The vague notion of complexity, in the pragmatic sense of the term, applies to the European competition as a whole. This complexity is already present from the start, in the rather ambitious concept of a contest of ideas for solutions even in situations where the usual urban transformation and rehabilitation projects have proved ineffective. It is present again, in the difficult basic conditions faced by the candidates on their sites. During the implementation phase, there is constant complexity for the European competition winners: this is a real obstacle course filled with pitfalls.

**Complex programmes, confused situations**

On the level of conception, complex programmes are projects at the junction of architecture and city planning. They endeavour to establish a link between highly diverse urban usages which coexist, but not necessarily in harmony, and to invent spaces for this purpose.

Even when complex programmes have been conceived especially for open, evolving situations, in the course of implementation they come up against real "confusion" due to frequently chaotic urban conditions over which they have no control. As the following examples show, this confusion is increased, in the case of the European competition, by the fact that the winners are often unable to rely on the usual implementation processes of the traditional architecture competition.

During the last two European competitions many teams of architects (in Barakaldo and Villetaneuse in European 5, Toledo and Apeldoorn in European 6) tried to resolve the dilemma posed by programmes that always tend to be too static, but also by rigid implementation processes, in seeking to introduce substantial "self-organization" of the project. According to their basic hypothesis, the market itself could generate a very diverse combination of usages if only the appropriate conditions were set up. However, such programmes are rarely as easy to put into practice, as their authors would wish. For the systematic of programme planning, necessary from the start so to speak – and which is most often an open catalogue within a framework of precise rules – demands an almost Herculean task of preparation and coordination between all the different participants.

However, it is not only such particularities that have radically altered contemporary understanding of a "mixture as lively as possible" of uses. In recent years complex programming strategies have often been supplemented with "hybrid" projects which imply, as their name suggests, a certain imbalance between their different components. This is to take account, at the conception stage, of the fact that today the mixing of urban usages can only be achieved thanks to an increased number of private (and consequently less "reliable") partners; at the same time, it is also a means to be prepared for programmatic surprises throughout the phase of execution. Finally, in redeveloping difficult urban areas – disaffected industrial zones, residential districts divided by main traffic routes, or outer suburbs – they seek to have at their disposal tools more substantial and effective than what was long aimed at within the framework of the concept of a "European city." For this objective of a balanced mixture of usages rests on idealistic, almost naive conditions, which have long been out of date in problematic urban areas.

In searching for a new definition of the idea of diversely interactive usages, numerous winners return to the multifunctional projects that appeared in the sixties, until they ended up as taboo in the course of over-technical realization. These were mainly about "openness" and the "superposition of usages"; dominant themes of the period, applied for example by Cedric Price in Inter-Action Centre or Frank van Klinkeren in t'Karregat.

But the social and political context of the sixties, with their aspiration to more openness and transparency of structures, has changed radically. At that time, flexibility was a reaction to rigid political systems. Nowadays nearly everything is mobile and flexibility, a component of complex systems, has become characteristic of the global market; and European projects not infrequently have to be measured by its definition of complexity, which tends towards isolation and exclusivity.

The problem is that this concept of superimposed usages, invented in a particular restricted context and which appears exemplary in t'Karregat or Inter-Action Centre, has today been transposed by all the big supermarkets crammed with new services. On the European sites the concept is replaced by an idea of diffused complexity, operating on larger, more...
indeterminate spaces, which can only be transposed within a framework of negotiation. Its only defect lies perhaps in its being much more difficult to introduce into public opinion.

How can such "indistinctly mixed" forms of complex conception strategies be applied to the concrete transformation of urban areas? The following examples show the process in different stages of execution: the Zaandam, Barakaldo and Quarrata projects are completely or at least partly finished, Ixion is in the implementation phase and the Vâsio and Clermont-Ferrand projects are at a slightly earlier stage.

**The example of Zaandam: mastering a large scale**

The project on the banks of the river Zaan presented by the winners of the 1982 Europa V architects Tania Comerjo and Pierre Gautier is far-reaching and complex in various respects: firstly, on account of the imposing size of the different buildings; secondly, because of its tri-dimensional arrangement, with gangways and bridges connecting these giants planted on the land that stretches between the river and the city; and finally, through the wide programmatic scope of a project that has transposed the historical construction style of the old shipyards into a model of reference for the new residential buildings, mobilising another two firms of architects for this purpose.

