Chapter 4: TRANSFORMATION PROCESSES

Yesterday is but today’s memory and tomorrow is today’s dream

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A CHANGE IN SCALE. A CHANGE IN RELATIONS

Traditional construction, as in architectural heritage, is a full and living part of “historic acts” (1). It retains traces of the periods it went through, revealing the foundations of the society that created it. The architectural heritage that has reached us communicates a long and rich history of individuals and societies. Like any architectural inventory it sustains the influence of different periods, relations, and events. We will thus regard the term “process” as a sum of the facts and phenomena which influence a construction and integrate transformation. Transformation can be progressive or abrupt, superficial or deep.

Changes have always been deep-rooted in traditional construction.
They are a sign of its vitality

By transformation we mean to say a sum of all the changes that can be found on a construction for a given period of time. These changes are evident in use, form, or aspect. Such transformation can be reversible or irreversible.

Both process and transformation are deeply associated with architectural heritage. Throughout the ages, change has always marked buildings and constructions. Of course these transformations were generally quite slow and often distant in time: “very seldom perceivable in a single generation.” The exceptional circumstances of our contemporary age are speed and concentration. The capacity and force of today’s transformation processes are faster and more drastic than ever, affecting our entire perception: the healthy, energetic traditional building now seems flawed, sick, even boring. What was previously an understandable evolution of housing, is likely to become - and often does become - a brutal transformation, an entirely new construction both in nature and technique. It is now flawed and difficult to comprehend. Transformation processes which were considered normal and natural have become a burden, disproportionally so because our view and scale have changed. Without exaggeration we can say that the phenomenon has become monstrous in the literal sense of the word. The damage is visible today. It is so widespread and dramatic, so common, it is an indisputable reality. The rate of construction renewal is so frantic and accelerated that entire blocks of architectural heritage have been swept away, losing their appearance of only 30 or 40 years ago. The material landmarks (town planning, architecture), and also the immaterial (know-how, techniques) have been vanishing. The first emergency measure should be to keep records of former layouts, before too radical a change occurs, in order to understand the keys of architectural heritage. This includes both real estate and cultural value. The ultimate achievement would of course be to rehabilitate heritage today. Though this objective is indeed a tough one, we should never give up.

The transformation processes presented here are the result of powerful means of transportation and distribution, in addition to standardisation and industrialisation of new materials in mass production which lead to the inevitable and violent disappearance of traditional know how. In practice, it led to a banning of traditional, local materials. The criteria is no longer proximity or practicality, but rather profitability: low cost combined with easy, ready to use materials. What used to be a blessing has become cursed and doomed, what used to be loved is now hated. However, after only five decades, many questions and concerns have arisen on all the levels of this insane rushing venture, which spare no culture and recognises no boundaries. The Corpus Project is a testimony that all Mediterranean
people, without exception, share a common sensitivity: they are all alarmed by the same serious concerns.

This chapter emphasises the causes and the effects of processes, and, as we will often plead the case of traditional architecture, it is important not to confuse this with an adhesion on our part to any traditionalist current. Moreover, synchronicity and dialogue with every historical period, far from useless nostalgia, are the key to a worthy future for this architecture.

**The keys to a new horizon**

Although the 19th and early 20th centuries introduced significant changes, triggered by the industrial revolution which spread unequally in time and space throughout the Mediterranean, specialists unanimously agree that the 1950's were the real turning point for dramatic changes. From this period onwards we find a combination of determining and major factors: demographic growth, a bursting of the traditional family cell, great migrations, rural drift, urbanisation, a new system of work organisation, the global economy, and mass tourism.

We must be brief on these issues. There are numerous valuable studies on the subject, and we would lack rigor in merely repeating the same ideas. We must, however, insist on the direct manner in which the above factors weave their way into the processes of transformation in Traditional Mediterranean Architecture. It would, moreover, be illogical to analyse the investigation results and research without setting them in a more general frame.

The demographic factor is most important, and it did not go unnoticed by ancient Mediterranean thinkers. Thus Plato in his Laws recommended an ideal city of 5040 citizens. A perfect number according to him, allowing for a rich variety of divisions and groups. In the 14th century, it was Ibn Khaldoun who saw a sufficiently dense population as an advantage to improve specialisation. Since then, theories have tried to explain, forecast, and organise population. In December 1966, the UN officially stated that "serious problems (have) arisen from demographic growth". (2)

The Mediterranean was not spared by this phenomenon. From 1970 to 2000, the population of bordering countries grew from 285 to 427 million (a growth of 50% in 30 years!). For the next 25 years, the Blue Plan forecasts an increase of 97 million, including 92 million for the south Eastern European countries of the Mediterranean and only 4 million for the north. These figures show the significant repercussion of average annual increases in almost all countries, compared to the past few years. (3) In certain areas, a drop in birth-rate is linked to the breaking up of the traditional family cell. It is especially connected to changes within the female population. In some modern areas, women have changed from the established "woman-mother" statute to an equal-to-man social role. Women are now independent from their families, freed from financial, social, professional, or educational stereotypes, upsetting and transforming the traditional "market of marriage". They often postpone the date of their first childbirth. The new family structure leads to a crumbling of former social cells. An overwhelming youth increase in the most traditional countries contributes to the breaking apart of these cells through two phenomena: the abrupt loss of influence of older generations, generally the most conservative element of a society, and a transformation of the roles within a family group and of its individuals. (4) This considerable and swift growth and transformation caused significant population migrations. Among the most notable, the exodus (5) from rural areas to urban environments.

De-colonisation, military or industrial wars, intensive construction and agriculture in the countries of the northern bank, all forced population displacements and created an increased need for labour (often unskilled). This great need for unskilled labour was sustained by the intense demographic growth and high rates of unemployment in less developed areas. Three factors contributed to these displacements: modifications of space/time vectors, as distance was no longer a constraint; mobility which has become a fact: means of communication, which have become quasi "instantaneous", cheaper, therefore more accessible to a growing number of individuals.
Consequences didn’t always have the same causes. Nationals generally come from rural environments and are mostly young people, leading to a "de facto ageing" of the population back home. The older ones are less open to risk taking and innovation, which causes stagnation, impoverishment, and a recession of their environment. We can also consider that the money sent home by the migrants has contributed to a decisive improvement of living conditions and means of production, therefore bringing a new dynamic to certain areas. But we must not be blinded by these rare mirage-like exceptions. Most cases unfortunately lean in the direction of the first tendency. Undoubtedly, a new trend of exchanges – with pain and inequality – has developed in the Mediterranean: cultural mixing and intermingling persist.

