ENGLISH

English translation by Paula Olmos

Spanish architecture abroad: a title for remembrance

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Every single person interested in History knows very well how rather frequently events seem to accumulate in a concrete period creating a certain sense of coherence regardless the diverse origins of each of them in such a way that it seems as though the same hand should have drawn them all, the same mind should have produced them all.

In these cases there is usually no clue about a possible common explanation. On the contrary, the diverse facts seem to make up a rather arbitrary sum and the understanding of their common features and common meanings is, most of the times, due to what we will call "coincidence" for want of a better term or more conscientious studies.

We have to admit, then, that, particularly, the History of Architecture is full of these coincidences. What could be the reason for so many synchronous events that with time would be understood as crucial? I wonder what is the right term to design such an incredible event as the concurrence in the same year of three masterworks as Ronchamp, Saynätsälo and Yale's Art Gallery (1) (I am not, obviously, pointing out that it should be unnecessary to make an individual study of the personal circumstances and local, temporal and social conditions of each of the works).

Another interesting "coincidence", though probably less influential than the previous one, seems to be occurring in this same year of 1995 and is made up of numerous events of which the first one has been the Golden Medal conferred to Miguel Fisac (a Medal for a Pioneer).

But this is just the beginning of the story. I will mention, then, what I consider the other coincidences: the exhibition dedicated to Julio Cano Lasso (2) (another, this one "second generation", pioneer); Luis Racionero's project to publish in ABC a series of articles in which he takes a look at the most important works of architecture built in Spain in the later years; some awards won by Spanish architects abroad; the threatening taking effect of the new educational plans in our Madrid's Architectural School; and finally, the research project presented by Víctor Pérez Escolano to obtain a Professor's chair in Seville and whose title is "The Obscure Decade" (a sentence by Antonio Fernández Alba)(3), about Spanish architects and architecture in the sixties.

This is just an excuse as good as any other to dedicate an article to one of my most cherished issues: the sixties decade in Spain, the initial conditions and, above all, what was read, published or written in those years. To which purpose I will concentrate on a 1962 short tract precisely called "Spanish Architecture Abroad".

This work was one of the "Cuadernos de Arte" belonging to the "Colección

Extraordinaria" published by the Editora Nacional and is a kind of catalogue of the exhibition organized by Madrid's Ateneo under the patronage of the Dirección General de Información, in april 1962. It includes an introduction by Castro Arines and a brief text midways between exposition and manifesto signed by the "Association of Students of Architecture" (A.E.A.). It also contains a record card on each of the works exhibited with the same anonymous sign. But in the fourth page, one can read: "texts by: José de Castro Arines, Adolfo González Amezqueta and Bernardo Ynzenga".

I would like to say, then, a few things about the contents of that booklet and its ends, the authors and works there included and about what was read, studied and commented in 1962 in the Spanish architectural circles. And also about the mentioned A.E.A. which, as we will learn, published other things in those years and which was better identified in many of them.

But, first of all, I will ruthlessly indulge in nostalgia by telling you a brief anecdote: on the booklet's back cover there is a list including the rest of the issues in the same "Colección Extraordinaria", all of them published in connection with exhibitions held in Madrid's Ateneo. Number 2 is a publication named "Christmas as seen by children" and I must admit that I was, precisely one among the "children" who had "seen" Christmas in Madrid's Ateneo. I had worked, with the rest of my class in Nuestra Señora Santa María Grammar School, in a mosaic representing Nativity which, due to its size and detail required the collaboration of some of the teachers as we were just eight girls in the class for four square meters of mosaic...(4)

Going back to our main issue, the question of who made up this A.E.A. is probably best answered in an article published by Acento Cultural the previous year and called "Architectural Education" (5); the article is signed by a list of names in alphabetical order: Juan Cuenca, Antonio Escario, Manolo Gallego, Carlos Gil Montaner, Adolfo González Amezqueta, Secundino Ibáñez, Jaime Lafuente, Carlos Meijide, Rodolfo Segura, Bernardo Ynzenga.

We can spot two names which did also appear in the mentioned booklet now accompanied by others: they were students in Madrid's Superior Architectural School (I think that it was not yet "Technical"), part of a forty people class who intended to finish their studies in 1963 and who made up the "114th Promotion"

These students seemed dangerous: they published a few commentaries on an article by Reyner Banham (6) and its consequences in Spanish architecture and shared the

publication with Fisac and Fernando Ramón. They also stated their position regarding architectural education which they found "faulty and, above all, disoriented, without a clear and convincing method for the students to estimate the acquired knowledge"; and the reason seems to be that there were "no masters, no prestigious professionals to be followed and in which it would be possible to find a link with history", because the real "masters" were "similarly disoriented within this ideological confusion provoked by our historical conditions..."

The article published in Acento Cultural is worth reading: I advise the reader to take a look at some expressions ("ideological confusion", "concepts which are alien to modern world") and see whether he is able to replace them with some names, for example those mentioned by Juan Daniel Fullaondo (7) in a recently published posthumous article. I should also mention that some of the concepts used to criticize architectural education then can be easily applied to today's circumstances. Just as an example the "perplexed students... whose only recourse is to take a distressed look at all kinds of magazines and books...".

It is clear that they were dangerous people. In just a year they succeeded in organizing the exhibition "Spanish Architecture Abroad", they selected the works, the materials, sought for funds and wrote the record cards and the texts of the catalogue besides enticing a prestigious critique, José Castro Arines, to write an introduction and presentation.

Some particularities of this exhibition are rather significant beyond the organizers' impudence: first of all the importance of the works there included. It seemed as though the main criterion was the importance of the authors: Sota, Coderch and Valls, Fisac, Fernádez del Amo, Barbero/Joya/Ortiz Echagüe, Puig, Perpiñá, Carvajal/García de Paredes, Molezún/Corrales, Pérez Piñeiro, Leoz and Fernández Alba; the later one in association with Carvaial and with M. Reina (8) (strange associations which make us think about what would had happened in case of continuity). In fact, if we take in account the architectural reality in 1962, we can just miss Oíza and Cano Lasso in the selection if we conceive it as a list of the Spanish architects who had decided to join the modern tradition leaving behind the Empire's aesthetics, the style of El Escorial and other aphorisms of the preceding period.

This interpretation accounts for the inclusion of two works by Eduardo Torroja who had died the year before. That is, he had to be included in a rigorous selection of "modern"

The works exhibited are also rather significant: Esquivel, Vegaviana, The Dominicans' Church in Valladolid, the Pavilions for the 9th and 11th Milan's Triennials, that for Brussels, SEAT's dining

rooms and a Raised Tank in Morocco, all of them effectively built, together with projects as the demountable, itinerant theater by Pérez Piñeiro or the HELE module, and even some escapades to the outside Big World as Oteiza and Puig's Monument to José Batlle in Montevideo, two urban plans for Berlin and Geneva by Perpiñá, a Cultural Center for Leopoldville by Carvajal and Fernández Alba and Tunis' master plan by the same Fernández Alba and Reina. All of the built ones have become classical references in Spanish history of architecture and others are really ambitious examples.

But this is just an impression. In fact, the criterion was to exhibit works which had earned some international prize during the period from 1951, in which Coderch and Valls won the First Prize in Milan's 9th Triennial, to 1961, the year of the U.I.A. 4th Congress' Critique's Award (London) and the 9th Inventions International Exhibition's Golden Medal (Brussels) for the demountable theater by Pérez Piñeiro. This criterion was so clear for the organizers that the booklet included a separate leaf which said: "being this catalogue in press...the architects Julio Bravo Giralt, José Manuel Fernández Plaza and Pablo Pintado Riba have been accorded the Third Prize in the Contest for the design of the Peugeot Building in Buenos Aires, organized by the Foreign Building and Investment co.". That is, the aim of the exhibition was to present a group of works which had won international recognition and prove that all these prizes (many of them for such a brief period) were obtained by "modern" works by "modern" architects...

This is more or less the argument in Castro Arines' introduction which is a defense of modern architecture in which one can read the names of Le Corbusier, Mies, the GATEPAC, Mondrian, Brancusi and even Gideon's "Architecture and Community" and which dedicates some invectives to the "professionals and guilds" who should affect "amazement or disgust". I copy: "Look backwards to old lost times! What is this thing of looking backwards? What does it mean that old times were always better even talking about architecture?".

We begin to understand the dangerous quality of these students who, under the patronage of Castro Arines, of the Spanish Association of Art Critics, and the "Infinito de Arquitectura" Group, dared to organize an exhibition in Madrid's Ateneo which was a public bet on modern architecture, sustained by the international recognition earned by this kind of architecture.

We should think that, if they decided to do it, they had considered it necessary. Although it might seem strange that, as late as in 1962 it was necessary to defend modern architecture in Spain.

But, indeed, it was. Corrales and Molezún's pavilion for Brussels had recently had (1958) a great success, and Carlos Flores

had published his "Spanish Contemporary Architecture" (1961); in the U.I.A.'s Fifth Congress in Moscow (1958) had been presented some examples of Spanish architecture which were based on traditional and vernacular motifs (9); some of Fisac's churches had been already built and in this same period between 1958 and 1962 some other interesting works were being built as the Maravillas Gymnasium, the Rollo convent the Syndicates Headquarters, the block in Cristo Rev square...all of them "modern" buildings which were the practical consequence of the theoretical discussions in the magazines' boards of editors and the groups of students in the School.

But, we should not forget that this was a restricted phenomenon; in the School of Architecture what was taught was stone cutting and wood construction, even the proper frame of spires as if we were still in the 19th century. A portico of arches over stone columns and a garden niche could perfectly be exercises in the projects' class and the Gijón's Labor University had just been finished.

I have mentioned the magazines ("Arquitectura", "Hogar y arquitectura", "Cuadernos de Arquitectura") because they were the main promoters of modern architecture. In fact, it is not difficult to imagine which were those "all kinds of magazines and books" mentioned by the article published in "Acento Cultural"; because foreign books were not imported (at least before Inchausti (10)) and there were no translations into Spanish. The only modern books on architecture available in Spanish were "How to look at architecture" and "Space, time and architecture".

About the mentioned "How to look..." and its Argentinean edition Fullaondo has recently written (11): ""Space, time and architecture" was, fortunately published in Spain by HOEPLI (a medical and scientific publishing house). But the most usual thing was to find architectural texts in Argentinean editions by Infinito or Poseidón and the same happened with the monographies about modern architects which were translated in Argentina and published by Infinito (in the late fifties) and by Víctor Leru (in the first sixties)" (12).

Thus, during the period in which the A.E.A. began to publish some articles (1961-62) the situation was rather deplorable: there were no texts, just a handful of modern works, some discussions in the circles around the magazines and possibly the testimony of people coming from abroad. But the circumstances were more or less the same as in previous years. Why did the students decide, precisely then, to ask for a renovation in architecture and architectural education?

We should not forget that the change in the economic situation, the end of the postwar period, was beginning to take place and that during these same years marginal artists' circles (13) were gathering in Spain trying to look for new ways in art, to which Spanish modern architecture was to become a debtor. But I would also like to point out a concrete event which ocurred in Madrid's school of architecture and which determined the students' revolt over the economic and artistic circumstances.

It was like an Epiphany: the school was full of traditionalist teachers in favor of 19th century style examinations ("exact drawing" for the previous exam, and "dyeing" and "stain" for the admission exam), and the students were completely astonished by the arrival of new teachers called Alejandro de la Sota, Javier Carvajal and Antonio Fernández Alba. These three names were the initial discharge of a revolution in Madrid's School and their role in the students' stirring has not yet been properly valuated not even described. Although it may be a little bit late, this 1995 remembrance is better than oblivion.

Much has been written about Alejandro de la Sota's refined and beautiful architecture; descriptions, commentaries and appraisals. But there is little about his educational labor. He began by transforming the admission exam by including exercises in drawing and even design completely alien to the decadent, pseud-orthodox "beaux arts" style which was the norm. He added a previous "Course" (the so called "Cursillo") in which the students, for example, designed glass panes (very "modern", and even Nordic), completed paintings, designed stage sets (for "Becket or God's Honour"), or posters etc...

At the same time and with a group of selected student, Sota began to organize a modern projects workshop for which he took Mies van der Rohe as a model and in which the lack of rhetoric was the main aim. Just a bit later, Javier Carvajal who had just arrived from Rome and who was, therefore, a cosmopolitan and enlightened importer of Italian books, joined Sota as an enthusiast educator. Antonio Fernández Alba, Alvar Aalto's supporter in Madrid's School and a friend to many avant-garde painters and sculptors, completed the team.

The three of them succeeded in infecting the students with the fever of modernity which should never again be soothed. We should point out that this labor took place in a traditionalist School in which the Imperial values and the classical composition survived along with these new ways of education. A significant anecdote is that of the student with an impeccably Miesian project who was forced, in 1961, to add some wrought iron lampposts to it... But the introduction of modern issues in the school, together with the proliferation of modern architectural works in our country (as those included in the exhibition), started an irreversible process. The sixties progressive economic opening facilitated the acquisition of foreign books, magazines and all sorts of information. At the same time, other "modern" architects entered the school, some mature professionals as Cano Lasso and Oíza and some young graduates as Mata Gorostizaga, Moneo and Fullaondo.

The new Educational Plan, the increasing number of completely persuaded "modern" students, the labor of the magazines, the first "post graduate masters" which brought the American influence and other interesting factors strengthened this process which has been described by Víctor Pérez Escolano in the mentioned study. Doric, Ionic and Corinthian niches which had been the symbols of the school and after which a students' party had been named disappeared and, in the same way, the mentioned party which succumbed under the pressure of the last state of exception. Spanish architecture had made an effort to resemble foreign architecture and it continues doing so.

The fact that all these things ocurred in the late fifties and first sixties and the present remembrance due to the Golden medals and

the exhibitions dedicated to the pioneers, to the Spanish architects who decided to embrace "modern" architecture, should make us think that our architectural history cannot be assimilated to that of other western countries taking in account the late assumption of modernity and the pressure under which its theoretical premises were learnt. If it should happen that, once and for all, the History of Spanish architecture be based on real events and their respective dates, based on the circulating theories and the available texts, this would be good news for the scholars, even if it irritates some mystifiers and false exegetist.

NOTES

- (1) Among other difficulties, historians find problematic the issue of establishing the exact age of architectural works as they have such long construction periods in which, besides, the project is normally several years older than the building, but I am talking about the period from 1950 to 52. The following dates, though are currently accepted: 1950-53 for the enlargement of the Yale's Art Gallery (L.I. Kahn), 1950-55 for Ronchamp Chapel (Le Corbusier). (2) A selection of projects by Julio Cano Lasso made along 46 years of professional career has been in display at the Exhibition Gallery of the Ministry of Public
- Works during the first three months of 1995.

 (3) According to its author, this study was part of a greater work on the development of Spanish Architecture in the twentieth century. The chapter called "The obscure decade" has been elaborated separately study as a research project to opt to a
- (4) The group of teachers in the Santa María School was neither a large one. Just three or four of them, among which Many Segura and Martín Chirino, came to help us with the mosaic.
- (5) "Acento Cultural", Madrid, III, 1961 pages 37-39.
 (6) "Stocktaking", an article published in "The Architectural Review" afterwards translated and republished by "Arquitectura" under the name "Balance 1960" and which provoked long discussions.
- (7) In "¿Qué pasa en España? Bailaores, turismo y Próspero Merimée", published after the author's death in "Arquitectura" 299, Juan Daniel Fullaondo talks about Luis Moya's classes in the School of Architecture in which he dared to establish a relationship between Mondrian and the classical orders.

- (8) Carlos Flores, who has been Reina's friend for so many years, can talk us about his enormous book collection, and broad culture.
- (9) Some new villages built by the Architectural Service of the National Institute for Colonization were presented to the UIA's 5th Congress, celebrated in Moscow in 1958.
- (10) Inchausti is the family name of a book seller who invented a system with monthly payments which permitted his clients to buy on hire purchase. All the students of Madrid's School of Architecture in the mid fifties and first sixtles considered him a patron and the father of their own book collections. His sister, Cristina Inchausti has kept up to nowadays this familiar tradition
- (11) The translation of "How to look at architecture" was made in 1951 and published by Poseidón, Buenos Aires. The translators were Cino Calcaprina and Jesús Bermejo. In his book "Zevi", Juan Daniel Fullaondo tell us how he remembered to have heard Bermejo talking about this translation in one of the examinations held in the School. The edition which circulated in Spain was the second one, published in 1955.
- (12) An example, the collection "Arquitectos del Movimiento Moderno", a translation of an Italian work compiled by Belgiojoso, Peressuti and Rogers and published by Infinito from 1955 to 1960; or P. Johnson's "Mies van der Rohe", whose translation was published by Victor Leru in 1960 and 1963. Pevsner's "Pioneers of modern design..." was also translated and published by the Argentinean Infinito in 1958.
- (13) "El Paso" group, which was created in 1957. The Team 57, of which we have recently seen an Homage-Exhibition in the Reina Sofia Museum, was also created in the same year. I hope the reader would have noticed that the mentioned A.E.A. article published by "Acento Cultural" is signed by Juan Cuenca, a member of Team 57. The artistic movements which took place in Spain during this period seemed rather interested in architecture as it is the case with "El Paso" group. An excursion organized by my School (Santa Maria) to Arcas Reales in 1957 (I was one of the group) could be another testimony of the architectural interest of the cultivated minorities in this period.
- (14) The first "Cursillo", that is the first admission exam which did not only consist in drawing statues was presented in 1956.
- (15) The niche party was the traditional reception organized by the Fifth Course students for freshmen. The last one of these parties was celebrated in 1970.

