

TeMA

This Special Issue of TeMA - Journal of Land Use, Mobility and Environment, collects twenty-seven contributes of international researchers and technicians in form of scenarios, insights, reasoning and research on the relations between the City and the impacts of Covid-19 pandemic, questioning about the development of a new vision and a general rethinking of the structure and urban organization.

Journal of Land Use, Mobility and Environment

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Covid-19 vs City-20

scenarios, insights, reasoning and research



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COVID-19 vs CITY-20

SCENARIOS, INSIGHTS, REASONING AND RESEARCH

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Laboratory of Land Use Mobility and Environment
DICEA - Department of Civil, Architectural and Environmental Engineering
University of Naples "Federico II"
Piazzale Tecchio, 80
80125 Naples
web: www.tema.unina.it
e-mail: redazione.tema@unina.it

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The cover image is a photo collage of some cities during the Covid-19 pandemic quarantine (March 2020)

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"Passata è la tempesta ...". A land use planning vision for the Italian Mezzogiorno in the post pandemic

Paolo La Greca ^{a*}, Francesco Martinico ^b, Fausto Carmelo Nigrelli ^c

^a Dipartimento DICAR
Università degli Studi di Catania, Catania, Italy
e-mail: paolo.lagreca@unict.it
ORCID: <https://orcid.org/0000-0001-5162-5519>
* Corresponding author

^b Dipartimento DICAR – SDS Siracusa
Università degli Studi di Catania, Catania, Italy
e-mail: francesco.martinico@unict.it
ORCID: <https://orcid.org/0000-0002-2012-6351>

^c Dipartimento DICAR – SDS Siracusa
Università degli Studi di Catania, Catania, Italy
e-mail: nigrelli@unict.it
ORCID: <https://orcid.org/0000-0002-0003-3190>

Abstract

The Covid-19 pandemic event can activate a comprehensive reflection on the change of development models, overcoming the current unsustainable ones. Present events in Italy are mainly affecting Northern Regions but also the Southern ones will suffer from economic consequences, related to the pandemic. This is particularly relevant for the marginal areas of the Italian *Mezzogiorno*.

The article highlights issues that are deemed relevant for including inner areas of Italian Southern regions into the process of economic recovery after the pandemic, in order to avoid the deepening of the long lasting North South imbalance, in the light of the growing depopulation of this part of the Country.

The focus is on the role of Health Services, Education, Built up Environment and Transports, systems considered as key elements for promoting a well-balanced use of existing territorial assets. The real challenge is to reverse this terrible threat into an opportunity, introducing effective changes into the way we waste our limited planetary resources, especially the territorial ones. In this direction, Southern regions can play a fundamental role for increasing the resilience of the entire nation.

Keywords

Italian Mezzogiorno; Regional development; Regional planning.

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1. Introduction

The Covid-19 pandemic event is producing a large debate in almost all sectors of scientific research, including land use planning. Undoubtedly, what happened in the late winter and spring of 2020 appears as an epochal change. In this contribution, we propose hints for a new vision related to regional and urban planning, by "wearing new glasses" shaped by the augmented awareness stimulated by Covid-19.

Making forecasts on the long term effects is a risky exercise (Viesti, 2020). However, this event should activate a comprehensive reflection on the change of development models, overcoming the current unsustainable ones. The following considerations are mainly referred to as the Italian condition, assuming a point of view that focuses on the peculiar features of the weakest part of the Country: the so called Mezzogiorno. Some of the conditions that are characterizing the Southern Italian regions can be referred to other Southern European countries.

Going beyond the current effects of media overexposure, the progress of this debate is producing a growing number of proposals that are referred to as the territory. If the political elites and the entire national community will accept the challenge of the pandemic, this will become a great opportunity for referring future investments to territorial instances. A clear political stance is necessary, but it can be hardly adopted by Governments without a solid vision about the future and a consequent capacity of taking strategic decisions. It is wishful that, in Italy, the political debate about the revitalization of the national economy will be deeply discussed in the light of the next political elections¹. The central point is, once again, the direction to give to economic recovery packages, reversing the current approach aimed at advantaging financial revenues and concentrating the efforts toward sustainable production of staple goods and overall improvement of quality of life.

Besides, there is a growing concern about the dramatic consequences that Covid-19 could have on measures for contrasting climate change. A recent working paper from the University of Oxford Smith School of Enterprise and the Environment (Hepburn et al., 2020), based on a survey of central bank administrators, finance ministry officials, and other economic experts from G20 countries, identify five policies with high potential on both economic multiplier and climate impact metrics. Three of these policies (clean physical infrastructure, building efficiency retrofits, natural capital investment for ecosystem resilience and regeneration) are more directly related to land use planning. The authors highlight that "the recovery packages can either kill these two birds with one stone – setting the global economy on a pathway towards net-zero emissions – or lock us into a fossil system from which it will be nearly impossible to escape".

1.2 Disasters: opportunities for urban public improvement

Planners know that major deadly environmental events have triggered substantial changes in the city infrastructure and management. We are entirely aware that diseases have always played a major role in shaping and improving cities. We can even go further by assuming that most significant urban development experiences are the result of the urgent need to give suitable answers to major problems of public health. The precondition for this is an enlightened urban policy, implemented by looking-forward decision-makers technically assisted by urban planning professionals used to deal with real-life problems. Unfortunately, it seems that this was more common in the past, as it appears from the following examples.

The Metropolitan Board of Works (MBW), in mid 19th century London, or the first generation of renovation and redevelopment Plans in post-Unitarian Italy are very well-known examples (Dato, 1987). At that time, the

¹ One of the first comprehensive opinions has been produced by the left oriented think tank Forum Diseguaglianze Diversità (https://www.forumdiseguaglianzediversita.org/wp-content/uploads/2020/05/ForumDD_Durante-e-dopo-la-crisi.-Per-un-mondo-diverso.x89907.pdf)

scientific and technical findings of civil engineering profoundly brought about changes in urban planning, contributing to the definition of its methods and tools.