The mechanisation of the rural world, the technical advancements that invaded agriculture (6) drove to property concentration, a "rationalisation" and productivity logic (cereal, sunflower, beet). An agricultural market competitiveness resulted in the exclusion of millions of peasants, pushing them towards large urban centres. The concentration of industrial activities in urban environments and increase in construction contributed to attracting populations from the countryside, triggering a local depopulation process and, in many cases, abandonment. (7)

*Galloping urban development and a collapse of the rural world created new strains that traditional construction failed to withstand*

The urban population grew from 94 million in 1950 to 154 million in 1970, and to 274.5 million in 2000. Forecasts of the Blue Plan predict an urban population of 379 million in 2025. Although slowing, the urban growth rate will increase by 60% over the 25 next years, faster than the growth ratio of the population. Over this period of time, the southern bank will become more urbanised than the northern bank (74.4% in the South, 69% in the North).

As for the littoral, it will follow the same trend. But this band of the Mediterranean area is very narrow and fragile. It is, therefore, more of a concern. The population on the littoral grew from 58.5 million in 1970 to 96.1 million in 2000 and, according to forecasts, it could reach 127.5 million in 2025.

The yearning for concentration causes tremendous flows of populations in cities, and is not without damage. The absorption (8) of farm land by the expansion (9) of urban areas, a horizontal growth over huge areas, especially on the southern bank, the illegal occupation of grounds, unauthorised construction, the emergence of suburban districts which lack equipment, infrastructures, and planning, or the squatting of town centres, are among the most dramatic examples. We see an “under-integrated growth” to quote the Moroccan geographer Mohamed Naciri. The most recent migrant waves suffer from the worst conditions, settling in the most precarious and unhealthy zones. Often only "in transit", with very limited means, neither they nor the owner invest in construction.

The introduction of this population leads to less and less attention being paid to environmental parameters. Here too, a significant change took place compared with the harmony traditional societies used to keep with their landscape. Questions of climate, soil fertility, energy, and water supplies (10) no longer play the same rule as they did previously in determining the localisation of the population: they are suddenly replaced by strictly economic criteria. The concentration of population required by a task-divided work organisation, as well as the need for a more fulfilling social life facilitated by easy and efficient means of transportation, have drawn man further and further away from nature (11).

The relatively modest dimensions of the Mediterranean favour concentrated urban strips (12) which are literally sinking the littoral into concrete in certain areas. Two major phenomena coexist: metropolises and tourism.
Nearly twenty large metropolises can be found in the Mediterranean. They are spreading and gradually absorbing average or small surrounding towns and cities, making up enormous urban agglomerates. If it is true that the reinforcement of these Mediterranean metropolises is decisive for the future of the area, many internal difficulties must be managed and solved.

A phenomenon goes back as far as the XVIIIth century with the advent of the first social practice spread for therapeutic and leisure reasons: tourism. Tourists settled discreetly in few specific spots on the French and Italian Rivieras in the XIXth century, and then again in the 1930’s. Mass tourism only really developed forcefully after the 1950’s. A new system of work organisation and paid-leaves, together with the creation and improvement of road infrastructures, popular affordable cars, and cheaper air transport all brought a boom in mass tourism. The Mediterranean was, and is today, one of the favourite destinations in the world.

The Mediterranean area has since never ceased to grow in the overall, international tourist flow. It accounts for onethird of the total number of tourists, and 30% of international tourism income (55% for Europe). Within the Mediterranean area, coastal tourism is also very significant (70% of national and international tourism in Spain and Italy).

The Mediterranean area is the largest tourist centre in the world with 140 million tourists per year. Some countries of the area are among the largest tourist hosting countries in the world: France 1st, Spain 3rd, Italy 4th, Greece 17th, Turkey 22nd, Tunisia 30th.

These figures show that tourism is unequally distributed according to areas and that a considerable discrepancy exists between North and South. After a first stage of a strong littoral trend which is ongoing, interest for inland discovery (13) is consolidating a complementary tourist offer. Countries with significant archaeological resources (Greece being an excellent example), have long benefited from this richness. Insularity is a major asset when looked at from this angle. Cruises with stops, together with a certain "concentration of the genuine Mediterranean touch" in restrained areas, and a significant amount of "local colour", make islands and modest countries like Cyprus desirable tourist destinations.

With over 140 million tourists per annum, the Mediterranean area
is the largest tourist centre in the world

The exploitation of the littoral did not follow the same pattern throughout the area. In Spain, the littoral was almost totally constituted in a continuous strip of urban structures and seaside resorts. In Turkey, whose great tourist centres concentrate the majority of visitors, the littoral has remained practically unaltered. Tourist access can also be restricted for political and safety reasons. This is the case for Libya, Algeria, the Balkan countries, and the Middle East, which all have little or no tourist activity, at any rate much less than their hosting capacity would enable.

In these great changes, which have come to pass at a speed never before experienced in history at varying levels of growth and progress, we find the new, generalised exchanges between the entire planet: the global economy. As Michel Beaud suggests (14): a change of worlds. In any case, the novelty of today does not imply that traditional architecture will not continue to play an essential role in our heritage as a memory for humanity, said François Durand-Dastès. The “local” heritage will continue to be significant, even irreplaceable, as proximity is essential, and bonds will consequently tend to get tighter. Emerging regionalisation, based on common interests for all countries, is the sum of the regional partners’ assets. The capital of one cannot be destroyed without endangering the whole group. New means of communication have reduced distance to almost nothing. It would be absurd to deny the world has become a common area of exchanges. It seems intelligent and essential to include this parameter in the elaboration of our strategies, asserting the right of Mediterranean traditional architecture to preservation.
This brief overview of the predominant phenomena which has marked the past five decades of transformation in the area should help us connect the data on the processes of transformation of traditional architecture, to the context and conditions in which they took place. Finally, and equally important, this illustrated recollection of figures can help grasp the power, hierarchy, value, nature or meaning of these phenomena, not forgetting they are liable to change. Understanding such characteristics or dimensions will be highly relevant when trying to set up future strategies.

We can distinguish two scenarios: world-wide and local. On the one hand, the phenomena which we are constrained to take part in because the planetary trend exceeds the single state, bearing its logic, nuances and characteristics. On the other hand, the places where these large currents are managed locally with more or less difficulty and success, sometimes transforming reality in a clear and measurable way. It is the world-wide scenario which is often used as an excuse to justify resignation or awkwardness. It is the local level - of course fed by the first - that we will develop.

The diversity which we so often evoke in this project, is found on political, social, and economic levels. The process of transformation in traditional architecture – following similar patterns throughout the area - is managed in various ways and has seldom been commented upon until now. This project – together with others which have been launched in recent years - should contribute to opening up discussions. Therefore the initial situation, the ways, means, approaches, and even results can be quite different from one area or country to another. In this instance, cultural diversities and economic variations are quite revealing. Consequently, we must discard a global analysis and comprehension which would be exclusively based on the more monochrome North Western model. This possible similarity in processes leads us to presenting them as sets of themes, adding characteristics gradually as we go along.

THREE LEVELS OF TRANSFORMATION

We can say processes of transformation affect traditional architecture on three levels. Of course, this schematic and theoretical dividing is much more relative on the spot, and sometimes hard to decipher along the winding roads of changes in meaning and orientation. These transformations often affect the three levels simultaneously, in a domino collapse effect. Traditional architecture must therefore not be separated into subjectively preferred items, but be considered within its global context.