Reflections on the period of the italian reconstruction, through the case of the Tiburtino district in Rome

Carmen Díez Medina

The fact that architecture, as well as any other product of art, is inevitably linked to the ideals and worries of a particular age is something nobody hesitates in accepting. When real "architecture" is realized, the relationships between what is built and the particular period in which it is built are manifest. In the Histories of Architecture, in fact, there is always a brief introduction about the particular social, political or cultural context in which architecture takes place. But we can proceed the other way around, by starting with the buildings in order to "read" in them the historical conflicts; conflicts between ideals,

interests, languages or personalities... Moneo said once that architecture could be "a good scalpel with which to discover the mental stage of a particular period", and I think that the sentence can be appropriate for our present case. The Roman districts called Tiburtino and Tuscolano, built, as well as the towers placed in the Etiopia Walk, during the first fifties, will be for us more a starting point for the analysis of a certain historical moment and its cultural background than objects of architectural significance. They are the first social housing districts built after the war and, as we will see, they clearly show the

contradictions and hesitancies of their age.

The experience of the Tiburtino was probably the most controversial. It gathered the two new architectural "masters", Ridolfi and Quaroni, with a group of young collaborators among which Carlo Aymonino and Mario Fiorentino. This innovative experiment in which the two older architects organized groups of lately graduated professionals tell us about the open-minded attitude towards the project.

The simple plan of the district tell us many things. First of all it is rather visible the intention of using an "organic" arrangement, an informal atmosphere in which the different "types" (terrace houses, paired houses and towers) make up a loosely controlled universe. We find, therefore, a resolute "Organicism" whose sources are varied and complicated. This clear intention of creating articulated urban spaces in order to achieve the "psychological" comfort of the inhabitants reveals a profound conviction born out of the rejection of previous experiences. This Roman architects of the reconstruction could not forget the dark age of the "sventramenti" undertaken in the city's historical center, or the so called "borgate ufficiali", disastrous operations from a social and cultural point of view which were the main contribution of Fascism to urban planning in Rome since 1924. The so called "borgate", new peripheral districts which were to be used just during ten or fifteen years, had been designed as isolated units. Not just because of their location but also because of their social composition and external appearance, a rigid and geometrical composition of identical houses which accommodated in an inhuman repetition individuals belonging to the same social class, and their complete lack of integration within their countryside environment. Taking in account the type of houses built in them and the poor materials used, they were not so different from the shack districts which spontaneously arose in the city's outskirts. And the fact that the architects of the reconstruction remembered these operations just too well and tried to make their best in order to find a completely new way is something that needs no further explanation.

We should also recognize that, after the invasion of Ethiopia in 1935 and the proclamation of the Empire in 1936, the Fascist regime began to make use of the rhetoric idea of the Old Rome as the banner of the Imperial Myth. It therefore began to promote an architecture which was supposed to have its main reference in that of the Old Empire and a particular architectural language was created which was based on the monumental and massive appearance, rhythm and symmetry which would represent Italy's "renewed glory". Important national architectural contests succeeded in gathering in Rome the most significant architects of the period which displayed in a clear way the deep political and cultural change. The projects submitted in the contests for the Palazzo del Littorio (1937) or the E42 (1937-39) are good examples of the cultural atmosphere of the period. Mussolini's Forum, the Via del Rinascimento, the Via della Conciliazione, the Piazza Augustea, Ministries and Palaces of Justice... all of them conceived as rhetoric exercises invaded Rome. In all of them the "classical monumentality" promoted by the Regime in

order to represent its political aspirations is clearly visible. The violent reaction towards this kind of architecture present in many postwar projects was something rather understandable. The architects of the Tiburtino districts, specially Ridolfi, had personally passed through the experience of the compulsory loyalty to the Regime and the vivid recollection of those years could not be

This will surly clarify the importance of the puissant APAO (Associazione per l'architettura organica), to which the architects of the Tiburtino district belonged and in which the personality of the young Zevi was a main support. Ridolfi used to say that "men as Zevi were very useful" as he was an indefatigable "cultural instigator", a significant personality who, in spite of his young age, was a crucial factor for the development of Italian architecture during those years. Zevi who had graduated with Gropius in Harvard, came back to Europe in 1943 as a devotee to Wright's work and was convinced of the fact that organic architecture could be the means to confront reconstruction. His vehement contribution to the cultural atmosphere of those years, not so much embodied in his built work as in his research labor on the renovation of architecture, can be traced in many projects in which the "organic" intention is visible. A feature which should not be oversimplified and which conceals behind such complex designs one of the most difficult periods in Italian history. The direct attack to Le Corbusier's "machines to live in" and to the rigid Functionalism of the twenties is also a general reproach to impersonal architecture. Zevi's premises, just when social and collective issues were more on stage, were not compatible with Le Corbusier's as his dynamic activism would not suffer a theoretical aspiration to "depersonalized" architectural orders. Talking about Le Corbusier's buildings, Zevi says that they do not respond to social issues with the required modesty and commitment but are "esperimenti di laboratorio per dimostrare una teoria anch'essa sociale, se volete, ma di una socialità utopistica, universalista, in certo senso dittatoriale e sicuramente presuntuosa". It is precisely, this social and poetic aspect against the avant-garde's "geometric terrorism" and the "neue Sachlichkeit", that humanized sense of architecture so present in Aalto's work, what Zevi is trying to promote when he talks about "organic" architecture. An architecture for which he recalls the definition made by the Swedish architects, "funzionale non solo rispetto alla tecnica e alla utilità, ma alla psicologia dell'uomo"

The interest in defining a pleasant atmosphere for social life, the presence of the mentioned psychological factor, which in Tiburtino would become a double-edged feature, is already visible in the district's plan, so influenced by Zevi's post-functionalist theories. The creation of a urban space appropriate for the needs of the inhabitants is understood as part of the process of humanizing architecture.

The analysis of some of the particular plans of the different buildings, though, might reveal some contradictions in the use of the so called "organic" language. Wright's conception of the modern building as an "organic substance" in which space flows in opposition to the "senseless accumulation of segregated parts" is not present in these

types. In fact Quaroni was more interested in urban design issues and the main factor, for him, was the possibility of life in the streets. Thus, he proposed anonymous buildings, "depersonalized", whose individualities would be concealed behind an homogeneous painting made by means of the mix of several Roman clays. His housing schemes are absolutely conventional and the apparent irregularities caused by the chamfers in some of the corners cannot account for their "organic" designation. On the contrary, Ridolfi's houses (undoubtedly the best work in the whole district), clearly show an architectural intention, his well known bent towards formalistic issues. But his careful choice of materials and colors, and his details which, in this project, talk us about an interest in the recovery of traditional architectural practice, should not be understood as belonging to "organicism"

What is therefore behind all these

contradictory features?

'Organic" architecture, in these context of interdisciplinary collaboration, had become something of a magical solution which should contain the dreams and hopes, the aspirations and desires of Post-war Italy. But Wright's conception of organic architecture, so much linked to this particular author's personal work, and whose diffusion in the American context had already been controversial was much more difficult to reproduce in the complex and heterogeneous Italy. A country which, according to the great issue which Costruzioni Casabella dedicated to Pagano, was living "the last spring" of Rationalism just when it was preparing itself for reconstruction. In these conditions, the materialization of the concrete projects had to reveal the weakness of the theoretical systems

A good example of all this is the "palazzina" of the via dei Monti Parioli, in Rome (1947) by Zevi, Piccinato and Radiconcini in which it is possible to notice the difficulties found in trying to introduce "organic" arrangements in a so well defined a type as it is that of the "palazzina" which was used by many Italian architects as an opportunity for experimentation.

This building type which appeared as a definite volume with deep roots in Italian tradition and at the same time as a new solution was determined, from its very beginning, by the existence of strict rulings on its characteristics. Midway between the Roman urban palace and the isolated villa surrounded by gardens and with four main facades, the palazzina presents some constant features which make it rather identifiable. The transformation of such a type was, therefore, something problematic; a fact that is rather visible in this particular project; with all his enthusiasm and conviction, the very champion of "organic" architecture in Italy cannot do otherwise than introducing in an embryonic manner some minimum traits of his ideas; some walls which, with their movement, try to achieve a flowing space and a shy attempt to design a rich exterior volumetry as a means to avoid a standard

Ridolfi, in his reflections on Rationalist architecture had proved himself more prudent and brilliant as he had already realized that it would be difficult to play with, and transform types as the palazzina whose roots were not in rationalism. If we take a look at the plan of the Rea palazzina, for example, and we notice its

inclined staircase and facades aligned with the streets we will not find any trace of rationalism. Instead of trying to break the building's volume in order to adapt it to the irregular lot or to divide in a rationalist-like manner the different functions included in the plan (as he successfully did in his Ostia projects), Ridolfi makes use, in this particular case, of one of his most characteristic devices (which we could name "architecture by elements") also present in the viale Etiopia towers or the Terni School. It consist of analyzing and segregating what we could take for the most simple rational elements and then rebuilt the composition with these trying to recover a renewed rationality in the form of an aggregate of rational units, be them material (facilities, walls, structures) or methodical (rational distributive analysis). A remarkable feature of this building is the conception of the external wall as a complex diaphragm, an element which is also present in other works by Ridolfi and which, in this case is notably achieved. Both the distribution of the plan (the front composed by bedrooms with terraces) and the architectural solutions (cantilevers, lateral screens in the terraces. details of different joints which reveal diverse functions, the pergola at the roof terrace etc ...) determine the autonomy of the diaphragmfacade and its rich depth. The project becomes, thus, a remarkable attempt to overcome, by means of an analytic approach, the difficulties imposed by the type, what makes of it one of the most celebrated examples of the Roman Rationalism of the thirties

Coming back to our issue; the conviction of the inevitable need for an "organic" architecture became, as we have seen, somewhat problematic when coping with a particular case, what revealed the uncertainty and weakness of certain positions in the Italian cultural world of those years. Besides, the extensive definition of "organic" proposed by Zevi and capable of including so different architectural examples proved itself an ideological concept as it just marked the opposition to Milanese "rationalism", a movement which tried to recover the legacy of pre-war architecture in a line of continuity which has been lately analyzed by Rogers. In this context, the APAO was really the counterpoint to the orthodoxy of the Milanese "Movimento studi di architettura" (MSA) and both were used as a landmark by the architects. In spite of the fact that these polarized tendencies were not so fierce to one another as were similar debates after the first world war, it is also true that the ideological climate had as a result that just a few architects could escape the imperative for commitment. As an example of this situation. we can take a look at the polemics issued by the different architectural magazines as Metron (Zevi), Domus (Rogers), Spazio (Moretti) or La nouva città (Michelucci). It was essential to be seen as a representative of one of the tendencies; to be "organic" was just one of the possibilities: "I'equazione architettura organica = architettura della democrazia è utile piú che altro per riconocersi, non certo per riconoscere". What really did not account for the clarification of this kind of architecture but on the contrary made the situation even more confusing.

In the agitated lines of the Tiburtino, one can read this excited cultural background, the rebel positioning of buildings is a clear sign

of the conflicts between "organic" and "rationalist" tendencies whose contradictions had to appear sooner or later.

But one can find even more things in the brave balconies over the street life and the enormous quantity of chimneys conversing with the pines and lampposts, or the halfopened shutters or the casually visible gutters. Ingenuous protection canopies here and there, modestly plastered walls, the presence of brickwork in ventilation lattice screens and courts; all these talk us about the necessity to contact with certain social classes which suddenly had become significant, invading the city from the country trying to forget a loathsome past. A war was just over. There was famine and unemployment and all this was happening paradoxically in the middle of an economical expansion. The lack of housing produced by the immigration waves was terrible. And the Tiburtino district with its architecture made of roof tiles and wrought iron grilles, as well as Calvino's texts with trains full of emigrants and other stories, created a psychologically familiar atmosphere for these future Roman inhabitants coming every day from the Lascio and other Central Italy regions. Echoes from French Existentialism came now and then. The Spirit of collectivism was alive. De Sica and Rossellini presented a loathsome and sordid authenticity. Guttuso's colors echoed the tragic accents of the manifest reality. And thus, through architecture, we can learn about the age's historical conflicts, about the above mentioned vivid reaction against the monumental rhetoric of Fascist buildings which came to be seen as images of distortion and falsehood, patriotic mottoes which concealed reality.

The architects of reconstruction started from shared ethical basis: they were in search of that truth of which they had been so many years deprived by the regime's sceneries. It had to be clear that truth was something different: so different that it was difficult to find and, thus, the visible discrepancies between diverse architectural examples (even within a same project) cannot be explained by means of considerations as climatic conditions, the particular habits of the dwellers or their idiosyncratic building methods. It rather seems as though the architects were not very convinced of the way they should face their problem and felt isolated and insecure.

Ridolfi and Quaroni's truth, for example, was very different to Libera's, as they embraced the poetic of Neo-Realism, the image of the lost rural life. We should point out, though, that Ridolfi and Libera had worked together in their juvenile years and had shared experiences. After being two prominent architects during the inter-war period, both in their mature years now, they accepted to work with the INA-Casa, a fact that give us the opportunity to see how different were the developments of two professionals who even had had common beginnings. For Libera, this work implied the possibility of pursuing his previous line of experimentation. He had repeatedly demonstrated his great ability in taking advantage of the strange sympathy of the Fascists' left wing for Modern architecture, specially Piacentini's, an important personality who, belonging to the Regime's circle, tried to make some room for the new architectural vision of some young

professionals as Libera. The "Palazzo dei Ricevimenti e dei Congressi" in Rome (1937-43 and 1952-54) was, thus, the only building in the E42 which, even with some concessions, made use of Modernist tradition in its translation of the Regime's requirements. But now, they worked for Gestione INA-Casa, an organization which had a concrete programme for developing land and building housing districts according to the 1949 Law Fanfani, which had among other objectives that of fighting unemployment. The first seven years of activity were characterized by the visible interest in recovering popular roots in architecture, a process exalted by Neo-Realism with its emphasis in artisan labor and local traditions, in hand-made technology and "organic" ways of settlement. As we have seen, the Tiburtino district was almost a declaration about all these issues. Libera's project for Tuscolano 3, though, is a particularly strange piece as belonging to this first seven years of INA-Casa activity (Libera was the director of INA-Casa's technical bureau between 47 and 54). In fact, it presents some characteristics which are rather opposed to the Organization's proposed aims. The architect designed single-storey houses which, although based on popular types, were solved by means of a modern anti-traditionalist language. Following more or less the same line as Pagano in his studies about the "città orizzontale", Libera designs a rather interesting solution for the grouping of the one-family houses. These form cells which include four units creating an homogeneous and continuous grid of intermediate spaces as private courts and access corridors which can be used as sitting outside spaces. With the same ability used in the previous period to avoid the Regime's requirements, the architect abstained, in this case, from following the fashionable populist tendencies, imposing a theoretical rigor in which pure geometry conforms a unit isolated physically and conceptually from its nearest environment. In the central block, the modern flair is almost stronger; the refined use of the structural solutions as expressive elements seems almost anachronistic within the just described Roman context. The same happens with the building's general arrangement with a unique entrance next to a lower body over which a suspended arch (another of Libera's structural feats) appears. This lower building includes some retail installations and common services and prolongs itself in a wall which delimits the whole project. Libera's design presented a remarkably high level, appearing as an attractive alternative with its simple architectural forms and its implicit consideration of the rural types from the point of view of modern standards. The project kept in mind the people for which it was intended but tried to avoid the common repertory of artisan detailing, appearing as a disciplined exercise on architectural loyalty. In front of this Roman solitude of Libera trying to continue with his architectural work interrupted by war, Ridolfi and Quaroni, more committed to social issues present a radically different attitude. If we keep in mind Ridolfi's experience in the mentioned Rationalist Palazzinas or his work in the Towers of the viale Etiopia (almost contemporary with the Tiburtino), in which the architect tries to

recover his line of investigation on the

problems of crowded cities avoiding the antiurban solution of the Tiburtino, we will surly understand much better the complex meaning of this tremendously contradictory district.

We can recall here what we said in previous paragraphs about Zevi and the ideological origins of organic architecture in Italy, which was supposed to produce the desired psychological effect of satisfaction. Although Zevi was probably not aiming at presenting particular solutions for architectural forms and language, we can say that Ridolfi faced this project as a social compromise as he had done in the previous district Italia in Terni (1948-49) and that of Cerignola (1950). He identified architectural technique and language with that of the popular classes which were now his "clients" (so different from those of the palazzinas in the thirties) and the change had ideological and cultural implications. And here we find one of those evident incongruities so common in the history of architecture, the Tiburtino paradox. While trying to avoid the scenographic methods of Fascist architectural language, the authors indulged in the same fault, with completely opposed intentions, by making a rhetoric use of another type of symbols. The identification of popular and rural "pureness" and its use in the process of annulling pre-war "failures" and commitments created a "new rhetoric"

based now on a supposed "popular character" which was to replace the discredited classical monumentality... It was a semantic manipulation of an ideology rather similar to that produced during the Vienna Höfe operation, another significant event in modern architecture. In this later case, the borrowed language was that of the urban middle bourgeoisie, the "biedemeier" culture, whose symbols were reproduced in the new "Volkspaläste". The cultural presence and political power of a workers' class (with so different a history from their Italian counterparts, and this is another case in which architecture appears as related to historical circumstances) was, in this case, represented by the evident references to typically Viennese types and elements as the palace's courts, the arches, towers and bay windows which appealed the proletarian dwellers of the new districts as the Tiburtino solutions appealed the Italian rural emigrants.