It was only the "Great Stink", in the unusually hot summer of 1858, that forced MBW to take serious and final measures to deal with drain issues in London, despite the ten years relentless campaign by Edwin Chadwick who moved his belligerence action from Poor Law Commission to the report "Sanitary Condition of the Laboring Population" to thrust the improvement of sewers. In that summer, due to the unusual climate conditions, the river Thames released a miasma that spread all around the City and Westminster alike penetrating even into the newly opened House of Parliament, forcing its abrupt evacuation. In fact, at that time, despite the pioneering research conducted by John Snow, the father of modern epidemiology, who had already made it clear that cholera was unquestionably linked with drinking water contamination, the disease was widely thought to be odor-borne. For this reason, the unbearable stink, caused by the enormous amount of excrements on the Thames bank, led to panic. "Disraeli was seen rushing from a committee room, 'his pocket-handkerchief...applied closely to his nose, with body half bent, hastened in dismay'. Gladstone did likewise" (Jenkins, 2019). The Great Stink drew attention to the unbearable condition of the river. The Parliament voted to make the Office of Works independent, giving it powers to borrow at guaranteed low interest. It also authorized the board to proceed without submitting their plans to the government (Hall, 1998). Sir Joseph Bazalgette's great embankments project could be easily started with two outflow sewers 132 Km long, north and south of the Thames, serving the huge drainage network with the pumping stations, that is still renowned. London's most essential item of modern public infrastructure was in place thanks to "The Great Stink" that, as *The Times* declared, "should prove the best of all sanitary reformers" (Jenkins, 2019).

A century later, another major environmental event caused an equal relevant reform in environmental British history: "The Great Smog". From 5th to 9th December 1952 London was stuck in a smoke-laden fog that hidden the city and its suburbs. About 6,000 died in the following months as a result of the event and 100,000 more suffered from diseases due to the smog's effects on human respiratory tract; cattle at Smithfield market had been asphyxiated by the smog; travels were disrupted for days and millions of people faced serious inconveniences, even if the own behavior of the same people affected by the smog was somewhat the cause of it (Bell et al., 2004). Churchill, in his last term as Prime Minister, at first, underestimated the issue but, as soon as he realized the relevance of the matter, he gave a firm institutional answer introducing a courageous, profound even if rather unpopular innovation, for that time. This dramatic event caused a rethinking of the air pollution issue, going beyond London's fog stereotype. This led to the first comprehensive pollution legislation that headed to the Clean Air Act of 1956. This act ruled for almost four decades the environmental policy and emissions limits in Great Britain, both for residents of urban areas and factories which were obliged to convert to smokeless fuels².

A similar situation happened in Italy in 1966. The Agrigento landslide, in July, and the river Arno flood in Florence, in November, revealed the limit of the unbearable urban development and uncontrolled growth that had characterized post-war reconstruction of the Country. Thanks to the work of a special Commission, established by the minister of Public Works involving prominent urban planners, it was possible to detect the real causes of this terrible landslide. By this far-sighted political and technical approach these tragic events turned into opportunities, opening up a profound reform in the Italian planning legislation. One fundamental achievement was the right for public services and green areas in any local plan³.

The lesson learned by these events, and many others we can evoke, is that public policies for Land Use Management should have a crucial role in dealing with any form of risk. Consequently, land use planning has

² See. met.org.uk

³ See "Urbanistica" n. 48, 1966.

to play again its relevant role in leading actions toward what is both necessary and desirable for the sustainable future of our Planet.

In every catastrophic condition, radical renovation can sprout. The Covid-19 should be the occasion to start this regeneration. We must say: "If not now when?", borrowing the title of Primo Levi's famous novel.

Ulrich Beck calls it "Emancipatory Catastrophism" and he underlines that, sometimes, commonweal can be considered as a side effect of evil. He writes: "It is the very experience of the catastrophe that violates the 'sacred' norms of civilization and humanity and thereby produces an anthropological shock. This shock is the starting point to create a possibility of suitable institutional answers and it can lead to institutionalizing them at a global level. It is not an automatic process but it happens through a complex series of cultural and political efforts" (Beck, 2016). It is precisely these cultural and political efforts that everybody must vigorously pursue, according to her possibilities and specific responsibility.

It is necessary to think about tomorrow, already today. Otherwise, another of the usual dramatic "our tomorrow" will start. A condition to which the history of our country has unfortunately accustomed us. In the formation of public policies, in particular, those oriented towards risk mitigation, the mutual relationship between the "knowledge" of the phenomenon by public decision-makers and the necessary "consensus" plays a fundamental role (Douglas & Wildavsky, 1983).

Furthermore, our technical ability is enhanced considerably in emergency conditions. The current sanitary emergency must be addressed without diminishing the centrality of other equally highly relevant emergencies. These include, at global level, climate change and, at the local one, the safety of our built-up environment exposed both to seismic risks and to the progressive deterioration of its structural resistance capabilities. On several occasions, it has been highlighted that a true shared "Progetto Paese" is very much needed (INU, 2016). We have to look for a far-sighted, patient, and long-lasting commitment that focuses on maintenance as a consolidated practice of action on buildings and infrastructures, restoring a sense of shared responsibility.

2. The main issues at stake

The common theme that should characterize this comprehensive project for the future of Italy can be described by the concept of "well-balanced land use" a theme that has traversed planning history, although it has been almost neglected under the mounting wave of hyper laissez-faire market economy. The relationship between the unsustainability of the current development model and virus diffusion is not clear. Researchers in many fields are intrigued by the quest for assessing the a-priori epidemic risk of a geographical area, and by identifying high-risk areas within a country (Pluchino et al., 2020).

The correlation of factors (air pollution or characteristics of urban settlements, like built-up density) with the spread of pandemics are likely to be a trendy research field shortly. At the same time, the differences in the demographic, social, and economic structure among countries and regions are emerging clearly as fundamental factors of the response to the impact of the virus in the emergency phase⁴. Social distancing is the ugly term that is commonly used for describing the simplest action, but at the same time difficult to implement, to be applied for containing the spread of the infection. It is hopeful that a more politically correct term like "security distancing" will be adopted in the future but, in any case, it is certain that the way we use our cities and the regional settlement structure, will be not marginal to cope with present and future risks. Once again, reducing unbalances will be a sound objective for the post-pandemic agenda for regional and urban planning, in coherence with general objectives like sustainable production, energy efficiency, and contrast to climate change.

New welfare policies are required to transform these widely accepted principles into real actions.

⁴ For data on the effects of social actions to contain see www.endcoronavirus.org.

In Italy, reducing unbalances means not only reconsidering the characteristics of the two prevailing settlement models, compact cities, and sprawl but also to cope with the perennial issue of the North-South development distances⁵.

The post-pandemic can be interpreted as a stimulus to deal, with a renovated strength, with the problems of Southern regions. In this direction, it is reasonable to recuperate the memory of the actions that were quite effective, like the major intervention implemented by the central government, the so-called *Cassa per il Mezzogiorno* in the first 15 years of its activity (Felice, 2013; Prota & Viesti, 2012).

