

REMAINS, DEBRIS, RUINS...FROM DECONTAMINATION ISSUES AND DISPOSAL TO THE CONFIGURATION OF NEW LANDSCAPES

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ABSTRACT: This study is structured on the analysis of the definition of ruins and rubbles and then shows the real present state, through cartographic, historical, urban and territorial surveys of different stories of cities destroyed by acts of war (since the II World War until the most recent conflicts). The study was divided in parts relating to the material dimension of the destroyed city and the intrinsic spatial conformation, as results of acts of war such as: hills of rubble and modifying coastal lines as a result of piles of inert materials and also general waste. So the city gained a renewed post-war image, a different spatial identity and another orography that, now, asks to be revealed. Following the war, in effect, what remains is nothing more than a collection of urban materials often without any value that, in their physical state, occupy space and reveal other urban and territorial pictures. However, 'rubble' take a meaning in 'urban design', take an active role in 'geographical plane' and show an alternative means to describe the overlapping and solidification of historical signs.

KEYWORDS: Debris, Ruins, War, Reconstruction, Identity

1. INTRODUCTION

This work is meant to investigate which urban phenomena might take place in a post-war condition of ruins and rubble. We are going to evoke images of war, of destroyed and re-built cities, of identities lost and found, which will shape the new urban setting in its material dimension. And the material will be explained in the critical observation as ruins to keep as reminders of past memories on one hand and as waste to dispose on the other. So any urban dimension, any post-war reality starts its process of reconstruction and regeneration of a territory torn by years of contrasts. All conflicts, more or less distant in time, more or less extended in space, always leave behind heaps of rubble, of debris of any kind and shape, a whole of urban materials often absolutely worthless, but able to occupy space and reveal/create a different and unexpected image of place. That's why starting from the rubble is a way to study the urban project, because it gets an active role in the geographic shaping and outlines a different way to consider the setting and overlapping of historical marks. Ruins and debris are not to be only considered as prerogatives of a physical and/or cultural context,

which determines and leads the architectural and urban practice from outside, but above all as peculiarities inner to the project itself, belonging to the world of relationship between themselves and the landscape, natural or artificial, in which they have to act. It is also important to be able to distinguish between ruins and rubble, so starting a process of selection of the architectonic assets through which the material culture updates, or better tries to update, out of respect for some invariant elements which are the identity factors of continuity in the present. In this way the dimension implied by what is debris and what is ruins can acquire, according to various interpretative levels, a decisive role in the qualification-requalification of the space, connoting it both formally and historically. In this sense the ruins get into relation with the soil not only lying over, in order to preserve the original morphology, but they become the interpreters of a place, the main actors in the memory of a time past and not yet passed. In the ruins an additive logic prevails, which takes any urban dimension into a condition of reciprocal detachment recalling a far off story. A story witnessed by a heap of ruins that enchant the viewer like a landscape of sculptures, a landscape where you feel free to get lost in a dreamlike dimension created by the image of a fragmented town. A landscape of ruins creates a magic atmosphere in which a malignant rule of unstable balance takes shape, between the show of the collapse and the need to tell the story witnessed, to document the facts of a time passed but not yet dispelled. As to the rubble instead, a subtractive logic prevails, which transforms the soil modifying its quality thanks to operations interfering with the inertia of the soil itself, to some extent recalling the original meaning of space suggested by Heidegger that is 'emblematic space'. (M. Heidegger in *Saggi e discorsi*). The ruins, then, become space in the soil and of this they become an integral part, a sort of mineralized landscape. From this point of view we could say that the town, even though composed of several realities, must come to terms with the substance it's made of, which appears, in its ultimate synthesis, destruction itself. The rubble, then, gets all the characteristics of a heideggerian *spatium* with variable thickness, through which man's action and material come into contact with one another giving shape to a renewed urban context, shown in the orographic change, with the appearance of debris-made-hills of variable height and more or less in-town, with marshland reclaimed and coastline advanced into the sea. After this, what appears is a sort of artificial landscape, a shapeless urban entity in continuity with the natural landscape. The promise of a future town that, between liberated and occupied space, gives form to the post-war urban identity. The destroyed city acknowledges the existence of material which, because of its nature, occupies space and needs a project able to make it the essential element of the context where it has to act. And this element becomes urban and territorial object, or better, soil as interpreter of different/several environmental relationships.