The area/space

The area/space is the unit (the actual construction) constituted by a farming or city environment, with different populations and activities. Society and landscape. We will partially comment on this level, as it is geographical, historical, economic, and exceeds the field of our project. Additionally it has been thoroughly studied many times over. The great transformations of the rural world mentioned earlier, destroyed the harmony that used to exist between and landscape, found in a farming and village environment. The role traditional architecture used to play lost a good part of its meaning: heritage fell into uncertainty.

*When transformation works are carried out to "set buildings to standards", without discernment, just to conform to law; they generate considerable damage. This leads to a lack of discernment, and endorses the most inappropriate practices*
The spatial organisation of villages, cities and districts.

The rate of urbanisation and construction, the power and abundance of automobiles have often affected villages, cities, and districts both in organisation and morphology. Historical districts were disfigured and scarred by the creation of a multitude of roads and openings, "airing out" (one dies of an overdose of oxygen!) traditional neighbourhoods, widening streets to car size, or closing them with a belt of choking new districts. The construction, the house.

Building, The house

The house, whether considered from a formal, practical point of view, or from the point of view of materials, techniques, and how used for its construction, the house, a second or third skin of the population, as certain authors defined it, automatically integrates and represents all the changes of the people who inhabit it. The house reflects the skill or awkwardness of its management, its values, the rank or the dignity it was granted or refused by each society and at any given historical period. This expression and connection to an era make it easy to interpret cause and effect, pressure and reaction. This is where we concentrated our work. We will try to point out and interpret the transformations and processes in these fields.

TRANSFORMATION TYPES

Formal transformations

• Those that modify the volumetric profile

In the field of shapes, we find three major groups of transformation. Here we face one of the most dangerous and destructive transformations, which can not only result in significant damage to the construction but also to its environment. Generally speaking, these transformations, through the degradation they impose on the construction's environment, are an excuse for even further new neighbouring transformations. The change of the volumetric profile can evolve in two ways: an increase in volume, in height and projection (overhang), while respecting the same layout in terms of ground space, or else a form of "colonisation" which invades free areas, building in normally preserved parts of the house's harmony (court, garden, etc.). In both cases a considerable increase in urban density and population bring about the following problems: equipment, infrastructures, the quality of neighbour relations and more generally the quality of living. This change of the volumetric profile sometimes causes the disappearing of essential elements in the typology definition. A typical example is substituting a sloped tile roofing for a flat roofing with a terrace. Very often, structural problems appear: increased loads or modified load bearing points accelerate the degradation of the construction. Of course, from a formal point of view, a very serious disfigurement of the typology and site is currently ongoing, most of the time in an irreversible way. Correcting this trend is unfortunately too costly and heavy to assume. On a practical level, non-existent or lacking administrative control but also inadequate legislative frame, migratory pressure or real-estate speculation, permit these transformations. Another cause is also the dissolving of traditional social relations, which had great influence on private individual choices; this frame has never been replaced. A cultural abandonment of traditional typologies and practices also feeds these transformations. This deterioration of the original volume can take on different shapes in different areas: in the Moslem médina it can grow in height, over streets, sometimes even grow into basements; in Turkish houses, increasing a volume will absorb the garden or semi-open spaces (exterior sofa). This can also be the case in village houses in the Western Mediterranean. This is a relatively uncommon transformation for the area taken globally, but is sometimes very frequent and concentrated in specific sites.
• Those that modify the openings

This type of transformation significantly affects the aspect and the composition of the façades. It interrupts the original relation and balance between the empty and full spaces, disturbing the verticality, horizontality and hierarchy of the façade organisation. According to the degree of changes, this transformation can completely disfigure a typology. There are two basic reasons for these modifications: first, a contemporary aspiration for a good view and more light, and, second, a reorganisation of openings in accordance with a new interior distribution. Other reasons for these transformations include the desire to recover half-open areas and integrate them to inside areas in order to increase living space, improve thermal qualities, increase standards, and reach new fashionable comfort levels. Here again, we have a non-existent, inadequate or ineffective legislative frame, or, to say the least, a lack of pedagogy and ideal: all of these are highly responsible for this damage. It is quite clear that this type of modification transforms the character of certain typologies completely. An example is the open house with an inside court patio. In this case, the building has already been seriously modified by the roofing of the patio, which then loses its primary role: the house no longer has any opening on the inside, and one only finds new space for ventilation and light in façades. This type of modification is considered frequent throughout the Mediterranean area.

The so-called "adequacy" of these inside areas is sometimes the result of real estate speculation, voluntarily increasing density in certain districts. They are often encouraged by the arrival or displacement of a low income population which is re-lodged in "sub-apartments" resulting from the partitioning of an originally larger apartment. A certain incapacity of authorities to develop programs, or a lack of means to execute such projects, also contribute to worsening this situation.

We have often noticed that not only do the transformations not improve the quality of living in any of these areas but, on the contrary, they deteriorate them. Damage can also result from a lack of understanding of the original spaces, as well as from a lack of knowledge and know how in adapting these places to today’s needs without disfigurement. All these transformations visible on the façade naturally result from deeper transformations brought to the inside areas.

• Those that modify textures

These types of interventions, although apparently light, can radically modify the aspect of a construction, and generate pathologies which are serious and difficult to solve. We must evoke here the wide range of renderings using industrial mortar cement, but also a contemporary taste for bare walls in the name of a certain nobility of apparent stone facings, or sometimes the reduction and disappearing of maintenance for economical reasons. A range of alternatives complete these types of interventions: elimination of mouldings and profiles, flatness of the walls, removal of the ridge sheathing or zinc works, laying of shutters, pallet of paint and colours. Once again, we must observe the same absent or inefficient legislation, the loss of traditional tricks of the trade, a lack of regulations, an invasion of new industrial products, a loss of know-how, a desire to be fashionable and "modern". (15) A wide range of pathologies is inevitably the consequence with these types of practices, due to the incompatibility of traditional and new materials. This is a common transformation in our view, even generalised throughout the Mediterranean area.

• Other ailments

In the "unclassified" ailments we must not omit the last formal transformation, the most serious: destruction and ruin. The shape disappears to nothing, a well known reality in the area. This vanishing is triggered by four main causes:

- Military Conflicts + natural disasters: wars have unfortunately been eternally present in Mediterranean history. The recent conflicts in the Middle East and the Balkans were devastating for traditional architecture in the area. We can also add to these aggressions another dramatic reality
along the same destructive line: natural disasters (floods, earthquakes, volcanic eruptions) which have ruined innumerable traditional constructions since Antiquity, and sporadically continue to do so.

- Colonisation and occupation: they have affected traditional architecture in certain areas, and in some instances still do. In these cases, the damage and effects were and continue to be varied. Regarding occupation, the major negative effect is the lack of access to the heritage, generating obvious consequences. Despite a more or less interesting heritage left behind by the coloniser, colonisation usually sets new constructions taking no account of local structures or values. The coloniser simply imposes his architecture on the area. In many regions, you can find notable traces of this phenomenon.