Libera's example is rather significant. In Tuscolano 3 he did not face, as he had done before, the exigencies of the faded regime; things were different now and he had to dupe the new "winners"... The inexorable pendulum of History proved now how difficult it was to avoid the absurd play of winners against loosers and how mistakes were always the same.

Neo-Realism and architecture. Madrid's "housing problem", 1954-1963.

Miguel Angel Baldellou

Introduction

Spanish architecture and, particularly Madrid's, suffered in a most serious way the ideological insecurity brought by the Civil War. The previously untroubled process which, from the end of the 19th century, had succeeded in creating a local tradition connected in some way or another with the European waves, was suddenly interrupted and the new ideology imposed formal models that were completely strange to this process' dynamics.

The long period of so called "Regime's architecture" has been analyzed as a determined and somewhat violent rupture with Republican rationalist architecture. Consequently, the "recovery of reason" occurred in the fifties' decade has been considered a "Revolution from the inside" undertaken by the best among the younger architects, the first generation of graduates after the Civil War.

After almost half century, we can now consider the problem in a new way.

First of all, we must take into account that, leaving aside some orthodox examples of rationalist architecture (a few ones but rather brilliant), it is nevertheless true that this current was something of an strange fashion among us which did not find enough time to connect with our vernacular tradition. With the Civil War, our just ten years old "rationalists" saw how the ideological support previously received was interrupted and replaced by a clear opposition. In just three years, the architects who remained in Spain after the war

had to adapt themselves to the new situation. The apparent easiness with which they succeeded in doing so reveals us that neither the previous attitude nor the new one were more that eclectic adjustments of a deeper tradition to external demands.

Consequently, we can analyze the period between 1927 and 1948, between Fernández Shaw's Gas Station and Cabrero's Syndicates' House, as a clear parenthesis in which Spanish architecture was forced to adopt unnatural models completely strange to its logical internal development.

If we accept this non ideological interpretation, the above mentioned "recovery of reason" occurred from 1955 to 1965 will reveal itself as something rather different. Perhaps a more natural process and yet less courageous; what would explain some points so far rather enigmatic even for the main characters of this story.

Taking into account that we are now at the end of a period in which these architects graduated after war (Fisac, Sota, Oiza, Corrales, Molezún, García de Paredes, Carvajal) have been considered the most significant masters having an important role in our architectural education (at least in many cases), I think that it would be interesting and even necessary to take a new look at the origins of this "recovery" and its surrounding circumstances.

To this effect we have decided to analyze the consequences of one of the best-known examples of this renaissance, the construction of Madrid's outskirts undertaken during the so called "Laguna's Policy". In this way, we will review our own origins from half century's distance.

The so called "housing problem" was faced by means of individual solutions based on the development of personal models that were in some way rather out of context and which, once revealed, clearly showed that the uproar's period had finished. Nothing in them could make us recall the ideological pressure which imposed a kind of appearance's programme. Our architecture and our architects could then join his foreign colleagues in this new period of ideological crisis between the neorealist current and the "cold war" as if they had just been woken up from a long dream which had been a nightmare for so many of them.

The official architectural projects undertaken in Madrid's outskirts between 1954 and 1966 are therefore a good excuse to reconsider some aspects of our recent past.

The considerable quantity of new districts built in those years made up the political response to a situation labelled as "the housing problem".

If we think about it in these terms, the consequences are rather predictable. The aim was not to solve urban planning issues; the basic problem was to create as quickly as possible housing units for the population that had either already settled (an obvious euphemism) in our city or was about to move to it. It was necessary to provide for the new demand when a "problem" already existed.

Consequently, nobody thought about basic structures and services, and they just decided to take advantage of the existing roads in order to "clean up" the city (eradicate shacks, was the expression).

The operation was, therefore, from the beginning a matter of quantity and lacked any precise and broadly shared sense of urban organization (1). The only connections that can be found between the different projects are precisely due to the system's economic and ideological grounds.

Regarding this particular point, we can now quote Jesús Morán words (2):

"Madrid's urban development during the last decades has left us a intricate heritage which we are now forced to disentangle and in some way correct.

- Areas with no urban services whose appointed builders, now deceased or just working in other places had personally acquired the building permission for the whole of the lot.
- Completed developments which do not comply with the regulations requiring the transfer of property of a quantity of land to the Town Hall for urban planning purposes.
- Building permissions given to developments which cannot be considered local
- Building permissions to develop unobstructed areas in which no urban services nor transfers of property have been undertaken.
- Illicit but irreversible transfers to the Town Hall of lots with legal obligations or not at all unobstructed (occupied by families, with high tension cabling, with an unresolved ownership...). There is even a case of a transferred currently used cemetery which was disguised as a green area.
- Almost completely developed areas in which the most important legal obligations and urban planning and social issues have

been procrastinated (transfers (now impossible), new dwellings for dislodged population, completion of planned urban services and green areas in lots which are in most cases occupied by the mentioned dislodged families, etc...)

 Areas in which the legal transfers of property have materialized in unconnected pieces of useless land which the Town Hall should now maintain.

- Areas in which there is an excess of built volume or number of dwellings over the officially approved conditions or have been built without permission.
- Not built or unfinished in due time planned areas.
- Urban plans which do not comply with the legal regulations.
- Approved urban plans which did not show any sensible approach to the urban matter which have caused for example the destruction of existing green areas or traditional urban grids, demolition of historical and artistically valuable cultural or religious buildings, etc...

 Private development areas in which builders have appropriated and even sold properties which should have been transferred to the Town Hall."

Around the mid-fifties, the economic circumstances of the country made possible some official operations in which a change of attitude was appreciable. The time of sermons is over although their echoes remain. Though improvised, they look for a new theoretical justification that would pretend an "ideological" continuity while trying to approach social reality. It is an evident transitional period before the apogee of "development policies" what justifies some of the formal proposals. The formalistic "culture" we are talking about, its architecture and urban planning indicate the situation translating it into specific proposals.

The way in which the whole operation took place has not been clearly analyzed in the recently published Histories and so far we have no serious studies about the official strategies that came to impose the forms and the contents of our architecture. Regarding this particular point it seems as though in the later years interest has focused on architecture and urban planning issues more directly related to the civil war roots and aftermath. The limits have, therefore, been the Republic and the post-war period. But the period we are talking about, in which the conceptual basis of the Regime came to be gradually dissolved has been unfortunately neglected. And I say "unfortunately" because it is during these years that Spanish architecture tries, almost desperately, to find its own means of expression. The efforts undertaken during this period were, to a great extent, responsible for subsequent architectural development.

Leaving aside some general, broadly admitted, statements, it can be said that there is not any serious analysis on the specific projects made between the 50 and 60, not even by the most significant architects. It is certainly true that the discrepancies between the different architects were visible what makes of the issue a difficult one and that it is easy to get lost in the diverse currents and influences contradictorily intertwined once the Regime decided to open the barrier.

The historical context sets some theoretical limits to the whole issue but the

specific way in which from this basis the particular proposals were constructed is something that is rather difficult to grasp beyond a shallow general understanding. Some aspects of this context, the ideology for example, seem to be more efficient that others in other to justify the whole process. The current ideology, that of the political authorities as well as the architectural world one, was then in a process of adjustment. The architectural and urban planning values that had been fostered by the Regime had come into a crisis and the generation of architects involved in the necessary formal changes had to take decisions without the theoretical basis of a profound reflection to help them; in such a way that many times it was just by accident that they chose one way or another which fact makes almost impossible any coherent analysis of the whole process. Things came to happen in an arbitrary way. The role of intuition in deciding just what model should be chosen and when is something that has not been so far properly appreciated. It is perhaps this confusion what makes so remarkably difficult to pass from general statements to concrete cases. Formal references and recognizable images are evident as well as the shallow approach to a non assumed History.

It is not just by analyzing ideology that we will succeed in understanding these architectures. On the contrary, it is precisely their lack of "commitment" with any ideological system what makes of them vigorous and still interesting architectural examples.

We will, nevertheless, set a series of limits to the scope of our study in order to obtain more homogeneous results. The common features of the projects revised will be: the character of the commission, which is in all of them official or state's; the budget assigned, very low; the chances for innovation, limited to formal changes but in some sense encouraged by the authorities; the sites, all of them located in the outskirts of the Capital city; the sought for aim, to solve or diminish the "housing problem". All these seem to be more decisive than the very author's will in each of the cases, the diverse ways to understand the practice which are, though, rather visible. Probably, the most remarkable aspect of this projects is their attempt to disassociate the architectural image from any specific ideology. In some of the cases the quality of the job was so exceptional that the very same authors did not meet so high a standard afterwards. This process of breaking with the Regime's first models forced a new relationship with European culture in search of the links lost since 1936. But twenty years of cultural isolation were something of a burden for any coherent development. This fissure is not yet closed and we are still taking false steps, just listening to the end of the story and never to the premises and basis. By studying some of the projects we intend to acquire a better knowledge that will lead us to some basic conclusions on the issue of the Historical evolution of our architecture. We have selected precisely those who seemed to be more interesting because of their formal qualities. By analyzing them we will probably be able to understand which were the criteria used in selecting the new model, what routes were discarded, how did the model survive and what was it good for.

We will previously consider some particular aspects. First of all to what extent were this projects a valid answer to the real problem, that is, housing. Because it was houses that were being designed. The services were considered just in connection with the houses. The settlement, the community, was just the result of the addition of a certain number of houses. Houses that were to be dwellings for certain type of families which were supposed to improve their habitat conditions while the authorities got rid of the shacks. At least they succeeded in concealing them behind facades. They found a decent image for a problem that was not being properly solved. In fact, some of the settlements were built as provisional dwellings, a fact that supposedly justified terribly low standards just slightly above the previous conditions of the relocated families.

The attitude of the State was, nevertheless, corrected by the intelligent job of some of the architects that did not accept the inherited formal alienation and made of their projects examples of pragmatism.

But not all of these social housing districts were so successful. There were obviously some projects during the period that did not try any formal innovation among which some were even connected with renown architects. But a few selected examples gave way to an optimistic view of a supposed revival. In most of the cases, though, the projects did not reveal any true effort nor an outstanding capacity that could justify such an important official commission.

And we have come to a key issue. There was a certain way of acting that had its subsequent effects, an special atmosphere around these commissions which should have been just ordinary, routine projects had it not been for what was called "Laguna's Policy". The architect Julián Laguna was appointed Madrid's Urban Planning Manager and it was under his patronage that the housing development projects were assigned to a group of young architects whose only merits were their own technical capacities.

This Laguna's Policy encouraged a kind of architectural, theoretical as well as practical, research on the issue of the minimum housing unit what, in its turn, made possible a return to Functional Rationalism and a recovery of the European architectural tradition. As experiences were rather isolated, though, they did not achieved the necessary continuity to built up a coherent system. It was precisely this irregular quality of the achievements what made of them just good jobs by good architects and not a consistent contribution to culturally meaningful architecture. The lack of any systematic approach caused by this occasional quality of the proposals was one of the main characteristics of our National architecture. It is true that, in the particular case of the Caño Roto Settlement, a long and continuous project allows us to observe the architects' evolution. But it is also true that the 18 days available for the project of the Hortaleza Development were something that seems to us hardly admissible even in emergency cases. Improvisation as a regular policy was unfortunately the norm.

We should now consider just what was understood by architectural "experimentation" in those day. It was not, for sure, a conscientious and constant work. I do not mean that the architects involved did not

make their best of their own knowledge and time. I just want to point out that these were not sufficient. Architects did not have the specific knowledge of specialized professionals and their proposals were not precisely the outcome of untroubled reflection. On the contrary they almost boasted about their improvising, their doing quickly what should have been done slowly. And it was the very structure of the process that was to blame for it. In these circumstances, leaving aside the always limited budgets, the architects had no other solution than working strictly on functional and formal aspects, something they had been accustomed to and whose result was nearly always superficial.

The institutions that made the commissions, the INV or the OSH, did not take the trouble to organize a long term programme that would improve methods as well as results. Architects were supposed to solve the pressing troubles and most of the times they used the same strategy as the official institutions which had call upon them. The particular projects we have selected are therefore exceptions and should not be taken for typical examples of the current official architecture.

Among all the social housing developments built in those years there were some that were rather appraised by the architectural circles. The reasons for this widespread appreciation have been diversely analyzed. In general terms we can say that the mentioned projects were considered as the most valuable contribution of a group of young architects that, in due time, would compose the, so called, "School of Madrid" (3).

The reason why so young architects, almost unknown to professional circles, were chosen to take the responsibility of such an important operation has been interpreted in terms of an ideological turn in which the Administration showed an interest in a change of image that these architects knew how to take advantage of. This offer could not be made to older architects which had already given the most of themselves. I personally do not think though that this supposed high level decision ever existed as that. It is most likely that, without thinking too much about images or formal arrangements and even somewhat disdaining the whole issue (extremely lowbudget housing units for marginal population, absence of any organizing plan, temporality), they resolved, in a paternalistic way, to give an opportunity to young professionals. What happened though would not have been expected. The architects' response was radical and convincing and the unexpected success of the operation led many people to think of a systematic attempt.

It was then possible to try a formal change and facts were faster than thinking. The unplanned economic boom was very near.

The fact is that never again there has been a group of so important and qualified architects as those summoned up by Laguna working together in one single operation of such a social relevance.

The names of Alejandro de la Sota, Fco. J. Saenz de Oiza, José M. García de Paredes, José A. Corrales, Ramón Vázquez Molezún, José Luis Romany, Eduardo Mangada, Carlos Ferrán, Fernando Higueras, Antonio Vázquez de Castro, José Luis Iñiguez de Ozoño, Javier Carvajal and so many others are something that make us consider with the utmost respect the operation and the sensible selection.

Among the many housing developments built during the period from 1954 to 1965, we have chosen those which were most valued by critics and whose authors are precisely the mentioned architects.

One of the reasons for this broadly acknowledged estimation is based on the fact that these projects displayed for the first time after the Civil War a new approach to architecture that could have some links with what had been accomplished before the conflict and with what was being done around Europe. We would reconsider this statement by trying to discover the origins of the images recalled by the architects and the cultural models that made possible for a paternalist urban operation to become an intuitive exercise of rationalist composition.

We will consistently establish the characteristics of the period in which this prodigious process took place. The Falangist rhetoric was somewhat fading and its cultural production was clearly obsolete. But the country's material circumstances (economic, political, social) were not yet favorable to a radical change.

We are talking about the architecture of a period of critical transition, from autarky to industrial development, sharing characteristics of both. From the previous period it inherited a kind of wilfulness which was, nevertheless, frail due to the lack of conviction. It took the somewhat rationalintuitive character of the rural architecture of the Regime which had produced interesting examples developed by the "National Institute for Colonization" or the "National Institute for Devastated Regions" (as has been mentioned by Solá-Morales (4) and deeply studied by Manuel Blanco (5)) and, at the same time, recovered pre-war experiences (Republican as well as from Primo de Rivera's dictatorship).

The so much remarked Regime's arrogant architecture was in most cases no more than an emblematic use of external appearances under which the traditional designing methods emerged, better or worse employed independently from the circumstances.

The economic and political situation under the Autarky resulted in the selection of the rural area as the site fit for architectural experimentation. This accumulated experience and the formal images emerged from it were subsequently assumed by the architects of the city, even by those who had been so far creating self-satisfying motifs for the Regime or the powerful classes.

The absence of an "explicit civil commitment" (in the words of Solá-Morales talking about Coderch's proposals at the end of the forties decade (6)) and the links with rural architecture as a particular formal model are also characteristic of Madrid's architecture in later years. That is probably the reason why it seemed so easy to break with the previous policy.

The context in which the architecture we are talking about was produced is one that inherits some aspects from the previous stage and prepares itself for the upcoming economic development of the sixties. It is a critical time in which, with the ideological situation created by the war, some decisions are taken facing the future boom. The real

industrialization, considered by some authors as the reorganization of Spanish Capitalism (7), has been profoundly studied. The work by Leira, Gago and Solana (8) is specially interesting due to its particular ideological approach to the urban planning issue. It explains why in this particular period the circumstances provoked the mediation of the State in the "housing problem". The marginal settlements had become socially and politically dangerous in the fifties after a somewhat calm period. Spanish private economy was not yet prepared to take up the responsibility of such a building operation as it was more involved with industrialization and capitalization (9). Therefore the State decided to undertake the campaign but making an excessive use of the pre-existing substructures and reducing the investment to a minimum. In the first fifties, the immigrant's rush building thousands of shacks in the outskirts of the city became a serious problem. The lack of decent housing was officially acknowledged by the establishment of the labelled "housing problem" and Madrid's Urban Planning Bureau took up the responsibility of creating the basis for a quick solution. The ideological presentation of this strategy was undertaken by means of the publication of "Gran Madrid". An analysis of this publication can be read in the above mentioned article by Leira, Gago and Solana which also reveals the mechanisms used in the process of appropriation of the urban space by the dominant class by means of the State's policy (creation of developable land and increase in allowed building volumes (10), expropriations undertaken by the Bureau which had posterior consequences in the development of large areas disconnected from the city's core(11)).

But it is our opinion that if it is dangerous to analyze architecture separately from its contexts it is also misleading to justify architectural objects just in terms of their historical circumstances. Therefore we will try to analyze each aspect separately in order that both appear as internally coherent.