Traces, leftovers, wreckage and rubble and not only ruins, when observed with critical eyes, have been gaining historical sense and value. Nowadays we live a time when both building and destructive techniques have changed/improved deeply so that the difference between rubble and ruins has been getting more and more other qualities. Architecture, as all wars, from Germany to Vietnam, from Hiroshima to Beirut, from Gaza to Jerusalem, from ex Yugoslavia to Iraq, has given shape to a new urban and territorial reality and also to a renewed social identity, suggesting even the subversion of the ancient 'poetic of ruins' into 'poetic of rubble'. Progress and dissolution have become unavoidable fate in any time and since the early XX century when technological and industrial progress clashed with the first World War, the new inventions have brought destruction and catastrophes until the ultimate tragedy of Hiroshima and Nagasaki. Tragic events they were, nothing but expression of the absurdity of the war and even more abnormal because they took place in the highest pitch of scientific and technological achievements, causing the destruction of whole cities in a few seconds with their silent explosions. The modern wars annihilate the shapes of both the human and urban body

and a fragmented, formless, kaleidoscopic image of town is being outlined, which changes with the changing light, ephemeral and always looking for a further formal identification. In the early XIX century Walter Benjamin himself saw the destruction of a town as the essential element of its very foundation: I 'passages' of Paris: "[...]dreams, about the decline of Paris, demonstrate the incomprehension of technique. In them, is expressed the vague awareness that, together with the big cities, arised, also, the means to destroy them[...]". (W. Benjamin in 'I passages' di Parigi). We could speak of 'urbicide' any time we have to cope with a conflict or the siege of a town, like the four-year-long siege of Sarajevo, or the destruction of Beirut, the numberless attacks in Jerusalem, the 9/11 attack in New York, the yearly war in the Gaza Strip etc. Even Paris could be numbered in the list of towns victims of urbicide in the descriptions of Walter Benjamin, Thèophile Gautier, Honorè de Balzac, Victor Hugo and Jean Baudrillard when, in *The disappearance of art*, he referred what Valèry had said after the first World War: "From now on the cities know they are mortal. After Auschwitz and Hiroshima we could say: Now the civilization knows it is dead". (J. Baudrillard in *La sparizione dell'arte*). Baudrillards' s words have the taste of an apocalypse because nothing else remains to history nor to the world saturated by itself. With the passing of time it is the space that becomes the permanent element, a link between past and present, a conditioning factor of the present onto the future. Witnesses of the past the towns change, transform themselves, are the result of social and political balances, the expression of economy, subject to crises, metamorphoses and sometimes even doomed to collapse and death.

The urban forms must then be interpreted in continuous metamorphosis, in a continuous molecular change which brings, inevitably, to the discovery and definition of different and a more or less stratified scenery. Such urban entities, more or less far away, such spaces suspended in a past time, such war scenes full of, or maybe enslaved by, a political, military, historical value, together with the collective memory, need a careful evaluation to be able to get meaning or to reveal a new and indistinct one. In particular in this study we are going to tell of cities destroyed by the absurdity of war and inhabited by men beaten/crashed in body and spirit, whose idea of town, after years of conflict, has become a torn image of collapsed buildings, of open fields/areas instead of squares, of heaps of rubble instead of palaces; waste and waste, not ruins inspiring romantic feelings but only pieces of material scattered everywhere. In 1949 Heinrich Boll, *L'angelo tacque* (H. Böll in *L'angelo tacque*), referring what he had seen, gave a perfect description using the word 'trummer', that is rubble, only rubble. The rubble of towns which seemed to be the only possible outcome, the very essence of destruction, the relics of history. Furthermore immediately after the second world war, in Germany had been forming 'trummerberg and trummerhaufen', which mean mountain and mound of rubble and such terms are still able to recall the urban setting after being bombed, the urban setting become just heaps of debris. What happened then of all the waste rising up to the sky and of the old towns lying in the shadow of such heaps of rubble? It is to such questions that our work tries to answer, starting from cartographic, historical, urban and territorial evidence in order to tell the story of destroyed cities and of their subsequent environmental, social and territorial transformations till their renewed image and identity. We will explain what happened of all the rubble heaped in destined areas during and above all after the war and how all this kept modifying the territory and its orography and also the previous urban structure which was to become completely different. As a consequence new places, forms and shapes were appearing during the reconstruction, sometimes reminders of the old cities and of the history of men, often just imitations of a destroyed past outlining a sort of 'fake' urban dimension impossible to read and recognize. What could actually be seen was the sudden appearance of hills instead of flat land, or of solid ground instead of marshland or pools of water, in other words sudden orographic changes. So we could say that the hills of

debris or a new coastline became the true witnesses of a historical tale, monuments to the devastation of war. But the new synthesis needed a recomposition based on principles and rules coming from the nature of the place which, in its geography and dimension, revealed the logic and role acquired in the definition of a renewed urban image. After every war attack the urban space was suspended and past and present and future mingled and were confused, time seemed to have moved backwards, the ruins appeared in an obsessive way, pervaded by homesickness/nostalgia and wish for redemption. In order to keep the city as a living organism, destruction and reconstruction became protagonists, essential elements always present and absolutely necessary to the constant settling process, to the metabolism of a city that lived, grew and modified itself incessantly. In our essay we will have an eidetic outlook to reveal, as in a vision, the passing of time and its working on things, corrupting them and defining new settings as well as new urban and social identities. In particular we'll do this examining urban realities involved in conflicts during the second World War and also in more recent years such as the Balkan war with the siege of Sarajevo and the war in Lebanon with the razing of Beirut.

