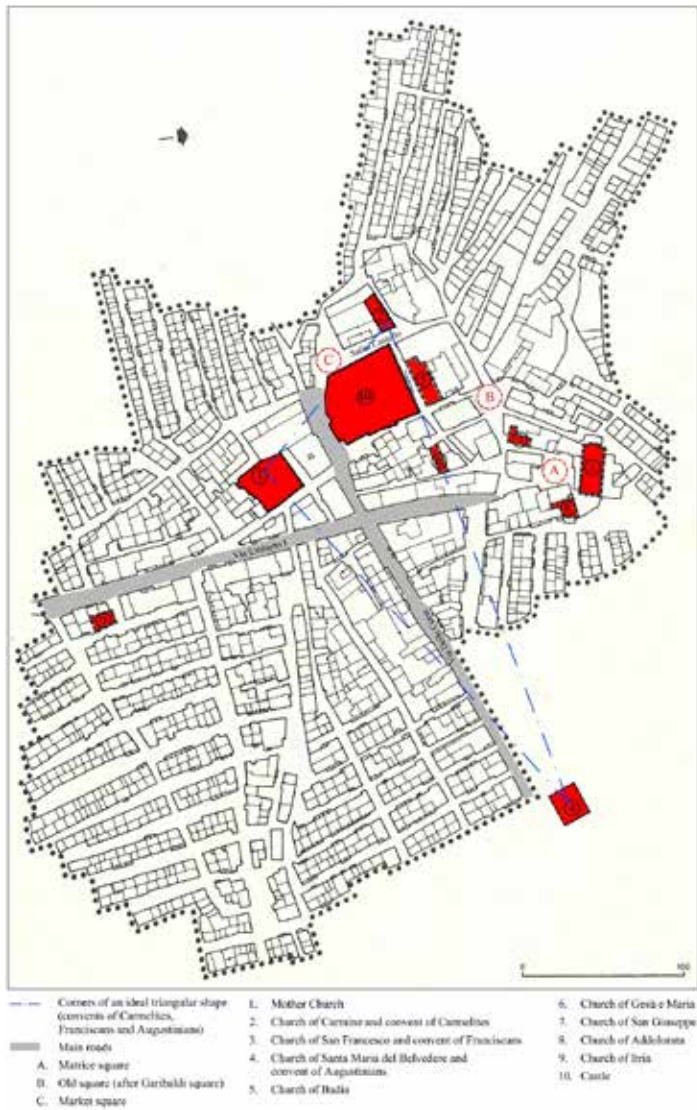


FIGURE 4 Old Gibellina. Design of the cadastral plan.

THE EFFECTS OF THE EARTHQUAKE ON THE SOCIO-ECONOMIC FABRIC

The earthquake aggravated the already unstable socio-economic conditions in the area, highlighting a pre-existing state of crisis. The impact of the earthquake on work activities caused an interruption in the established methods of land management by destroying infrastructure as well as homes and rural working buildings. Like other towns hit by the earthquake, Gibellina was affected by a rapid acceleration in the already significant phenomenon of migration to Northern Italy and the countries of Northern Europe. It was estimated that following the earthquake, about 50% of the population emigrated temporarily⁶.

In an atmosphere of urgency, the main priority was to respond to the housing crisis. Following common practice in similar circumstances, two shanty towns were therefore constructed to house the large number of homeless, one located in the Rampinzeri area and the other in Madonna delle Grazie, physically separating the population into two settlements.

Being suddenly forced to live in temporary shelters and give up their usual habits heightened the pessimistic attitude of the inhabitants of Gibellina, which manifested itself in the pursuit of charitable interventions from public bodies.

THE CONSTRUCTION OF NEW GIBELLINA

The first legislative action aimed at reconstructing the areas affected by the earthquake in Western Sicily was the D.L. 27/02/1968, subsequently converted into Law 241 of 1968, which provided the first funds for reconstruction. In April 1968, the Institute for Social Housing Development (ISES) had already been commissioned to plan the building reconstruction of the affected areas⁷. Additional supplementary provisions on allowances for the benefit of the areas affected by the earthquake were put in place by Law no. 858 of 1968.

The ISES, established by Law no. 133 of 15/02/1963, was set up as a technical body with its headquarters in Rome. It was in charge of social housing around the country, and also had the task of intervening in cases of housing reconstruction after natural disasters. The body was highly centralized and linked to the government, since its actions were directly carried out by experts appointed by the Ministry of Public Works.