Conditions

The estimation of the architects' work, although it should be manly based in the reality of its production, should also take into account the particular conditions in which the designing process took place. In the particular case of the housing development operation undertaken by the Spanish State between 54 and 66, there were a series of circumstances that should be mentioned here in order to have a legitimate opinion. Leaving aside the dominant ideology (which in this case is almost impossible as it clearly determines the rest of the circumstances) we will take a look at other aspects: legal, economic, typological, later on we will see how architects tried to manoeuvre within this

I. SPANISH REGULATIONS ON SOCIAL HOUSING AND ACTION PROGRAMMES The first law approved after the Civil War regarding social housing was that of 1939 which defined the so called "protected housing" and which replaced the previous 1924 law on "low-income housing". The 39 law, in its preamble says about the 24 one that "it had resulted in the creation of associations which had more interest in benefit than in social ends. In this way, the

State invested enormous quantities in useless operations which did not meet the social demands, because, most times, cheap construction was mistaken for unfinished, badly built and with poor materials construction".

The Law approved on the 19th April 1939 was followed by a regulation passed the same year. The "protected houses" were a responsibility of the National Syndicates' Delegation (DNS) and funding was as follows: 20% given by the National Institute for Housing (INV); 6% paid by the recipient; 40% loaned with no interest by the INV; 24% loaned at an interest of 4% by the INV or the DNS.

1939 was a rather busy legislative year and several departments were created that would be responsible of building the necessary housing developments: the National Institute for Housing, the Syndicate's Home and Architecture Bureau, Devastated Regions' Bureau, National Institute for Colonization, General Direction of Architecture and Madrid's Reconstruction Committee. In order to make possible the housing construction programmes that were being rather unsystematically designed, it was necessary to create on one hand a "Home's Savings Bank Book" and to force the public administrations to donate the required land in

In 1944 public funds were made available through the Banks to be loaned for the construction of protected housing.

These dwellings had to comply with the INV regulations regarding allowed areas, programmes and materials' quality. In 1948 the State approved the so called "State's Allowance Housing". These kind of dwellings were ordained by the Bills approved on the 19th November 1948 and the 2nd November 1953 and by a Ministry's Order of the 10th August 1954. Allowances were granted for twenty years for those who decided to buy one of these houses and funding was made available according to the following classification:

Type 1st Category	2nd Category
a)More than 125 m2	6 ptas/m2 4,60 ptas/m2
b)More than 90 m2 and less than 125 m2	6,10 ptas/m2 4,65 ptas/m2
c)More than 70 m2 and less than 90 m2	6,40 ptas/m2 4,85 ptas/m2
d)More than 50 m2 and less than 70 m2	6,50 ptas/m2 4,90 ptas/m2

The main difference between categories was the price of the square meter established for towns over 200000 inhabitants.

Funding was as follows:

Loan at 3%, 50 years paying-off, up to 60% of the lot and the building.

Donation: 10% for the 1st category and 14% for the 2nd one.

Sometimes it was possible to expropriate the land in which the houses were to be built.

In 1954 the "Low-income houses" were created by the Spānish legislative power and with them came the first Syndicate's Plans which provoked the real boom of the State's housing operation. Two kinds of houses were defined:

1. Low-income housing belonging to Group I were built without State's donations but the buyers could have tax reductions, had a right to expropriation and could obtain loans for 60% of the total price.

2. Those belonging to Group II (divided into three categories 1st, 2nd and 3rd) implied INV credits with 50 years for payingoff, complementary loans and donations for building in the case of personal labor of the beneficiaries in the works. The INV conceded advances with a 50 years paying-off and no interest and up to 80% of the rest when there was personal labor of the beneficiaries in the works

By means of several Decrees and Bills in 1955, which also established the necessary loans to be made by the Official Bank, enterprises with more than 50 workers were compelled to built dwellings for them or transfer land to the Town Hall to this effect. Thus, the grounds were established for a

private control of the policy.

The Land Law, 1956, passed together with the establishment of the General Direction for Architecture and Urban Planning (so far only for Architecture) and the Ministry of Housing Law, 1957, modified somewhat the first strategies and provoked the institution of the so called "Subsidized Housing" by the subsequent new Ministry's Decree of 1957. This category included the Low-income housing (Group I) which obtained a subsidy established in 30000 ptas. per dwelling, together with the beneficiaries of the 1954 Law who, depending on the total area of the house received a different quantity. The total areas could go from 30 to 150 m2.

This modality was managed by means of Madrid's "Social Emergency Plan" that was subsequently enlarged to cope with the whole country. At the same time, the so called "Controlled Settlement Organization", created in 1957, began to work immediately on the effective building of subsidized dwellings.

The now still valid category of "Officially Protected Housing" (VPO), was instituted in 1963 and is out of the chronological extent of this study. The effective building of the different types of social housing just mentioned ocurred in different stages and under the responsibility of diverse institutions. From 1939, the INV was the main State's organism in charge of social housing matters, mainly through its branch "Devastated Regions"

The National Housing Plan which ordained the construction of 1400000 dwellings from 1944 to 1954 did not reach the 300000. From 1954 to 56, when it was the "State's Allowance Housing" category which was legal, construction decreased (just 10000 dwellings a year) and, moreover, these few could not be afforded by the lower income

population

In 1954 the Francisco Franco Syndicate's Plan was approved which elaborated four annual plans for the construction of social housing. By this time it was the "Syndicate's Home Bureau" who took the lead working on low-income housing. The following groups and funding formulae were established (54 Programme).

Low-Income

- a) 100 m2, five bedrooms
- b) 90 m2, four bedrooms
- c) 80 m2, three bedrooms d) 74 m2, two bedrooms

Funding: 40% advance INV, 50% loan INV, 10% initial beneficiary's contribution (DNS)

Minimum-Income

- a) 58 m2, four bedrooms
- b) 50 m2, three bedrooms
- c) 42 m2, two bedrooms
- d) 35 m2, one bedroom

Funding: 40% advance INV, 20% donation INV, 24% loan, 10% initial beneficiary's contribution (DNS), 6% personal labor.

Social Housing Just one type: 42 m2, three bedrooms. Funding: 80% advance INV, 20% advance

The Second Syndical Plan somewhat simplified the issue as follows:

Second Category Housing a) 82 m2, three bedrooms b) 94 m2, four bedrooms Funding: 5% initial contribution (land) DNS, 50% advance INV, 45% loan INV.

Second Category Housing a) 56 m2, three bedrooms b) 68 m2, four bedrooms Funding: 5% initial contribution DNS, 75% advance INV, 20% Ioan INV.

Social Housing Just one type: 42 m2, three bedrooms. Funding: 80% advance INV, 20% Builder.

The Third Syndical Programme modified the situation in the following way:

Second Category Housing a) 82 m2, three bedrooms b) 94 m2, four bedrooms c) 104 m2, five bedrooms Funding: same as Second Programme

Second Category Housing

- a) 60 m2, three bedrooms
- b) 68 m2, four bedrooms
- c) 78 m2, five bedrooms
- Rural Housing 82 m2, four bedrooms and courtyard. Funding: same as Second Programme

Social Housing Urban: 54 m2, three bedrooms. Rural: 54 m2, three bedrooms Funding: 80% advance INV, 15% loan INV, 5% initial contribution DNS.

During the period from 1956 to 1961, the INV elaborated the Second National Housing Programme whose aim was the construction of 470000 low-income dwellings (420000 of Group II and 50000 of Group I), 50000 social dwellings and 25000 more by the INC and other organisms.

Madrid's Urban Planning Commission (created in 1946, the year of the Bidagor Plan) designed in 1956 a plan whose aim was solving the "Housing problem" in the outskirts of the city. To this effect four successive goals were established:

1. Construction of a series of "Absorption Settlements" in which the population living in shacks would be relocated. At least 20 of these Settlements were built in Madrid (among them Fuencarral A and B).

2. Creation of "Controlled Settlements" that would take advantage of land already provided with urban services. They intended to rationalize the process of self-construction avoiding the anarchy by selecting already prepared land. The usuary received official help to buy land on hire purchase and apply for no interest loans and provided him with the necessary technicians for the building works. Fuencarral C, Caño Roto and Almendrales belong to this second type.

3. Creation of new "urban nuclei" trying to meet the demand of higher status housing once accomplished the urgent needs. This programme would be a single stage, quick

operation.

4. Construction of Model-Districts. One would be built each year as a self-correction experiment, its size and form determined the district's name.

The Housing Ministry began to apply in 1957 a policy in which the low-income dwellings were successively abandoned in favor of the new category of Subsidized Housing by means of the so called Social emergency Plan. In 1961, the same Ministry presented a new Housing Plan whose aim was the construction of 3713000 dwellings up to 1976. The plan was divided into fouryear periods, the first one of which was 1962-65 as 1961 was considered a, transitional year.

The first stage was developed in three successive phases which included the study of the housing demand, the organization of the plan in each borough and the elaboration of the action plan. Regarding the construction of the dwellings, private enterprises should take the initiative while the official agents would complete the works up to the desired quantity. In the first four-year period, though, the State did not wait for the private enterprises to begin working and the INV commissioned the OSH with the promotion of social housing developments

The 61 National Plan established three theoretical types of nuclei whose size would determine the needs for services and community buildings:

a) Residential nucleus (5000 inhabitants)

b) Neighborhood (20000 inhabitants)

c) District (100000 inhabitants).

The community buildings were divided into the following groups: religious, cultural, health, assistance, administrative, political, recreation, meeting places and others.

Many of the singular buildings effectively constructed in the Settlements follow the mentioned classification.

It is rather clear that the public initiative here presented is basically that of Madrid's Bureau for Urban Planning whose projects were undertaken by the OSH and the Controlled Settlement's Organization, created in 1957.

The legal context during these years was rather confusing and unstable probably because the aim was to fight a problem that already existed and was progressively increasing. The seriousness of the situation was undoubtedly the main condition in elaborating plans, projects and budgets to achieve political and social ends. In such a context, the architectural projects could not be the result of quiet reflections but of the uneasiness and provisionality proper to an ideological crisis.

II. THE DEVELOPERS. THE SYNDICATE'S HOME BUREAU (O.S.H.). The Syndicate's Home Bureau (O.S.H.) was created in 1939 as one of the organs of the

"National Movement" (fascist unique party) (12) whose aim was specified in its foundational papers: "In spite of the discernment and hard labor of our State, it seems as though its action cannot achieve the desired ends without an equally fervent and intelligent collaboration on the part of the organs of our National Movement, specially those belonging to the Syndicate's Organization. The Movement's Syndicates must help the State to put into practice the policy designed by the National Institute for Housing. The Syndicates will accomplish, thus, one of their most cherished aspirations: to provide Spanish workers with dignified and happy homes"

A posterior paper (No. 132) published by the Movement's General Secretary indicates the objectives of the Syndicate's Home Bureau, defining it as "the only organ within the Party which will act as Building Organization for the "National Institute for Housing" (13).

It began to collaborate with the INV in Local and Provincial Plans, elaborating studies about the most urgent needs and the demographic and economic situation of an area. It also contributed to the association of the workers to the local Syndicates and organized working groups and workhouses to make furniture and kitchenware

The Bureau elaborated the building projects trying to establish some kind of standardization in their contents as well as in the bureaucratic procedures associated with them. It also tried to coordinate the different O.S.H. branches with the Architectural Service belonging to the National Delegation of Syndicates, a previous countrywide organ.

In those years: "the ends were rather ambitious and the means poor and insufficient for a quick success. We needed an adequate organization, technical competence, the collaboration of all the institutions, economical resources and high levels of production of building materials. The difficulties found in meeting all these factors, the initial lack of experience and the poor state of our economy (a consequence of the hard moments endured by our Country in the years previous to the creation of the Syndicate's Home Bureau) made of our labor an extraordinarily difficult one. We must point out, though, that there was a progressive improvement in later years" (14)

We can divide the OSH's activity up to 1964 into two different stages

The first stage, up to 1954, was characterized by the fact that, in those years the private capital was interested in "more beneficial" sectors, according to Valerio Bermejo (15). During this stage the legal texts used were the 1939 and 1941 Laws of Protected Housing, which forced public entities to donate the necessary land for the construction of the dwellings. The quantity of available land was rather considerable and the official credits reliable, though to a certain extent insufficient. But, in spite of all these factors and the fact that the OSH's activity covered 38% of the building sector, the number of dwellings constructed, 22000, was rather low in comparison with the 176000 of the second stage.

During this first period the OSH built

Protected and State's Allowance Houses whose programme, building quality and surface was established by the INV. The National Government Bureau, though, dictated some complementary rulings which defined two types of dwellings:

1. Rural Dwellings for artisans in villages under 5000 inhabitants, built in adequate lots to fit the necessary dependencies for the user's activity. They could be arranged as terrace houses, isolated and, in any case, they would be single story or two storey houses.

2. Urban Dwellings for industrial workers which would just include the necessary area for the strict dwelling without complementary dependencies. It was recommended, nevertheless, that, if the lot was large enough, they should have a garden or private orchard (16).

Funding was State's during those years (39-54). A few operations counted on complementary funds obtained from private companies. The OSH created the "Home's Savings Bank Book" as a means to help the lower income class to gather the necessary 10% of initial beneficiary's contribution to obtain a social house.

The situation of the building industry was also critical as it had not recovered itself after the war. The building rhythm was, therefore, rather slow (17).

The 1941 Decree which created the "Home's Savings Bank Book", forced the future users to contribute with 10% of the initial funding. "The OSH, through its collaboration with the Postal Savings Bank, created the "Home's Savings Bank Book" which facilitated the whole housing operation by providing the builders with the necessary funds to achieve the dwellings. In this way, the future beneficiary was involved in the process of construction and the "Savings" spirit" was fostered; this same criterion should be used in later years in order to help the users to improve their own house by acquiring new furniture or undertaking refurbishment works" (18).

But this credits were not sufficiently effective up to 1947, when the Funding Institute for National Reconstruction and the General Savings Banks allowed their funds to be used as credits in favor of the Protected Housing developers which would back up to 50% of the building costs.

The OSH common procedure was to gather groups of possible beneficiaries selecting them on a professional activity criterion (19).

These groups could be gathered after the construction of the dwellings was already decided or just constitute assemblies of potential future users. There were, according to Doz, other types of collaboration, for example "with all those organizations which, forming a community, could be constituents of the social milieu interested in the solution of the housing problem". The OSH offered these groups "to collaborate with it in its mission for providing the workers' class with an hygienic and decent home by means of the protected housing plans". In this way, the Syndicates, Brotherhood, Fishermen's and Farmers' Associations and groups of industrial workers were asked to cooperate with the OSH through three different programmes depending on the funding procedure for the first 10% of initial contribution.

"This interesting formula, together with the OSH's conventional procedure, permitted, thanks to its social insight, the obtention of satisfactory results and was one of the first methods to involve private economy in the housing field. This procedure can be considered as a real beginning of a process that led to the Decree of the 1st July 1955 which forced private companies with more that 50 workers to built dwellings for at least 20% of them" (20).

The second stage covers more or less the decade from 1954 to 1964 (21). In it, the OSH was mainly dedicated to the effective building of the projects. This stage can be considered a middle phase between the days of the autarky and those of the industrial development. The OSH's procedures are now circumscribed to those established by the Protected Low-Income Housing and the Obligatory Expropriation Laws of 1954, the 1955 National Housing Plan and the first Land Law of 1956 which encouraged the private sector to participate in the housing field in a profitable way.

The I Syndical Programme planned the construction of 43700 dwellings in one year: 5462 belonging to the category of low-income housing, 29899 to the minimum-income housing and 8339 to that of social housing. This programme was realized in ten months with the collaboration of the Town Halls which donated the necessary land.

The II Syndical Programme included 49136 dwellings which were regulated by the 1954 Low-Income Housing Law, all of them belonging to the 2nd and 3rd category of social housing units. But the programme was not completely realized in due time. The III Programme planned the construction of 37753 dwellings belonging to the 2nd and 3rd category of social housing units; it introduced few changes in relation to the II programme. The IV Programme proposed the construction of 15497 dwellings very similar to those of the previous programmes (22).

The definition of the quantity of dwellings assigned to each province, the selected types and the effective distribution was decided by the Central Office, after being proposed by the Syndical Housing Board which based its demands on an estimation of the most urgent needs.

The common procedure was as follows:
The land was acquired, either purchased or
obtained by means of donations or
expropriations, by the National Delegation of
Syndicates; the projects were elaborated and
revised by the Department of Architecture of
the Central Headquarters and sent to the INV
to be approved and be accorded the desired
benefits.

The works were commissioned by means of an economic competition according to the OSH's technical, economic and legal regulations. After so many years we have come to the conclusion that many of the observed defects of these building were originated precisely by this procedure which avoided, for example, the control of the Official College of Architects.

The way in which the dwellings were assigned to the families, at least those controlled by the OSH (obviously just for members of the organization) was the following: 20% for old applicants, 10% for ex-combatants, ex-prisoners, first affiliates and combatant's widows with children; 30% for workers with more than four children and

30% for members not belonging to the previous categories.

Some of the regulations on the occupancy regime can be interesting. The OSH delivered the dwellings whose mortgage had to be refunded, the monthly fee was determined by the initial quantity donated by the State and the Syndicate. The user acquired the house once the mortgage was paid off. The OSH undertook its building activity by means of the so called "Francisco Franco Syndical Housing Plan" which proposed the construction of up to 43000 dwellings within its I Programme while the Low Income Housing Law of 1954 was being elaborated. There were four Programmes and 132260 dwellings built.

The National Housing Plan proposed on its part the construction of 170316 dwellings which had to be built by the OSH. In addition to these large-scale operations the OSH elaborated an Emergency Social Plan for Madrid in 1957 which included more than 15000 dwellings. The legal novelty of this stage was the new regulation on subsidized housing (57, 58, 59).

The total production of the OSH can be seen in the following tables.