2. CITIES OF EARTH

2.1 A renewed urban image

Of cities destroyed by acts of war, in every time and in every space, little remains of that austere, tragic, disturbing and at times poignant bitterness that characterized them at the time of reconstruction and of which, today, we only have testimony thanks to film stories, photographs, paintings and more. There is, in fact, no trace of the Berlin of the Third Reich, replaced by new architectures built since the fifties, or hidden under mounds of earth transformed, mostly, in green hills scattered anywhere within the urban fabric. In particular, in the German capital, reconstruction plan envisaged, as the first act, rubble removal, as far as possible retrieved or simply transported and accumulated in dedicated areas, going this way to form the thirteen artificial hills, more or less high and more or less inside the urban system. Beyond the first problem of clearing the rubble and rebuilding the city, there was to find a renewed urban image, a different identity value, far from the one desired for power and supremacy characteristic of the post-war years. The 'plane of the hills' was, then, an interpreter both of the architectures, of the territory and of the relations between the different parts of the city; of a city, moreover, militarily divided into four sectors. This division resulted, in fact, in the inability to dispose of the debris in areas outside the urban system, and then forced to find, in its interior, space for it. Heaps of debris were consequently raising within the city: in public parks of the nineteenth century, as in the case of the hill of Großer, 78m high with a volume of over 2.5 million m³, and of the Bunker Hill, of only 48 m high, raised both right in Friedrichshain park, work of Peter Joseph Lenné and of which only the fountain Märchenbrunnen designed in 1913 by Ludwig Hofman remains, which has been subject to continuous changes and formal alterations. Initially, in time of war, destroyed by bombing and by the construction of Feuerleiturm bunker and of Flakturm bulletproof towers, then submerged in the rubble of the bombed city and so drawing a different orography of the ground, today, easily recognizable because actually a reality absolutely far from the usual scene and therefore identified as a distinctive sign of a historical narrative, guardian, among other things, of real 'war machines'. Another change to the nineteenth century park, in 1950, was the construction of two swimming pools, of an outdoor theatre and grandstands for about 8.000 spectators; in 1989, however, there was the time of the pavilion, house of the Peace Bell, a gift from Japan in the name of the alliance against nuclear war; at the end, from 1995

until 2004, a general recovery plan was planned, characterized by the restoration of the 'fountain of fairy tales' and the completion of a better articulated sports complex. In the post-war city, therefore, a bit everywhere, piles of rubble took form, in fact, transformed, most of the time, in nothing more than green hills, more or less accessible, more or less known, more or less internal in the urban system; it is the case, for example, of the mount Volkspak Prenzlauer, before 1969 called Oderbruchkippe, or Dorferblick south of the district of Neukölln. Rudower and Dorferblick, located at the edge of the Wall, today considered commemorative areas both of the Great War and of the story of 'hostage city'. Other hills are located on the opposite side of the Wall, in the green areas of the former East Berlin: Humboldt in the park of Humbolthain, and the Prenzlauer itself. In addition, three mountains of debris are next to the airport: Tempelhof, Insulaner, Marien southwest and Rixdorfer northeast, in the park of Hansenheide. The renewed landscaping plan had given, then, answers to multiple, more or less complex, questions referring to the removal of debris, to the required and due reconstruction and conquest of another urban image, as well as to the use of public green both as a tool of urban planning and of concealment of structures, rubble, ruins reminiscent of Hitler's ideology. In the current scenario, the case of the hills Klamott and Humboldt, there is a clear example: located, as mentioned, in the parks of Friedrichshain and Humbolthain, they rise where two of the six complexes of artillery towers and air defense command had been built between 1940 and 1942, while the third is located in the Tiergarten park. These complexes, called Flakturm, were composed, each, of a tower 40 meters high, sized 70x70 m, and a control tower at only 300 m away, same high but small: 23x50 m. The 'buildings of war', although they could be reused as hospitals or offices, were, for the most part, hidden under heaps of material of various debris, since by hypothesis a destruction proved senseless, given their intrinsic 'resistant' nature. In fact, the towers of the park Friedrichshain were completely buried by the rubble of the bombed city, and one of the two towers Humbolthain, in part, resurfaces now, and is used as a terrace view of the city and entrance to the underground path that crosses: bunkers, tunnels and abandoned subway stations, dating back to the Second World War and to the Cold War. In the urban scene actually, always in the centre of Berlin, also the hill of debris, known as Marien rises, with a height of 73m from the sea level and volume of 190.000 m³, located in a quarry and, since before the end of war, used as a waste dump of every kind of wastes and only, in part, of the rubble of the destroyed city. The result is a cone-shaped hill with a rich vegetation, toboggan runs and spaces for children's games. However, in the German capital, the most famous artificial hill is, at the moment, Teufels, high 114.7m, commonly called 'the mountain of the devil', which is located in the south-west of Berlin, or rather to the north of Grunewald forest. The pile of rubble, amounting, more or less, to 75 million m³ of rubble, had grown between 1950 and 1972 and, by the way, hid part of the ruins of Hitler's Wehrtechnische Fakultät, the visionary plan designed by Albert Speer who speculated in that area the construction of the university for the study of engineering and military technique, as well as the expansion of the Ministry of Finance, the Reichsluftfahrtministeriums. Structures that were only partially realized and that remained, for the most, not touched by the bombing, then chosen, later, as a basis on which to accumulate debris. Also the last stratigraphic investigations clarified, more or less completely, the timing of building, and in particular it was estimated that the debris accumulated in that area, in 1957, were, more or less, 10 million m³ and only in 1972, after being used as a common waste dump, reached a volume of 26 million m³ and was finally declared definitively closed and a recovery plan proposed. Later, in 1997, a group of scientists proposed and initiated multiple investigations, real archaeological explorations to detect the history and parts of buildings hidden from the mountain: a bunker in ruins and parts of a disused tunnel of underground, for example. One could say that the past turned into land, in