- Political decisions: they affect construction in rural environments (motorways, railways, industrial complexes, condominiums, dams) as much as they do in urban environments (large openings in typical districts, demolitions due to wearing or to "give traditional quarters oxygen", restoration - here is a word! - modification of alignments, yielding to automobile traffic). In all these cases, traditional architecture is not at the top of the list of priorities, but more often than not regarded as second-hand or disposable material. Behind arguments in favour of progress and through legal decrees, this silent process contributes to breaking apart and reducing the stock of traditional constructions.

*Traditional architecture can contribute to mitigate the devastating roller effect of today's global and standardising trend, and preserve both local specificity and diversity*

- Abandonment: Here is what one could call "a loss by destiny". When confronted to this situation, resignation, indifference, or a slack attitude all prevail in the fields of decision-making and power. For some, infirmity. Others still -real estate developers- make a significant profit from this lack of mobility: they build and exploit caricatures of traditional architecture. Abandonment is constant and unfortunately significant throughout the area, although in certain cases, it has been partially reversed. To make matters worse, abandonment seriously damages the image of traditional architecture, by making it look archaic, obsolete, and therefore pointless. Recent initiatives, like rural tourism or a slow recovery of certain local farming activities, can give us the impression the process is losing momentum, which is significant as it confirms a possible improvement of this situation.

**Functional transformations**

- On the level of wall partitioning

On a functional level we find two great families of intervention. The idea here is to alter the distribution of the interior area, for a variety of reasons: creation of non-existing rooms (bathrooms, toilets, kitchens), modification of existing areas (dividing a room or connecting room), multiplication of homes (family breaking up into smaller cells, or in most cases, real estate speculation), complete change of use (offices, stores), absorption of external areas or half-outside (court yards, patios). The repercussions of these types of modification are extremely variable depending on the intensity of the intervention and the quality of the areas once they're changed. We understand this phenomenon in two ways: meeting new family and social needs, and a speculative strategy; the partitioning or increasing of an area and rental units in the same volume, always causing denser lodging and inevitably lowering living standards, sometimes even eliminating the most elementary hygiene. This intensive and abusive use of volumes accelerates the wear and tear of the construction, sometimes even causing dangerous defects. This is always a threat to traditional architectural values and use, therefore endangering survival. These interventions sometimes associate structural changes, which are generally light, but there are exceptions. This type of modification is seen frequently throughout the
Mediterranean area as it is the simplest way to adapt the interior volume. It also has very few administrative consequences, as it is invisible from the outside.

These modifications, sometimes considerable, are often the result of legal and regulated concerns. There exists an encyclopaedia’s worth of regulations, drawn up for new buildings and packed with very strong language such as safety, fire hazard. Language which ignores the specificity and values of traditional architecture, applied with much effectiveness, we would say impertinence, as it contributes to the destruction of this fragile architectural stock, with the authorities’ blessing for "setting it all to safety standards".

• On a three-dimensional level

These are generally heavy interventions generating serious typological consequences, -although a relatively good façadism can give us the impression that everything is all right – as they modify structural crossings as well as vertical accesses, and of course the whole system of partitions. Worst of all, organisation, relations, and hierarchy in traditional space distribution are disappearing. The traditional area is so transformed it is becoming unrecognisable. Several motivations can be divided into two main groups: the goal is to obtain a larger, more useable volume (often to increase real estate profits) with less cumbersome crossings (demolition of vaults, of floors with earth or lime mortar), either rearranging levels or replacing structural elements and vertical accesses regarded as decayed or unstable. These are ultimate and irreversible losses of very significant elements at the heart of a typology. The immediate consequence for traditional architecture is that vaults, cupolas, staircases, beams, pillars are doomed and disappear. Some structural problems are also associated with these interventions: they often include changes to the openings in façades when the difference in height from the original to the new level is significant. This type of modification is like the work of a termite. It is silent, never ending, and attacks the core of certain typologies. Buildings gradually become a caricature of the original construction: a macabre decor. This threat to the diversity of Mediterranean traditional architecture is a particular danger to the rarest models. This type of modification is common throughout the Mediterranean, for both groups of interventions.

On a functional level, we must add closing down and new use, following a change of activity related to agriculture, livestock raising, and the craft industry. Besides workshops, the space originally devoted to one of these activities is usually a ground floor with small openings: it is merged with the new living spaces, causing more or less damage to the original typology. The frequent use of ground floors for garages implies a heavy modification in the façade, and this, maybe the most common modification, is found from one end of the Mediterranean to the other.

Obviously, we most frequently find these different types of transformations combined in reality. We separated them to ease analysis and interpretation. The results are generally heavy and quite diverse. An approach for restoration will therefore include just as many nuances and characteristics in foreseen solutions.

**MATERIALS AND KNOW HOW, TWO WORLDS SHAKEN BY MODERNITY.**

Regarding materials, techniques, and know-how, we shall try to specify those which are still in use, common and transmitted, as well as the most widespread new materials and techniques.

Two important points must be made on this level: the change in labour costs, and new trends on the market of building materials. In traditional construction, labour and time were non-constraining parameters. Nowadays, on the other hand, they have become very relevant elements. In the past, all the work was done manually. This was a limiting constraint, but materials persisted for several centuries, and any intervention remained in harmony with the environment as a whole. Today, the preference for new, ready-made materials and products is clear, for both simplicity of use and easy distribution. If modern components are more expensive, they are, on the other hand, considerably
cheaper in terms of labour costs: they save on construction time as they tend to require less know how and skill. Beyond a comparative cost analysis, which would surely shake off our set ideas on cost efficiency with surprising results, we find the forceful, ever growing image of a modern Western model which is the unconditional – though maybe questionable - winner. Distribution networks and markets did not only leap forward concerning materials, but they also leapt forward with regard to craft experience (stokes, tricks, gestures), models, and homogenisation. This implies the eradication of an expressive diversity, making the Mediterranean landscape look banal and standardised, with two obvious effects on the environment:

Loss of skill. Easy, ready to use materials require no proficiency. As long as one remains on a single house level, the added value of an expert is no longer essential.

The temporary yet permanent. Indeed, if easy-to-use materials are enough to build the carcass of heavy works, finishing the works is an entirely different story. This often creates an image of unfinished buildings, resulting in a strange miserable landscape which strongly evokes a shantytown or poor slum area.

Many abandoned villages and houses disseminated throughout the area display the ailments in housing, and clearly testify for the poverty of projects and resources dedicated to traditional architecture.

Today, the self-builder lacks the general-purpose technicality for his traditional environment and he is a banal layer of improved components, far from the know-how of an expert, who is able to realise the delicate work starting with rough materials.

These technical pressures transform practices and the stock of traditional constructions. Additional pressure comes from two very powerful social stereotypes: the idea of the outdated versus the modern. Two myths everyone seems to embrace. In this context, at least in a first instance, it is logical to see the progressive abandonment of traditional materials and techniques. It is a global trend, slightly contradicted, here or there, by a few surviving exceptions.