A strategic plan will be required. It can assume different formulations (Boeri, 2020; Nigrelli, 2020; Pasqui 2020), but it is necessary to define a general framework for proposing actions that are becoming more and more essential for "furthering the economic and social progress"⁶ not only of Southern regions but also of the entire nation. The future scenario for *Mezzogiorno* is extremely complex and has been widely discussed since the Country Reunification in 1861. It cannot be summarized in a short article but only one novel element deserves to be highlighted: the recent acceleration, since 2015, in the depopulation of these regions.

This phenomenon is extending from the most disadvantaged clusters of municipalities that have experienced a long-term decline (De Rossi 2018; Caselli et al., 2020; Reynaud et al., 2020) to the main metropolitan areas. What is happening in the last five years is a clear sign of a progressive weakening of the capacity of resilience of the nation is facing economic crises. On the contrary, data on regional virus spreading have changed the scenario. Southern regions and marginal areas have been less involved in the pandemics visa-a-vis the most affluent and dynamic ones, first Lombardy.

Despite the considerable uncertainties about forecasts on Covid-19 (Petropoulos & Makridakis, 2020) or other similar pandemics, there is a growing consensus about the necessity of a careful approach for the future (Kissler et al., 2020; Pan et al., 2020). The possibility of "living with the virus" for a long period is likely to induce changes in the layout of living space and the settlements at various scales, from homes to cities, involving public realm layout, services provision, and the relationship among settlements at a regional level. Italy is traditionally characterized by a settlement model based on a network of small and medium-sized cities (under 20.000 inhabitants according to UN definition). These centers have been the accumulation points of administrative, economic, and cultural services, fundamental for populations living far from the main cities and metropolitan areas.

This model has been heavily challenged by the prevailing logic that privileges metropolitan areas. The search for efficiency, in all fields, has shaped all sectorial public policies, mainly education and health. This Darwinian approach is producing small prosperous islands surrounded by an ocean of poverty and stagnation (Wolf & Ramon Roses, 2018). This is also emerging from the studies performed for defining the Italian National Strategy for Inner Areas (SNAI). It emerges that in inner and peripheral areas it takes more than 40 minutes to reach basic services, whereas in main metropolitan systems this time is 13 minutes.

The role of the accessibility to Services of General Interest (SGI) is key in accelerating the depopulation of inner areas, but this element has been widely underestimated in the political decisions taken to reduce these services in the last decades.

In the following paragraphs, some of these issues that we believe are particularly relevant in the post virus perspective will be presented, with a special focus to the Sicilian regional context which encompasses a range of settlement systems that can be assumed as a test field for reflecting on the possible future of the other Southern Italian regions.

⁵ For an interesting standpoint about the continuity of some problems of *Mezzogiorno* from 1950s until today, see an article by two American political scientists (Perry Clark Carey & Galbraith Carey, 1955).

⁶ This statement is part of the Article 1 of *Legge 10 agosto 1950, n. 646* that established the Cassa del Mezzogiorno.

2.1 Health Services

The quality of the Health Service is crucial for understanding what is happening in inner areas. For instance, a key point is a decision of closing small hospitals. The "technicians Government" (2011- 2013) led by Mario Monti, took this resolution saying it was suggested by budget review purposes.



Fig.1 Gangi and Etna volcano, Sicily

Many observers due consider this unreasonable decision as to the noteworthy negative turn of events that spring out its unbearable effects on the occasion of this pandemic. Actually, Monti's government has only pushed forward a process that had begun a decade ago, as immediately visible confronting yearly issued Istat data. As a matter of fact, most recent Italian Health Service figures show that in 2017 "hospital assistance relied on a thousand hospitals, among which 51.8% were public and the remaining 48.2% were private structures, accredited to Public Health Service (SSN).

The decreasing trend of those organizations built on the refurbishment, reconversion, or merging of numerous different structures, already significant in the past years, has now been confirmed" (Istat, 2019).

Moreover, in comparison with the previous decade a noticeable decrease, almost 20 %, has been reported, and the discrepancy becomes even more severe in the public sector. However, if we go deeper, confronting the above mentioned Istat 2009 data with those issued a decade before, it emerges that, in 1999, the active hospitals were 1,381 and among those 847 (61.3%) were public.

In other words, in the past twenty years, public hospitals have suffered a consistent reduction, from 847 to 518, whereas private structure decreasing has been less severe, from 534 to 482. In the same decade (1999-2009), hospital beds have been reduced from 311k to 225k, dropping to 191k in 2017. The latter could be interpreted as a positive achievement in those areas where the network of general practitioners has been reinforced, but surely it is not true in the South. Here, many health structures have been completely emptied of hospital wards, specialized staff, and medical tools. Although being officially opened on paper, they are nothing more than ghost organizations with the only purpose of representing false entities to avoid potential objections within the affected community.

If we consider that, in the meanwhile, sanitary expenses have been increased, then it appears quite evident that the above-mentioned facts are not strictly related. Consequently, the decision of shutting down so many

hospitals has represented a high price to be paid for the mainstream conception that has progressively shaped the welfare, with the deceiving belief of contributing to its improvement.

Currently, it seems that Regional Health Service planning is not adequately based on geo-localized data that could indicate where to find those mentioned ghost hospitals, or on the identification of communities needs taking into actual accessibility of hospitals. However, to realize that struggling to reach the nearby hospital is still a major cause for countless rescue attempts that end up with a fatality, it is sufficient to open a local newspaper.



Fig.2 Piazza Armerina Hospital (almost empty)

Changing this destructive trend is highly advisable but it is not always necessary to maintain the traditional way in which hospitals are managed. Telemedicine, the long-distance approach to healthcare, can be a solution to be integrated with physical facilities, but this requires relevant investments in data infrastructure and training, and most of all a U-turn change in the mindset of decision-makers.

2.2 Education

Also, the data on education services and facilities demonstrate a clear retreat of the public sector from inner areas. This attitude has contributed to making these zones less attractive, in comparison with medium-sized cities and metropolitan areas, the major providers of SGI.

In the period 2000-2020, the education system has been reformed several times, once again to comply with spending review objectives. This has produced the merging of existing schools, to reduce the total number of headmasters and administrative staff, based on the declining number of students.

Exceptions that were originally allowed for mountainous areas have been progressively abolished. The combined effect of emigration and birth rate reduction has increased the number of schools that are considered too small to keep their administrative autonomy.

A completely new phenomenon is the re-use or even the abandonment of school buildings, although this is quite difficult to quantify from official data⁷.

Regional institutions in charge of education are supposed to merge existing schools according to not only the compliance with national norms but also applying criteria of both efficiency and efficacy, taking into account the difficulties that derive from the management of several branch facilities and their location.