height and in Berlin alone, in thirteen hills of rubble, each with a unique history and a 'treasure' hidden. Moreover, in the case of mount Teuferls, in 1964, given the strategic position and relevant height, United States located a basis for radio interceptions, active until 1993, and even today, albeit in poor condition, present on top of the hill. Concerning its reuse, a controversial discussion is still open, on one hand proposing recovery, because recognized as a symbol of the Cold War, and on the other hand, the total demolition. A hope for demolition, indeed, since 1990, by a group of investors who, as a result of the economic enthusiasm, following the German reunification, proposed a total disposal to implement an extraordinary speculation with hotels and residential complexes. The project was, however, proved quite impossible and without any equilibrium and therefore abandoned. Later, a general lack of interest led to a serious deterioration and worsening hygienic conditions of the whole area that only a few years ago returned to be the object of study, then declared 'accessible' place, active and reactive in the urban system and where, at the time, one can find ski slopes, equipped paths and, in the windy days, even practice flight activity. Well, but then the thirteen hills of rubble, in rebuilt Berlin, were weaving a close relationship between the past, the present and the future, reaching, in fact, the status of historical documents, as well as, of course, being important structures around which, in time, the contemporary Berlin went structuring and recognizing itself. A built landscape, therefore, a dense envelope or even, according to another perspective, an urban mass, formless, which, over time, has been providing continuity with the natural landscape not only in the city of Berlin but also in other urban realities devastated by acts of war.

During the Second World War, generally speaking, the whole of Germany had been the victim of devastating destruction: countries, cities razed, becoming nothing more than piles of rubble. This is the case of the city of Monaco whose rubble had gone forming several hills, the main ones: the Olympic, where, in 1972, the Olympic Games were held and the Fröttmaninger, recognizable by the wind turbine placed on its top. Singular case is also the one of the city of Frankfurt whose destruction gave shape, even in this case, to many hills. In particular, it was said that, right from the start, after the war, a strategic as well as scrupulous removal of debris was organized, as a matter of fact, removed from the urban system, through an articulate, well-structured infrastructural system. The mountains of rubble were then forming just near the railway lines, the best known of which are near the Olympic Bornheimer district, the area where the stadium used to be. It is worth remembering the Riederwald hill made in a quarry and for years used as ordinary landfill to serve the city, and still object of controversial disputes given the necessary remediation, always postponed given the high costs and political - administrative difficulties. Another urban story worth telling is, undoubtedly, the one of the city of Nuremberg, almost completely destroyed during the war and rebuilt, where possible, as it was, where it was (as was done in many other cities in Germany and in other countries). At Nuremberg, in fact, with the 'urban rubble', the hill of 356 m high and a volume of 5.53 million m³ was raised; the part below the surface of the adjacent lake, the only evidence of the ambitious plan of Albert Speer designed for the Olympic Games, where the construction of the largest stadium in the world was planned and where, now exists the hill of rubble. This area, at the time, shows high levels of contamination and requires, at the earliest, a careful plan of remediation and safety.

Of course, not only German cities but also the Italian ones reveal their destruction, the result in nothing more than material, with the building of artificial hills, more or less high, more or less inside the urban system. From 11 June 1940 until May 1945 rubble, debris and rubble again, were, in fact, spreading throughout the Italian territory. Italy, like Germany, has been, somewhat destroyed. Heaps of rubble of whatever type and shape were everywhere: a feeling of ruin, spread across all urban areas, 'drifted' in the post war period and those cities

considered strategic military targets such as Genoa, Naples and Milan, which for this reason underwent major destructions, very soon looked on monuments, large edified areas, falling down to heaps of materials, lonely open spaces, silent monuments, at the time slashed but resembling their past times, a time of glory and quiet.