With their strategy of platforms realised separately but linked to each other in a very flexible way, Condro and Gautier have designed a system permitting the introduction of a certain notion of community in spite of the size of the buildings. The basic condition was a clear distribution of the public spaces. And as these are a riverside walk, they form a pleasure zone open to inner city-dwellers and tourists, while other amenities serving as pathways are only accessible to the residents.

This exceptional attention to making public and semi-private spaces parallel no doubt played a decisive urbanistic role in the project's success. In order to implement it on the site, a special framework of realisation outside the usual processes had to be negotiated with the property developers. The city itself retained its influence during much of the conception phase: ownership of the premises was not transferred until the local authorities granted the new owners planning permission, which they did only on the grounds of the architectural value of the different elements to be constructed.

Very large islands have always fascinated many participants in European competitions, as seen in a whole series of examples (Amsterdam and Rotterdam in Europa V, Amsterdam, Avilés and Groningen in Europa 6) designed mainly as a controversial counterbalance to the growing individualisation of housing evidenced by the increase in estates of detached houses. In order to integrate such large blocks of flats in the city, it is however necessary to surmount numerous conflicts. In this respect, Zaandam is both a model and a special case: this site demonstrates how the typology of large aligned buildings, which has often proved deficient in city centres, can be usefully reconverted today. The sine qua non being constant support from local authorities in order to be able to guarantee the realisation of a project incorporating costly public spaces, even in the face of resistance. In compensation - and this is interesting for the often costly reconversion of former industrial sites near city-centres - it permits a density of dwellings above the normal average.

**The example of Clermont-Ferrand: the determination to stick to the definition of the strip**

Another site appears more difficult to define and therefore to control: the Rabenasse district of Clermont-Ferrand, the "piece of city" on which Europa 6 winners Christophe Boyadjian and Patrice Prévot are working. Their project for the rehabilitation of this district also possesses an important architectural component: six slender, almost skinny villas, which enable the architects to give their urbanistic project order and rhythm.

The central idea is to revitalise a long urban strip, a sort of corridor which serves as a link between the old city and the university district.

The hemmed-in position of this corridor - the site is sandwiched between the elevated urban motorway to the east and the railway to the south - has been transformed by the architects into a potential asset: it could have the function of a bridge and offer a new liaison between the old city and the university residence. To achieve such a function demanded a corresponding revitalisation of the district, without presupposing an excessive mixture of new usages.
On the other hand, the city planning strategy had not to be too timid to be perceived in its own right. Along with the six lofty villas, a base of public areas with connecting ground floors is designed to guarantee the continuity of this urban strip. And most of all, the two parallel roads that limit the district on the east and west are to provide it with a new backbone by gaining in liveliness.

Two years after its success in the competition, all the difficulties that accompany the implementation of such a project have become clearly apparent. Certainly, the two winners were commissioned by the city to develop a general urban plan, but at the same time it was decided to create a new fine arts school in the district. The implantation of this school was hardly in keeping with the urbanistic objectives of the European project. “Today we have to focus on what is decisive in this process,” explain the two architects. For the bridge function, this means in particular the conception of the infrastructures, the creation of public areas and the reorganization of the public highway, not forgetting parking spaces. Thanks to this programme, the “strip” between the old city and the university district could gradually become self-evident to the inhabitants and, let’s hope, an example to private contractors.

The example of Iraklion: how to combine programmes and not functions

In European 4, Socrates Stratis proposed a series of coherent but limited interventions for the Iraklion site on the north coast of Crete. The aim was to revitalize a quayside area which, despite its idyllic location, had become a disaster zone hemmed in between the old city and the shore.

