

Venice: Myths of the past in cities of the present and in the age of the media

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Foreword

While I was preparing this essay, terrorism, which we knew as an incomprehensible and isolated act of madness, struck New York City and Washington, DC. To my generation, New York is the heart and the symbol of the American world. It expresses the spirit of the history of this young country, born out of the hopes of millions of men and women who migrated there from other parts of the Earth. It represents Prometheus' spirit: man's desire to build his own destiny with courage, tenacity, trust in his own abilities, sustained by eternal values, the very same symbol of the success of the city. This calamity does not change in anything such values or this symbology. New York continues to represent the civic strength of man as a builder. And the calamity does not bend it, but rather strengthens it. This essay is dedicated to a wounded America and to New York, which, as Jean Gottmann often said, is the Venice of our time.

Introduction

My scientific experience in studying the historical dimension of cities has brought me to a few conclusions on the weight of myths in the life of the modern city.

- Out of the myths of the past, the contemporary city draws a great impulse to change. But the weight of such myths on actual life could also be quite strong, to the point of creating an opposition to the same changes to which those myths have given place, if such changes seem at some point to contradict the myth itself.
- A second point refers to the weight that myths have acquired in the life of the contemporary city with the development of democracy and of the connected media to maintain the conditions that will ensure historical continuity or get the democratic consent of people for change. But the search for consent through the media always demands that the government of the city should not lose touch with reality, in relation to those myths in the life of cities with an important past which continue to exist

in the contemporary city too.

- A third issue is that historical continuity between the past and the present of a city presupposes that its actual life is framed in an urban context with characteristics which are not very different from the former ones and of a much greater size than that of the past. In such cases the problem is that of the territorial context in which the city with a long life – now turned into an historical center – inserts itself, a context that does not allow for great differences. And this represents a strong handicap for historical cities, if – due to their cultural myths – they are not or they are not lived like a myth of the territory (the best part of it), but as a separate entity.

There are four meanings of the word "myth":

- A myth means a sacred story about the origin of gods and of religions as in ancient Greece;
- A myth can also mean an idea expressed allegorically;
- A myth is also an imaginary and schematic idealization of an event or personage playing a determinant role in the behavior of a human group; and, finally,
- A myth means a utopia or illusion.

In the context of the present paper – my contribution to our debates on "Defining success of the city in the 21st century" – I prefer to deal with the second meaning of the word "myth," without excluding the last.

I focus here on the city of Venice. I have devoted my attention to it for many years and I know it better than others, but also because there is no doubt that the theme of the preservation of ancient historical centers represents one of the big challenges for the new century.

As a matter of fact, not only have the defence of the natural environment and the defence of the quality of life gradually imposed themselves among the concerns of city administrations, but also the preservation of the architectural and urban heritage has acquired greater importance within a culture that is more and more oriented towards the defence of historical continuity. In a certain sense, Venice is paradigmatic of this attitude in contemporary culture, because it has inspired other cities in imposing the need for preservation. The lagoon by which Venice is surrounded represents a real "breakup of load" compared with other cases of contemporary urbanization, much more than in the case of wall-bounded cities. And it is paradigmatic by the presence in its historical center of a large number of monumental buildings – churches and *palazzi* – which are not easily replaced by modern constructions.

In this sense, with the exception of the compromises from which the city has suffered, especially on its outskirts, Venice has become a model of continuity between past and present. This model could be applied also to the case of other cities with a long historical tradition, if their administrators had the objec-

tive to safeguard the historical part from the necessary transformations required by contemporary urbanization.

Furthermore, Venice presents another advantage: it is particularly well known to many scholars – as it is to those gathered for the Berlin symposium of the World Society for Ekistics – who will find the issues that I am addressing here of almost immediate comprehension. I thought that even if it were not possible for me to be present at the symposium, with all the advantages of a live presentation and debate, discussing Venice for the simple reason that Venice is a symbolic case that I know well, will be a way to attenuate my sense of guilt for not having been able to participate in a debate that certainly has been of great interest for its objectives, for its panelists, and finally for Ekistics that deserves more and more our applause for its longstanding attention to the great problems of world urbanization.

The myth contradicts itself

The first issue that emerges from the examination of Venice refers to the ancient myths. Myths of the past are often important in preparing the conditions for modernization. But at the same time they constitute a risk because modernization can hardly occur in the same places and ways to which the myths refer. Thus, those myths mobilized in favor of change-return can try to get back what they think was lost, giving way to a schizophrenic condition of the historic city for its inhabitants and its rulers.

The contemporary city and the myth of maritime destiny

Let us start with the first question that every historian of cities has to face. It can be formulated in this way: when does the past end in the case of Venice and when does the history of the contemporary city start? There is little doubt that, in an historical perspective, the first task is to single out the time when the city of the past became a contemporary city, and the real qualitative gap that this represents. With contemporary urban expansion, size was in fact modified in every way, beginning with unprecedented speed in growth. It is not pure chance that historians, geographers, sociologists and economists always use the term "revolution" suitably to appropriately mean a radical change compared to the former situation.

In the case of the city of the lagoon this fundamental turn can be traced to the end of the First World War, many years after the arrival of the railroad to connect the city with Lombardo-Veneto (1847) and over 50 to 60 years after the birth of the Kingdom of Italy and the annexation of Venice to the new political context (1866).

With the peace treaty of Campoformido (1797) – that marked the formal end of the Republic of Venice – what remained of the old State was politically surrendered to the Austro-Hungarian Empire. In becoming one of its provinces, the new empire built a railroad connection hinged on Verona. But if the arrival of the railroad did not really start the process of the modernization of the city, this political change – after the brief government of Napoleon – did not really affect the city from an urban studies' perspective either, because it did not change the conditions of the economy or the demography. The city continues to exploit resources that were accumulated in the past and are no longer renewed – a process that has been going on for centuries.

After the end of its role as a maritime port that had constituted the great engine of the urban, architectural and cultural development of Venice and the very same reason for its life in the first centuries, the interest of the Venetian oligarchies turned to the exploitation of the agricultural resources of the

vast contiguous continental hinterland where Venice had extended its control through the military conquest of the so-called *terraferma*, that altogether stretched to Lombardy, up to Brescia and Bergamo, at the gates of Milan. Yet, the nature of these economic resources had not had the same effects of the maritime-port economy, that involved the great accumulation of capital giving vent to the expression of the architectural-cultural complex of Venice known to the whole world. Instead it gave way to the construction of main residences on the *terraferma*, the so-called "Ville Venete," often masterworks of great artists. Still they did not modify the condition of the city, which continued the construction of monumental buildings, above all churches and *palazzi*. But neither the Venetian Renaissance, nor its Baroque epoch will be as rich in buildings and monuments as its Byzantine age, with the so-called Gothic Venetian style. Whoever has studied the history of art and particularly of architecture has been able to ascertain the close relation between the accumulation of wealth in the developmental phases of the economy and its use in the masterworks of art and culture. Venice represents an evident demonstration of this connection.