In 1974 the magazine "Cuadernos de Arquitectura y Urbanismo" published a monographic issue (No. 105 Nov-Dec) whose title was "Home's Syndical Bureau. The licensed vertical Huts". It reveals the opinion of a number of professionals before a labor of 35 years. Among other issues the management of the operations was analyzed (23), as well as the relationships of the OSH with the Government's Housing Policy (24), the cities involved (25), the housing problem in the case of Barcelona (26), with the user (27) and even the press (28) in a specially conflictive moment.

The conclusions which can be drawn from the study published by "Cuadernos" verify the grounds of the radical critic to the housing policy and its main organ, the OSH, undertaken by the opposition in later years. It is also a new testimony of the fact that most times what we find behind a housing policy is just a political battle and ideological propaganda instead of a true intention of helping the country to obtain one of its most fundamental needs.

The absorption neighborhood units (U.V.A.)

The U.V.A. operation was announced by official propaganda as an "appropriate and urgent" action campaign.

The Decree of 12th January 1963 permitted the INV to commission the OSH with the construction of six "Absorption Neighborhood Units" on previously selected lots. A total of 6586 dwellings were built by means of this procedure whose aim was to put into practice a "new social concept of urban planning". It displayed though a mix of paternalism and political opportunity as the trumpeted aim was that of replacing the shacks' districts by provisional but decent and organized dwellings for a potentially violent population. On the other hand, this operation was an opportunity to test the new building systems, the supposed rationality of the projects and the users' response.

The U.V.A. operation in numbers can be resumed in the following way: 6586 dwellings, 6 churches, 6 administrative centers, 6 health assistance centers, 6

schools (children: 12% of the population), 6 day nurseries (babies: 2% of the population) and 203 shops.

The average area of the dwellings was 50 m2. The health centers and the administrative pavilions which included the offices for the Town Hall representatives, Postal service, Political authorities and Maintenance Services had 100 m2.

The results of this operation have been broadly considered pathetic and the dwellings, "officially protected shacks". But in some of the cases this conclusion can be somewhat exaggerated. In fact, similar operations undertaken in other places with the same ideological-propagandistic procedures have not been much better.

Hiding reality is not a proper way to meet collective demands but it is neither good to be indiscriminately (and comfortably) critical using the same demagogic analysis as those of the official propaganda. The U.V.A. experience was an opportunity to think about the housing problem on an industrial basis, a challenge for the housing sector which had prove itself efficient in case of social emergency. After this operation there were no more chances to make such experiments. It was the end of an epoch and the beginning of a new age that was to come: the Development.

The architect and the house. The architects and the minimum housing unit

The issue of the minimum but inhabitable housing unit has always been, since it was posed as a problem, a fascinating challenge for architects (29). Some added elements and circumstances even made of it a kind of obsession. It was considered a proof of the designing capacity of the professionals to the detriment of other expressive qualities. The real ethical aspects of the issue were intermingled with a certain fantastical pride of a supposed messianic mission on the part of the architects which created a rivalry between them based on the difficulty of the question and the necessity of displaying the personal capacities of each of them. But this strange race to see who could diminish to more inconceivable levels the area occupied by a possible dwelling simply frustrated any objective improvement of the offered quality of life (30).

The "rational shack" was progressively considered the star of the projects and the modern architects employed their labor in a designing process based on an ingenuous functionalism (31) which proposed the "dwelling machine" as a pseud-scientific theory of housing supported by the progressive transformation of society by means of a process of rationalization, industrialization, production and consumption. A theory which served as well the totalitarian regimes as those based on the most aggressive capitalism.

Spanish architects exerted themselves, with magnificent results, to contribute to the formal and typological definition of this type of housing in pre-war Rationalist years. Their examples were examined in the CIAM Congresses celebrated in Frankfurt and Brussels (32).

The GATEPAC (Group of Spanish Architects and Technicians for the Advancement of Contemporary Architecture) contributed to the issue by examining the problem from a urban planning point of view with equally interesting results (33).

In Madrid, the labor of the Municipal Technical Bureau, was not so committed to the orthodoxy of the Modern Movement and therefore was not so influenced by its dogmatism. We could say that its ideological basis were a kind of Leftist Realism which determined its General planning as well as its concrete projects (343).

When, after the war, the building sector began to work again, the minimum housing problem was assumed by the paternalist regime now in power (35). The number of dwellings built during the first post-war years in rural areas promoted somehow the advancement of popular design topics. Formal and typological efforts in the minimum housing field during the days of the so called "Autarky" aimed at obtaining a Folk or Popular image which concealed, nevertheless, rational and systematic structures which, as we have already mentioned, tended to come to light in subsequent years (36).

In the mid fifties, the INV organized a contest for the construction of experimental housing units in Madrid; the main aim was to "encourage building companies to collaborate with architects and design better and more economical solutions which may involve the use of new materials, building systems or ancillary elements" (37). Some works were submitted which showed the rationalism employed by the architects of the time. The intention was to envision the problem from the point of view of the building companies and the architects. With these premises the results could not be very brilliant. But the contest revealed that the Rationalist heritage was not so lost as it could seem nor the Spanish architects so isolated from what was happening abroad.

The contest's proposal was clearly a technical and economic one, avoiding any ideological analysis of the results and, at the same time alluded to typical rationalist problems and procedures. The Hansa District project in Berlin, the result of a contest organized in 1953, was the model for the INV proposal for Madrid. It was also based on the older experiences of the 1927 Stuttgart Weissenhof. In fact, the process of opening Spain to political contacts coincided with an artistic and formal aperture.

The Weissenhof Siedlungen (38) were the means by which the existence of an International Style was proved and the Hansa District, thirty years later, tried to check its general diffusion.

These groups of buildings just tried to certify the results obtained from a coherent urban planning together with similar intentions on the part of the different architects. In Stuttgart the following architects took part: Mies van der Rohe, Oud, Bourgeois, Schneck, Le Corbusier, Gropius, Hilberseimer, Bruno and Max Taut, Poelzig, Duicker, Rading, Frank, Stam, Behrens and Scharoun. In Berlin, Gropius, Max Taut, Scharoun and Le Corbusier (its building was located outside the precinct), repeated the experience. The 1957 Interbau made circulate the results of the Hansa experiment among Spanish architects. The comparisons could be established over the different contexts. means and purposes.

The housing contest was won by the HELMA Building Company together with the

architects Romany and Lozano. An analysis of the submitted projects proves that the issue was not sufficiently mastered to talk about any "experiment". Some of the proposals, though (those by Romany, Oíza, López Iñigo, Subías and Guiráldez and Cubillo) were promisingly interesting and displayed a surprisingly similar language after so many years of superimposed symbolism.

Architectural "experimentalism" was not really taken seriously as a collective mission. Circumstances had to change a lot to encourage such an effort. For example, it is essential that there would be continuous projects in order to achieve a certain improvement of the types and concrete designs. Or that the project would be calmly undertaken in order to correct it several times during the designing process by spotting the contradictions between theory and practice, or even that the architect would have the user's experience. None of these was the case. However, someone as Coderch (someone out of Madrid) was able during those years to undertake a progressive design based on the modification of popular images that would result in the creation of broadly accepted forms

In Madrid, though, the only architects who obtained continuous commissions were those belonging to the Oíza and Romany group who made up a kind of local school (together with Manuel Sierra and afterwards with Ferrán and Mangada). This architectural group achieved the definition of a certain kind of official housing whose overall quality and appropriateness was rather significant.

Leaving aside the work of these architects, there were other two interesting and completely different experiences that should be mentioned here. One of them was the U.V.A. project for Hortaleza, a very quick operation, a project designed in 18 days (surprisingly enough, the result was rather estimable) and by a group of architects which had never worked together before (just Higueras and Miró were partners before and after the operation). The little time employed and the economic restrictions have always been blamed for the supposed defects of this project. But I really think it was precisely the presence of these restrictions what made possible the simplicity of the proposal, the real flexibility behind an apparently rigid scheme which enclosed unexpected possibilities. In fact, the case could be taken as a lesson about the good results of a design restricted to a basic support. The middle flexible spaces which act as filters as well as connectors is precisely one of the proposal's most interesting elements. The other one of the mentioned experiences was the rather prolonged U.V.A. project for Caño Roto which progressed with the constant labor and commitment of its two authors which felt really involved with the project. In this case, particular circumstances made of the project a unique experience. By now, we will just point out how the original plan was continuously altered according to the users' (who were also the builders) demands and also to the increasing commitment of the authors who corrected and improved the design (they even came to live in the district) according to the economic resources and the construction process. The care with which the design of the open spaces (shared by the users and the architects) was undertaken was highly remarkable.

The Caño Roto experience was a model of performance for the authors of "Loyola" and 'Juan XXIII" and the attitudes taken during the process encouraged some changes in the urban conception of this kind of neighborhood. There were other influential operations around 1957 as the Elvira de Corrales Complex in La Coruña or those mentioned by Ferrán and Mangada (the English New Towns, Brutalism and the theories of Team X) (39) but the significance of Caño Roto was remarkable. Probably its authors exploited to its consumption a unique designing rule. But a formal investigation fever touched the architectural world just when the State's involvement in housing was near its end. The best fruits of this fever were not even cropped. Neither Vázquez de Castro's "Costa Rica" project nor Ferrán, Mangada, Romany and Oíza's "Horizonte" project were effectively built, while others as the Tres Cantos operation was thoroughly

Around 1963, we find two other interesting housing operations: those of "Juan XXIII" and "Loyola", both in Carabanchel but belonging to different urban plans though designed by more or less the same team: Romany, Ferrán and Mangada, with Oíza in Loyola's case. Both projects were promoted by the "Employee's Home" and both were conceived as rather small operations: between 500 and 700 dwellings. In both designs the main feature is the enclosure of the free spaces creating small autonomous units. In this way, it is the form of the whole unit which predominates over that of the houses what approximates the design to a urban scale. The overall form is what justifies the form of the dwellings.

It seems as though the architects involved came closer to urban planning as the experience proceeded. And that is precisely the reason for the interest paid to the use of certain spaces to which there was a form superimposed. A clear functional arrangement defines the roads and tracks, there is a visible concern about community life and economic interchange and a remarkable variety of progressively public open spaces.

With the kind of block used, more similar to that of the open urban lot than to the isolated building, the authors try to meet a historical demand in a move that was not sufficiently appraised in that time. The importance of the space defined by these blocks is analyzed by Amezqueta, in Loyola's case, in the following way (40):

"The most remarkable elements which define such a kind of community life are the result of the design of spaces which have the psychological effect of linking indoors, private life with outside collective activities, but which, at the same time, keep the relevance of the user's individuality, its comfortability and the privacy of its relation with environment. In the Loyola project (based on an idea by Team X), one of the best designed features is the way the traffic is introduced within the precincts of the district without disturbing the overall pedestrian conception and scale. The arrangement of the traffic roads mixed with the pedestrians' paths but with significant changes in dimension and pitch and some elements as the curbing which prevent any dangerous cross, succeed in going beyond the rigid separation of cars and pedestrians by means of the subordination of the former to the later which are the ones who establish the scale".

"A project as that for "Loyola" aims at making of the community spaces really inhabited and collectively used grounds. Besides, taking into account the character of the dwellings proper, we have to say that, at least, they are rather correct and similar to those belonging to the same tradition".

The same author, talking about the "Juan XXIII" project (41), makes some references to the previous one. It is the cumulative development of both projects which is interesting. "The importance of this continuity in a chronological series of operations becomes emphasized by the fact that in the Spanish case there is more of a continuous progress towards complexity and designing richness than an evolution based on a try and error process".

"The strategy employed in this later chapter of our architecture is almost a didactic approach towards more complex models in which each stage does not constitute a dialectical position regarding the precedent one but just the acquisition of new elements".

"If it were not that Hegel's conception of cultural history is broadly surpassed we would be tempted to talk about an archaic period straining towards a classical one. In our case, we can, nevertheless, assert that there is a clear evolution from simplistic conceptions towards more complex, more controlled and constructed designs" (...)

"In the new project for "Juan XXIII", there is a kind of recovered equilibrium defining a more complex, mature and advanced stage within a coherent process. The architecture of a housing unit is now approached from an enriched point of view which tries to have a more conscientious and deeper knowledge of elementary problems for which, in the previous projects, almost rudimentary solutions had been devised" (...)

"To sum up, we are in front of a more elaborated and mature analysis and recomposition of the possibilities of a global structure which was absent in previous projects and just insinuated in the "Loyola" one. This is the real significance of the "Juan XXIII" project."

..."one of the most remarkable features of the "Juan XXIII" project is the fact that, in it, the structure and its modules are not the result of abstract planning, of metaphorical and bureaucratic procedures, but of immediate perception, of the information drawn from actual use and experimentation. That is why the different levels of organization and different scaling of the spaces coincides with the effectively used paths."

In relation to the plans of the dwellings, we can also talk about a kind of evolution. In "Loyola", the arrangement of the different dwellings is based on designing modules of 3x3 and 7x6. A unique type of house makes up by addition a superior organism whose main feature is the treatment of the public space and the inner path. The units, composed by two asymmetric elements have a kind of detached access which becomes the connection device between different units. We obtain thus the basic element formed by two pairs of houses. The composition by addition of unitary elements is, thus, the main designing device used in the "Loyola" project.

In "Juan XXIII", however, the variety of different housing plans is the logical consequence of a more general approach in

which the complex structure predominates over the buildings' forms. This type of conception is also interesting because it reveals a different attitude towards urban planning on the part of Spanish architects. The author's justification in the presentation of their work was rather explicit:

"We have assumed: that a superimposed structure organized into "levels" solves composition and construction problems and supports the district's identification and administration services, we are sure that it also encourages the development of the community.

That the use of the connections and services's system as an organizing structure, give us the opportunity to design it in first place and thus make it simpler and more compact what improves these same communications and services and the identification of the different elements, besides diminishing administration and maintenance costs.

That a ramified structure, though adequate, is not enough to cover the user's elected lines for access and services and that a closed ramified structure might work better.

That certain amount of "integration" saves space and every kind of urban elements and that the exclusive use of the intermediate spaces between blocks to guaranty sunlighting and intimacy has very good results.

Moreover...

That these intermediate spaces can be elements of the design as distinct as the very dwellings or the blocks and should be taken into account when planning the structure of the interconnections and services and not be just the result of the particular location of the blocks.

That the complexity of the structure and the location of the blocks must be determined by the existing activities and groups.

That one of the means, probably the only one, to achieve this complexity with our present intellectual development is to rationalize the categorizing system.

And that, in order to have an organized whole, it is essential to make use of concepts as hierarchy and module.

Therefore, our proposal establishes:
That the 502 planned dwellings will be distributed into blocks of approximately 80 dwellings, arranged by means of a net of pedestrian paties connecting them all and leading outside the district towards special urban elements as the Carabanchel Alto Square.

That all blocks will enjoy an open public space. That cars will just be able to approach the district by the periphery preventing any road crossing the district and organizing the parking lots around the pedestrian connections.

That all the blocks will be rather similarly designed: every block with its sunlighting and leisure space, all around an access and services' ramified and closed structure.

The blocks will be divided into three bands, two outer ones occupied by the main rooms and an inner one in which accesses and services are located.

That each block will have the adequate height in relation to its location within the district and consistently a particular kind of access. Thus, two storey buildings have a central gallery access (sometimes double high). Six storey buildings present central

galleries each two floors with elevators and staircases located at its sides. Five storey ones have a central gallery in the first floor, a central staircase and the possibility of connecting with the elevator of the block next to it on the fifth floor.

We have designed six basic types of dwellings but taken into account the possible advantages of particular locations.

Regarding this point, we have tried to take advantage of the possibilities of ground floor dwellings by means of enlarged terraces, courts etc.

We have also established flexible modules for the dwellings in order that they could be used in slightly different access and services' structures.

To this effect, we make use of several scales at the same time and different modules as 30 cm, 120 cm, 360 cm." (42)

Most of these ideas were already present in the "Horizon" project, an experiment on independent and isolated life, "Citadel", next to Madrid that was never realized. However the introduction of a certain flexibility in the project by Ferrán, Mangada, Romany and Oíza is a real novelty as the tendency in previous proposals was exactly to avoid the differences.

Around these same years, 1962-64, Vázquez de Castro, together with Sierra, Cubillo, Vega and Lahuerta, designed a project for Madrid's "Costa Rica" neighborhood, with 455 dwellings and complementary buildings.

This project was neither built but might help us to understand the evolution of the author since "Caño Roto", as here what prevails is the conception of the compact urban block with different dwelling types. The project is a clear rejection of the open-block and the "Rue-corridor" whose worst effects were being experienced.

We should consider now whether the proposals of these architects were realistic at all. To this effect it would be good to know the reforms undertaken by the users of the dwellings.

The results of such an investigation can be, however, rather differently analyzed. We can think that many changes imply the architect's failure or, on the contrary, just the flexibility of his design. It depends on the theoretical basis of the project: either the author chooses a closed design or decides to offer half finished products, either he tries to collaborate with the users or even goes as far as designing the basic furniture.

The last option has been embraced in particular moments of significant ideological pressure. We should recall now Fernando Ramón's furniture for Officially Protected Housing.

The reforms undertaken by the users in these social housing districts have been basically provoked by three types of needs. First of all the lack of space which was always minimum: the users have glazed the terraces, have changed the position of the partitions, the location of furniture (which, in the case of minimum housing is an essential element) and have invaded the open courts when these were present

Secondly, they have considered technological aspects within their houses: they have placed double glazing, improving the shading screens and installing security devices.

And finally but most evidently they have tended to change the external elements which

individualize the different dwellings as window frames, specially in the case of detached housing with different sheds over the porch and significant alterations of the entrances.