Milan, for example, at the end of the war was widely hit with more than one third of the buildings destroyed. The urge to rebuild whatever formal, structural or spatial order gave rise to several projects, among which AR Project, thought up by a group of architects and engineers such as Albin, Bottoni, Gardella, Mucchi, Presutti, Pucci, Putelli e Rogers. The AR Project faced the problems of reconstruction, and represented a significant example of break with everything related to the prewar urban system, proposing itself, therefore, as an instrument for a new image and a different structure of the town in general. Major changes of the urban system were planned, aiming at a general reorganization of residential buildings, delocalization of industrial areas and a careful planning of green public areas. Milan came out of the war and started the reconstruction, mainly: 'where it was, how it was', even if with quite different ways, shapes and interests. In this background the project for QT8 came up, conceived by Piero Bottoni, proposed in 1947 at the VIII Edition of the Triennale in Milan. The QT8 could be described as an 'experimental district' where it was planned: a center of the district around the new church, wide green areas of 68 hectares and, in the North-western area, in the Boldinasco excavation site, the realization of a hill of ruins, the Star Mountain (Monte Stella), that is to say the nowadays well known Little Hill (Montagnetta). The architect himself, while describing the project QT8 said: "It was during the proceedings of the works that I realized the absence of something, something which could better characterize the district, which could influence the feelings of the inhabitants and, in some way, offered them guidance." (P.Bottoni in Opera Completa). In particular, the construction of the Montagnetta had been carefully planned with regard to the disposal and waste management, starting from the construction of concrete steps on which waste interchanged with earth has been dumped. Step after step Monte Stella was assuming its shape following a strategic plan of the disposal of different 'types' of materials: at first the ruins of the war, than earth, usually pebbly, excavated during the construction of new buildings and then for years urban undifferentiated waste, it was definitely closed at the end of the sixties. Afterwards it was obviously subject to a detailed remediation plan which established, actually, afforestation, play grounds, relax areas and winding paths.

Ultimately, at the end of the war, Italian and German cities, many urban areas were subject to some destruction recognizing that the 'material' which, depending on its nature, occupied space needed a planning view capable of 'reinterpreting' and transforming things into primary elements of the background to which they belonged. Elements which represented, in reality, urban and territorial objects, or better, which turned to earth to interpret new environmental relationships. A promise of future towns, therefore, which, thanks to the emptied and filled space formed the postwar urban identity. In other words, the way was paved for a sudden change in the orographic structure testifying that the conservative attitude was not, in any form, recognizable in the definition of material in which the concept of change was embedded. The hills of ruins became, therefore, guardians of history, extreme sum of war actions and maybe even 'monuments' of the destruction of war. Wherever you excavated, in reality, ruins of antique buildings would emerge, fragments of the thoughts of those who preceded us and these remains, these words eradicated and injured, these words of other people which are nothing else but the founding ground of the contemporary city, the city which appears to us but in the meanwhile hides thousands of other stories.

This research shows, therefore, what is the 'real landscape', it tells its story, its material, where and how, continuous dumps, never ending, doing, building, starting exactly from a

particular state of fact, peculiar of a territory which, with different shapes and weights, has been reduced, by war actions, to heaps of rubble.

3. SEA CITIES

3.1 In Italy

Recalling what so far described, we observe how the history of cities destroyed by wars, tells in different ways and forms the urban and territorial transformation they have been subject during the passing of the time. Buildings, palaces, destroyed, became proves of the volition, of the nonsense of war, exemplified, actually, by the abundant changes in urban scenery as well as by the sudden orographic changes and by the shape itself of the ground like it happened, as previously seen, for example in Berlin where the ruins of the destroyed city have shaped thirteen artificial hills, nowadays totally internal, active and reactive in the urban system. Starting from the ruins people, consequently, shaped the ground: hills were where before was a plain, earth was where before was sea, well demonstrated by cities on the coastline like: Genoa and Palermo, for example, and even, in more recent times, by cities like Beirut, victim of a civil war which lasted for years and actually caused a change in the limit between sea and earth caused by deposit, controlled and uncontrolled, of ruins in water.

In Genoa and Palermo the dumping of the destroyed city in the sea, water was done in the open air, it was an habit followed and repeated for years, more or less orderly and administered, which, as a matter of fact, caused a clear modification of the coastline.

Naples, on the other hand, even if sea town, but with a quite different ground and construction structure, tells a partially quite different story. Certainly, even in Naples, the debris were dumped at sea with the consequence of the increase of the sea level, however most debris were disposed underground, in this way occupying the galleries made in the past in order to excavate the material necessary for the construction of the city itself.



Figure 1. Genoa: change line cost by the deposit of debris and also general waste (from 1943 to 2012)

The material went back, therefore, to its original state and the tunnels, the 'empty spaces' in the underground, used as shelter during the war, were soon 'invaded' by debris and only in recent times they were newly made usable and safe for visits. In conclusion bombardments of

the Great War have caused, more or less everywhere, major damages and destruction to the historical and architectural heritage of Naples, Genoa, Palermo... and in general of all over Europe, with the consequence, during post war times, of the reconstruction of entire cities, awesome monuments, in the majority of the cases, with conservative or better emulative plans of the morphologic figurative entity of the past. Starting from France, from Germany, United Kingdom and Italy, the cities re-earned, in, approximate, organic and detailed way, the image they used to have. Each building was rebuilt 'where and how it was'. The 'imitative' reconstruction appeared to be the first answer to the wish of other horizons, far away from the recollection of the war and recalling, on the other hand, the historical, territorial and social value in which recognize each lost and often recovered identity.