To understand what happens in Venice in the long centuries that intervened between the end of the maritime-port economy – which for the historians coincides with the battle of Lepanto around the middle of the 15th century – and the beginning of the contemporary city, it is necessary not to forget the important change that happens when, from "engine-city" of its State, Venice becomes only its capital. It is a change of conditions. It induces the capitalists to change investments and to aim at other resources, but it will never succeed in erasing from the mind of its inhabitants the idea that the fortune of the city was founded on the sea and on its traffic. This will return as a recurrent idea in every century of the "stasis" epoch and it will always be in the mind of those who wished for the return to its past strength and fortune. A real myth. It is not by chance that this call to the splendid Mediterranean perspectives was imagined by Napoleon himself, into whose hands fell the last resistance of the ancient Republic. Master of the city and of many of its goods, he would dream of returning to the splendors of a renewed Mediterranean destiny with an eye turned towards the Red Sea and to what would later become Suez. Even when, with the end of the Republic, what used to be for many centuries one of the greatest States of the Mediterranean became a province of the Austro-Hungarian Empire, the greatest concern of its inhabitants continued to be the port and sea traffic. To the Venetians, the ships that arrived in St. Mark's basin – the pulsating heart of urban life – continued to represent the image of the glory and wealth of the past. This call did not weaken during the dominion of the Austro-Hungarian Empire, not only for the above-mentioned reasons, but also because Venice certainly felt the consequences on the economy of the city and because the new rulers aimed at the development of the port of Trieste.

The ancient myth in 19th-century Venice

All this explains why the principal efforts engaged in after the end of the Republic of Venice – and for the entire century that followed – are addressed to reactivating the maritime traffic and the economic vitality of the port. Particularly the objective is pursued through projects that aim at making the port of Venice more appealing, with the reduction of taxes, the adjustment of port structures to the new ship technologies, and finally the adjustment to the new inventions for terrestrial transportation. In this sense it is easy to understand why the construction of the Milan-Venice railroad is greeted with great favor, as it crosses the lagoon with a bridge allowing the trains to reach the west side of the city. It will be this important tech-



Fig. 1: On an ancient map of Venice the water penetrates the city and small boats join the big vessels anchored in front of St. Mark's.

nological innovation to subsequently sustain the birth of a real modern port as a substitute for St. Mark's basin, where, in the 19th century ships still continued to be reached by smaller boats forwarding commodities on arrival and departure. Only a few real piers existed previously for lumber, salt, wine and coal. Storehouses for cereals were also available on the shore of St. Mark and on the eastern tip of the Giudecca.

A modern port with docks, piers, cranes and stores came into being only at the end of the 19th century. It was built with the intent of connecting it to the railroad that reached the city around the middle of the century. New works were accomplished in the lagoon – from the excavation of more suitable channels for the traffic of motor-ships to the maintenance of the water mirror of the lagoon – continuing in fact a tradition in which the Venetians had specialized in the preceding centuries, as the city kept living between the anvil of rivers that, with their load of sediments, threatened to bury it, and the hammer of a sea that from the outside pressed on the long and tight sandy islands (*lidi*) and on the mouths in which the necessary exchange of water between the outside and the inside of the lagoon occurred. Finally, reductions of costs (free port) were planned, to appeal to maritime traffic, as in the new times the port function maintained just in the least part its character of a commercial, international center.

There is little doubt that all this acted on the urban texture of the city in at least two ways:

- In the first place, with the construction of the above-mentioned infrastructures – from the docks to the piers – and with the reclaiming of new areas, constructions of *rive*, inter-

ment or excavation of channels inside the city.

- More remarkable is the second change. That is the overturn of the urban orientation which, from sea transport through the basin of St. Mark and the channel of access to the Adriatic, shifted in large part to the *terraferma*, where the revolution of transportation was establishing a new logic. And the barycenter of the city, that for many reasons continued to be solidly anchored to St. Mark and the Rialto, felt this greatly as new attention had to be brought to the terminal of the terrestrial transports, compared to previously.

This represents the condition of change of the economy. The real breakthrough – that will open Venice to the perspectives of a radical change – has not happened yet, as the economy is still limited to the growth of maritime traffic, recalled with various expedients, such as the free port, the construction of the new port and the arrival of the railroad. In fact it is not possible to say that the urban economy of the 19th century had drawn from the maritime-port activities anything comparable to the great prosperity of the past, due to the radically new conditions following the industrial revolution and the different political context in which the city had come to operate.

Certainly, from the financial point of view if the shipyard activities were certainly not comparable to those once developed in the Arsenal of Venice, other businesses were developing: a navigation company, an insurance company and a hotel company – that started to look to the tourist exploitation of the beach (Lido) and to exploit the fashion of sea bathing. These are just the first signs of change because, while the investment in insurance and in tourist hotels will have the ten-