These changes are specially evident in those cases where the dwellings were completely conceived on a drafting table and considered simply as designing problems. And, consistently, less significant wherever they were assumed as open, uncompleted designs that could easily suffer the "aggression" of their own users.

This particular point brings out the old issue of "intellectual property" and particularly the discussion about its being applied to architecture. We can take as an example the settlement in Fuencarral A which has suffered just minor alterations in the outside but interesting inner changes which we will subsequently analyze.

The neighborhood units

The districts we are about to analyze were built in an specially significant period of Spanish architecture. Between 1954 and 1958 works began in those of Fuencarral A, B and C, Batán and Caño Roto. In 1963 Hortaleza, Juan XXIII and Almendrales began to be built and the previous ones were finished. In 1966 they were all finished.

The three projects at Fuencarral were all very quick projects (they had building periods of just two years); the works in Almendrales and Juan XXIII lasted for a sensible period of three years; in Batán and Caño Roto, though, the building period was prolonged up to six years. The speed record was obtained by the Hortaleza project with just two months.

These evident differences can be understood as the result of different aims and modes of operation in the diverse projects. This particular diversity will permit us having a broad vision of the Madrid's official architecture between 1954 and 1965.

We will study seven cases in chronological order and taking in account its geographical proximity.

Two of them belong to the so called Absorption Settlements (Fuencarral A and B); three are Controlled Settlements (Fuencarral C, Caño Roto and Almendrales); there is one Neighborhood Unit (Batán) and another Absorption Neighborhood Unit (Hortaleza) (43).

FUENCARRAL A (1954-1965) Architect:

Francisco Javier Sáenz de Oíza

According to Flores and Amann, "among the different social housing developments built in Spain after 1939, this particular project can be considered as the founder of a new epoch in which it would be seen as a reference. Its architecture is specially sober and rigorous but the evident economic restrictions probably overshadow to a certain extent its intrinsic quality. In any case, the clarity of its structure and the sensible formal solution make of this project a reference for the Spanish architecture of those years. The urban design aspects, though, are not so developed as the rest of the elements within the project" (44).

In L. Moya's words we are in front of "an architecture which tries to look as conceived by popular inspiration, with its detached houses which will help rural men to install themselves in a city". We should not forget

here the supposed aims of the absorption settlements' policy.

There is not a main urban form. The district is the result of the location of the different Unités d'abitation over an orthogonal grid (unrelated to the site's profile as well as to the pre-existing roads). The district is, rather clearly divided into two parts separated by a central road. The eastern sector has a large central space possibly intended as a public square. Neither has the western sector a more definite form. The setbacks produced near the western bound of the district and the rotation of the buildings' orientation to the north are, nevertheless, the result of taking into account the site's contour lines what, to a certain extent, breaks the basic grid (a rupture that is also present in the other sector's northeastern block). To the southwest of the district, we are left with a triangular lot which is intended to be occupied by a school.

The total number of dwellings comprises a similar amount of single family houses and block flats. The first ones (60%) are two-storey houses with a rear court, the later (40%) build four-storey blocks. Both types are intermingled without any apparent organization. The only criteria used by the designers seem to be those of sunlighting (low houses to the south), creation of a definite lateral boundary by means of the four-storey blocks and the location of some of these blocks in the significant centers as a way to distinguish them.

According to Flores and Amann, the district's urban concept was clearly not as developed as the architectural design. It was a kind of experiment that tried to offer a new vision and break with the old images.

It is easy to notice how the single family houses are left in the inner part of the unit. Open spaces are not properly treated and therefore cannot provide a meeting place for the people of the district. They are also rather out of scale. Community buildings are rather scarce, as the district just counts a church, a school and a nursery.

The land occupation is as follows: housing, 29%; other buildings, 2%; private open areas, 16%; public spaces, 48%; roads, 5%.

FUENCARRAL B Architect: Alejandro de la Sota

It is a small nucleus in which, as it happened with Fuencarral A, the idea of absorption settlement is understood as an excuse to offer the image of a rural architecture. In this case, moreover, the overall arrangement intends to be much more organic. Regarding this particular point, we cannot forget Sota's labor in the INC and his collaboration with this institute in various projects for rural areas (45). We will even find, in the single family houses, the profile of Vegaviana village. But the good intentions of the architect, here as in Fuencarral A, must overcome the difficulties of incredibly low budgets.

The district's overall form is somewhat lost (48) for different reasons. First of all, there is a visible unrelatedness between the blocks and the houses. These, form little groups as in a real village, but the higher buildings must be setback towards the district's boundary and present a peculiar design of the accesses. The intention of defining an inner area segregated from the exterior is rather clear and it is a repeated

element throughout the project as it is also present in the idea of the houses before a public space.

The blocks are mainly orientated towards the inner side of the district while the single family houses are distinctly arranged around their inner courts. But it is significant to notice that the open spaces are not residual areas but, on the contrary, create a carefully designed atmosphere of collective space, at least in the streets limited by lower houses. This is probably possible thanks to the fact that the "disorder" is left inside (47) and, thus, the outside areas are seen as unchangeable. In this sense, it is also significant the importance of the open spaces' scaling which facilitates that each neighbor take care of the part nearest his house.

The building types (rather similar to those used in Fuencarral A) are as follows: two-bay, four and five storey blocks and two storey single family houses. Community buildings: church, school and nursery (none of them by Sota).

The land usage percentages are: housing, 22%; other buildings, 1%; private open areas, 11%; public open areas, 51%; roads, 15%.

The inner roads just give access to the district what makes of it a quiet area in which it is easy to park a car. The unit is surrounded by more general roads and is, therefore, rather isolated from other nuclei. The community buildings also appear as isolated from the housing groups.

FUENCARRAL C (1957-1960) Architect: José Luis Romany.

It is a Controlled Settlement located very near to the Absorption Settlements of Fuencarral A and B, which fact, makes possible to establish a comparison between both types of social housing. The formal image of the nucleus is the result of the volumetric simplicity of the dwellings, the unity of the design and the use of definite materials and building details (from the fiber-cement roofs to the exterior galleries which became almost a symbol of social housing architecture).

The rationalist use of space as it appears in the plans is also visible in the district's profile, this is particularly apparent thanks to the land's contour which permits interesting and clarifying views of the whole unit.

A completely orthogonal grid with no relation whatsoever with the contour lines is used in this case. But the monotonous results of this arrangement are minimized by the sensible treatment applied to the land discontinuities, the clear use of materials and the volume composition which, even making use of just a few building types (two-bay, four and five storey blocks and two storey terrace houses), achieves specially attractive spaces.

Regarding the road distribution, Flores and Amann say that (48): "the settlement has a main problem in the roads' arrangement as general traffic penetrates it. There are also some negative aspects present as the excessively closed spaces surrounded by high blocks. The adaptation of the single family houses to the land contour is a good choice as well as the care with which its architecture is conceived. The attractive glass covered market places, a work in collaboration with the architect Enrique Miguel, are also an interesting element".

Luis Moya describes the road system thus: "A ring road which is also a direct

access for the blocks located on the boundary and indirect (by means of cul-de-sacs) to the inner blocks. Two penetration roads beginning in this ring road. Community services in the center (49)". The same author, talking about public space, asserts: "although, they are not completely paved, the pedestrian walks are. Vegetation contributes to the settlement's pleasant atmosphere almost as much as the absence of cars which remain in the ring road".

There are, nevertheless, some large areas left which, originally intended for community buildings are now just residual unoccupied lots and which seem to degrade the otherwise lively atmosphere of the settlement. The visual and physical limits of the district are rather definite to the north and west due to the land's contour and to the south due to the adjacent highway.

Community buildings: a school, three market places and 135 shops in an excellent covered shopping center.

Land usage: housing, 27%; other buildings, 3%; private open areas, 6%; public spaces, 59%; roads, 5%.

BATAN (1955-1963) Architects: José Luis Romany, Francisco Javier Sáenz de Oíza, Manuel Sierra.

The image of Batán's Neighborhood Unit (or Our Lady of Lourdes) is absolutely transparent, in plan (limited by Extremadura's Highway, and the large green area called "Casa de Campo_") as well as in volume (due to the use of high towers which draw a neat skyline).

It is located in a piece of land previously exploited for agriculture and which occupies a vantage point from which the "Casa de Campo" and the whole city are clearly visible.

The significant architectural level of this settlement has granted it broad recognition, mainly because of the use of higher blocks which makes of this district a really urban proposal, not as the ambiguously rural designs present in previously mentioned projects. This fact, together with the sensible use of low maintenance materials, the intelligent arrangement of open spaces and adjustment to land's conditions have made of this projects a perfectly preserved unit. Moreover, community services are better and more abundant in this district than in other social housing developments.

It is to be notice that, in this case, the developer was not the O.S.H. but the Employee's Home.

The very authors of the project give us some clues about these particularities (50): "Segregation of traffic from pedestrian paths. Creation of civic spaces designed for man, quiet areas in which it is possible to erect the house of man just by the green zones, before Nature."

These authors reject the Regime's rhetoric and talk in the language of the great masters. Let us see what they say about zoning:

"It is a consequence of the mentioned idea of the perimetrical block conceived from its inner court with just one access from the main street. An ideal solution. The unit is thus divided into two main zones: the civic center and the dwellings. The later presents three categories (four, five and twelve storey) depending on its particular location mainly

taking in account the views over the "Casa de Campo".

They describe the center of the district in the following way: "It occupies the center of the nucleus. It has three main functions: religious, the major one and therefore dominant; commercial, occupying adjacent spaces but without interfering, and cultural, even more linked to the first one and located in the most quiet corner, the most green, looking over the "Casa de Campo."

"The commercial and entertainment area is located towards the road, as it also holds a noisy activity. Nevertheless, it looks over the district and has no direct relation with the traffic."

"The three sectors of the center present public squares just for pedestrians independent from the nearby roads".

Regarding the dwellings, the authors mention that "the structure of the district tries to create quiet zones for the location of the dwellings, surrounded by green areas and segregated from traffic problems. By means of easy inner connections, they are linked with the civic center and the parking lots, located in strategic spots of the district."

Traffic is analyzed in the following way: "We have two types of traffic: automobiles and pedestrians. The first one divides into general traffic, surrounding the district by means of a ring road and local, inner circulation."

"There is just one way to get to the civic center's parking lot which is even prolonged through the land's depression up to the rear part of the block. A branch to this main road connects it with the byway surrounding the Casa de Campo and leading to the future subway station. The mentioned main road presents roundabouts and parking lateral spaces. Public bus circulation would be channelled towards the inner part of the district without interfering the road traffic. An exterior parking lot would be solution for the vehicles not pertaining to the district".

Regarding the green areas, their commentaries are: "The plan includes a series of significant green areas. On one hand the lines of trees parallel to the perimetrical roads and occupying at least a depth of twenty meters protect and isolate the dwellings (distance from the facades to the road axis is, in any case more than 30 meters). On the other, the green zones in streets and squares by which pedestrian walks develop.

Finally, we have the large green triangle just by the church's civic center, which would be used as a playground for the nearby schools and which opens itself towards the huge green mass of the Casa de Campo."

This is probably one of the first attempts, among the mentioned districts, to incorporate to the design the poetics of the modern movement, arranging the different parts in a somewhat organic manner. Time has been generous with the authors. The open spaces are well proportioned in relation to the built masses and the atmosphere achieved is rather pleasant also thanks to the buildings' textures and materials which present a perfect combination.

Two types were built: double bay, five storey blocks and 12 storey towers.

Community buildings: school, state grammar school, church and shops, all of them arranged in such a way as to be the center of the nucleus' life.

Land usage: housing, 14%; other buildings, 4.5%; private open areas, -%; public spaces, 68.5%; roads, 12.9%.

CAÑO ROTO (1957-1963) Architects: Antonio Vázquez de Castro, José Luis Iñiguez de Ozoño.

A Controlled Settlement which represents the apex of a process and the starting point for a new decade. After Caño Roto nothing was ever the same in Spanish social housing. Flores and Amann's opinion, expressed in 1967 is still perfectly valid (51):

" Spatial and volumetric richness. Small exterior areas which are singularly pleasant and efficient. A wise segregation of the larger spaces from the tiny streets leading to the two storey houses. A canny use of the land's pitch as an element of design. Temperate architecture in color and detailing. A good solution of working details as drying rooms, canopies, block numbers etc... Careful landscaping which proves that this is not an impossible aim for economical housing developments as long as it is prudently selected and located". "The significance of this project is due to its innovative intentions as it breaks with the traditional arrangement of the blocks trying to look for a higher urban quality of the open spaces." "The variety of houses' plans is also to be noticed (12 types). Among which we can mention as the most interesting one the two storey type with a court and a

The image of Caño Roto is somewhat fixed in our minds thanks to its abstract character which makes no reference to something pre-existing but is just based on the exactness of form. The composition, mainly based on the rectangle defined by the sliding blinds becomes a subtly changing element as a way to establish some link with the experiences of the Constructivist avantgarde. However, as Fullaondo used to say (52), the main influence in Vázquez de Castro and Iñiguez de Ozoño's project is that of Neo-Empiricism as they somewhat break with the previous period, that of Oíza and Romany, in search of a greater diversity, a smaller scale and lower density with which they achieve a more vigorous design.

The image of the Spanish cheap house was destroyed by this project in which the solutions employed are as neat and brilliant as never before. It was probably the first time that the architects of a project came to live in the site; and this is probably the reason why their work became so sincere so much like a personal service to the community. For the authors it was a personal experience in which they tried different types, forms and arrangements. This can explain some of Carlos Flores' inquiries (53):

"If we should mention a particular fact about Caño Roto's project, it seems rather amazing that, once appeared, it was not as influential as should have been. Why did these architects, just graduated and so young, not follow the established tradition? How did they happen to be able to establish a link with a living tradition without at the same time falling into Picturesquism? These facts are difficult to explain if we take into account that the authors were beginning their professional careers after a poor and incomplete education as was that of our

Schools. It is necessary to admit that Caño Roto is a proof of mental maturity (not just architectural), rather amazing in such young authors. Caño Roto is first of all a project presided by a solid idea, balanced, coherent and realist. We will not find the brilliant architectural practice typical of young professionals, but something more mature, grounded and logical."

"Regarding the lack of continuity, we must admit that it is rather astonishing. Caño Roto is an excellent work and it is exceptional in more than one thing. Everybody asserts its merits and virtues. Very few works have been so much admired in Spanish late architecture. However, and rather paradoxically it has not been imitated, nor even assimilated nor followed. It is currently renowned and celebrated but nobody seems able to learn its lesson."

The possibly excessive use of the cubic form is balanced by the variations of the land's contour and, if it is true that the absence of a definite center is not at all solved by the peripheral and massive school, the very rhythm of the outer groups of houses built in a later stage somewhat avoids such a necessity. In relation to these dwellings, Moya says (54):

"We consider this district a real model among those promoted by the State. Urban design is sensible. The open spaces are carefully studied and we can ascertain that they are currently being used."

"The system of half-closed spaces succeeds in creating pleasant spots curiously facing towards the neighboring units. Commercial buildings are well located. Vegetation, though scarce, is well designed for an easy maintenance and carefully located."

The roads' system is a bit complex, with a central artery which divides the district into two sectors, but taking in account the project's size this is not a real problem. The visual union between the controlled settlement and the older absorption district (with the same name, a project by Laorga) tries to overcome the formalistic differences. The different textures and colors coincide with volumetric changes and the rupture is aesthetically valid. The extensive variety of dwellings (12 in the settlement and two in the outer groups), makes possible that the total number (1900) should not seem so high. Community buildings, though, are not enough: just the school and some commercial buildings (119 shops). Land usage is as follows: Housing: 36% Other buildings: 1% Private open areas: 14% Public open areas: 31%

HORTALEZA (1963)
Architects:
Francisco Cabrera,
Lucas Espinosa,
Fernando Higueras,
Antonio Miró
and Arturo Weber.

Roads: 18%

In this Absorption Neighborhood Unit (UVA), the urban form is a consequence of an architectural image. The complete occupation of the land by a module-housing block is the base of the whole arrangement. The basic unit is obtained by placing the block parallel to the site's contour lines. The

unit defines residual spaces which are, subsequently, occupied. The block's dictatorship does not leave any place for the expression of the form of the land. Common spaces are somewhat included in the dwellings by means of making galleries and corridors out of them. Public areas become auxiliary spaces to the private ones.

This spaces are mainly occupied by stairs and terraces due to the land's pitch which becomes a main design factor. Vegetation justifies this arrangement.

The architectural form is, on its part, based on the premises exposed in the project's written documents. The use of a module, technological and economic factors, result in a linear housing scheme. The module is used in the obtention of all the dimensions in the house, the bedrooms, the kitchen-bathroom and the vestibule-living-dining room.

The necessary prolongation of the house becomes Hortaleza's leit-motiv. The corridor-street which leads to all the dwellings is conceived as a balcony over the public street, as a meeting point and as a filter between private and public areas. The plants placed in these galleries, the railing and the composition of the amazingly thin pillars are the very elements of the facade: bars, vegetation and air.

The light quality and the transparency of the perimetrical gallery contrasts with the rigid rectangular block which could be infinite and which has no special solution for its extreme, except the roof over the ends of the symmetric blocks, a device later used by Fernando Higueras. I will go back again to Flores and Amann's commentaries:

"This project, which includes 1100 social houses, succeeds in creating a pleasant atmosphere with rather limited economic means."