The previously evoked trilogy: local materials + corresponding technique + adapted know-how, used to be linked to a shortage based economy. Construction meant finding and provisioning for the least expensive possible elements, which generally implied using nearby rough material requiring either a transformation process or production before implementation. The indispensable expert in this process was also often the builder, sometimes assisted by the future owner himself. In this approach, the preparer/builder represented a considerable additional value associated with the act of construction.

The situation today is entirely different. An abrupt halt and discontinuity took place in traditional architecture and workmanship; the trade is slowly vanishing. We can find a coexistence of the two situations here and there in the area: on the one hand, the survival of traditional materials, techniques, and know-how which continue to be extracted, manufactured and implemented according to the same rules, with the same actions, therefore without discontinuity; and on the other hand, a resumed use of traditional materials and techniques reintroduced on the construction market, with a more or less industrialised production and more scientific and analytical application.

These two examples are marginal situations in terms of presence and regarding the actual total volume of materials used. Both are going in opposite directions: we must understand the first situation as a surviving but slowly dying process, the second as a certain rebirth, a renaissance in disguise, not always recognisable, which seems to be on the road to success. In spite of certain successful stages, the most highly symbolic being the re-integration of lime or the moderate reactivation of certain craft industries, progress and techniques are still fragile and looking for their landmarks.
These two situations are rather clearly distributed in the Mediterranean area. One finds the first in the less developed countries and the second in countries with more significant industrialisation levels. In the first, it is especially poor means of communication or distribution networks which allow for traditional materials and techniques to survive. As for the second, a certain reintroduction is based on a questioning and criticism of a certain form of development, together with a prospect for new markets.

Most of the time, materials of traditional architecture such as stone, earth, and wood, used as basic materials, have been substituted by new industrial materials, CPJ cement, brick/breeze blocks, aluminium, and PVC everywhere in the Mediterranean. From this point of view, there is no difference from one end of the Mediterranean to the other. The same materials are found everywhere, developing the same homogeneity in mistakes and banality. There are subtle differences and nuances: the more industrialised areas have a great passion for interpreted traditional architecture, whereas a greater eagerness for modernity prevails in the less industrialised areas. The main phenomenon remains the colonisation of traditional construction by new industrialised materials. Most typical of this phenomenon, we find CPJ cement and its derivatives, concrete coming in first place.

FIVE GREAT PRESSURING FACTORS, BUT SMALL REACTIONS

We have now seen the various levels in which modification occurs, and we will study these processes from another angle: the factors that lead and favour their use, in a wide sense, mainly practical and operational, observing facts bluntly and without beating around the bush. We can distinguish five pressuring factors, each containing a great quantity of items.

Structural factors

Considered here as those factors belonging to the global economy, markets, communication, the media, and social changes. We already mentioned the importance of social change on traditional construction and environment. We will concentrate here on the issues resulting from new markets, new systems of distribution and the effects of the emergence of new materials. We will also look at the capacity of traditional architecture to adapt to this new situation.

The impoverishment of an expressive diversity, the loss of genuine local traits and standardisation of Mediterranean landscapes are major consequences of traditional architecture abandonment

Shorter distances due to improved means of transport, powerful manufacturing, and distribution networks completely changed one of the fundamental parameters of traditional procedures: what was local has become de-localised. Thus, the practice of using local resources and nearby materials has become almost pointless. Everything can be made anywhere with any material. The local aspect is no longer essential, maybe not even important.

In addition, the powerful and generalised penetration of concrete and its prefabricated shapes on the market, has eliminated traditional materials and techniques. This phenomenon, with a certain time lag, took place both in the North and the South. In the total mass of construction, both traditional materials and techniques in use today are considered as absolutely minor. However, in certain areas, some traditional materials are still significant, and certain traditional techniques are widely used. As for know-how, it is a heritage many craftsmen in the Mediterranean still have. It is not apparent because it was either recycled by the new system, or rejected because it was considered out-dated or old fashioned. A knowledge exists, but it is no longer in practice, and we must note that it is only very seldom transmitted. If it is true that certain training centres and schools of building arts can be found
in almost all countries, it unfortunately does not imply a real presence on the spot; we will develop this point in the following chapter. Besides, we cannot expect traditional materials and techniques to be used spontaneously, facing the very powerful competition of new materials.

Traditional Mediterranean architecture is an under-exploited potential

We can ask ourselves whether this heritage of traditional architecture has what it takes to adapt to a real market, with today’s social and family requirements, safety regulations and standards, not to mention the convenience and comfort sought. Generally speaking and given the significant variations according to typologies, the results we found reveal a strong capacity for traditional construction to be integrated into the real estate market and the socio-economic networks under normal conditions, without "heritage patronage". This capacity is also to meet the requirements of modern life, household comfort or public equipment. Moreover, after the inquiries and studies we carried out, we are convinced that traditional architecture is an under-exploited Mediterranean potential, or sometimes exploited in a perverted way.

Finally, we must not forget the substantial changes that occurred between the population and its environment under both legal and legislative pressures. This in combination with an ever growing population and shrinking space has melted away secular relations. Accessing supplies such as wood, stone, earth, and processing these materials have little in common with traditional means: today’s rule seems to be that this tradition is inaccessible. It is nowadays difficult to even carry out projects where the works would be considered as too tough and tedious. So constructions are only carried out when the industrial process proposed allies ease, safety, and profitability. This is true for the production and distribution of materials as well as actual building. Finally, self-building is burdened by heavy regulations and constraints imposed by authorities and construction corporations.

Administrative factors

They concern the legislative aspects of the subject as well as procedures, actors, but also awareness on the topic, both official and popular.

Here again, we find the same great differences between the two Mediterranean banks. This difference is especially obvious in the level of interest of local populations, the number of programs, amount of promotion, and how accessible they are, regularity of mortgage and loan paying, and finally technical or administrative support. Many aspects generate substantial differences. On the Eastern and Southern banks, there are problems of transparency and flexibility in the way help is accessible and attributed or not, together with excessive procedure sluggishness and complexity. These procedures are sometimes arbitrary, and always suffer from a constraining centralisation which hampers the autonomy that would be necessary for a broader dynamic of energies and local synergies.

As for the legislative frames – a highly important issue - they are slowly and gradually converging, though this point must be taken with all necessary caution, especially concerning procedures. The new legislation in south-eastern bank countries is often inspired by the legislation in the north. Great differences still remain: implementing the law, respecting the law and the means and rigour in its application. And we are aware of how much a good lawful apparatus is essential for proper law enforcement: if we do not go beyond a mere legislative rhetoric or a virtual world, it just stands as a set of good intentions. We also know the importance of providing adequate means guaranteeing effective application. On these points, the gap between North and South is flagrant.