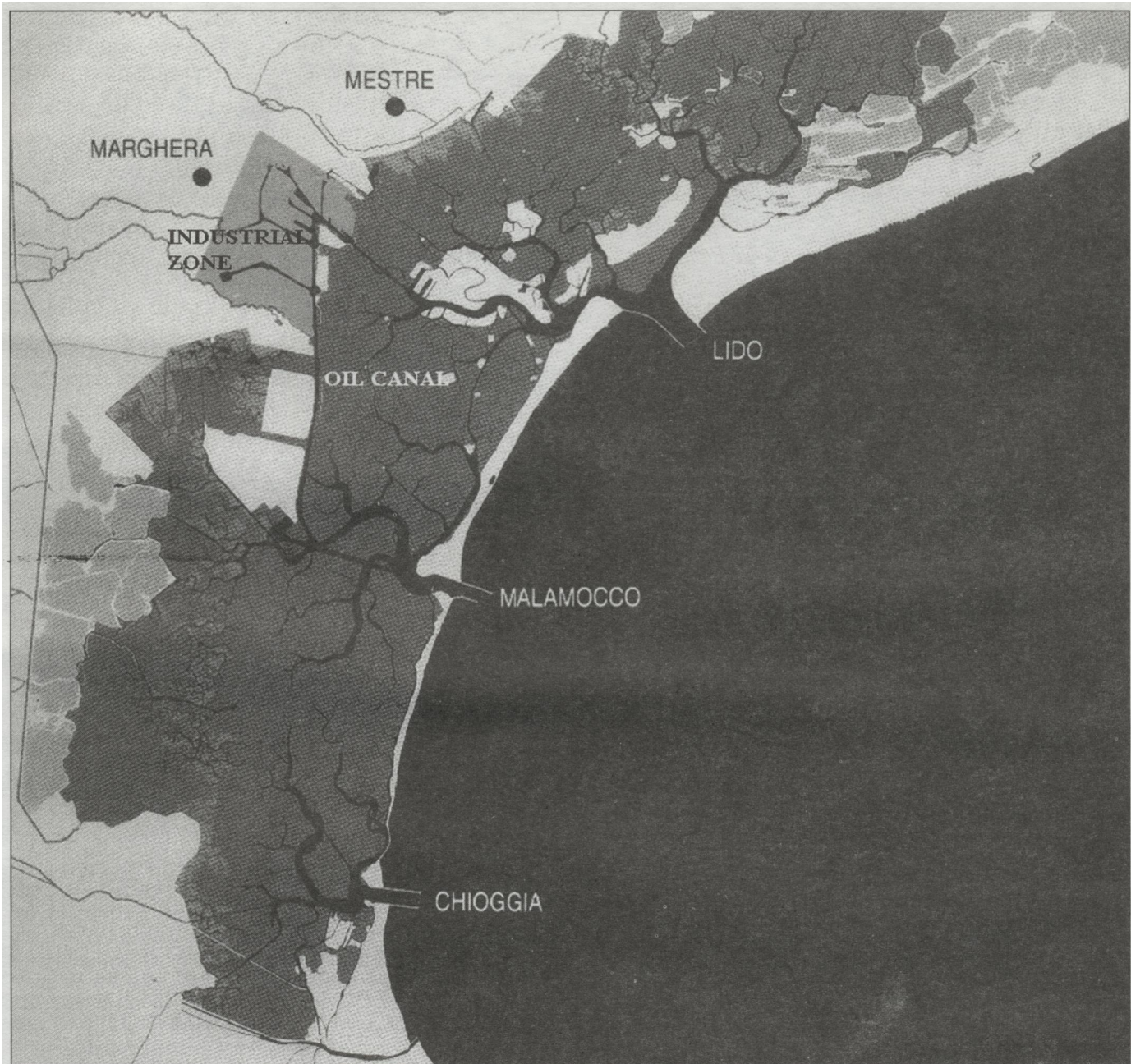


Fig. 2: Map of today's lagoon where it is possible to see the development in the *terraferma* in front of Venice of the industrial zone, the new seat of Mestre and the large "oil canal" permitting big ships to connect the industrial zone with the Adriatic Sea far away from the old city. But the oil canal is accused of altering the hydrographic rhythm of the lagoon (erosion) and exposing the nearby historical city of Venice to dangerous traffic.

dency to gather in the city, the maritime-port activity to which the Venetians continued to look as the true destiny of Venice was destined to move elsewhere and to change radically.

From this moment the city becomes schizophrenic. The myth sustains the creation of conditions that will allow the modernization of its economy. But, since this modernization will not address the historical city but will take place outside it, the same myth will have to fight, naturally in vain, in order to have modernization look to the historic Venice. Among the numerous projects that accompany these events and try to catch up with them, a few propose to lengthen the railroad in the lagoon, up to the basin of St. Mark and even beyond. But the logic that prevails is another and it looks to the *terraferma* for the objective difficulties that a city like Venice faces.

- On the one hand in fact this relates to a medieval city structure that the construction of buildings of monumental type and the presence of a capillary articulation of interior canals makes less easily modifiable than elsewhere.

- On the other side, before the resistance posed by cultural and artistic concerns imposes itself in terms of civic awareness and political responsibility, this minute texture of narrow streets and buildings, of churches and small waterways and short *rive* offers impracticable conditions to modern technologies of transportation.

Venice will necessarily be excluded by the contemporary maritime traffic, way before the issue of pedestrian-dedicated areas matures in so many big cities of the world today. And the presence of the lagoon barrier, necessary to the life of the

inner canals and to the daily flow of water exchange, necessarily transforms the contemporary growth of the city in a split way. In the last century, on the contiguous *terraferma* a new city was born, and a new maritime-port, both destined to overcome economically and demographically the city of the lagoon.

The rising of a new Venice

The new picture is clear by now. Precisely because the Venetians plan to give new life to the city they inherited and their true interest is tied to the sea, they prepare the conditions for the actualization of the economic role of the city and the way of life of its inhabitants to look to the *terraferma* as the fit place to realize such aspirations. The future is prepared with a vision of the city life that originates in the past. The new technologies, the character of the new economy, and the new political context will impose a relocation in a new place different from the one originally envisioned. It is paradoxical that a Venetian-centered vision leads to an extra-Venetian solution. The efforts to keep the modern economy in the ancient part of Venice become frustrating, even harmful, as they sabotage the actual realization of change. The case of Venice is very explicit in this regard and in this sense it appears interesting because it allows a kind of first general law to be formulated. In past myths concerning a historical city, the actual city finds great strength to change. But the weight of such myths on actual life is so strong that they can oppose the change to which they have given place, even if this seems to contradict the same myth at some point. Every effort to maintain activities in the city of the lagoon is deemed in fact to be very expensive without even reaching the purpose. The weight of the myths that feed the preparation of change will not succeed in modifying the real conditions that will come. The new Venice of our times cannot effectively unwind in the urban and architectural texture of the past, even if it draws its ailment and comfort from it. If a new Venice had risen now, it would have risen on the *terraferma* and not on the lagoon, because the only way answering to modern port growth is connected to the availability of easy terrestrial access and of large areas close to the water, that the presence of a wide basin like the lagoon makes very appealing as long as access to modern ships is allowed. And the only urban economy allowed today is an economy characterized by great volatility and flexibility, one that is ready to pursue the sudden changes imposed by globalization. A myth that comes from the past favors the present only if it is possible to adapt it to the imperious conditions of the new economy.

To summarize: if the end of the independent State, the arrival of the railroad, the construction of the port represent the main stages of Venetian urban life in the 19th century, in the first part of the following century a radical change in the perspective of its maritime-port economy happens. At that time, a financial group at least in part investing in the surrounding region and taking advantage of the important gradients of the Alps for the production of hydroelectric energy, finds, on the lagoon edge overlooking Venice from the *terraferma*, the proper place for the development of maritime-industrial activity. An example recalled many times is that of Marseilles, but there is little doubt that between the end of the 19th century and the beginning of the 20th the growth of heavy industries for which the coastal location is convenient, since it allows important savings on transportation costs, starts to occur elsewhere and anywhere that environmental conditions allow. Naturally, this geo-economic reality is much more complex than what the simple savings on transportation costs seem to suggest. In the case of Venice this seems evident, since in the realization of a coastal industrial zone a complex interlacement of conditions