On the contrary, official data show that the prevailing criterion is the number of students. For example, in Sicily, there are more than 800 headmaster positions. Some of them are in charge of more than 10 facilities, located in different municipalities (up to 18).

In Calabria, headmaster positions are less than 400 but they manage up to 15 branches, located in municipalities that are quite far from each other.

Cases of evident mismanagement are frequent: elementary schools merged with high schools but not including junior high schools or branches that require hours to be reached from the headmaster office.

The extreme conditions are referred to the most fragile areas in Southern regions, like the mountainous zones of Calabria (Sila) or Sicily (Peloritani and Nebrodi in the Province of Messina). In small remote towns are reappearing classes that include children of different ages (the so-called *pluriclassi*), a condition that in Italy was common in rural areas in the 1940-50s.

It is becoming quite common that boys that have to go to junior high schools have to commute to another town, with major inconveniences for their families. Also, in this case, this is a further incentive to move the entire family to larger towns.

The considerable reduction of investments in this vital sector could be explained also considering the progressive aging of the Italian population. It is fundamental to reverse this trend, especially in marginal areas. The redundant school facilities could be used for hosting new modalities of teaching, introducing a wise use of new technologies, and experiment with new teaching formats.

2.3 Regional accessibility: roads

Inner areas are not attractive because they are far-flung places. Their accessibility is even worsening in recent times since road is not maintained and railway lines have been closed because they are not efficient.

According to the last National Account of Infrastructures (2019) motorways amount to 6,943 km, roads of National Interest to 22,399 km, regional and provincial roads to 142,149 km, the last ones represent 83% of the National road network. In the last 20 years, motorways have increased of 465 km, local roads by 40,000 km, including more than 26,000 km reclassified from national to local roads.

Data show that Northern Italy is better endowed by any considered parameter (inhabitants, geographical extension, vehicles in operation).

The worst situation is in Southern regions, Sicily and Sardinia included, where regional, provincial, and outdated national roads are prevailing.

The situation of the road network that connects many small and medium-sized towns is often dreadful throughout the entire Country. In marginal areas, the situation is even worse and investments to recover from this problem are even less, due to the limited number of users involved.

Roads have been often closed because of landslides or lack of safety conditions since bridges are at risk of collapsing or the road surface is highly unsafe.

The provincial administrations, which are in charge of the intermediate level of the Italian road network, are crucial for guaranteeing the accessibility of inner areas, but these institutions are in political limbo since they have been the target of rather confusing reform attempts.

⁷ This statement is part of the Article 1 of *Legge 10 agosto 1950, n. 646* that established the Cassa del Mezzogiorno.

Quite recently, the Union of Provincial Governments (UPI) highlighted this situation, proposing 2,25 billion investments on existing projects that are waiting for funds⁸.

This situation has been highlighted by the Automobile Club (ACI). A recent report (ACI - Fondazione Caracciolo, 2018) states that this network is a fundamental asset for the economy of geographical areas, where the presence of SMEs that work on traditional assets (including cultural and environmental ones) is the main pillar of the local economy.

In the final remarks, the authors evoke the capacity of the county to recover, in about ten years from the "immense ruin" of national road infrastructure that followed WWII as an inspiring example for contributing to foster a new Country's development.

2.4 A new role for railways for boosting marginal communities

Railways lines are also fundamental for any policy aimed at strengthening the role of inner areas but, at the same time, it is very difficult to upgrade these infrastructures for several reasons, including how some of them were built.

Some examples can help in understanding problems as well as potentialities. Along the railway Palermo - Catania there is a station called *Roccapalumba - Alia*, about 70 km from the capital city.

The place where the station is located is very secluded, far from the surrounding small towns of this inner part of the island. The reason for this location lies in the original design of this railway line.

The aim of this railway was not to connect the two main Sicilian cities but to transport minerals from inner mining districts to the main harbors, accordingly it was not useful to have stations near the existing towns. Despite this, today there are still trains calling at this remote station, used mainly by commuters that work in Palermo and still live in the inner territories. Within a radius of about 10 km from the station, there are five small towns⁹ that are progressively losing inhabitants but that still totals about 15,000. Despite the progressive weakening of the role of inner Sicilian towns the number of commuters that use this station can be interpreted as a feeble sign of resistance that requires swift actions to be strengthened.

These five small towns are still offering advantages that are capable of offsetting the burden of commuting (it takes 45 minutes to travel from Palermo). These advantages include mainly the cost of houses, but also other ones related to the general quality of life, including the opportunity of practicing the self-production of food, typical of these communities.

By favoring this kind of living conditions, it is not only reasonable to think that this will limit their demographic crisis, but it is also possible to imagine a modest revitalization of these towns. Young people from the main city can be attracted to these places, where it is possible to establish new businesses, revitalizing traditional activities or promoting innovative ones, based on ICTs or other high-tech productions.

Other industries that have large potentialities are the ones related to sustainable energy production and bioplastics. Commuting can be limited to some days or events, like the ones related to the attendance of leisure and cultural activities. In this way, the underused housing and the excessive development of the recent past can be recycled, assuming a new role for supporting the revitalization of these communities, reducing at the same time, the lack of attractiveness related to the remoteness and the low appeal of these places.

This model can be replicated around other major cities in Southern regions, triggering other kinds of synergies, taking advantage of existing infrastructures that have been built during the long season of investments aimed at reducing the North-South gap.

⁸ See <https://www.provinceditalia.it/strategia-italia-upi-destinare-le-risorse-non-spese-dalle-grandi-aziende-di-stato-a-grande-opera-di-modernizzazione-della-rete-vearia/> (in Italian).

⁹ Alia (3,400 inhabitants), Lercara Friddi (6,700) Roccapalumba (2,300) Vicari (2,600).

For example, industrial estates, the so-called *Agglomerati Asi*, built during the period of *Cassa per il Mezzogiorno* are very often connected with railways lines, built for transporting raw materials and finished products. Some of these estates that are still partly empty, due to the limits of the development model adopted at that time (Martinico, 2001) but they can be re-used for hosting exchange nodes for transports and other activities, including labor-intensive ones, according to the TOD principle.

Some examples include the estates of Dittaino, in Sicily; Lamezia Terme, Saline Ioniche, and Gioia Tauro in Calabria; Pisticci in Basilicata. All these areas are typical examples, of legions of underused industrial estates that have great potentialities for being reconverted.

2.5 Urban mobility and public realm

On an urban scale, another key element is preserving and enhancing the role of the public realm since its enhanced quality will increase social distancing. By reducing the space devoted to cars (both for traveling and parking) there will be many more opportunities for walking and cycling and also for leisure activities. Open-air bars and restaurants can occupy larger areas along urban streets. This change can be even more relevant in Southern Italian cities that are often characterized by dense urban fabrics with a very limited public realm. This is particularly true in settlements built in the 1950-70s when development took place mainly based on rudimentary master plans or illegally.