There is a certain drift in the idea of traditional architectural heritage, it is too often associated with a monument, which creates a reflex of classification, a registration on a historic preservation list. Worse yet, this registration ends up becoming the only effect, the final goal in following the law. The objective, what is considered as a success, is to classify, to save: but no corollary can be found, far
from it. Classification is often confused with inventory, and perceived as the ultimate achievement when it is actually just the beginning of a tough and complex process. At this point in time, classifying takes all its forceful figurative meaning; putting away: arrange and forget. Because there is no systematic intervention, promotion, or restoration following the classification of a monument. This protection too often appears as a poor and misleading indicator of the vitality, health and management of traditional construction stocks. Moreover, a criterion of classification which is only interested in a single architectural object is no guarantee against collateral damage.

Classification only concerns a few units (buildings or sites), while the great majority of traditional architecture remains unprotected. This is reinforced by a lack of nuance and levels in preservation, leading to a standardised, homogeneous attribution of protection and related means, thereby excluding significant sectors of traditional architecture. Preserved units are seldom subject to any real major attention, and this is accentuated on the South-eastern bank. Notorious discrepancies can be found in the legislation of the north and the south as regards defining interventions with written authorisation, and presenting projects before undertaking works for a traditional construction. The results of the survey we carried out on "civil discipline", to see how people follow regulations and laws for building permits and authorisations were not very encouraging: throughout the Mediterranean area, almost two thirds of all interventions requiring an authorisation had none. This rate is three quarters for scattered housing and more than one third for urban housing. Obviously, the existing legislation, little sensitive toward traditional architecture, took very little account of its necessary preservation. This type of legislation encourages an absence of architects; it is too easy going for interventions, quality, and materials used.

More often than not, there is little difference between a "registration" and a mere "storage" of heritage

Another significant actor in intervention is the conceiver, the architect: His presence should theoretically guarantee reliability. However, many questions linger on this obscure issue. The legislation on the role of architects in traditional construction is varied and ambiguous, with great differences according to countries. Other technicians, with quite various training backgrounds, can often intervene and replace an architect. Considering the low rate of civil discipline, the owner or the mason are often the only designers. We estimated architects are present in less than 50% of the cases requiring authorisation throughout the Mediterranean area, which means that an architect is present in only one third of all the interventions carried out. And this does not account for lenient signatures or lack of follow-up on building sites, which is sometimes the case, and can be significant in certain instances.

Economic factors

They are considered here on national, local, and individual scales. That is to say on the three levels most directly concerning the problem (although we wish the regional scale to become increasingly important in a near future).

In the Mediterranean, we find municipalities, provinces, areas, states, with very significant variations in budget resources, which induce great variations in the means to undertake and carry out programs of preservation / restoration. Governments often have to face other priorities. However, the poorest states must face the same acceleration – if not greater - of today's degradation. Significant damage is inevitable, unless we consider acting at a regional level in the short run. Moreover, efforts are concentrated on operations concerning monuments. Countries with major historical monument sites such as Greece and Egypt, for example, are compelled to concentrate their efforts and budgets in this sector. Whereas traditional architecture, if it is not in the frame of protected sites, does not attract the attention of political power much, if even at all. The situation is structurally better for the countries of the Latin area, which benefit from a more comfortable economic situation, and have a longer history.
of actions and programs, experience, as well as a greater population awareness. If this situation is certainly better, it is just as true that a deeper evolution has uncovered new problems and that many remain to be solved. Political and administrative systems are more decentralised than those on the South-eastern bank: it is possible to monitor, follow, and manage programs more effectively locally. It is much more difficult to deal with the same detail, accuracy and flexibility from a distant, sometimes non-Mediterranean capital.

Beyond myth and prejudice, traditional architecture can provide fully satisfactory comfort

The shortage of money is not only true for administrations, but especially affects populations lodging in the most degraded districts or traditional buildings. On the South-eastern bank, official funds are scarce and seldom managed clearly: the capacity to invest for the improvement of a building is therefore very low.

The lack of economic resources was reported as the second most significant handicap - after the desire to move towards new housing- slowing down the restoration process and investment in traditional housing. Besides the lack of resources of the user, the lack of assistance in restoration is often reported. Here again, great differences are found between North-western and South-eastern banks, as regards rates, means, and accessibility to funds. On the two banks, we noticed that the economic parameter is at the very base of many reflexes that condition intervention for traditional architecture. It is here that traditional materials and traditional techniques are heavily penalised. Indeed, as labour represents a great part of today’s costs, all the techniques considered as slow are automatically rejected (rendering with lime, laying stones in mortar etc.). There is also a temptation towards simplifying the models that adds to disfigurement (joinery, mouldings and profiles, ridge sheetings, zinc works etc.). Industrial products are becoming increasingly competitive and override crafted products. The promotion of energy saving, on the northern bank, has favoured the spreading of all kinds of PVC and aluminium joineries or heat insulation, for a few years now. The roofing, a most essential element, follows the same fate with a switching to plates, out of metal asbestos cement or metal sheets, in substitution to tiles or plant roofing.

The cost of a rehabilitation project and the administrative taxes are reported as half as hampering as those mentioned so far.

Factors of comfort

In a very broad sense, comfort also includes ideas of adaptation, relevance, convenience, and status. We face a touchy issue, subjective and complex by the number of qualitative and cultural parameters linked to its evaluation.

The idea of comfort (16) is to be understood on two levels: that of production, distribution and implementation of materials - we evoked this aspect earlier – and the use of urbanised areas and traditional buildings.

On a first level, the word comfort is used partly with its figurative meaning, which does not betray its root definition: indeed, we now refuse certain working conditions (material extraction, production, realisation…) which imply physical strain, risk, excessive slowness, and that do not guarantee minimum homogeneity in materials and realisation. We demand comfort and regularity. We can no longer ignore these requirements, even if this means calling upon heavy, local structures or more elaborate craftsmanship. Therefore, the training programmes and projects that enhance know hows or reintroduce traditional materials will have to take these fundamental aspects into account.
As for the level of comfort corresponding to urbanised and built areas, we must bring significant nuance. We dare speak here of direct discomfort and indirect discomfort. The first situation of discomfort derives directly from the essential morphological constraints of a construction: smallness, failing hygiene, heavy upkeep and maintenance. I.e. we would have to deal with significant constraints to adapt the spatial and functional characteristics. There again we should be attentive, because a good analysis and thorough, a well undertaken study and generous economic resources can bring solutions that seemed unimaginable at first.

The second situation of discomfort is on the other extreme. It refers to buildings which are presumably satisfactory as far as current socio-space needs are concerned, but whose large size is a problem to finance restoration, upkeep and maintenance, in particular the cost of heating. This could be a Lebanese house in Israel for example, or a sofa court house in Turkey, or a farmhouse in Provence. Sometimes, given the size of the construction, its value – once rehabilitated – in relation to the price and size of land it is built on, especially in urban environment, can suddenly soar, making it difficult to master such real estate pressures, if programmes or laws do not accompany restoration.