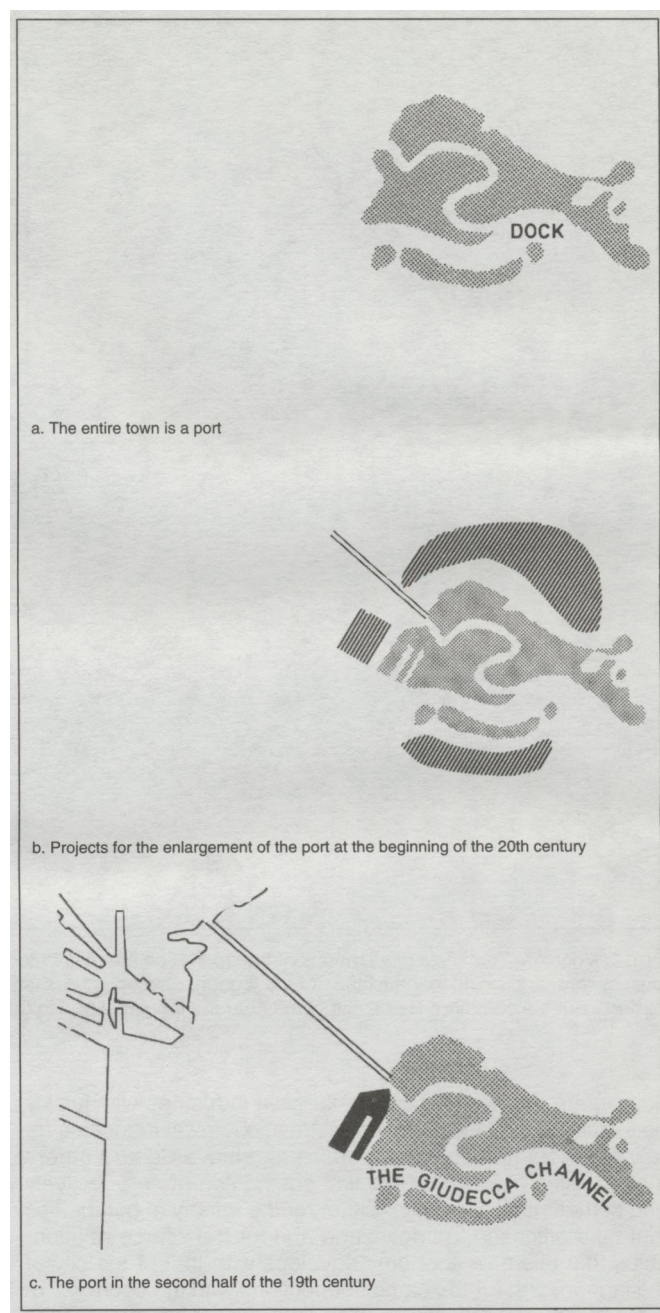


Fig. 3: Evolution of the port of Venice before the arrival of modern technologies (railway and fire vessels) (a); the actual localization of the harbor structures (b); and a few projects of the localization of the “maritime station” in the old city before the choice of the present one (c).

and circumstances intervenes, which it is not possible to mention here.

On an edge site and other areas of the lagoon contiguous to the *terraferma* facing the city, an important industrial area is realized – Porto Marghera, subsequently called the first industrial zone. It will become attainable through the deepening of a canal parallel to the railway bridge that had been realized for the birth of the Venetian port, to unload coal away from the city. On this edge area reclaimed from the lagoon a complex combination of heavy industries starts to develop. The new location appears greatly convenient, not only in terms of costs and conditions, but also because the ships directed to the new industrial port will be exempt from the traditional costs of the

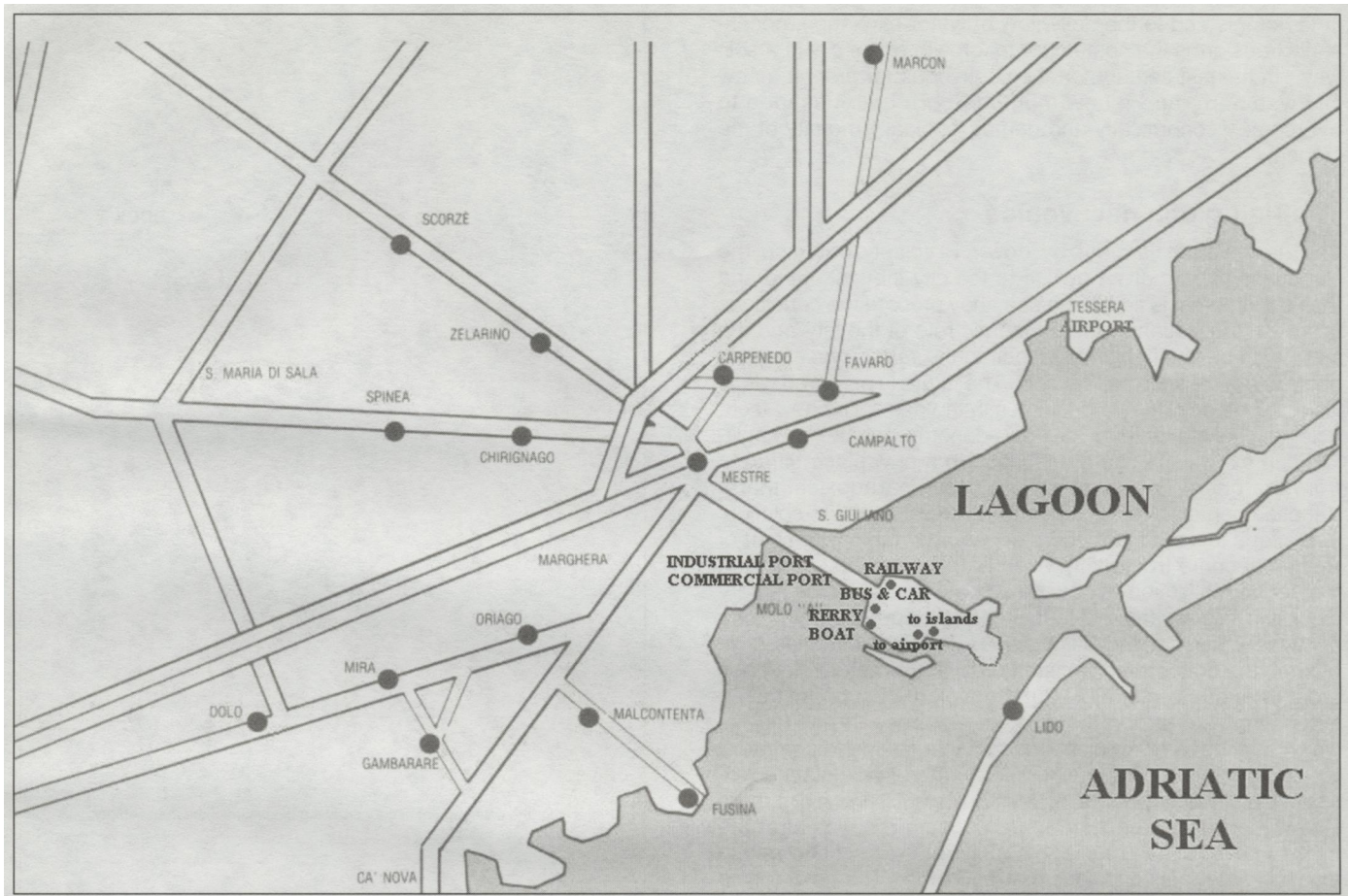


Fig. 4: Venice – Terminals of all means of transportation are distributed everywhere. The historical city accommodates the terminals of the railway, buses, cars, and boats to the islands of the lagoon; passenger vessels also arrive in Venice as well as a line of motorboats for connection with the airport. But the commercial port is located near the industrial port in the *terraferma* of Marghera and the airport is located near Mestre.