"Most of Spanish "economical" housing developments, even those which had some architectural value, were mainly characterized by the image of poverty, It seems as though the architects would like to make the dwellers remember continuously that they belong to the lower levels of society. The Hortaleza Settlement is just the opposite to that oppressive and stern architecture. Anyone can realize that, in spite of the economic restrictions, the authors have achieved a really significant urban scene. It is not a matter of concealing, with flowers and terraces, a lamentable reality, but of providing the inhabitants of the social houses (surly too small and not very comfortable) with a nice environment in which they will be able to live a better life."

"We believe that, above any other thing, this is the most significant positive feature of the district."

The road structure divides the unit into three areas surrounded by perimetrical routes which leave the buildings in the center. Community buildings are: the church, the health center, the school pavilion and commercial buildings.

The building type used is the linear two storey block with access gallery and an inner court between symmetrical blocks.
Land's usage is as follows:
Housing: 25%
Other Buildings: 4%
Private open areas: 7%
Public open areas: 49%
Road system: 15%

ALMENDRALES (1963-1966) Architects: Javier Carvajal, José Antonio Corrales, José María García de Paredes and Ramón Vázquez Molezún.

The Almendrales Controlled Settlement is based on the recurrent use of a neat and visible module, really identifiable thanks to its profile typical of north light roofs and enhanced by the rhythm of fenestration. Texture and color unify the open blocks which have no intention of enclosing the inner space defined by them. Their relative locations create a somewhat blurred space (56). This is also due to the triangle shaped lots defined by the road system. The settlement is not isolated from the adjacent urban grid but it is easy to identify because of its general arrangement, mainly based on sunlighting criteria.

Public spaces are, probably too elongated but the buildings' setbacks together with vegetation define interesting landscaping effects. Community services are properly located within the district.

The main housing type is a five storey block, which appears either isolated or attached to a similar one. But there are also some singular housing buildings, as an eleven storey tower, a block with access galleries and a special boundary block which closes the district to the North. The different architects designed particular elements but they tried to maintain a common criterion. Land's usage percentages are: Housing: 22%
Other buildings: 16%
Private open spaces: Public open spaces: 49%

Road system: 13% The Dwellings

The starting point in the definition of this type of social housing is, obviously, the area occupied by each of them, its plan. That is, the main aim is to achieve a total area in which the common square meters would be the minimum possible. In the same way, inside the dwellings, the secondary spaces are usually avoided in order to enlarge to some extent the main rooms. Functional analysis of these projects should take into account the minimum requirements of this type of housing. In the same way the technology employed is a consequence of the difficulties of a particular historical period in which architects could do little more than have good intentions.

Finishes and maintenance criteria, usually a fundamental factor, become in these projects something accessory as the main problem is how to keep within budget. The main design problem is, therefore, the election and definition of the housing types. The question is how to fit the minimum requirements of the different dwellings into a compact form. The first models used were those derived from the international rationalist architecture, specially those developed in fascist Italy which had been divulged by means of treatises and other types of propaganda and which were the perfect source for that particular period of Spanish architecture in which Republican rationalism had been proscribed (57).

But the labor of the architects which we have selected proves the exaggeration of Pawley's slogan "architecture versus mass

housing" and we can say without trembling "it is architecture anyway".

The dwellings in Fuencarral A have become somewhat obsolete with the years. We can, nevertheless, make some reflections about the types designed by Oíza. First of all, the two types, the two storey single family house and the four storey block are both based on a 3.5 m. x 3.5 m. module which determines the arrangement of the plan (width of interior street: 1 module; building's depth: 8 modules; facade's length: 4 modules). This results in a certain monotonous quality of the design probably intensified by the limited economic means. The advantages and disadvantages of the rigid use of modulation are perfectly visible in this project (58). For example, the long lines of terrace houses with no setbacks together with the quality of the construction make of the district the typical image of "cheap", "humble" housing. The same happens with the oversimplified four storey blocks organized around the two flight staircase whose landings look over the street and which more than anything else enhances the bare character of the block which has no accidents on its external surface.

The design of the four storey block is obviously determined by the economic restrictions. The minimum requirements are strictly assumed as the only possible and the dwelling's total area is reduced to the indispensable. Corridors, vestibules and other auxiliary spaces are eliminated and included in the main dining-sitting room in which the different functions occupy diverse corners, the cooking corner, the sitting corner, the sleeping corner etc. However, if we accept this data: main bedroom: 8 m2; double bedroom: 7.30 m2; bathroom: 2.45 m2; kitchen: 2.15 m2; dining-sitting room plus vestibule and corridor (sometimes even including a third bedroom): 14.52 m2, Oíza's solution is almost a perfect one: a central axis with the bathroom on one side and the bedrooms to the other. The mentioned exterior landings of the staircase are also used as common balconies, a meeting point for the neighbors, not only because of its privileged location but also because it is the only place inside the building in which it is possible to enjoy outside conditions.

The most significant dwellings at Fuencarral B are the single family houses in which Sota tried to make his best in order to create the minimum conditions for privacy in such an incredibly reduced area. The typical problems of minimum housing are even more acute in this maisonettes. In this case, the author did not make use of the Rationalist tradition but tried to work within popular poetics. In any case the lack of space is visible in fundamental points as the interior staircase or the windows which are like ventilation slots. The building system used in Fuencarral A and B is based on traditional brick bearing wall but its effective realization is not even conventional. Fiber-cement roofs and outer plastering and painting makes rather easy for the users to maintain their own houses

As in Oíza's settlement, the rooms must assume unexpected uses as a consequence of the lack of space.

Some building details typical of rural architecture, as the window/access door made of this settlement a project with a somewhat ambiguous image. It is to be noticed the care with which the fenestration

and the facade's proportions are designed. In fact, the popular character of the project is just something superficial.

Construction difficulties, as in Fuencarral A, were so important that the completion of the project was threatened. But, finally, this is only visible in interior details.

In the blocks, the most characteristic detail is probably the exterior staircase which has lateral openings and a closed semicircular landing and which should appear as an sculptural element. This character, though, is somewhat lost because of the deficient realization of the project. If Sota had continued designing social housing, I am sure that we would have now more accurate examples by him than those of Fuencarral B. One just has to take a look at his later interesting work.

José Luis Romany's dwellings at Fuencarral C belong to two basic types: single family houses and blocks of flats. In both models the author used a series of materials which became almost inevitable in Spanish social housing. The fiber-cement of the roof is also present on the blind lateral walls which define some open areas. It acts as a rain screen and reduces the massive aspect of the blind wall which could be excessively monotone. The use of exterior sliding blinds (most of them replaced nowadays with rolling blinds) create a changing image of horizontal character which was also present in Caño Roto. A characteristic detail of the block of flats is the type of window used in bedrooms, short and elongated, which unifies the rear

The most apparent textures are those of the light colored brick, the exterior sliding blinds and the fiber-cement elements which create striped surfaces which enhance the linear quality of the different surfaces. The dark glass' windows and the metal frame of the carefully designed glass pane between the dining room and the terrace are the only singular elements in an image dominated by the mentioned materials.

The flats are paired around staircases and have a clear and well designed general arrangement in which the corridor is used as a division element between different zones.

The scheme of these dwellings is rather easy to analyze but it does not escape the disadvantages of the rigid bearing system. There is, however, a cunning use of the bearing walls as subtle modifiers of space which is worth mentioning. The rigidness found in the plan of the different dwellings is also present in the whole block's and it is just by means of the wise design of the facade's fenestration and textures that the architects succeeds in eluding this inconvenience.

In Batán's Neighbor Unit, the linear blocks have a similar scheme to those in Fuencarral C. But a simple change in the structural system (the bearing walls are, in this case, parallel to the longer side) permits the alteration of the proportions of the different areas inside the houses and the project is, therefore, much more flexible. The different dwellings include more spaces and there are some interesting solutions of corridors and wardrobes dividing them. As we are talking about isolated blocks, the lateral walls are, in this case, free and can bear fenestration contrarily to Fuencarral C in which they were always blind walls. The evolution between both projects is really significant.

The other type of flats, those occupying the tower, present two different arrangements, both embracing the staircase and vertical core in such a way as to take most advantage of an inverted symmetrical composition. Water supply tanks are located under the roof which is divided into structurally independent portions. This ingenious device makes of the roof a flexible element; a fact that, together with the facade 's varied fenestration (depending on the rooms concealed behind it) and some interesting details (as the setting back of the blind's cases to make the window appear as more vertical) makes of the project a somewhat dynamic work of architecture.

The use of different colors and textures in the diverse housing types enhances the project's visible richness apparently achieved with rather limited formal means.

In the towers, the authors did not feel ashamed to show the structural elements and, inside the houses there is always a free pillar which could be used to establish an additional partition (many users have taken advantage of this suggested possibility). The authors are clearly trying to build flexible schemes and therefore provide diverse elements which, although may seem to make the house more complex, are the starting point for rational alterations.

This housing development is incredibly well preserved surely thanks not only to the selection and sensible use of materials, but also to the existence of a much more reasonable budget.

In Caño Roto, there is an interesting variety of plan types which can be grouped into three basic models: patio-houses, two storey houses and flats.

The buildings included in Caño Roto's first stage are mainly light colored: from the brick to the sliding blinds (an important feature in this case) and the paintings over concrete and wooden elements.

The eaves' finishing is another characteristic detail of this project. The basic element in the facade's composition is the careful proportion used in fenestration which was in a first stage enhanced by the painting design.

The plans of these models are rather different. Patio-houses can be analyzed either as a development of some of Mies' schemes or as based in Oiza's solutions for experimental housing.

The type named 2A is a one-bay scheme with lateral bearing walls. The building s main facades look over the street and over a rear court. It is a two storey dwelling with a clear arrangement and excellent spatial quality.

The 2S type has more or less the same scheme as the previous one but, in this case the bay width is just 4 m. which means that the upper bedrooms do not have an adjacent bathroom. This is, therefore, placed on the ground floor, just by the kitchen and next to the facade. The kitchen is enclosed within the sitting-dining room. These houses form two rows with adjacent rear courts and front facades facing parallel streets. The types 2B and 2C are both L-shaped patio-houses, grouped in rows and lines. The ground floor is identical in both. Its bay width is 4 m. and the access is placed in the center of one of the wings of the L. leaving the corner as a facilities' block and dividing the plan into two segregated parts. Type 2C has three bedrooms on the first floor occupying just

one wing while the rest is used as a drying room/terrace. Type 2B's first floor also occupies half of the ground plan but in this case the terrace is not accessible.

Types 1D, 1E, 1F and 1G are interesting two storey maisonettes accessible by means of covered linear galleries. There is an external detached staircase which, every three storey gives access to the gallery. In each dwelling, the access floor includes the kitchen and a sitting room divided by a staircase which leads (upstairs or downstairs) to the bedrooms floor. Each bay is, therefore, shared by the ground floor of two maisonettes. The bedroom (upper or lower) floor includes three bedrooms, a bathroom and a drying room. The area dedicated to drying is possibly exaggerated and the central position of the staircase results in flawed circulations. This ingenious solution for the maisonettes is perhaps too complicated. Type 1A is rather similar to that described for Fuencarral A and C and Batán and, in fact, so many other developments. We are talking about a symmetric block with central staircase. However, in this particular case, the careful design of accesses and corridors achieves interesting solutions. Again, there is a kind of obsession about drying rooms. Types 1B and 1C are the corner types for these blocks which become rather intricate. In a second stage, some blocks were built which had a starshaped plan.

They include three flats per floor placed around a triangular staircase whose landings are the flats' vestibules. Each dwelling is, therefore, almost independent. The shape of this vertical core permits an interesting solution for the semi-closed courts used for drying.

The plan of each flat places the different rooms around a nucleus of facilities. Kitchens look over the courts on the access side and bedrooms and sitting rooms face the street. The clarity of the idea and, at the same time the richness of the relationships between different spaces together with some interesting working details make of these buildings excellent examples of social housing.

Exterior finishes are, is this case, rather different from those used in Caño Roto's previous stages and on the contrary much more close to those visible in the nearby school. The red faced brick and its bond are impeccably understood and the authors prove themselves real experts in the possibilities of this material. The location of drainpipes closing the courts and the use of grilles protecting the ground floor terraces are also astute details.

In Hortaleza's project, the building system determines to a certain extent the exterior appearance. Traditional methods were employed with new, non-conventional (in 1963) materials. The aim was to explore the possibilities of demountable elements (as was initially required by the official commission). But paradoxically the use of certain conventional solutions and traditional materials seemed to aspire to permanency.

Partitions are thus built in traditional masonry while prefabricated panels are avoided. But the roof is made of fiber-cement sheets with suspended ceilings of wood shavings mixed with cement board underneath. The project details, though, showed a metal sheet that would be replaced with traditional ceramic tiles.

The plan of the dwellings is based on identical bays between structural lines. The absolute simplicity of this scheme can be understood as absolute flexibility. We obtain, thus, a container in which the only definite element is the nucleus for facilities. The prolongation of the house by means of the access gallery, a device which was used in many of these projects, is, in this case, a most significant element. This space, midway between the street and the private areas is an evident formal filter and one of the most interesting architectural contributions of the period.

The dwellings built in Almendrales' first stage were designed by Corrales and Molezún. The programme is the typical one for houses of three or four bedrooms located in a tower around a vertical communications core. But unlike other tower projects, this one is mainly concerned with orientation and this particularity determines the building's plan and silhouette and the location of the different blocks in the district. Thus, the different facades present successive setbacks which create a rather dynamic image. It is obviously rather difficult, with such a restriction to have rooms which have a correct size, but the authors proved themselves rather resourceful in their design.

However, there are some dubious spaces which are the result of the necessary use of the sitting room as a passageway. The rich texture of the brick together with the dynamic quality of the resulting volume produce a powerful play of light and shadows which differs from what we have seen in other projects.

There is just one type of dwelling but the addition results in an interesting variety. Carvajal's linear block presents again the mentioned galleries but in this case the particular solution is fairly natural and unaffected. Not like Corrales' design for the district's last stage, closing the unit to the North in which the different rooms occupy rather narrow bands. The most ingenious and complicated solutions can be found in these blocks which present a highly interesting plan. Again, texture and color are one of the main elements of the project.

Community buildings

Once the houses built and the people relocated, it was usually necessary to begin the construction of complementary buildings. The aim was to provide the new districts with churches, schools etc. But most times these came rather late and were insufficient from the beginning for the neighborhood needs. In less than a few cases there was more than a church and a school.

Of all the possible community buildings, these were precisely, in the minds of the promoters the most necessary to maintain their control over the population.

They were singular buildings segregated from the housing project and sometimes commissioned to different architects. Of all the singular buildings designed for the mentioned housing developments, we analyze Almendrales' Parish Church and the school for Caño Roto, not just because of their intrinsic quality but also because of the interesting relationship they establish with their respective nuclei of population.

Both try to define their own territory within the district. One of them in a subtle and indirect way, the other with energy and

decision. It is visible in both the intention of the authors to transcend everyday life by means of new spatial experiences.

Almendrales' parish church was designed by José María García de Paredes. It is a work in which religious symbolism is as important as formal considerations what has made of it one of the Spanish most characteristic buildings of that period.

The architect explained his design in the following way: "There was a high tension cable crossing over the lot, besides we had to establish a set back because of the nearby Andalucía Highway and also had to make room for a future nursery. All these conditions forced us to divide our programme into two separate buildings. The first one would house the church and its services and the other the parish' dependencies. Both were linked by means of a covered porch under the mentioned high tension cable. The church, the parish building and the porch define a cloister opened towards the East which is like a previous space to that of religious experience." (59)

In spite of the detached character of this account, the building did not avoid religious meaning.

In fact, the Almendrales' parish church became a significant reference for Spanish religious architecture from then on.

The church as a container; the religious, isotropic space; the use of a module in the design; all these are somewhat concealed in the architect's account:

"... we should not forget that the faithful are not just "seeing", "listening" or "attending" the service; they participate in liturgy as a community."

After his explanation about the reason why he has not proposed a traditionally orientated space for the church (economic and technological, but also a personal formalistic choice; just remember the preceding Cuenca's contest in which he was already advancing some of Almendrales' solutions), the architect presents the building's idea:

...a cellular space in which the structure is supported by many thin columns emerging from the very people and which materialize the "ecclesia", the "assembly's place". The church is conceived as a large container in which the different traditional parts (narthex, baptism chapel, choir and chapel) are located without breaking the flowing space. The space is subdivided into autonomous parts by a steel structure which supports a rather light roofing and skylight. The basic cell is repeated up to fifty-one times and, in each case, it contains all the functional elements of the building". "An autonomous element which builds an space by means of addition allows us to design a church that, depending on the case's particular conditions, could be as large or as small as we may think convenient. It also admits construction in stages and any enlargement at any time."

González Amezqueta's account of this project mentions its: "uniform space" which has no privileged direction and in which all the container's inner extension, and not just a focal altar, expresses the total space shared by the community. An architectural conception that, in my opinion is completely different from the dynamic space of Miguel Fisac's churches and which expresses rather better the sense of a gathering community". "It is clear that the intention is to promote the

idea of a shared service more than that of individual devotion".

Amezqueta makes the following interesting analysis of the building's achievements:

"In the Almendrales' parish church, the use of a repeated structural unit (the skylight) has a double function: to achieve an spatial uniformity avoiding, at the same time, the design of a structural feat, a large span supporting system with no intermediate pillars, which is the other way to obtain the mentioned quality."

"On the other hand some antecedents of the way in which the interior space is treated, of this purest spatial definition as independent from functional intentions, can be traced in other Spanish architectural works in which a global space is divided just with light screens or singular elements which impede a total perspective but which are not real limits to a flowing space."