Stratis’s project was based on the local population’s desire to enjoy the pleasures of the beach. It combined various functions: a footpath with a small museum, new transversal links through the historical ramps and the construction of detached houses to revitalize the seashore. But the implementation of these infrastructures soon came up against the ponderousness of the archaeological excavations authority. Furthermore, the city lacked finances for small details, so that for the architect, part of the realisation process consisted in finding funding programmes both national and, given the site’s historical value, international. Stratis was partially successful. The most difficult part was perhaps trying to harmonize the different aid programmes and their particular requirements with the project’s objectives. As regards the backbone of his concept, the redevelopment of the quay which should permit the creation of new pedestrian routes thanks to the steep slope between the old city and the beach, the architect has not yet found sponsors. With co-funding from the European Community, he now has the means to build a small arts centre incorporating several functions, from the reintegration of emigrants through job creation aid schemes to local cultural programmes. The architect himself is surprised by the turn his project has taken: “Today we are working essentially on architectural projects whereas our concept was more in the city planning area.” He has managed to inject part of the urbanistic project’s flexibility into the implementation of the arts centre. The premises allocated to the different groups of users are admittedly not large on account of the lack of funds, but they have unusually high ceilings. They could later be combined to fulfill other public functions.

The example of Växjö: how to see the city planning project as an implementation in itself

In Växjö, two years have passed since the European jury announced its decision. The progress of the project shows the possibilities of an overall urban plan for the development of a new district when the latter has been conceived on the basis of harmonized modules. On the site of a former army parade ground, the firm of architects S.ö.d. in collaboration with local city planners and the property developer, is working on an extension of the city towards the Norra Bergundsön. A trapezoid strip of land has to contain up to 4,000 dwellings. The prize-winning project was deliberately limited to a small number of basic, well-defined ideas or rules, and to the concept, easy to convey to the future inhabitants, of a “living-street” determined by differentiated modes of habitation. The rules envisage a construction in generally orthogonal rows but which is flexible enough to harmonize with existing modes of habitation. At the same time, this concept of fairly dense housing that can have up
to four storeys offers leisure areas in the form of parks interspersed among the buildings, most of the surrounding woods being conserved as they are.

This project is regarded in Växjö as the way to prepare for the next 50 years. Although the realisation phase is fairly recent, the programme restricted to robust structures and simple arrangements is already a success. In this particular case, the winners profited from their knowledge of local building customs, which give preference to an abstract architectural language, easy for any property developer to handle. More sophisticated projects not so open to variations of implementation would certainly have been much harder to impose at Växjö.

The example of Quarrata:
how to combine a patchwork of ideas for projects

On the Italian site of Quarrata, the Europian 3 winners were immediately able to implement a whole series of public buildings and their corresponding municipal premises. Until the beginning of the nineties, the eyesore of an old disused furniture factory stood on the city’s main road, largely responsible for the impression of a “dispersed city” with no real centre. The local authority wished to establish the new centre there.

Having looked at the very different projects of the two winners, the Italian firm Cilostrat and the Finnish architect Jarmo Raveala, the then mayor decided to have both firms work on the general plan of the city centre. The work was shared out in relation to this global plan. The Turin architects were to design the pedestrian zone, a few blocks of flats and a new building to house a library and an arts centre. The Finnish architect’s mission was a “polo tecnologico” (technology pole), a multi-functional building to contain spaces for training and exhibitions.

A passing visitor today may be surprised at the juxtaposition of the Italians’ rather amusing buildings – which even include an evocative façade sporting post-modern “eyes” – in strong contrast with the minimalist rough concrete architecture of the Finns. However, the long discussion process between the Finnish and Italian projects also brought to light inter-
esting things in common. Thus, in agreement with local initiatives, the usages of the public buildings were designed from the start to remain open throughout the day and evening, for extremely diverse activities. And during the architectural implementation, care was taken to overlap the interior and exterior spaces so as to erase any notion of separation. The Finnish architect Jarmo Raveala compared the ease with which residents could go in and out of the buildings to the speed of a gunshot.

The example of Barakaldo:
the transformation of a hybrid usage

Eduardo Arroyo won the Europian 5 competition in 1999 with his proposal for a housing estate based on a concept obtained by statistical means, in Barakaldo in northern Spain. At that time the project looked rather hermetic: by drawing on a vast amount of statistical data, the “possible concept” presented the greatest possible combination of flexible elements – a kind of satirical attack against the rigid distribution of usages in traditionally mixed districts.