harbors. In the new area, metallurgical industries will quickly be installed. And aluminum industries, chemical industries for raw products and chemical fertilizers, shipyards and others that, in using products of the first ones, integrate productively and sometimes financially. Either for the variety of companies that take offices in the new zone and for the scarce relationships that this new economy develops with that of the city of the lagoon, and for the same connections with the economy of the new country of which Venice is by now part, the process developed in Marghera could have easily been not Venetian. But the financial group imposing itself, whose great exponents are Volpi, Cini and Gaggia, not only takes root in Venice, where the headquarters of the port-industrial development initiative are located, but appears tightly tied to the life of the Venetian city for the initiatives that are also developed in the cultural-tourist area. It is the same financial group in fact that will strengthen the above-mentioned hotel activity and that will give life to the international Biennale art exhibition, which will become one of the important events of contemporary Venice.

In this sense, at the risk of oversimplifying, I am inclined to consider that the true turn in the life of the city, if prepared by the changes that intervened in the preceding century, still coincides with the initiatives of the financial group of Volpi, Cini and Gaggia. Marghera on the *terraferma*, contiguous to the city of the lagoon, a major industrial complex that will employ directly up to 30,000 workers, is developed, as is the strong expansion of tourist-hotel activities, integrated in a cultural offer that pre-

announces the actual future. It is not by chance that one of the greatest foundations in the city, dedicated also to the study of Venice-related issues, is the Cini Foundation, on the island of S. Giorgio. With this bipolar solution, the above-mentioned schizophrenia is overcome and the city seems to have given life to its actualization, by looking beyond itself, but with eyes turned to the past.

The increase of risks: Democracy and the media

The second main issue that we can draw from the examination of the Venetian case refers to the central role of the search for consensus in the age of democracy and the central role of the media in this process. In the contemporary city, in order to get people's consent and support to realize any strategy, the myth can be used finally to pursue wrong objectives. The risks are not small, as the necessity of allowing comparison between different opinions should be taken into account.

New Venice, new Marghera and the opposition to the maritime-industrial strategy

In the history of Venice's modernization, there is a second important date: November 4th, 1966, when, many years after the development of Marghera and of the cultural-touristic role of Venice, a process representing a new main turn in the

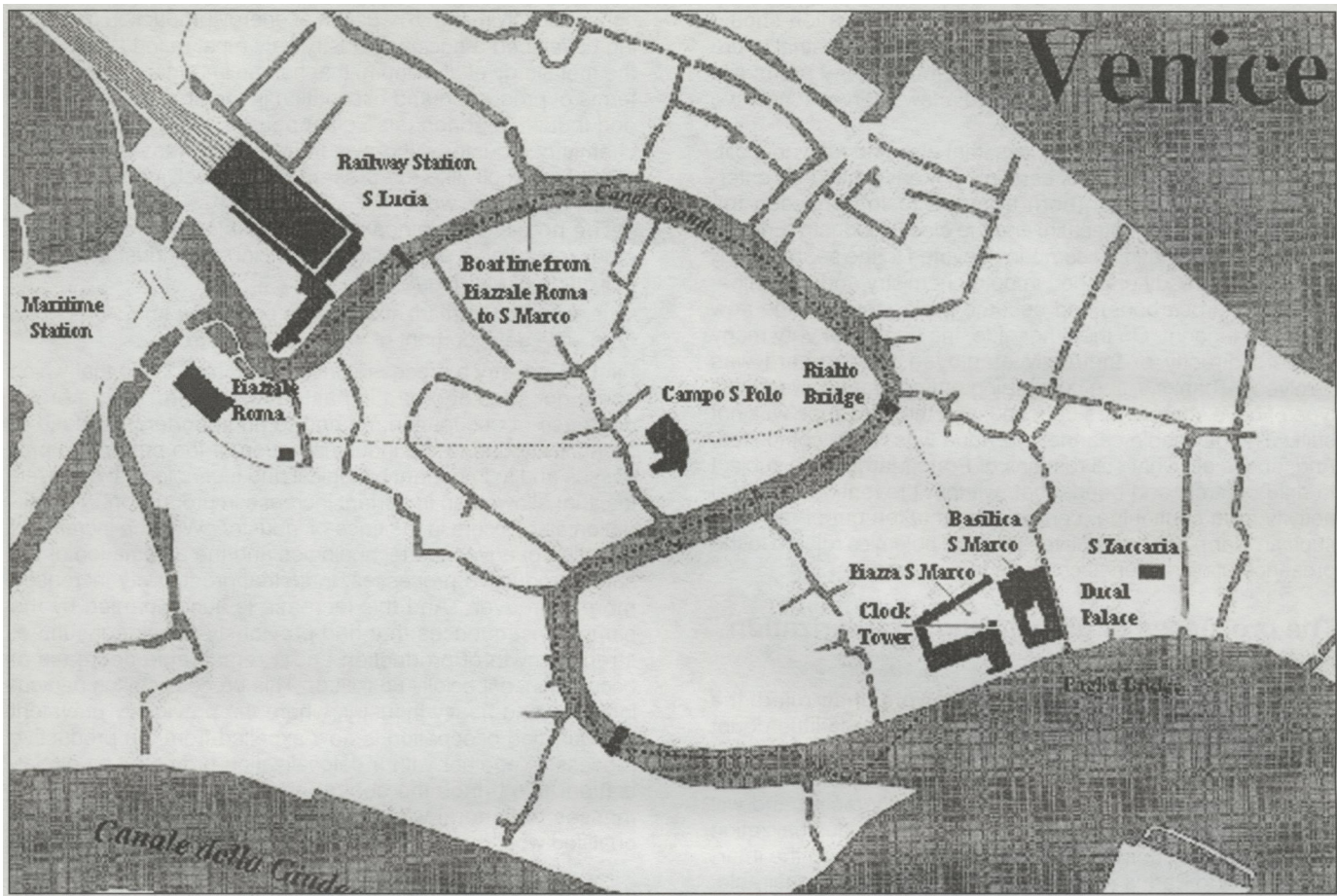


Fig. 5: Venice and tourism – The hundred thousand tourists who visit Venice daily concentrate on navigation along the Grand Canal in a *vaporetto*, and a visit to the square and church of St. Mark. In a few cases mass tourism visits the Lido, the Giardini (the seat of the Biennale) and Murano, the island of artistic glasswork.

economy and life of the contemporary city is established. In the night between November 3rd and 4th 1966 Venice is submerged by an exceptional water tide or *acqua alta* that reaches unprecedented heights. This event is so powerful to the point of preventing even the daily exchange of waters in and out of the lagoon. Seawater comes over the Lido that hems the lagoon at S. Pietro in Volta-Pellestrina and floods inside from this part. Then it remains inside, held back by a wind blowing from the direction of the sirocco, preventing it from returning out to sea. This serious event is connected to particular meteorological conditions that also affect other parts of the country, exceptionally provoking the Arno river to flood Florence. Florence shares with Venice a remarkable artistic heritage. And in Florence, this event will also attract the world's attention because of its extent, and the damage it produces, since the city is certainly not accustomed to water. By contrast, in Venice, despite the exceptionality of the event, *acqua alta* is a well-known phenomenon and the event certainly does not have the immediate resonance of the Florentine flooding. Besides, the area from where the Adriatic waters enter the lagoon had already been indicated as at risk to such an event from previous studies. In short, the Venetian exceptionality limits the external perception of the damage, and makes the *acqua alta* seem part of a well-known process.