Fig.3 Roccapalumba – Alia Railway Station

This approach is gaining momentum with the effects of the pandemic, many local administrations are incentivizing the use of outer areas, by reducing or eliminating taxes on this use of the public realm. This is happening also in places where climate conditions and traditions are not particularly oriented to this way of living, like in the Mediterranean countries¹⁰.

It will be wise to promote a change of the contingent attitude that is emerging in this phase into a most established one. The instance toward increasing and redesigning public spaces cannot be limited to extending pedestrianization but it is advisable to transform into long term planning actions. A wise direction could be the

¹⁰ For instance this is the case Vilnius Municipality in Lithuania that is promoting the use of public spaces after the emerging of the pandemic emergency. (<https://vilnius.lt/en/2020/04/27/vilnius-set-to-become-one-giant-outdoor-cafe-municipality-shares-public-spaces-with-restaurants>).

proposal of very limited "acupuncture" demolitions of bad quality or abandoned buildings, to increase the quantity and quality of the public realm. This objective could be included in detailed plans aimed at promoting the urban renewal of underused city centers.

2.6 Tourism

The layman's perception of the current situation tends toward a prevailing pessimism on the future of the tourism sector. Tourist operators' opinions swing between doomed and optimistic forecasts about their future. Also, in this case, it is too early to make realistic forecasts, considering that previous events like terrorist attacks or similar pandemics (even if considerably more limited in size) had very limited long-term consequences. However, the Covid-19 crisis should be seen as an opportunity to critically reconsider tourism's growth trajectory, and to question the logic that more arrivals are always implying greater benefits (Gossling et al., 2020). So far even the growing concern about tourism (Seraphin et al., 2018) has not stopped the steady increase of tourist volumes. The impact of the pandemic on tourism and landscape and is still unclear. For instance, the effect on Cruise ships, traditionally seen a safe environment was devastating, and there are also growing concerns about the reduced amounts of funds for the management of national parks worldwide, due to reduced revenues caused by the lockdown. The issue is how long this effect will last.

Looking back to the past, the idea of limiting the Coastal Development in mass tourism destinations is rooted in a long-lasting tradition. *Italia Nostra* the pioneering environmentalist association was battling fiercely against the uncontrolled development of the main tourist coastal destinations, the so-called "*rapallizzazione*" after the name of a well-known seaside resort in Liguria. Even the unique attempt of approving a National Territorial Strategy (*Progetto '80*) proposes a containment of uncontrolled coastal development. The results of these battles have been very limited so far, even when the planning authorities have produced acclaimed landscape protection plans, like the ones of Sardinia and Apulia.

The pandemic can act as a sort of catalyst for favoring a more balanced approach to tourism development. The new situation can boost low-intensity tourism at least in the initial phase. This form of tourism is typically applied to areas out of the major tourist destinations, that are likely to become particularly fashionable in the era of social distancing. The changing strategies of major internet platforms for searching accommodations are a clear sign of the new trend, engendered by the fear of the contagion. Holiday homes, especially the ones that are equipped with a swimming pool, are highly requested for the next summer holiday season. This opens up new market opportunities for inner areas of Mezzogiorno that can offer relaxing locations in the countryside, at cheaper prices in comparison with top-ranking European destinations like Tuscany or Provence.



Fig. 4 The archeological site of Morgantina in Sicily

The precondition for taking this opportunity is the capacity of offering a complete set of attractions for prospective visitors.

This is the correct way for boosting Alternative Deliberate Tourism (Weaver, 2000) in areas that, so far, have been marginally involved in the tourism industry.

Cultural and natural heritage are the main assets for attracting tourists, but this requires high levels of regulation (Trigilia, 2017).

Accordingly, wise and highly integrated management of the entire sector is fundamental. This includes the need to strengthen the role of Landscape and Environmental Planning, otherwise, the rhetoric of Sustainable tourism will prevail (Weaver, 2012).

2.7 Underutilization of the built heritage

In Italy, Census data on the availability of rooms in residential buildings show a steady increase after WWII. The comparison of decennial National Censuses indicates a 192% rise in rooms from 1951 to 2011¹¹. In the early 1950s, the situation was still critical, the rooms/inhabitants ratio was 0.75 but it reached the optimal value (one) in 1971, jumping to 1.72 in 2011. In the same period, empty dwellings increased by 980%. The geographical distribution of the residential dwellings is quite homogeneous at the NUTS1 level¹², but it changes considerably at more detailed levels (NUTS2 and NUTS3). At the municipal level, the scenario is extremely fragmented.

Building activity in lagging Italian regions is only partially dependent on general economic conditions. This is emerging, looking both at the increase in the number of rooms in the period 1971-2011 and at the number of building permits issued in recent years (Tab. 1). For instance, in the less affluent areas of Southern Regions like the province of Agrigento, in the considered 40 years period, rooms in residential buildings increase by 107% whereas the national increase was only 82%. Tab 1 shows that after the 2007-2008 global financial crisis (GFC) the production of new residential buildings slowed down considerably throughout the country, but without relevant differences among Italian Regions.

Year	Basilicata	Calabria	Campania	Puglia	Sicilia	Total 6 regions	Total Italy	6 Reg./Italy
2008	5,324	28,705	30,957	46,269	46,523	157,778	658,034	24.0%
2012	1,828	12,540	19,379	18,472	23,573	75,792	289,876	26.1%
2014	1,638	5,975	11,707	11,756	13,096	44,172	168,941	26.1%
2016	1,566	5,803	9,877	12,063	10,449	39,758	163,086	24.4%
2018	1,163	5,278	13,979	16,263	11,468	48,151	197,501	24.4%

Tab.1 Rooms in new residential Buildings according to permits issued in a sample of Southern regions (Based on Istat data)

This negative trend is changing in the last two years, showing a slight growth at the national level. The same is happening also Southern regions where the relevant delay in recovering from the crisis seems to play a marginal effect. Southern Regions GDP is still approximately 10% below the pre-crisis value, whereas in Northern and Central ones this difference is about 2.4 % (Svimez, 2019). By the same token, the trend is still not influenced by the steady decrease in population in recent years. *Mezzogiorno* lost 256,300 inhabitants from 2003 to 2017, compared with a national increase of about 64,000, and the trend is accelerating in the last 3 years.

¹¹Data are referred to rooms in conventional dwellings occupied by resident persons (Source: Italian National Statistical institute (www.istat.it)).