In the idea of discomfort it would also be necessary to take into account connecting infrastructures, which are determining factors nowadays. Whether for accesses, communications, public and collective service equipment, or access to personal, social, and economic development networks: these living standards must be taken into account in parallel with heritage preservation. A lack or limitation of these parameters hampers the development of the population, thus leading to a rejection of this architecture and its environment. In addition to all these situations, we find the pressuring factor of stereotypes on what is perceived as modern, out-dated, and social standards in terms of comfort. This is true everywhere in the area.

For a great number of populations, the media image of modernity and its models overshadows the values and qualities of traditional architecture.

However, the analysis of traditional Mediterranean architecture shows that a significant amount of its stock offers good cultural and comfort conditions and capacities, from the start. The negative image that nonetheless prevails is often due to poor information and pedagogy, and the persistence of awkward rehabilitation approaches.

Nowadays, the idea of comfort is a number one priority, a requirement for inhabitants, and should consequently be managed attentively, to successfully revive traditional Mediterranean architecture.

Psychological factors

They concern attitude, perception, scale of values of the users (an accurate word, though cold, to designate the people actually living in traditional Mediterranean houses), decision makers (politicians, developers), contractors and professionals (architects, various technicians). We can group factors in two groups: those which refer to the environment, the architectural space, the materials and techniques used, and those related to the dominant social models and stereotypes.

These models and stereotypes appear most regularly with users in similar ways, throughout the whole area. In the North-western area (France, Spain, and to a lesser extent, Portugal) awareness, reconsideration and changes have developed forcefully over the past few years. On the South-eastern bank this is not very significant. On this bank, cities remain the most spectacular areas of "concentrated modernity" for rural and suburban populations. We find a very basic aspiration to becoming "urban". The desire to change from traditional construction to modern construction is dominant. Not only for houses in precarious conditions, but also for rather comfortable houses, or houses that could become comfortable with a little work. Thus, this aspiration is not connected only to physical constraints of housing, but also to psychological pressure. The traditional inhabited area is
perceived as a heavy burden of the past, obsolete, antique, while modern housing symbolises a leap towards a certain freedom, a certain emulation: it is "the" model that mass media crystallises as an almighty reference. The same flaw affects materials. “Traditional” rings with a negative connotation, associated to out-dated, poor and void, while new materials represent progress, wealth, status, performance. The same applies to techniques. Traditional masons, recycled in the use of new materials and techniques sometimes refuse to apply traditional techniques, because they feel a certain shame or ridiculousness in using them. Nonetheless, psychological factors, such as the attachment to family heritage and home, to symbolic shapes, materials or environments, make populations preserve and invest in traditional houses: unfortunately, this group is little significant.

Tourism acts as an opportunity to revitalise this architecture, although its considerable side effects are not always under control

Along the same lines, certain urban environments, districts or sites acquire such symbolic force, that it triggers political decisions and actions, guaranteeing a certain protection for their traditional heritage.

We have emphasised that traditional architecture building sites seldom benefit from architects and even less often from specialised architects. It is often the contractor / mason who takes a substantial part in advising and decision-making for rehabilitation works. They are generally enthusiastic for “novelty” and “technical modernity”, they are suspicious of the performances of traditional techniques and prefer "rebuilding" rather than "correcting". A small and non-aggressive intervention will often be misunderstood and poorly assessed by the owner, and even the builder, who prefer a heavy intervention considering it as the only real change: a slight change would disappoint. Pedagogy is a more than welcome element to be developed. The lack of pedagogy brings about statements as: "concrete is more resistant than wood" and "it is better to demolish and start from scratch". Failed operations, ignorance and an incompatibility of materials generate poor results, conveying a certain number of negative stereotypes and reflexes. This situation is stronger in rural environment. On the South East bank we can see a slight persistence in certain traditional materials and techniques, whereas in the Northwest, they have practically disappeared; only today do we see a small re-introduction in certain fields. We find masons and builders who, as certain users, are attached to the symbolism of certain materials. For example in the use of round tile, and lime... The psychological factor remains a most powerful one.

Most cases are usually a combination of one or more pressuring factors we have analysed so far. This combination of pressures can vary in proportion according to region and culture: each has its own priorities and values, generating distinct reactions and answers.

SITES ARE IDEAL OBSERVATORIES AND IRREPLACEABLE LABORATORIES

As for the sites chosen for our project, they are marked by two large pressure groups: those gradually disfiguring built elements with all the alternatives of the processes of transformations we presented, or those generating serious upheavals in town planning, the whole construction itself and its relation to built and natural environments. These would be the consequence of all the great structural pressures and transformations presented at the beginning of this chapter.

It is through the sites that one really perceives the differences in interpretation of architectural heritage, the importance or ignorance granted to traditional architecture and the difficulties of its management in the various areas, because of the particular circumstances and problems in each spot. Sites are complex and integral subjects in themselves, and therefore better laboratories than a simple and isolated construction. It is here we assess the success or failure of: a municipal or national program or project, the evolution process, as well as the validity of the ideology behind these efforts. Many large vectors are present on the sites: political decisions, legal and administrative frames, public
resources, private interest, collective expectations etc. Many significant nuances can be found on the accompanying CD-ROM, developed in detail and local specificity.

However, a phenomenon is passing on a superficial homogenisation of gestures: tourism. Indeed this flow of visitors in the search of local colour awakens the rediscovery of the great potential of traditional architecture and its sites. Thus, the recovery of buildings and sites as an asset to tourism, as a capital made profitable, takes on a similar aspect. Differences mainly appear in: the depth of operations, the proficiency, the participation or adhesion, and the investments related to a project.

Admittedly, if tourism acts as a great "reviver" for traditional architecture, it is also true that it can become a terrible predator, when poorly oriented, and when there are no solid heritage protection structures. These undesirable effects are present everywhere in the Mediterranean. No area or culture is safe from this risk. Certain impostures and uncanny cases are cropped onto the natural vitality of some sites, favouring caricature and folklore, and contributing to further confusion and anecdote – sometimes to the extent of a certain loss of culture - in the knowledge and perception of traditional Mediterranean architecture.

The sites which become simple products for intensive tourist consumption, where all the other activities are sacrificed and given up. They often suffer from a certain social loss of energy, an exaggerated erosion, and sometimes become little more than a seasonally animated decor.

In addition, a significant number of abandoned sites, thousands, still exist, drifting towards ruin. Just as many sites are continuously depopulated and tend towards abandonment.

Beyond material transformations, it is in the sites that we can also find the questions and concerns of a population, of political representatives, and project designers who are generally architects.

We learn very little from preceding failures which took place on other Mediterranean coasts. We therefore often find the same errors repeated here and there, obviously resulting from insufficient communication, information and experience sharing. On the other hand, obstinacy in copying imported solutions, without adapting to local realities, always lead to poor results. There is a certain impotence among local authorities or architects. A lack of anticipation obliges a management of very heavy and difficult situations, in already advanced states of degradation. Lack of promptness in information and training causes impertinent or just wrong decisions and actions. All these problems result in too many unsatisfactory operations, sometimes just total failures. This causes discouragement, a drop in public investment and especially and more dangerously so, feeds myths and prejudice on the incapacity of traditional architecture to be reinstated in today's world.