But if Florence's flood outclasses Venice's in terms of its impact on public opinion, the less resounding Venetian event will induce Unesco to intervene. To document the damage produced by the November 1966 flood, an accurate study is launched. It would examine analytically many aspects of the

Venetian situation, giving way to the suspicion that the city of the lagoon is already condemned. We shall return further to the awareness brought by this and to the events that followed. Here, suffice it to say that from now on starts a process of radical opposition to the solution given to the city by Volpi, Cini and Gaggia, with its two-legged logic of maritime-industrial development and the tourist-cultural industry. And this sets the problem of containing and conditioning the economic process activated in 1917 with the birth of Marghera.

Meanwhile, many processes had intervened in the dynamics of the maritime-industrial zone, because the war in Africa (1935-36) with the sanctions imposed on Italy by the League of Nations did not only have a major influence on the development of the raw products industry, installed since its very beginning. In the years immediately following the end of World War II, when Italy engages in economic development and starts an important activity of coastal transformation of the oil coming from the Persian Gulf and the Near East with the industry of the distillation and development of petrochemistry, Venice is directly involved in this process. A second adjoining industrial zone is planned, devoted primarily to the petrochemical industry. This plan also receives a remarkable push ahead from the nationalization of electric energy that in these years pours important capital into the main Italian industrial groups. Besides, a deep channel is realized in the lagoon, allowing the arrival of the big oil-tankers with much greater tonnages. This is undertaken away from the historical center, as the traditional access from the mouth of S. Nicolò del Lido shifts south to the mouth of Malamocco. A third industrial zone is envisioned.

Once concluded, the channel for internal navigation should allow ships to continue up to Padua, and a big industrial future is forecast for the southern lagoon, where many areas are available to be reclaimed, and where a few interventions have already shown its importance.

Stopping this important process, that also had relevant political support in the city, was certainly not easy, as large enterprises like Montedison (born from the fusion between the chemical industry Montecatini and the electric industry Edison) and Eni (the big national company devoted to the search for oil in Italy, but already engaged in petrochemistry and the refinement of hydrocarbons) had become protagonists in the new life of the lagoon. On the other side, the destiny of very many workers directly or indirectly employed in Marghera was involved. Thanks to the converging of important powers, this type of development was opposed, and the third zone was not built. The navigable channel to Padua was never completed. And, above all, what still remains of Porto Marghera is subject to rigid controls and bonds that, without preventing industrial activity from continuing, certainly have taken out of the area such an alarming perspective, although polemics related to the presence of oil refineries continue to be heard.

The processes of globalization, tertiarization and environmentalism

Considering the large economic powers that ruled the Venetian maritime-industrial dimension, there is little doubt that the antagonistic powers that have competed to realize this inversion of tendency were very important. And it must be said that, whatever problems the city is currently facing and will face in the future, a perspective like that of the industrialization of the whole southern edge of the lagoon and along the internal channel to Padua would certainly not have been desirable. But it is also probable that it would not have happened without reference to the changes in the industrial economy connected in the last decades to the globalization processes. In fact the attack on Marghera and its expansionist claims originated in the flood of November 4th, 1966, a deep upheaval in most industrialized countries also intervened beginning from the oil crisis of the early 1970s. This would have certainly reorganized the processes undertaken in the 1950s. As is well known, in fact, a first, remarkable change was the transfer of the greatest part of the investments formerly aimed at the raw and heavy industry towards the countries producing raw materials. With the elimination of those resources whose use appeared more expensive, the increasing globalization of the markets ended up selecting the richest reserves. Furthermore, the choice to divest – pushed by the cost of raw materials – is accompanied by the search for more convenient labor markets, particularly by those industries in which the weight of manpower continued to be remarkable.

This process stimulated the new Venetian port industry, as well as all the other harbors that had industrialized with iron production (Taranto, Naples, Genoa) and petrochemistry (in Sicily above all and in Puglia). The agreement imposed by the producing countries pooled in OPEC brought a remarkable rise in the price of crude oil that pushed large companies in this field to pursue a different strategy, contributing to industrial delocalization. Production will abandon petrochemistry and raw chemistry and will be oriented toward more refined “niche products,” that is qualitatively remarkable but for which the cost of the first phases of the productive process was strongly reduced while simultaneously decreasing the needs for a large unqualified labor force. This is still the current production of Marghera. With the exclusion of the expanded and modernized Finsider (shipyard) and oil plants, today, the first industrial zone, born in the days of Giovanni Volpi, has been entirely

converted. With the exhaustion of energy production (not having developed a nuclear industry Italy must resort to imports), the metallurgy of aluminum, that had an important presence in terms of production and occupation in the first and in the second industrial zones, also disappeared. And the big petrochemistry industry withdraws in front of the advance of high quality products like the present ones, involving high added value, but scarce work.

The process of delocalization was also the result of two other remarkable processes influencing the industrial decentralization of Marghera:

- the so-called “tertiarization” of the economy; and,
- the wide development of environmentalism.

First, in industry a process is involved analogous to that which some decades ago had impacted agriculture, with a brutal decrease of occupation, related to an important increase of productivity due to the industrialization of the productive processes and to important biological and technological discoveries, that allowed an important increase in production. This situation also occurs in the case of industry. With the increasing adoption of advanced technologies and the automation of the same productive processes, industrial productivity increased more than ever. And this increase is accompanied by the same consequences that had previously struck agriculture: strong growth of production and a remarkable decrease of occupation, especially unskilled. This process strikes particularly raw and heavy industry, where the previously prevalent low-qualified occupation is now expelled from the productive process. Together with a delocalization promoted by globalization, this brings the converted industry to replace large masses of general workers with a much smaller but highly qualified work force.