In Palermo, for example, a reconstruction plan was drawn up which was, in general, loyal to architectural systems of other times, systems that, on one hand, produced historical forgeries, and on the other hand made it possible to rebuild part of the historical architectural heritage widely destroyed and transformed in nothing else but ruins. In addition, the city became larger during the reconstruction and in the following years: prisoner of itself, without a predefined plan and quite often victim of an as bad as unfair reputation, fostered exactly by a silent public administration which even planned the demolition of several buildings of high historical value to give room to a as much 'bitter' as unscrupulous building speculation, both on the coastline and in the town center. Even though, in current landscape it is still common to see, here and there, 'pieces' of history, more or less awesome buildings, which, even when close to ruin, testify directly the brutal bombardments of the Second World War. On the other hand, with regard to the ruins, the simple debris of the destroyed city, as well as, in general, waste materials, as of the immediate postwar period and during the following years, they were mainly dumped in the sea water, and therefore they have modified the limit between earth and sea, whose floor was significantly raised.

A new artificial coastline conquered, therefore, room in the sea and, particularly, along Messina Marine street, starting from Oreto river till Bandita district. Another area used as final disposal site, at the beginning for the ruins of the destroyed city and afterwards used for undifferentiated urban waste, was the well known Acqua dei Corsari called, with an anatomical euphemism, the Big Breast (Mammellone). In particular, in contemporary landscape, the landfill site, observed from the sea looks like a great open air theatre, a stage on the sea of surprising 'charm' and maybe, exactly for this reason, the remediation plan, prepared in 2010, suggested the transformation in open air theatre. In this way, they were devising a theatre placed on an artificial hill and surrounded by trees.



Figure 2. Palermo: change line cost by the deposit of debris and also general waste (1943 - now)

Quite soon, however, the quite complex plan was interrupted and today it is absolutely necessary a quick 'step forward', a fast action of environmental remediation, even and above

all, to avoid further slippage of the hill and then the consequential dispersion of polluting waste into the sea. Exactly with the purpose to prevent the erosion, in recent times, six protective underwater barriers were placed 70 meters far from the shore, and at the moment it is expected to extend these barriers to more than 500 meters parallel to the coastline. The way is still long but, one step after the other, it will be newly a safe, sure and accessible place.

3.2 Beirut: the end of a city

At the end of the war the 'nothing' was reigning: empty, charred buildings from which you could catch a glimpse of the past of a city, which might have been marvelous and whose ruins testified nothing else but the absurdity, the tragedy of war. The rhythm, paced by strong light and dark contrasts, caused by the contrast between the walls injured by the bursts and the emptiness of the byzantine arcade and the windows of the modern empty buildings, returned the drama of the conflict. Different architectural styles shared, because of the war, the decay of whom they were victims, coexisting in the same space and time. Buildings, once mighty, now turned into precarious structures supported by 'injured' pillars, unstable edifices, bombarded and falling apart but still with their dignity of monuments, were ready to play their leading role in whichever urban scene. Nowadays, it is surprising the number of images and emotions that, the simple mention of Beirut, may recall. In 1990 the city woke up from the nightmare of the war, from the special segregation where it fell in April 1975 when the first conflicts burst out. Beirut was reinventing itself, exactly like the official reconstruction slogan repeats: "An ancient city for the future" (Gavin e Maluf 1996). Beirut was conquering another identity, another image, thanks to an urban regeneration plan among the most spectacular ever seen since then, and which was structuring itself, with different renderings, exactly around its nature of sea city. The penetrating and in the meanwhile ambivalent Mediterranean character which, since ever, distinguished, even during the war, the urban area, not only influencing its culture and social relations, but even and above all its space; since it recognized, in each historical time, a urban dimension disputed between the open horizon: the sea and the cosmopolitan atmosphere: the city driven, on the contrary, to the implosion, to the fragmentation into 'islands', in closed systems, 'blocked' by their contradictions and by the foolish need to mark, with strength, borders and barriers. The city started structuring itself thus with juxtaposition and overlapping of spaces where the homogeneity, stemming nearly exclusively from the religious beliefs, had an influence and it is still having an influence on restricted areas, nearly like internal tremors of the urban structure in general. A built continuum 'etched' with the infrastructural web and in addition with sub-units not belonging to the city, but to the district. Urban parts, more or less closed and more or less limited to specific social, economic, religious and political identities, stood beside one another in sometimes synchronic and sometimes disharmonic, but never contradictory joint presence. One could say that, today, Beirut is, just like in the past, the city of the minorities, of the exception and the internal diversity, a mosaic of 'systems' in which several social groups find room and that, as a matter of fact, demand continually a clear reconstruction plan. Each district, clearly differentiated by the religious affinity, recognizes however in Rue de Damas (Damasco Avenue) the functional and symbolic division between two well differentiated 'universes': East, the Christians and West, the Muslims. This clear urban division on religious basis, with the passing of the time, has strengthened till the 'crystallization', definitely, with the beginning of the conflict. Starting from 1975 till 1991 the city was, in fact, dramatically split into two opposite poles, Muslims on one side and Christians on the other. The separation is established exactly along Damasco Avenue, the so called Green Line by the mass media from all over the world. In conclusion, considering that so far said, similarly to that happened, even if in different times and places, to other urban realities lacerated by war actions, even in the case of the city of Beirut, the first