¹²The Italian groups of regions are: Northwest, Northeast, Central, South and Insular, the term *Mezzogiorno* is commonly referred to both the statistical South and Insular NUTS1 units.

The main effect of these combined phenomena is the growing number of unused buildings. Most recent data available from the Italian tax agency (Agenzia delle Entrate, 2019) shows that, in 2016, the share of unused buildings in the majority of southern regions is almost double than the national average.

At the local level, the situation is even more worrying because inner areas are carrying the burden of the uncontrolled development of the past 50 years. A sample of 11 small municipalities in Sicily, selected based on the highest relative population decrease, confirm that about 75% of residential buildings are empty (Martinico, 2020 forthcoming). This phenomenon is common to several towns of inner areas of *Mezzogiorno* and is extending progressively outside the historical centers.

The overproduction of recent residential buildings is the long term effect of several factors that include illegal building activity but also the bad quality municipal plans that have induced extensive new development (Romano et al., 2018). Interestingly, similar conditions are emerging also in more affluent regions of Europe like the Flanders (Bervoets et al., 2015). Besides, in Southern regions, the quality of existing residential buildings is particularly low and its impact on townscape represents a limit to tourism development.

The future challenge is to try to turn this condition from a weakness into an opportunity, both in main metropolitan systems and in small and medium towns (Martinico, 2020 forthcoming).



Fig. 5 - Unfinished dwellings in Acquaviva Platani, Sicily

Managing unused buildings is a very challenging task but it can be seen as a way for optimizing these existing assets, especially in inner towns. Matching fiscal policies and land use planning provisions can be a way for using the excess of residential and commercial buildings for supporting the revitalization of inner areas.

3. Hints for the post-pandemic phase

The post-pandemic phase could be the chance for involving in the recovery strategy the 60% of the Italian Territory, an area that, in the last decades, has been considered as the "ball and chain" by the developed regions, no more than the market place for their industrial productions, useful for compensating the reductions in the exports of goods abroad.

Reducing the GDP North-South gap could become, again, a central objective for revitalizing the national economy shortly, heading for a more sustainable direction. Southern regions will play a fundamental role if they are not considered, anymore, as the "scrap material" (Nigrelli, 2020, forthcoming) of the production process.

A wise mix of tradition and innovation is the recipe for changing the historical unbalance that is slowing down the entire nation. It is not enough to consider the relevant endowment of cultural and environmental heritage as a way to promote the renaissance of *Mezzogiorno*. The idea of promoting Southern regions as a sort of territorial *Buen Retiro* park for the relaxing weekends of stressed financial managers or businesses men, that fly from wealthy Northern European cities, is too narrow-minded, a broader vision is needed.

This approach requires a deep change in the cultural attitude of decision-makers. In this sense, planners, have the moral obligation to contribute to this change, assuming a critical stance, accomplishing one important task of intellectuals: breaking down "stereotypes and reductive categories that are so limiting to human thought and communication" (Said, 1994).

The specificities of South European cities, as opposed to the northern European ones, have to be explored for understanding the capacity to contrast the economic crisis. Countries like Greece, Spain, or Italy well before the pandemic crisis, have responded differently to the stress of an economic crisis. Popular spontaneity and informality are constant features of South European communities, one distinguishing character is the *joie-de-vivre* "which constantly brings people out to the streets and piazzas [...] in sharp contrast with the anti-urban narrative of Anglo-American cultures" (Leontidou, 2014).

It is not a chance that the North-South contrast is now harshly emerging in the European Institutions, as the effect of the pandemic. This deep contrast is full of contradictions since the attitudes of Southern Europeans are blamed by the Anglo-Saxon culture which is, at the same time, attracted by this way of life. A clear demonstration is a success of tourist destinations in the Mediterranean area, very popular among the Northern European. Illegal housing, tax evasion, and informal commerce have had, at the same time, extremely negative effects on the quality of urban settlements but they have also historically contributed to solving relevant problems, like the housing shortage that was inherited from the past.

The pandemic could accelerate the need for re-orienting the vitality inherent to the Mediterranean approach to life, as it is reflected in the prevailing urban culture. Finding a specific approach to cope with this new crisis could appear as a too ambitious objective. It can include actions aimed at limiting the negative excesses of this vitality, orienting the positive forces toward an alternative model. Once again, the challenge is using some of the weaknesses of Mediterranean culture to turn them into strengths.

As usual, the key issue remains how to implement this change.

The top-down ruling has proved to be not effective. For instance, it is useless to imagine extensive policies for demolishing excessive or incongruous buildings. Researches are demonstrating that worldwide communities are very reluctant to accept plans that change radically the urban structure, especially if they include provisions for the demolition of buildings. The application of environmental protection criteria has been a typical way of supporting exclusionary planning choices¹³. But this approach is likely to be unsuccessful.

The typical negative side of restrictive planning actions is the rising of housing prices. But this is not the case of inner areas, where the current condition of oversupply of dwellings and the consequent reduction of real estate prices, can act, in theory, in favor of new planning approaches, aimed at stopping new developments and favoring urban regeneration.

But current real estate dynamics are not working necessarily in favor of urban regeneration. On the contrary, they may act in the opposite direction, causing more blight and abandonment in inner small towns. This means that the issue of the oversupply of dwellings has to be carefully governed and subsidized, to be efficaciously contrasted. Any new strategy has to consider carefully the social perception of the built-up domain, the long-lasting result of the accumulation of personal investments in building their own houses or production facilities.

¹³ "These includes actions that have substantial impact upon certain categories of people Their exclusion can be achieved through the use of large lot requirements, prohibitions of multi-family dwellings, deep set-back regulations". (Clingermayer 2004).

The psychology of Southern homeowners is one of the key factors for proposing any innovative planning action. Waiting for the decay of the unused built heritage, as a way to overcome resistance to change, is not feasible.

Regarding the mobility, in the overall settlement system at a regional scale, inner areas in South Italy could have a future characterized by a conceptual similarity to the one of the exurbia, "a landscape of second homes and estates well beyond the outer suburbs, yet still connected to the city as a source of employment", according to the original definition of the 1950s by Auguste Spectorosky (Barilla, 2011). The key point here is to try to decline this kind of use of extended urban settlements in a different way, matching it with the typical multipolar structure of many European countries. This can be achieved by using the excess of existing settlements instead of promoting North American style new sprawl.