According to article 59 of the D.L. 27/02/1968, the reconstruction of the disaster areas was to be aimed at reorganising and relaunching the local economy, rehabilitating the population, and providing an alternative to emigration. According to the propaganda that accompanied the State reconstruction, a radical structural and infrastructural operation was to be carried out through investment in the industrial sector, which would have guaranteed work and wellbeing for the population. The reality was very different from what had been announced. The industrial installations were never put in place, and necessary steps were never taken to support the recovery of the farming and craftsmen's activities that, although small in scale, sustained the population and guaranteed the continuity of a tradition.

The interventions were initially implemented on the basis of the Western Sicily Territorial Coordination Plan promoted by the ISES. In its first phase, this plan involved the municipalities concerned, a special decentralized office of the Ministry of Public Works, and the General Inspectorate for the Earthquake Zone of Sicily, based in Palermo and established by the aforementioned law 241 of 1968. The Inspectorate was responsible for approving projects, allocating funds and contracts, and the technical and administrative management of the works, services and supplies, and also included a technical-administrative committee, chaired by the Director of Public Works and made up of a number of experts.

The activity of the ISES in the Belice area is documented up until 1974, when the Ministry of Public Works decided to transfer responsibility for the management, support and accounting of the work to the autonomous sections of the Civil Engineering Department responsible for the area.

An initial reconstruction proposal involved joining Poggioreale, Salaparuta and Gibellina together into one big urban centre, in the belief that it would be possible to create a conglomeration with better health, education, sports and administrative services, which would have been difficult in separate small towns with a population of about 5,000 inhabitants. However, opposition from the local authorities led to the abandonment of this proposal and the decision to create three new towns in three separate locations, different from their original ones, chosen according to criteria regarding proximity to infrastructure and favorable orographic conditions.

For the reconstruction of Gibellina, as with the other fourteen towns in the Belice valley, the ISES drew up a town plan coordinated by the engineer Marcello Fabbri. The new settlement was to be built about 18 km from the old one, in an area in the district of Salemi, in Contrada Salinella, at the meeting point between the main road, the Palermo-Mazara del Vallo motorway and the railway. This decision arose from the need to connect the city to the regional road network, in an attempt to take the new centre out of the isolation that it had been in for centuries. However, the most immediate effect was to distance the people from the original agricultural areas in which most of the population worked and earned a living.

The decision to build a town *ex novo* after a catastrophic event, although not in line with the prevailing trend of rebuilding towns *in situ*, was not a new idea, as it had already been done in Sicily, for example in the case of Noto, whose old settlement was destroyed after the earthquake of the Val di Noto (South Eastern Sicily) in 1693, and abandoned to found a new city⁸.

An attempt at developing a plan based on the social and economic reality of the area was proposed by the sociologist Danilo Dolci⁹. When explaining the methodology used in his proposal, he maintained that his plan did not have just one author and stated, «it has thousands of authors, tens of thousands of people that have been heard and consulted, from the illiterate, who have established experience of their land, to the educated, technicians and experts of the highest scientific level»¹⁰. He emphasized that the plan's goal was to «make an effective tool available to policy makers, and (...) an educational tool with which awareness can lead to practical solutions, through articulated cultural and political pressure, available to everyone»¹¹. A draft of this plan was sent to the relevant authorities. However, although it had resulted from the participation of civil society, and caught the attention of prestigious names in architecture and town planning, such as Bruno Zevi¹², Carlo Doglio and Leonardo Urbani, it was not taken into account in subsequent planning decisions.

In addition to the overall plan the ISES was responsible for the works of primary and secondary urbanization, including: the social housing, all of which is almost identical apart from subtle variations in distribution (used in all the reconstructed towns); school buildings (nurseries, a kindergarten and a secondary school); a cemetery and a community centre, as well as the livestock market and agricultural fair.

The site plan of the new city (fig. 5) was designed according to an urban model that was alien to the identity of the local population. It does not contain any reference to the old urban settlement, based on a cross roads as the layout for the streets, or to the pre-existing building types. The new plan is made up of two planimetric blocks that form an organic “butterfly wing” shape, centred on a longitudinal axis running East-West. The main facilities are located along this road axis, while the residential areas, made up of terraced houses, extend out to the sides, divided into four allotments.

The design of the plan reflects the town planning ethos of the sixties, which faced with the uncontrolled growth of large cities, had developed settlement models based on functional zoning.



FIGURE 5 Planning Study designed by I.S.E.S.

In Gibellina the building criterion applied is of an extensive type, characterized by flat architecture spread out over the land, made up of single-family two storey detached houses, based on the urban model of the Anglo-Saxon garden city. There are isolated houses with a small green space for each individual dwelling, and also a strong hierarchy between vehicular and pedestrian traffic.