act, when aiming at reconstructing, implied to free the ground from ruins, of each type and shape, already as of the first short truce in 1983, which started a sequence of reconstruction plans, too, in the area surrounded by Palace des Martyrs and Palace de l'Etoile, suggesting a nearly complete demolition, or better a radical blank slate (both undamaged buildings and partially damaged) so to make room for a different urban and architectural layout. However, it was only as of 1991 that a radical and wide reconstruction plan started. The plan focused on a very wide area, more than 1.8 mil m², one third along the coastline, or better focused on the surface of the water which turned into ground because of the disposal of debris and ruins, which had been collected both during the war years and continuously, above all, in the post war period.



Figure 2. Beirut: change line cost by the deposit of debris and also general waste, during the War and, especially, in a reconstruction time

3.2.1 Unavoidable parallelisms: in Beirut like in Berlin

The reminiscence of other wars, even if far away in time and space, like, for example, the Second Great War leads, unavoidably, to licit but inaccurate parallelisms. The destruction of the German Capital, for example, was the result of a madness originated and ended in that place, after having involved the entire world. The Lebanese Capital, on the contrary, bore the heart of each tension, internal and regional. Tension that, jet, showed up itself in the outrageous civil conflict located exactly in the urban dimension. Anyway, in both cases, at the end of the conflict the cities felt a strong wish for reconstruction in order to erase and forget the reminiscence, each sign of the war and, often, even leading to the destruction of everything that, even if undamaged by war actions, was a 'testimony' of a horrible past. In any case, the post war cities, besieged by the debris which had to be disposed of, were, as far as it was possible, freed from shapeless material thanks to recycling plans and, as far as it was possible, to disposal plans of the remaining part of debris in predetermined areas, with the result of modifying, as previously explained, the orography of the territory. In Germany, as previously seen, they shaped real hills of debris, whereas in Beirut, being a sea city, in water till the coast level. In particular, in the Lebanese Capital, from 1991 to 1994, a complex and

organized number of political and economic choices brought to substantial changes in public authorities in charge of the architectural and urban planning, thus influencing the structure itself of the city, largely managed by private enterprises. Therefore the Financial Society for Real Estate Promotion (Solidère) was set up with the purpose of the general organization of the reconstruction plan. In particular 1,8 mil m², including some places which symbolized the city such as: the suq, Place des Martyrs, Place de l'Etoile and several public buildings of peculiar political, cultural prestige, as the Palace of the Parliament, of the Government, the City Hall, to whom more than 600 thousand m² of sea surface were added, this sea surface was turned into ground by the disposal of material (originated mainly from the destroyed city), and then it was transformed into building area. An hedonistic spirit prevailed in the plan backed by the Financial Society for Real Estate Promotion, which in the Master Plan rejected the usual Levantine division into parts in favor of building volumes of mixed use, obviously, more convenient for the market and more favorable for performances and amusements. The poetry of demolition, carried out by the first plan, which planned an awesome ex novo center in which to identify, was, after some time, reviewed with a reconstruction plan more in line with the historic narrative, thus shaping recovery plans of antiquity, of vernacular, in a typical Lebanese style, more in general 'Levantine'. A real 'urban village' in 'traditional style' was coming out in order to recover whatever social and spatial identity, and developing, actually, in nothing more than a false urban center, similar to Disney, where everything is fake, exhibition, stage of a historic narration, but with a misleading flavor.