Investing in the improvement of existing infrastructure is necessary for promoting this objective. This will increase the opportunity to change accessibility to inner areas, promoting the wise use of railways, mixed with road transport both private and public. The amount of required investments has to be carefully considered. It is necessary to avoid unrealistic programs, like building an extensive network of high-speed trains, similar to the French one. In France, tiny villages in the countryside are well connected to the main cities that are the hubs of an extensive network of high-speed TGV trains to main cities. This condition makes possible living and working in a relaxing and pleasant hamlet in *Haute Normandie*, where a mansion house with a large terrain costs even less of a small row house in the Parisian *banlieue*, without experiencing an excessive sense of isolation¹⁴. A more modest strategy of progressive upgrading of existing lines can be feasible in South Italy but this requires a high level of coordination and a wise phasing in its implementation¹⁵.

More efficient transport infrastructure is a prerequisite, but it is not sufficient. As highlighted above, improving health, education, tourist services, and attractions, are the other pillars for building new competitiveness of small and medium towns. To be attractive, also data infrastructure has to be upgraded substantially. This can be the way of capitalizing some of the positive consequences of the recent boost of smart working, increasing the opportunity of living in an isolated town but working remotely in the nodes of rampant capitalism¹⁶.

In conclusion, the post-pandemic perspective is focusing on a two-pronged scenario following the current emotional contingency: our life will be completely different or, on the opposite, in few months we will back at our Business-as-Usual life. From our point of view, the main risk is that, in both cases, regional and urban issues will be, again, progressively neglected. On the contrary, the regional and urban dimension has to be central for any recovery policy. For this reason, territorial planning has to play a central role in determining the choices of any future recovery package, by giving ideas and competencies for shaping public policies useful for enhancing community life.

References

- ACI-Fondazione Caracciolo (2018). *Il recupero dell'arretrato manutentorio della rete viaria secondaria una priorità per il paese*. Retrieved from: http://www.fondazionecaracciolo.aci.it/fileadmin/documenti/notizie/Il_recupero_dell_arretrato_manutentorio_2018.pdf
- Agenzia delle Entrate (2019). *Gli immobili in Italia 2019*, Retrieved from: <https://www.agenziaentrate.gov.it/portale/web/guest/gli-immobili-in-italia-2019>

¹⁴ For instance from Rouen it is possible to reach Paris in 1.30 hours with 22 routes per day.

¹⁵ This was not the case of the Palermo-Catania railway line where the first phase of upgrading works (415 meuros) started not from the main city of Catania, which is still equipped with a single track line, but from a more remote section. <https://www.fsitaliane.it/content/fsitaliane/en/media/news/2019/3/25/work-commences-to-double-the-bicocca-catenanuova-railway-along-t.html>.

¹⁶ See the case of Colletta di Castelbianco, a pioneer project by Giancarlo De Carlo, that is still working <http://www.borgotelematico.it/index.php>.

- Barilla, J. (2011). The Road to Exurbia. *Places Journal*, September 2011. Accessed 28 May 2020. <https://doi.org/10.22269/110906>
- Beck, U. (2016). *The Metamorphosis of the World*. Cambridge: Polity Press.
- Bell, M.L., Davis, D.L. & Fletcher, T. (2004). A Retrospective Assessment of Mortality from the London Smog Episode of 1952: The Role of Influenza and Pollution. *Environ Health Perspect*. 112 (1, January).
- Bervoets W., van de Weijer M., Vanneste D., Vanderstraeten L., Ryckewaert M. & Heynen H. (2015). Towards a sustainable transformation of the detached houses in peri-urban Flanders, Belgium. *Journal of Urbanism*, Vol. 8, No. 3, 302–330.
- Caselli, B., Ventura, P. & Zazzi M. (2020). Performance-based spatial monitoring. An interpretative model for longterm shrinking medium-small Italian towns. *Sustainable Cities and Society*. Vol. 53. <https://doi.org/10.1016/j.scs.2019.101924>
- Clark Carey J. P. & Galbraith Carey A. (1955). The South of Italy and the Cassa per il Mezzogiorno. *The Western Political Quarterly*, Vol. 8, No. 4 (Dec., 1955), pp. 569-588. DOI: 10.2307/441964
- Clinger Mayer, J. C. (2004). Heresthetics and Happenstance: Intentional and Unintentional Exclusionary Impacts of the Zoning Decision-making Process. *Urban Studies*, Vol. 41, No. 2, 377–388. <https://doi.org/10.1080/0042098032000165307>
- Dato, G. (1987). I nuovi scenari urbani della Sicilia postunitaria. In Aymard M. & Giarrizzo G. (ed). *Storia d'Italia. Le regioni. La Sicilia*. Torino: Giulio Einaudi Editore.
- De Rossi, A. Ed. (2018). *Riabitare l'Italia. Le aree interne tra abbandoni e riconquiste*. Roma: Donzelli Editore.
- Douglas, M., & Wildavsky ,A. (1983). *Risk and Culture*. Berkeley and los Angeles: University of California Press.
- Felice, E. (2013). *Perché il Sud è rimasto indietro*. Bologna: Il Mulino.
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*. <https://doi.org/10.1080/09669582.2020.1758708>
- Hall, P. (1998). *Cities in Civilization*. London: Weidenfeld & Nicolson.
- Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., & Zenghelis, D. (2020). Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?. Oxford Smith School of Enterprise and the Environment. *Working Paper No. 20-02*. ISSN 2732-4214 (Online).
- Kissler S. M., Tedijanto , Goldstein E., Grad Y. H., & Lipsitch M. (2020). Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period. *Science* 22 May 2020: Vol. 368, Issue 6493, 860–868 <https://doi.org/10.1126/science.abb5793>
- INU (2016). *Progetto Paese*. XXIX National Congress, Cagliari.
- Istat (2019) Direzione generale della digitalizzazione del sistema informativo sanitario e della statistica, Annuario Statistico del Servizio Sanitario Nazionale - Assetto organizzativo, attività e fattori produttivi del SSN - Anno 2017, Retrieved from http://www.salute.gov.it/imgs/C_17_pubblicazioni_2879_allegato.pdf.
- Jenkins, S. (2019) *A Short History of London. The creation of a World Capital*, London: Viking – Penguin Books.
- Leontidou, L. (2014). The crisis and its discourses. Quasi-Orientalist attacks on Mediterranean urban spontaneity, informality and joie de vivre. *City*, VOL. 18:4–5, 551–562. <http://dx.doi.org/10.1080/13604813.2014.939477>
- Martinico F. (2001). *Il Territorio dell'industria - Nuove strategie di pianificazione delle aree industriali in Europa*. Roma: Gangemi Ed..
- Martinico, F. (2020, forthcoming). L'osso vuoto La sfida per la gestione sostenibile del patrimonio urbano nel Mezzogiorno in crisi demografica. In Nigrelli F. C. (ed.), *Paesaggi scartati. Risorse e modelli per i territori fragili*. Roma: Manifestolibri
- Nigrelli F.C. E. (2020 forthcoming). *Paesaggi scartati. Risorse e modelli per i territori fragili*. Roma: Manifestolibri.
- Nigrelli, F.C. (2020 forhcoming). Pandemia e urbanistica: ridisegnare l'Italia. *Micromega*, rivista bimestrale, n. 5/2020. Roma: GEDI Gruppo Editoriale. ISSN 2499-0884.
- Pan, X., Ojcius D. M., Gao T., Li Z., Pan C., & Pan C., (2020). Lessons learned from the 2019-nCoV epidemic on prevention of future infectious diseases, *Microbes and Infection*, Vol. 22, Issue 2, 86-91 <https://doi.org/10.1016/j.micinf.2020.02.004>.
- Pasqui, G. (2020). L'impatto della pandemia sui territori fragili: pensieri per il 'dopo'. *Www.glistatigenerali.com*, 18 March 2020. Retrieved from: <https://www.glistatigenerali.com/beni-comuni/pandemia-urbanistica-urbanistica-architettura-coronavirus/>. [Accessed 15 May 2020]
- Petropoulos F., & Makridakis S. (2020). Forecasting the novel coronavirus COVID-19. *PLoS ONE* 15(3): e0231236. <https://doi.org/10.1371/journal.pone.0231236>.