The wide streets and squares are clearly oversized for the population, whose work was related mainly to agriculture. This was the result of an indiscriminating use of town planning models alien to the culture of settlement in the area, triggering problems of identity in the population, which have not yet healed.

The reconstruction works of the new centre, which only started in 1971, went ahead in an atmosphere of heated debate and were characterized by delays and red tape. As a result, the initial urbanization works were only finished in 1976, and the following year the first 150 homes were completed.

The buildings and spaces for the community were added to the anonymous residential districts of social housing. They took a very long time to build and were subject to variations and frequent interruptions on the building site.

From the eighties onwards, a critical review of the urban plan of Gibellina was carried out by the Design Laboratory “Belice 80” coordinated by the professor Pierluigi Nicolini¹³, following which questions were asked about how to give identity back to a residential fabric considered abstract and inadequate.

At the same time, the rebuilding process offered a pretext to experiment with important designs created by well-known architects and artists, called on to produce works for the new centre by the Mayor, Ludovico Corrao, who was very active in the debate that developed around the difficult problem of reconstruction¹⁴. He helped make Gibellina a real museum of modern architecture, thanks to the extraordinary number of architects and artists who worked on its reconstruction, making it a unique experience on an international level.



FIGURE 6 The System of Squares

Some of the most important examples of the season of great cultural excitement that swept the town from the seventies onwards are:

- the Mother Church by Ludovico Quaroni, designed in 1972 with Luisa Anversa;
- the Cultural and Trade Center by Vittorio Gregotti (1976-1982)
- the Baglio Di Stefano by Marcella Aprile, Roberto Collovà and Teresa La Rocca (1981-1990);
- the Pharmacist's house by Franco Purini and Laura Thermes (1981);
- the Di Lorenzo Palace by Francesco Venezia (1981, 1983);
- the System of Squares (fig. 12) designed by Laura Thermes and Franco Purini (1982-1990) with the Civic Tower by Alessandro Mendini (1988);
- the Theatre by Pietro Consagra (1984-2007);
- the Secret Garden by Francesco Venezia (1984, 1987), who also designed the Exhibition Building (1985-87) and the Secret Garden II (1986, 1991);
- the Pirrello House by Franco Purini and Laura Thermes (1988-1990);
- the complex of housing and services on the axis of the social centre by Oswald Mattias Ungers (1988-1990).

In addition to the architecture, urban redevelopment was promoted by the creation of works of art and installations, located in various different places within the urban fabric and designed by avant-garde artists, starting with the famous Gate of the Belice by Pietro Consagra (1980), which marks the entrance to the town.

CONCLUSIONS

In the case of Gibellina, like Poggioreale and Salaparuta, the destruction of the old town after the earthquake of 1968 and the subsequent choice to found a new one have resulted in a permanent loss of identity, which was once focused on a few recognizable elements. This situation has contributed to increasing the sense of alienation of the population towards the new settlement, increased by the indiscriminate application of town planning models alien to the local culture, and the lack of any real consideration of the specific conditions of the place, the history and significance of the old town, and the real needs of the inhabitants.

Although the earthquake, as in other cases of post earthquake reconstruction, provided a fertile terrain for experimentation and renewal through an affirmation of the “modern”, the individualism underlying these works has not succeeded in giving the urban spaces that necessary character of unity, leaving the pieces of architecture as decontextualized models.

This idea is expressed in the critical review by Nicolin of the work carried out in New Gibellina. Referring to the relationships between urban areas and the local population, he noted that, «while the number of individual interventions with quality works continues to grow, (...) there is still no idea of the town itself. And this reminds us that it takes more than buildings to make a town»¹⁵.

Acknowledgements

The research leading to these results has received funding from the European Research Council under the European Union's Seventh Framework Programme (FP7/2007-2013)/ERC grant agreement n° 295960 - COSMED.

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Figure 1 - Graphic processing by the author.

Figure 2 - Le mappe del catasto borbonico di Sicilia. Territori comunali e centri urbani nell'archivio cartografico Mortillaro di Villarena (1837-1853), a cura di Enrico Caruso, Alessandra Nobili, Palermo, Regione Siciliana. Assessorato dei Beni Culturali ed Ambientali e della Pubblica Istruzione, 2001.

Figure 3 - Photo by the author.

Figure 4 - Gangemi, Giuseppe, La Franca, Rosalia. Centri storici di Sicilia: inventario di protezione dei sistemi urbani delle province di Trapani, Agrigento, Caltanissetta, Enna. Palermo: Vittorietti, 1979, graphic processing by the author.

Figure 5 - ASPa, I.S.E.S., b. 27.

Figure 6 - www.wikipedia.com.

Endnotes

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