Occupation in the tertiary sector also increases, as for many decades it has developed a considerable presence in the economy of the greatest countries of the world, after the growth of a number of previously ignored activities, that proceed from the increase in wealth of the population, and from the advent of new futuristic technologies. These are all the activities related to the new information and communication tools, while the multiplication of enterprises in the most disparate fields, the growth of entrepreneurship, of specialist competences and so on, follow a well known process. The repercussions of the process of industrial decentralization and the tertiarization of the economy also have important political consequences. The inertia to the changes of Marghera, traditionally interposed by the organizations close to the previous forms of heavy industrialization, that now faces decreasing support from the receding work force, seems to vanish. Such organizations do not pose much resistance or they openly sustain the environmental movements. This represents, as previously mentioned, the third dimension of the process that in Venice strikes the maritime-industrial economy, begun at the end of the First World War and further developed after the Second.

Environmentalism and the end of the Venetian myth of maritime destiny

The role of environmentalism is more complex in this process. Being the result of the calamitous event of 1966, the environmental concerns in Venice should not be confused with the more recent form of “ecumenical” environmentalism. The environmental movement, born in Venice after the flood of 1966, is first of all a movement of opinion articulated in two main directions.

- The first one expressly refers to the degradation of the artistic-cultural heritage of the city. This degradation strikes the

monuments – from the buildings to the churches, but also to paintings, codices and ancient furniture – and, according to the accusations of those years, is mainly the product of atmospheric pollution. In the case of Venice, this would not have been caused so much by the motorization of transportation (responsible for the wave motion that affects the stability of buildings), but more by the industrial discharges of Marghera, spread through the chimneys and the sewage. Marghera will pose resistance to such accusations, in attenuating its real impact on the city and with the adoption of provisions for the reduction of the risks.

In the case of liquid discharges it was quite soon evident that they were not due just to the industries, which will act on this problem directly, diminishing them either on their own initiative or under the pressure of legislative provisions that the State – a new protagonist of the Venetian problem – adopted in the following years.

- An important part of the water pollution originated in the articulated and capillary network of channels that, draining the fertile Venetian lowland, discharged in the lagoon the residues of fertilizers and pesticides from a vast agricultural area.
- Another relevant contribution came from water transport, particularly from the losses due to the breaking of pipes, but above all from the washing of tanks and holds that a myriad of small boats – dedicated to the most different forms of transport and in particular to those of hydrocarbons – used to perform inside the lagoon.
- Finally, the sewage system was basically lacking in the city, with residences and productive activities discharging directly into the lagoon, taking advantage of the water exchange produced by the tides. This situation had worsened, since, on one side, tourism multiplied the local population manifold for almost the whole year. On the other side, this increase conflicted with all the provisions adopted for reducing the risks of the Adriatic Sea flooding the lagoon again, and for managing other forms of hydraulic disorder in the internal waters.

Beyond the impact of wave motion on the foundations of buildings and on the whole industrial plant of the city of Venice due to motorization, the issue of water pollution ended up becoming the second direction of the development of Venetian environmentalism. Meanwhile, a well-orchestrated campaign of public opinion, directed by the Venetian *intelligenzia*, with the solid support of the then prince of Italian journalists, Indro Montanelli, attracted on the city the attention of world public opinion and that of the national government. Various committees, public and private, were formed and, with the remarkable financial help they were able to raise, it was possible to proceed to a gradual, but capillary work of recovery of the immense architectural, urban and cultural heritage of the city, that still continues today, but that we should consider substantially accomplished not only in the city, but also in many of the islands in the lagoon. This now appeals even more to a tourism that has assumed by now uncontrollable dimensions. We will return to this point.

● The second direction of Venetian environmentalism in the 1970s concerns the physical safeguard of the city. Such well-orchestrated media campaigns in fact communicated to the public the belief that the city was destined to disappear, submerged by the lagoon and as a consequence of the wicked effect of the maritime-industrial development of Porto Marghera. Of course, the idea to proceed to an indiscriminate industrialization of the whole southern edge of the lagoon and even of the two banks of the Venice-Padua navigable channel was not very sound. Nevertheless this media campaign condemning Marghera as if it were the only cause of the risks of erasing from the face of the earth the irreplaceable, important heritage that a city like Venice constitutes for the whole of humanity, had some serious consequences, that are still chal-

lenging the city today. Little by little, the former attitude, built in the centuries of triumph of the Republic, that tied the life of the city directly to maritime-port activity, decayed, setting the bases for a new belief. Venice was not a city suitable to contemporary life and economy, and should just live on the laurels of past wealth.

Venetian and ecumenic environmentalism

The media campaign promoted in Venice against Marghera faces an extremely complex reality that I shall try to synthesize here, before returning to the general considerations on the urban future of the city. A first dimension of this aspect of the problem of Venice that emerged with the flood of 1966 is represented by the subsidence process, or lowering of the level of the ground. A parallel dimension is the so-called eustatism or rising of the water levels, evident in the increased frequency of the so-called *acqua alta* within the city and of its extension on the urban fabric, compared to the beginning of the 20th century. While then the *acqua alta* used to occur especially during the winter season and just a few times a year, today it occurs in the other seasons also and a much greater number of times. This phenomenon, as well as the increase in the submerged area, is analytically documented by scientists. In the old days the main city paths were served by a few footbridges or sometimes by carriers who would lift people on their shoulders to cross the flooded areas. Today, footbridges have become insufficient, and a city service alerts the citizens, who would need to wear boots up to their thighs in order to walk in the streets.

Such increases are the result of the subsidence of the soil that originates from the artificial extraction of water or gas from the subsoil. There are also geological considerations related to the slope of the soil, in the areas where rocks, of more ancient origin than the sediments that constitute the Venetian subsoil, persist. To this geological movement of sinking (that recently seems to be reduced) it is also necessary to add the increase in the average water level, due to the breakup of the glacial masses as a consequence of an increase in the average temperature of the globe. Subsidence and the rise of the average sea level gave way to the concern that the city could eventually end up being definitely submerged, if it does not provide in suitable ways for the raising of the *rive* and of the whole urban floor, or with the regulation of the lagoon's water level in relation to the tides from the adjoining and connected Adriatic Sea. These are in fact the main strategic directions of defense undertaken by the company (*Consortio*) that works in the lagoon, finalized to the attainment of these objectives and finally to fighting the feared risk that Venice will be erased from the surface of the Earth. After the strengthening of the whole system of *rive* in the city, the islands of the lagoon and the beaches facing the Adriatic Sea which consequently preserve the mirror of water from the risk of outer flooding, this *Consortio* is operating in the direction of lifting the level of the walking plan of the city and in the building of mobile bulkheads. Examples are those of the Panama Canal in America or the Corinth Canal between mainland Greece and the Peloponnese. A first prototype, called Mose, was realized, that could become the tool to fully control the water exchange between the Adriatic Sea and the lagoon.