Arroyo was not able to build his housing estate in Barakaldso. On the other hand, he received an order for a football stadium, which in his initial project appeared as an erased blank surface. The architect has transferred certain qualities of the housing estate programme to the stadium project with unquestionable talent. Concerning the mixture of uses, Arroyo has restricted himself to an analysis of the inhabitants’ needs as regards public services, and has annexed to the exterior façade of the stadium directly accessible areas protected by a circular roof. In the unromantic environment of this suburban district, this corbelled structure offers passers-by a slight degree of protection and makes the stadium look somewhat like a public space.

A mere town-planning tool?

Independently of their particular problems, the Zaanstad and Quarrata projects show a coherence between the project and its implementation quite unusual for Europian projects. Those of Iraklion and Barakaldo, where the teams of archi-
tects were faced with another construction programme on the location, even a new site, are in the end more representative of the usual process. Within the framework of the urban study they are first asked to do, the winners often have to start again from scratch without knowing exactly, which of their ideas has a chance of being carried out. On the other hand, as shown in the tortuous paths that sometimes lead to implementation after many long years, such difficulties are a sign of general uncertainty as to the urbanisation of sensitive areas. On the city's part, this uncertainty may express the fact that the evaluation of how the problems should be treated on the site presented in the competition has changed between the start of the latter and the jury's decision. On the part of the owners, it may possibly show that other usages have appeared more profitable in the meantime. And finally for the winners, it means that they no longer see their project as the starting point for an implementation. The project becomes an urbanistic tool containing some guiding ideas, a tool which must constantly prove its worth to the city planners and owners if it is to have any hope of eventually becoming a reality.

The effectiveness of complex strategies

If we compare the implementation processes of the winners in recent European sessions confronted with such difficulties, there are many points in common that have helped in realising these leading ideas:

1. Integrate simple public activities in the project
   These “active factors” of public life range from the weekly street market to neighbourhood initiatives lacking the necessary premises, via the possibility of improved parking in the area.

Taking such factors into account in the project often appears more important than the traditional conception of public space, as it gives the other urbanistic objectives a substance that makes them quickly acceptable to the inhabitants. In the example of Clermont-Ferrand, the architects endeavour on the one hand to organize the public space around the future fine arts school, which they find difficult to incorporate in their urbanisation plan. But on the other hand, it is equally important for them to fulfil their objective, namely to preserve certain buildings, which would have been demolished long ago in the usual redevelopment scheme. These buildings represent a certain identity in a district in full mutation and are called into question on account of their “poverty of usage” mentioned earlier.

2. Explain the district's new role as clearly as possible
   The fact is that it is precisely the inhabitants who find it hard to imagine the potential for improvement of complex rehabilitation programmes. For the architects this means that in the phase following the award, they are compelled to work on a series of strategies liable to reverse public opinion. At Zaandam for instance, the architects doggedly explained how much importance they attached to preserving in their vast project the poetic and atmospheric value of the historical shipyards, like a symbol of the identity of the new leisure space in the heart of the city. The clarity with which they defended this point of view paid off in the end, and the buildings originally rejected because of their massive aspect were finally accepted. Such offensive strategies are all the more important as the municipalities often communicate in a vague, almost timid manner on the modifications they are seeking: “The city wants to modify the urban image” they declare in relation to the competition. Numerous winners have had to demonstrate exceptional resistance and firmness in this respect. This also goes for their tenacity in making it understood, at a certain point, how important the realisation of an exemplary project will be within in the framework of a general urbanisation plan. “If we could build at least one of our six high buildings,” explain the Clermont-Ferrand winners, “the development of the whole district could get something out of it.”

3. Start from a realistic assessment of the complexity
   Assessment of the potential complexity of new urban structures has evolved over the last few years. While many participants in the early European competitions started from the seemingly obvious principle that districts to be redeveloped could be revitalized via a multitude of new public functions - and were sure to be subsidised by the local authorities - this vision now belongs to the past. Numerous winners now present projects as modest as the Spanish

THE IMPLEMENTATION OF COMPLEX DESIGN STRATEGIES IN EUROPAN PROJECTS

Kaye Geipel

Barakaldo, Spain (Europan 9)
architects Abalos and Herreros, known for their famous, very simply constructed waste recycling plant, whose chief asset is a panoramic roof planted with greenery and accessible to the public: "We are not interested in very complicated, all-too appealing organizations of space. They are expensive and in too many cases boring and pretentious."