Pluchino A., Inturri G., Rapisarda A., Biondo A. E., Le Moli R., Zappalà C., Giuffrida N., Russo G., & Latora V. (2020) *Novel Methodology for Epidemic Risk Assessment: the case of COVID-19 outbreak in Italy*. Retrieved from <https://arxiv.org/abs/2004.02739>

Prota F., & Viesti G. (2012): *Senza Cassa. Le politiche di sviluppo del Mezzogiorno dopo l'Intervento straordinario*. Bologna: Il Mulino.

Reynaud, C., Miccoli, S., Benassi, F., Naccarato, A., & Salvati, L. (2020). Unravelling a demographic 'Mosaic': Spatial patterns and contextual factors of depopulation in Italian Municipalities, 1981–2011. *Ecological Indicators*, 115, 106356.

Romano, B., Zullo, F., Marucci ,A. & Fiorini ,L. (2018). Vintage Urban Planning in Italy: Land Management with the Tools of the Mid-Twentieth Century. *Sustainability*, 10, 4125. Doi: 10.3390/su10114125

Said, E. W. (1994). *Representations of the Intellectual: the Reith Lecture*. New York: Vintage Books.

Seraphin, H., Sheeran, P., & Pilato, M. (2018). Over-tourism and the fall of Venice as a destination. *Journal of Destination Marketing & Management* 9, Sept. 2018., 374–376. <https://doi.org/10.1016/j.jdmm.2018.01.011>

Shrink Smart (2009). Shrink Smart - *The Governance of Shrinkage within a European Context*. Retrieved from <http://www.shrinksmart.eu/>.

Svimez (2019). *Il Mezzogiorno nella nuova geografia europea delle disuguaglianze, Presentazione del Rapporto 2019. Note di Sintesi*. Retrieved from <http://lnx.svimez.info/svimez/rapporto-2019-tutti-i-materiali/>.

Trigilia, C. (2017). Città italiane come motore di sviluppo. In Carta, M. & La Greca, P. (Eds.). *Cambiamenti dell'urbanistica. Responsabilità e Strumenti al servizio del paese*. Roma: Donzelli Editore.

Weaver. D. B. (2000). A broad context model of destination development scenarios. *Tourism Management Vol. 21, Issue 3, June 2000*, 217-224. [https://doi.org/10.1016/S0261-5177\(99\)00054-0](https://doi.org/10.1016/S0261-5177(99)00054-0)

Weaver, D.B. (2012). Organic, incremental and induced paths to sustainable mass tourism convergence. *Tourism Management, Vol. 33, Issue 5, Oct. 2012*, 1030-37. <https://doi.org/10.1016/j.tourman.2011.08.011>

Viesti, G. (2020). L'economia italiana dopo la pandemia. [www.sbilanciamoci.info](http://sbilanciamoci.info), 18 May 2020. Retrieved from: <https://sbilanciamoci.info/leconomia-italiana-dopo-la-pandemia/>.

Wolf, N. & Ramon Roses J. (2018), *The Economic Development of Europe's Regions: A Quantitative History since 1900*, Abingdon: Taylor & Francis.

Image Sources

Fig.1: Paolo La Greca

Fig.2: Fausto Carmelo Nigrelli

Fig.3: wiki commons

Fig.4: Conchetto Scuto

Fig.5: google street

Author's profile

Paolo La Greca

Professor of City and Regional Planning, at the University of Catania, former Head of Department of Civil Engineering and Architecture and component of academic Senate. He is President of the CeNSU - National Centre of Urban Studies, (Rome), and has been also VP of the ISoCaRP - International Society of City and Regional Planners (The Hague). He is member of the PhD program "Evaluation and mitigation of Risks at urban and regional level", of the University of Catania. La Greca main research interests include Territorial and Urban Planning and Management aimed at urban renewal and environmental remediation. His researches has led to an extensive range of publications including books printed both in Italy and abroad.

Francesco Martinico

Professor of Town Planning at the University of Catania, School of Architecture, he received a PhD in Urban and Regional Planning in 1999. He spent one year as Research Trainee at Insead in France. He is currently project leader of Adaptm, an Erasmus+ program which includes partners from Egypt, Greece, Lithuania and Slovenia. His main fields of interests are regional planning, innovation in land use management, and the use of Gis. His on field experience extends over 30 years and includes plans of various scales, from urban master plans to regional and landscape protection plans, using an holistic approach that is particularly committed to environmental issues. He is author of several books and papers on planning related topics.

Fausto Carmelo Nigrelli

Professor of Urban and regional planning at the University of Catania, CEA (Certificate of Advanced Studies in Architecture) at the Ecole d'Architecture de Paris, Belleville (France) and Ph.D. in Urban and regional planning at the University of Palermo in 1996. From 2019, he is DEA "Directeur d'Etudes Associés" on Urban Project at the Paris Fondation Maison des Sciences de l'Homme. He is scientific Director of Special School "Emilio Sereni" on Storia e gestione del paesaggio nelle aree rurali. His research interests include urban and regional planning, landscape planning and territorial heritage, tourism and local development, the governance of territorial transformation, small cities and inner areas. He is actively engaged in scientific advisory activities for the local and regional authorities.