In this regard, two remarkable problems still remain open, which are connected to another aspect of the 1970s and 1980s debate on the lagoon: the so-called hydraulic disorder. Examining the variation of the so-called "dead" lagoon (water areas not reached by the tidal expansion) and the "barene" (semi-submerged areas according to the tidal rhythm), it is possible to realize the importance of the "canale dei petroli" (oil-tankers' canal), built to provide direct access to the maritime-industrial zone for the contemporary ships that need congru-

ous water mirrors and adequate depths. The excavation of this canal (whose material was to be used to fill the planned third industrial zone on the southern edge of the lagoon) has produced an increase in erosion, a trend that needs to be managed. The real risk is that of having the sea come directly into the lagoon. So, the advantage of having removed from the city the transit of big ships in the canals that penetrate up to the basin of St. Mark and, beyond it, in the canal of the Giudecca and in the "canal of the ships" (modernized with the construction of the first industrial zone) becomes secondary. The consequences were not only those of soliciting a monitoring action of lagoon conditions (a physical model and a mathematical scale-model were built in Voltabarozzo) that appears a very useful and important tool in a living context necessarily submitted to continuous variations. A second important effect was that of contributing to the spread of the belief that the lagoon is an unfit environment for contemporary technology, its safeguard being tightly connected to the possibility of removing from the city any contemporary economy with an impact on the natural environment. This was another decisive blow to the conviction that the destiny of the city was connected to the maritime-port nature of its economy. The latter had already been struck by the eventual impact of the projected mobile dams (when closed) on maritime traffic. Everything in fact conspires in this direction, while the closing of the lagoon gates also seems to interfere with another aspect of the city's life: the necessity of disposal of dark waters.

In short, as the ancient Venetians had already understood many centuries ago, an awareness emerges: that the lagoon and the city are a living organism – that in order to be maintained in health, precise rules, suitable technologies, and continuous experimentation are necessary. These are certainly more available today than in olden times. Today, and for reasons that are only partly related to the Venetian polemic on the lagoon, Porto Marghera and its industrial zone have changed, since the production is now one of "niche" markets and of high added value goods, and as a consequence of the new ties and controls against this type of economic activity. It is certainly not the intention to examine here in detail this body of ties and controls. But it is necessary to remember that the environmentalism that developed in the lagoon following the flood of 1966 was subsequently married to a "second" environmentalism whose ideological roots are sunk in different ground. The whole process of integration of man in the environment context (based on the development of science and technology) is now questioned, as Western man is accused of wanting to dominate a field in which his pretensions are sacrilegious. According to this environmentalism, the human pretension to compete with "Nature" and impress human order on it clashes with immense related risks, comparable only to those encountered by the builders of the Tower of Babel in the Bible, and the same God will punish them, by confusing their languages. The god of this environmentalism is a so-called "Nature," often mistaken with non-Western civilizations, to which the West would have pretended to impose its own strength and proper dynamism. The most evident sign of this will of power is represented by capitalism and industrialization, that must therefore be fought in all its forms, because it strikes at the very heart of "Nature," causing destruction and death hidden under the promise of wealth, preached by its entrepreneurs. When this environmentalism spreads in the lagoon, Marghera is not accused only for its responsibility towards Venice and the lagoon. It is the very life of workers and citizens that is now threatened by the risks of atmospheric pollution or explosions, fires, and poisonings. "Vade retro Satan" becomes the main attitude and with this anathema the long Venetian dream that envisioned in the maritime-port activity of the city the possibility of a better destiny is definitely buried.

Mass media in the age of democratic consent

This introduces the second point of our reflection: the weight that the mass media have acquired in the life of the contemporary city either to obtain the consent of people (democracy) and on conditions to assure historical continuity. In the case of cities with an important past, they are used to defend the most different theses in relation to historical events. In short, in the case of Venice we have seen the role of the media in spreading ideologies that stopped industrial developments on the *terraferma*, as they contributed to the convergence of world and government attention on the city. And finally the media spread the view that the lagoon requires a development based on activities and technologies compatible with its special conditions. This clearly shows how much the movements of opinion – thanks to the promotional campaigns sustained by the mass media – play an important role in the contemporary city. Even if it is still not possible to say which direction the economy of the city will take in the future, and even if it is true that real dynamics and consent are becoming more and more intermingled, yet it is sure that it is not possible to flatten its dynamics on the objectives prefigured by public opinion. And the condition is that the variety and the autonomy of the mass media should always allow different opinions and objectives to be voiced. The search for consent through the mass media always asks that the voices stay manifold, in such a way that reality does not become obscured by myths and ideologies that govern the life of a city with a great past, as happens with all such cities.

What happened in Venice after the flood of 1966 shows the immense weight of the tools able to mobilize public opinion today and for the success of the city in the 21st century. This is evident in the use of the media by dictatorial regimes in the 20th century. Even in democratic countries, the weight of media campaigns on public opinion is evident, as is well exemplified by the large commercial investments in the promotion and advertising of products. Moreover this is confirmed by the diffusion of new technologies – yesterday radio, telephone and television, today cellular phones, personal computers, e-mail and the Internet – which every form of mobilization of consent necessarily has to consider. Also, in the case of the city of the 21st century, the weight of this innovative combination must be put in the foreground, as is shown in the case of Venice, and as it also emerges with clarity from the forms of urban planning. The mobilization of consent has become in fact more and more a necessary tool for the realization of proposed strategies.

It is entirely evident, however, that in the contemporary world it is not possible to put aside the binomial consent-promotion, we already know the risks involved by this in countries under dictatorial and tyrannical regimes. Besides, those risks are not lesser for democracies, as the relationship promotion-consent, if not directed correctly, can cause serious damage when public opinion is distracted from considering the consequences that can fall upon it at a later time. It would be sufficient for instance to think of the initiatives enacted to prevent the values communicated by many television programs or films in order to attract people's interest from being given to consciences not yet fully grown, like those of children, and therefore incapable of withstanding the suggestions spread by such images. Beginning with Popper, ample literature documents some of the efforts accomplished in this direction without falling into the risk of directing consciences through censorship and similar dangerous tools. In this sense many defenses against the above-mentioned risks and danger are enacted today, aiming at the autonomy of the media from economic interests, or from the parties in political life; or through le-

gal control that however respects the right to self-determination of the individual; finally aiming at education and culture, and on ethical values of a universal course for society.

Conclusion

The lesson coming from the history of the entry of Venice into the modern age does not finish with these considerations. An important part of the change to analyze resides in the new identity of the inhabitants of Venice, and of the inhabitants of the *terraferma* but also in the penetration of the new identity, economic and social, of Venice in the territories of the Region surrounding its new development in the *terraferma*. It is a very interesting history with a continuous swing between the opposition of the Region to the new Venice, especially that of the *terraferma*, and the hope that Venice can reach the condition expressed by this affirmation: one of us, the better of us. But this history calls for a new article that I hope to be able to prepare for the next meeting of the World Society for Ekistics.

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The attempt at a synthesis on selected issues concerning Venice reflected in this essay has as background a vast scientific research and documentation effort of the author during the last 40 years. Following is given a first harvest of studies and articles in French, English and German by Calogero Muscarà on Venice and Veneto to assist the reader wishing to go deeper into the study of fundamental issues concerning the problem of Venice.

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