Well, but then after destruction, reconstruction and various domains the city kept continuously changing, acquiring more and more distance from the historic memory and shaping a veil which led to the wearing off of the past, sometimes revealed by the breaks in the layers, along the territorial boundaries, and even in the still present plant 'cardo e decumano'. At the end of the war, the city appeared: fragmented, polycentric, incredibly subdivided, and then both socially and materially destroyed. A spatial 'trauma' or better a radical annihilation of urban sense which, during the years of the conflict, had in part symbolically and in part even functionally, 'turned its back' to the Mediterranean Sea, whose presence no longer represented a perspective pervaded by the traditional cosmopolitan aura drifting over the city and on which it was worth to invest its own international vocation, rather it became a carrier of death and violence, because of illegal businesses and used for the final disposal of all sorts of waste. The Lebanese city had, thus, nearly denied the sea with its influences and its promises of faraway horizons, transforming the northern coast in a polluted and rather problematic area. A violated relationship which justified the attention paid by the plan proposed by the Financial Society (Solidère) with reference to the "return" to the sea on the part of the Lebanese city. The 'return' to the sea carried out, among the others, in the project for the reconstruction of the coastline, which, in reality, today seems totally new, without any Levantine shape, resemblance or sense. It remains now to wonder whether this, as well as, yet, even the inner part of the city center and the other reconstruction projects had actually shaped a fictional, unnatural urban structure far away from the Lebanese identity, mainly ignored and simulated in a banal way. The seafront nearby the urban center was characterized by the Normandy landfill, it was, as a matter of fact, nothing else but a wide piece of land, more or less 180 hectares, overlooking the sea east of St. George Marina where, later, modern, absolutely 'international' buildings, often designed by not Lebanese 'archi-stars', would have found place. This earth, as previously said, was formed partially during the last years of the civil war by the uncontrolled final disposal of waste, of each type and shape, into the sea, and by waste deriving mainly from the West area and partially, during the post war period, from the debris of the destroyed city and also from those originated by the reconstruction plan Solidère, exactly, quite 'destructive'. Plan that, among the others, as of the

Nineties, amplified a necessary and proper recovery of the area, causing the extraction of 5.000 tons of material, of which, more than half were dumped below the sea level. In particular, the landfill hosted more than 1 mil cubic meters of material which had to be treated and, as far as possible, recycled so that it could be turned into sea 'earth'. At the beginning they started an intervention plan with the purpose of containing the landfill leachate within appropriate barriers, secondly they put under control the biogas produced by the landfill, then they separated organic from inorganic part of waste followed by the stabilization of the 'humid' part by means of composting treatments. They carried out both sea and land excavation, in order to recycle most material, more or less 5 mil cubic meters of plastic, stones, demolition debris, special waste and unexploded bombs, too.



Figure 3. Beirut: landfill Normandy, is a large strip of land, about 180 hect formed, in part during the years of civil war(1975-1994),by deposit, in the sea, of waste, and in part, in a post-war time, by debris of destroyed city and even by a reconstruction plan very "intence

In conclusion, the recovery plan was organized in different times: the first, started in 1996 and completed in 1999, involved the southern part of Boulevard, a nearly 70.000 m² wide area, and ordered its careful remediation; while the second, between 1999 and 2004, involved the Northern area, healing, therefore, the remaining part of 'debris earth'. And yet, the first plan, with real estate and financial interests, aimed not only at transforming the area into healthy and sure earth, but even, and above all, recover the value, the 'meaning' of that peculiar land, which was the border, the filter, active and reactive, between earth and sea, assuming again, therefore, the role of the real 'junction' between the city, with its districts and broken perspectives, and the open sea horizon. Thus, the reconstructed, or on the way to be reconstructed, seacoast has been 'signed' nearly everywhere, that is to say, rebuilt by several, more or less famous international architects. One example is the residential district Norman Foster, known as 'building sat on an old landfill', which more than others represents, in the image of the contemporary city, real Beirut's face, since it reflects in its glass walls the tense relationship between open space: the sea and closed space: the city. In this landscape, still an open construction site, they are putting in place infrastructural works to connect the different parts making up the city, which is more and more big and complex because of the multi-ethnicity, multi-territoriality by which it is pervaded. In addition you can observe, traveling up the coast, that Normandy landfill is not the single reality formed by the, legal or illegal, dumping of ruins of the destroyed city but rather all the coastline has been, more or less, in different times and ways, place where material was dumped, thus resulting in the raise of the sea bottom with the consequent clear change of the coastline. It is the case, for example, of Dbaiyed district and also the area where today the landfill is situated (still now and active plant, with the prospect of a near closure and transformation into service area to the 'enlarged city'). And yet, thus all the coastline appears to be nothing more than a reality suspended between water and earth, a reality of social history and environment. On the other hand, the city harbor, interpreted as threshold on the sea, is, since ever, expanding in obviously different ways and

intensities, and in more recent years particularly toward the Northern coastline, which at the moment is waiting for the drawing up of an remediation plan orchestrated with the urban system. They are, as a matter of fact, areas known as Free- zone and starting from industrial area Dora, today without any urban definition, without any role, any environmental and social sense. These are absolutely chaotic realities which request, out loud, to be rejoined to the urban system, to be again part of an open harbor, competitive on national and international markets. A city which, among the others, wants, like in the past, to appear: dynamic, lively, absolutely multiethnic, multicultural... all in all a 'Levantine' city, a city that, in the contemporary panorama, is a little bit everywhere, a city without borders and a city which lives the territory. A territory intended like 'urban monuments' connected by more or less continuous, more or less structured infrastructural systems, which define the limit, the urban edge.

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