In the majority of European countries, we can start from the assumption that most public buildings are privately funded and that even interesting projects have to start by finding advocates. Today being open and flexible does not mean designing multi-functional buildings with refined fittings, but rather trying to integrate the principles of a consumer society and link them to one's own project. Thus the new stadium in Barakaldo stretches the welcoming arms of its conical roof out to a commercial urban landscape that possibly didn't deserve so much soliciud.

During the execution of their projects, some winners make the bitter discovery that the original project's elegant proposals have to yield to the pragmatic force of a new solution. Thus Socrates Stratis was compelled to abandon his concept of a lively promenade along the shore at Triktron in favour of new ramps and communication routes linking the training centre he designed with the city and the beach. Cedric Price, who advocated open, experimental projects but never put them on a pedestal, talked in this context about the "small future" that had to be planned. Which, applied today to difficult, problematic sites, signifies the possibility of rethinking a city in a way totally new and distinct from the kind of limited suburban improvement usually envisaged by the purely marketing world of theme-based housing estates and shopping centres. For the production of this type of complexity which integrates a large portion of reality into a project, Europe offers a necessary framework, especially during the phase of implementation.
IRAKLION, ELLAS

EUROPA N 4
Constructing the city upon the city

COMPETITION SITE
Greece, Iraklion - Agia-Triada
Population: 132,000
Site area: 0.6 ha

ARCHITECTS
Socrates Stratis, Kyriakos Koundouros (Aakis Ioannides, Maria Loizidou for the competition)
Assistants for implementation:
Michael Cosmas, Riccardo Urbano,
Marios Papademetris Technical Advisor: Androulla Poumbouri

Socrates Stratis and associates,
Stratis Koundouros
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CLIENT
City of Iraklion
Competition site: a new seafront
Located on the sea in northern Greece, Heraklion is Greece's fifth largest city. Although the city's eighth-century Byzantine layout was largely inside the city walls, the demographic explosion of recent times has now extended the urban fabric. Agia Triada occupies the north-west of the old town. A coastal road marks a sharp division between the city and the sea. Over a 3 hectare plot, the function of a number of buildings is to be changed: the fruit and vegetable market will be moved to make way for shops and social and cultural services.

Project of ideas: Relationship between city and sea - 1996
The proposal combines specific and non-specific plans, leaving flexibility in future urban development and playing upon demarcation and difference. The architectural operations are "generators of difference", designed to increase the town's complexity and specificity, in radical opposition to a functional vision of homogenous space. Emphasis is placed on the articulation of distinct figures in order to reveal the specificity of the locality. By reactivating and giving form to existing boundaries, to edges, to intersection, the design aims to express the dynamic relationship between the town and the sea based on specific space-time relationships.

Studies: Coastline landscape
The aim is to link the city back to the sea by reactivating urban and architectural boundaries in the intermediate space between the sea and the city fabric, and by using the 7-metre difference in level between the city and the sea.

A spectrum of uses is closely interwoven to form a kind of mosaic within the coastline landscape. The simple concept of creating a waterfront boardwalk imposes a clear rationale on the mosaic. The plans relate to the topography in different ways. Platforms for summer uses extend into the sea. A horizontal waterfront promenade with ramps supplies vertical accessibility. Strips are proposed for planting new vegetation. A museum situated under a stretch of road reveals part of the ancient city wall. An old passageway through the city walls is re-opened to provide a new access route. A combined cultural centre and car park, and public and entertainment areas on the hillside, provide panoramic views over the sea. New and existing roof areas are used to give new access to the museums. A series of small public squares is introduced where the pathways make natural meeting places. The ultimate aim of the architects is to offer the inhabitants multiple public spaces that act as "typologies of self-exposure".

The final design emerged from a long process of collaboration between the local authorities and the winning team. This process gave the architects time to become broadly familiar with the specificities of the site and country, in terms of planning, political, financial and other issues. In the encounter with a foreign culture, the architects have introduced, adapted and reformulated their design's architectonic and urban vocabulary, and transcribed it to the local context.

LEFT PAGE: Competition
RIGHT PAGE: Study