In countries with a longer tradition in protection of heritage in general, and of traditional architecture in particular, these errors are proportionately less frequent. Negative results are corrected and minimised, thanks to significant cumulated experience, more active and specific training, an adequate legislative frame and increased awareness, both political and social. In the other countries, the speed and extent of actions and needs render any anticipation of problems difficult, especially in the preparation of policies and attribution of roles. Limited resources are another major drawback, especially in South and Eastern bank countries.

*Traditional architecture has the right to adapt to changing realities. However, we could never accept a perverted and improper use of this right: this would cause its doom*

We must insist on the importance of the restoration sector activity everywhere in the Mediterranean, and the clear tendency towards growth. A growing market of restoration does not always imply a proportional increase in effectiveness, in particular when dealing with traditional architecture (and
this is too often the case). However, development in this sector creates opportunities for traditional architecture. Heritage awareness is growing: this is increasingly perceptible, at different degrees according to areas, and is still too weak in certain countries. A considerable number of successful achievements are unequally distributed throughout the area. Programs are set up with more or less intensity. A strong need for communication is felt, as well as the need for a development of a solid partnership that is making its way, and will have to be reinforced and extended. This is maybe the great future objective and the great hope to enroot the rights and values of Mediterranean traditional architecture, and fully benefit from all efforts and knowledge. Another positive aspect is flowing through the area: successful operations are speeding up enthusiasm and adhesion of the population, political decision makers and people of the art. These operations have become most convincing examples, blending all materials with a considerable pedagogical force. This is a vector we must exploit in the future.

Today, however, protected sectors of traditional architecture, rehabilitated or reinstated, still represent a smaller volume than those lost or degrading. The termite-like destruction of traditional architecture is ongoing and critical. The reinforcement and multiplication of restoration programs such as these will help contribute to reverse this tendency.

This chapter observes and analyses transformations of Mediterranean traditional architecture, showing that transformation and damage are clearly on a same level. This is not a twisted view: it is an objective approach that points out all the non-desirable and negative aspects, the traumatic and brutal transformations on traditional architecture. This perspective is deliberate as it represents the most general and critical trend - therefore essential for us to spot, emphasise, identify, in order to correct and stop the damage. This view is neither exclusive nor monochromatic: in this corpus, we have described how transformation pairs with construction from the very first day and through the centuries. Transformation, when appropriately used in terms of intensity, frequency and appropriateness, stands as a powerful sign of vitality. A construction has the right to adapt to changing and new realities.
Notes:

(1) La Production de l'Espace, H. Levesbe, Anthropos, 1981.


(3) The renewal rate of generations is generally estimated at 2.1 children per woman who can procreate. On the northern bank, lower rates are recorded (Italy, 1.37 or Greece, 1.59 in 2000).

(4) These changes in the composition of the population were not without consequences on traditional know how, or its transmission: "...the elder used to represent great prestige; they were highly considered, with good reason, as bearers of knowledge, experience, and wisdom, whose transmission could only be oral and direct (...) the development and renewal of technology and philosophy were extremely slow processes." Démographie sociale, Roland Pressat, PUF Le Sociologue, 2nd edition, 1978.

(5) Migration was a new phenomenon neither in the Mediterranean nor in traditional societies,"...social mobility was a constant characteristic in the traditional society." The world we have lost, further explored, Peter Laslett, Alianza Universidád, 1987. Both demographic expansion and migration are two phenomena known since Antiquity: examples of migrations are plenty and continuous: Valley of the Nile, Carthage.

(6) "...A rural environment becomes technically over-populated (...) according to the types of crop, a family of two or three people, old enough to work, could exploit from 5 to 10 ha. Today, large mechanized farms manage from 250 to 300 ha with three men." Géographie sociale du monde, Pierre George, PUF. This family-sized farm, described by P. George, coincides with what is found in Tunisia (area of Goulet) where the range is between 3Ha. and 12Ha. and is considered exceptional beyond 200Ha. This process of mechanization and "technicality" of agriculture is very obvious in other examples, as in Turkey (40,000 tractors in 1955, 672,000 in 1989, cit. in Environment and Development, A. and Y. Béchouchenou, Edisud, 1998.).

(7) The "urban revolution" appeared very early in the Mediterranean area: as early as 4000 BC, such a phenomenon occurred in Mesopotamia and in the valley of the Nile. In those times, however, it was precisely the organization of the agricultural area and the rise of agriculture that triggered such changes.

(8) Worldwide estimate of the FAO over the 1980-2000 period: 1.4 billion ha

(9) Everywhere in the Mediterranean area it has become impossible to outline the limits of towns and cities. Urban and agricultural landscapes and infrastructures make up a complex conglomerate. A few examples evoke conglomerates which several authors described as "Mediterranean urban environments" or "Mediterranean metropolis," either extending from large cities (metropolis of Istanbul or Car) or from very inhabited areas (French Riviera or Spanish littoral). There is a heavy price to pay: a 1997 report from PAM lists 109 "critical sites" having negative environmental effects on public health, quality of drinking water, leisure, and aquatic life etc.

(10) If water and other major issues are ignored in deciding localization, water is becoming an increasingly scarce and critical resource, for the development of populations, agriculture and economy. South-eastern and North-western differences are significant (renewable water resources, km³/year: North 860, East 213, South 106) Mediterranean Institute for Water, 1995.


(12) "In certain portions of the littoral, an intense, concentrated frequenting and land speculation make it difficult to manage and arbitrate the problems between the various activities on the Mediterranean littoral." Les Espaces littoraux dans le monde, L. Marrou, I. Sacanau, Doc. Géopolys, 1999.

(13) This inland penetration means more pressure on the landscape and an acceleration of urbanization: it highlights the strong saturation of the littoral, and has a significant impact on traditional architecture, probably in all fields. Now is the time to anticipate: Corsica is an alarming signal of this trend: from 1973 to 1983 urbanisation increased by 17.6% on 0 to 1 km band, by 18.6% on 3-5 km and by a considerable 40.2% on 1-3 km. Ministère de l'Environnement. Cit. in Atlasambient de la Méditerranée. Op. cit.


(15) "..."modernisation" is an ambiguous term and does not mean progress or better living standards, but only the emergence of new conditions..." Les Pays sous-dévelopés, Yves Lacoste, PUF, 7th edition, 1984. The positive and negative effects of these new conditions are by no means certain: they depend on how they are managed or integrated. This is clear in several areas: people give up good houses in a much more comfortable environment, for shabby new cubicles.

(16) In the Western world, the idea of comfort surely arises from domesticity and intimacy, asserted in Bourgeois times: "Ah! There's nothing more comfortable than home!". Emma Jane Austen, 1775-1816. This "finding" is certainly older in the East Mediterranean.