"...in the case of Almendrales, this spatial decomposition achieved by the mass of pillars and the contradictory immateriality of these induced by their grey painting create a mysterious atmosphere, the real essence of a religious building programme, its most functional definition."

"In spite of its simplicity and clarity, the inner space of Almendrales' parish church creates a most stimulating, pleasant and humane atmosphere keeping, at the same time, a certain sense of monument which is not present in other examples of Spain's modern religious architecture."

Amezqueta's objections, however, are focused on the relation between the church and its "parish", because it seems to be conceived as a completely different and segregated space. "From the entrance, (it is not even visible yet, you have to "look for" it), you must go through a series of previous spaces which "accommodate" the senses to the subsequent spatial experience and which make you somehow forget the settlement's problems. The always descending access leads to the church space by means of a narthex creating a kind of route which leaves behind a remote district and which makes you encounter the temple as a final climax. In this sense, the church is almost a convent, a retreat more than a parish church for a housing development. And from the civic point of view of urban design it does not suit the supposedly integrating function of a Spanish parish and is better understood as an isolated place for religious service"

The external aesthetics of this project is one of its most interesting achievements from the point of view of architectural significance but isolates even more the church from the settlement. Its austere and somewhat dull appearance expresses this isolation and besides its structural and symbolic language has nothing to do with that of the houses which is more or less uniform throughout the settlement. In our opinion, the Almendrales' parish church is, above all, a singular building, rather expressive in itself and which defines its own premises; it is, without doubt, the best architectural work in the whole settlement; but perhaps it should rather be "part of the settlement", moreover, a determining part for the whole development."

Amezqueta's account is, nevertheless, rather positive and concludes by pointing out that: "Almendrales' church is one of the better and more carefully designed examples

of Spanish modern religious architecture"

The Parish Church at Almendrales is a small building compared with Caño Roto's school, by the architects Iñiquez de Ozoño and Vázquez de Castro. Its large size is precisely one of the causes of its many particularities. Taking into account that Caño Roto's district is composed by small units, the enormous bulk of the school is something rather visible and, thus, its relation with the houses is somewhat blunt. The architects decided, in this case, to enhance the size of the building instead of trying to divide it into smaller volumes. They designed a clear unit concentrating the building's programme in a four storey volume enclosing an inner court.

The overall form is somewhat similar to the traditional image of a fortress/monastery, with a very closed exterior facade which is only broken in the corners and the singular access ramps which recall a medieval drawbridge.

The complete segregation from the rest of the district is clearly expressed by the external wall

The architects decided to have the ground floor semi-interred in order to diminish the total height of the building which could have been excessive as compared with the average height of the

houses. The successive floors are set back with respect to the lower ones in order to have the outer galleries sunlighted and the result is a bulky building clearly settled on the ground and with powerful shadows provoked by the setbacks. The facades are rather massive and fenestration is scarce. This solid quality makes of the school a somewhat aggressive and hermetic building, in spite of the careful detailing of the vertical surfaces, the texture of the brick and its overall dynamic appearance. The complete disconnection between the outer and inner spaces is not improved by the singular details as the covered exterior elements or the complicated circulations. A rigid division of the building into different areas and the simple linear development stand in contradiction to the specialized details which try to complicate the solution.

The school is probably conceived as a urban design problem in which the main aims are zoning, traffic segregation, creation of a certain amount of public spaces an the establishment of a compact in/out relationship; and, in fact, these conditions succeed in generating an interesting and uncommon building, with an amazing play of light and voluntarily long circulations. The architectural accomplishment of the proposal is, nevertheless, quite questionable as its outer appearance, its relation with the adjacent district is not at all satisfactory.

From "existenzminimum" home

Manuel de Prada

Minimum housing in post war Spain

From the end of the Civil War up to the last years of the forties decade, it is impossible to find any relationship between the Spanish architectural proposals to solve the "housing problem" and similar experiences within European avant-garde. The urgency of the political power to control the situation by means of manipulating the public and private life, made of any other issue that would not just be a basic recovery of the National sense, something that could be easily postponed or even ignored.

From that moment on, however, there were a few isolated attempts to go over some previous experiences, mainly the German studies on the definition of the "minimum housing unit". The most important among these efforts was the publication by the "Revista Nacional de Arquitectura" of the article "A contribution to the housing issue", a translation of an Alexander Klein's text, "Probleme des Bauens", previously published by the "Revista de Arquitectura de Buenos Aires"

Four years later, the "Cuadernos de Arquitectura" magazine made a monographic issue on "The housing problem". The aim of this issue was to take advantage of the impact of a contest organized by the C.O.A.C.B. in order to state the minimum conditions required by Spanish houses. But the discrepancies between the results and the sought for models were rather evident: certain ideas, clearly influenced by their own historical context appeared suddenly within a

completely different social situation and inevitably these same ideas were transformed and reinterpreted according to their new context. In the Spanish case, it was not possible to make just a slight adjustment and therefore a sort of metaphysical transformation of the contents as well as the forms took place.

It is nevertheless difficult to understand how it was possible to use Klein's study in this particular context; a context in which architectural magazines only published projects in which the main characteristic was the use of "genuine Spanish forms and detailing".

The answer is not an easy one and very different approaches are surly possible.

On one hand, the supposed scientific character of the study made possible that it would be considered a general theoretical approach to the matter with no real connection with Spanish "National" interests: Klein's statements about the problems of minimum housing had been, in fact, the result of an objective investigation with no previous hypothesis that just managed supposedly scientific data and whose methods where rather similar to those of statistics. Moreover, "Probleme des Bauens", was published as a separate brochure, with a different paper and with no introductory remarks. Two goals were achieved thus, the article remained as something independent from the contents of the magazine and, at the same time, it was presented as a document that should escape polemics.

On the other hand. Klein's study came to fill an important gap as Spanish post-war architecture lacked any theoretical basis.

The subsequent challenge was, therefore, how to apply the study's conclusions to the "urgent housing problem" in post-war Spain.

Klein's "existenzminimum"

While in Spain, the repeated use of National motifs was undermining the very character of architecture as a separated art, in Germany, after three decades of progressive abstraction in arts, there was a clear need for a completely new theory of artistic values.

In Klein's case, the starting point or "zero" for his investigation was the conception of the perceiving act as a fundamentally psychological fact.

The problem was, therefore, how to define the necessary features of spaces and forms that were to be somehow beneficial for the observer. Finding a theoretical basis in the experimental and visual principles enunciated by the "Gestalt" psychologists, Klein expounded what he considered a universal law that could be used in designing housing units. This law could be something similar to the following axiom: man is satisfied by the contemplation of "comforting spatial effects".

According to Gestaltic theories, an equilibrium of forms appropriate to the very physiological properties of the eye, makes easy for the brain to built a complete and satisfactory image of the object. To obtain or design these "comforting spatial effects" will be the first condition in order to avoid any possible "unnecessary shock" in the future user of the house, any exaggerated spatial emotion that would be disturbing and provoke a useless strain of nerves

The "comforting spatial effect" was for Klein the expression of equilibrium and normality. On the contrary, a "disturbing spatial effect" would just result in worry and uneasiness. Its reiteration, in excess and

Klein was, therefore, talking about a health problem (mental and physical health) that went beyond hygienic concerns. Klein even reinforced his arguments by quoting some "well known Professor Ziemssen" who, in the German Journal of Public Health, had mentioned the influence of "panorama" in housing design. According to this Professor. the "panorama", a large open space attached to the house, was a therapeutic element of the utmost importance that "not only does it act as something subjectively pleasant, that cheers you up, but it also stimulates, through the central nervous system, a therapeutic process which reduces the possibilities of anatomic deformations and helps the recovery of destroyed cells"

This type of argument, leaving aside the polemics aroused by them, had a curious effect in Spain as style questions were avoided. It is curious though, how someone as Alvar Aalto in one of the "Architectural Critical Sessions" celebrated in Madrid in 1952 (R.N.A. No. 124), defended his works using statements very similar to Klein's: Aalto justified the large openings in Viborg Library's conference room, by saying that the contemplation of the outside gardens would surly appease the speakers. (The curved forms on the ceiling had been, according to Aalto, defined by mathematical functions, in order that each guest could act as a speaker)

Klein's study as well as Aalto's critical

session, were examples of a clear determination to escape current polemics. Both renounced to strain their arguments too much and tried not have any conflict with other kind of interests.

Aalto, probably thinking about the consequences of civil war, advised thus Spanish architects: "a passionate antagonism between different theories and different architects belonging to opposed groups is something perfectly useless and even frivolous...It does not lead to any practical improvement and just creates violent hates".

Klein on his part always recommended "not to go too far in looking for a supposed objectivity as to completely eliminate architectural ornament in our houses...we should not restrain men from expressing their aesthetic tastes and individual feelings by means of these details"

Klein and Aalto tried to make clear that scientific and mathematical arguments were so clear and basic that they did not conflict with particular theories, tendencies and tastes.

One of the consequences of this attitude was, in Klein's case, the restriction of the minimum housing unit issue to the study of the plan. The plan was the measurable object which enclosed all the varieties that could be solved by means of mathematics.

And regarding the facades' composition, Klein did just established one fundamental condition: each facade was to be subordinated to the whole arrangement in such a way that they would form a superior unit. To make it clear, he added: "now that the fundamental principles of visual quietness within a city have been discovered...architects do not have any excuse to built a sensational architecture that would make a house completely different from its neighbor one"

His renouncing to dialogue, his "quiet discretion" are almost a direct application of Franz Rosenzweig sentence: "The tragical hero has an only way of language that is appropriate to him: silence". Serlio's "tragical scene" of the city could be, thus, considered a precedent to Klein's "comforting effect"; in the same way, a "comical scene" would be a precedent to the "disturbing effect".

This option for the comforting effects over the disturbing ones could be also considered a consequence the 1914 debates between Muthesius and Van de Velde: standardization and the search for a definite type, stood for the first time as a counterpoint to the artist's free expression; a conflict that, according to Walter Benjamin, was clearly won by the "type" over the singularity in the "siedlungen"

In any case, this search for stable, universal and objective criteria in architecture had, as a natural consequence the renunciation to singularity. The essence of architecture would be found by means of an inductive, abstraction and generalization process, and this required abstention from "sensational architecture"

In any case, Klein, in a rather unconscious way, came to identify the minimum house with the ideal house. Economy and renunciation to singularity, together with that ascetic and austere approach required by the issue of his study, made him mistake essence with perfection and perfection with art. According to Klein: "A perfect form, that is, the consequence of an exact correspondence between means and ends, naturally tends to simplicity". I would like to make clear that for Klein economy was not a concept exclusively

related to a certain way to exploiting material means. It was in economic terms that he also justified the sought for reduction of emotional and nervous efforts (by means of comforting effects), reduction of physical efforts (by means of minimum itineraries inside the house) and reduction of intellectual efforts (by avoiding useless discussions).

And, if the perfect form was the most simple and economic, and if the work of art was identified with "everything that contains a certain amount of perfection", the conclusion is an easy one: simplicity, obtained by means of economy and austerity is the inescapable condition of works of art.

In this way, the architectural object called "minimum housing unit" inevitably acquired the category of a piece of art.

The contents of a minimum housing unit

Alexander Klein proposed, in his study, a series of concrete rules classified into four groups: rooms arrangement, dimensions, orientation and lighting and furniture.

Regarding room's arrangement, his main advice was to divide the house into two separate sectors: bedrooms and bathrooms on one side and living room, kitchen and terrace on the other. The aim was to favor the simultaneous use of the different spaces with no interferences between them

This general statement implied the following design rules: a) Elimination of intermediate rooms. b) Separation of bedrooms and day pieces by means of a vestibule (which, if we also want to respect the first rule, should be the entrance). c) Minimum distance between bathroom and bedrooms, and between kitchen and dining

room

With the second group of rules, those about dimensions, Klein tries to find an equilibrium between functional "zoning" within the house and economy. Thus, he proposed at the same time an specific use for each room and a reduction in the number of rooms. Klein conceded the reduction of living and dining rooms, or of living room and study room, into a unique space. He tried, though, to avoid the "living kitchen"

The living room, moreover, should be the largest of the house, while the rest should just fit the essential furniture and the minimum extra space for easy movement.

This rather peculiar use of "common sense" was also present in the third and fourth groups of design rules, those related to "orientation and lighting" and "furniture": ...bedrooms should be placed facing East and day rooms facing West in order to have morning sun lighting in bedrooms and afternoon sun lighting in the day rooms...thus, this light source will be better exploited. Moreover, bedrooms facing West have the problem of the late sunset in summer as the overheated exterior walls transmit this extra heat inside the room and temperature raises at hedtime"

Klein was completely sure that, if these rules were followed and excessive light contrasts, asymmetric elements and disturbing effects were avoided, the result would be a healthy house with good humored inhabitants. In spite of his true conviction, he dedicated the rest of his study to prove the

His demonstration was based in the comparison between a project and its

"counter-project": we take a conventional modern house (project) and prove it remarkably inferior to another one (counterproject) designed according to the mentioned

Klein had to acknowledge, though, that his counterproject needed two drainpipes (one for the bathroom, and another for the kitchen) while the conventional project presented simpler facilities. This contradiction implied that rooms' separation was more important for Klein than the technical and economic advantages of contiguity. " We should not take our arguments too far ...

The housing problem: the german and spanish contexts

In order to have a clear idea of the importance of Klein's statements and rules we should now take a look at the contexts in which they were to be put into practice: National-socialist Germany and post-war fascist Spain.

In Germany, the successive administrative changes and economic crisis during the thirties did not permit Klein's theoretical proposal to have an effective influence upon housing developments construction

Frankfurt's "siedlungen" (1925 and 1931) were something more related to the rationalization of building processes, to the creation and management of the modern city than to any theoretical definition of "existenzminimum". (In fact May's self proclaimed "existenzminimum" model did not comply with Klein's basic rules). Although the Second and Third International C.I.A.M. congresses (Frankfurt, 1929 and Brussels, 1930) were almost exclusively dedicated to the "existenzminimum" concept, the question was then not so much the methodological difficulties as the political ones: housing was still considered a social good to which every citizen had a right and the basic problem was to built the highest number of units.

Even Gropius, in spite of the fact that he had been working, back in 1928, with Klein, did not think that the ideal minimum house could be defined in terms of a few basic theoretical rules

When, in 1933, Hitler won the elections, problems as the lack of State's control over the Social-democrat city rule (a problem which had been already denounced by the very architects working in the projects) tried to be overcome by means of a strict policy undertaken by Nazi Party's technicians which implied the construction of a number of housing units using the new methods of industrial production, "according to a systematic and extensive plan which will permit an economic and large-scale operation". The new administrators considered previous developments as "monotonous" and thus tried to promote the use of "local or artisan detailing". (This combination of tradition and new techniques was rather successful in Germany).

Spanish political situation, on the other hand, favored the quick diffusion of news about housing development operations in Germany. Even in 1943, five years before Klein's study was published, the National Architectural Magazine dedicated a great number of pages to the exhibition "Social Housing Developments", celebrated in Stuttgart in 1941, in which the Nazi administration tried to promote its own social

housing programme.

The Spanish magazine centered itself on two important examples in this exhibition: the types proposed by the "Regional Housing Commissar's Projects' Bureau" and the six "experimental types" introduced at the exhibition by the Reich's Commissar as "the result of a conscious study among a great number of houses designed by different architects and official bureaus".

Although both proposed the use of traditional motifs on facades, interior arrangements differed considerably: the Regional Commissar's projects included some, probably uncanny, appearances of "modern" detailing. (The "Two storey" type was rather similar to Frankfurt's "existenzminimum" type). On the contrary, five of the six types brought by the Reich's Commissar were almost an acknowledged antithesis to the so far accepted single-storey minimum housing unit: just one of the types avoided intermediate rooms between main spaces.

These contradictory situation with the use of two opposed design criteria was directly received in post war Spain. The exigency of quick "grandiose" solutions for the national reconstruction did not permit much sensibility.

Spanish situation during the fifties In Spain, the housing problem was not systematically approached up to the first

In 1952, the Catalonia and Balears Official Architects' College dedicated two issues of its magazine "Cuadernos de Arquitectura" to the theoretical basis of economic housing. These publications displayed the different types proposed by the architects who took part in the contest organized by the mentioned college, "under the patronage of our first authorities" with the purpose of "creating a favorable atmosphere to find a Christian and Rational solution to the frightening problem of housing".

The minimum conditions of the house, as selected by the magazine from the different proposals were rather similar to those stated by Klein. The main features were the following:

 a) Rational plan and functional distribution of furniture with a shared use of free spaces in order to achieve comfort without raising the total surface.

 b) Reduction of corridors and passageways but not complete elimination as "it is convenient to separate home's intimacy from any stranger".

 c) Facilities should be minimum and surfaces, volumes and fenestration just enough for hygienic considerations.

The magazine "Cuadernos" also included a description of the essential elements of the house:

- Dining and living room "which should not be intermediate rooms".
- Bedrooms "which should not be shared by more than two people. A bedroom/living room is neither acceptable".
- Kitchen.
- Sanitary facilities. "Its location should be near to the kitchen in order to facilitate plumbing".
- Laundry room.
- Garden or Orchard.

But rather against the very magazine's statements, it was impossible to infer these

conditions from the contest's submissions: these did not include the intimacy's corridors and in them the dining room was nearly always a pass through space as well as other rooms in the house.

This contradiction can be explained in terms of the differences between the German and Spanish models which were more radical in the respective theories than in the resulting forms. For example, while in Germany the aim was to achieve psychological comfort an mental health through a happy life among balanced and quiet forms, in Spain, the main problem was how to achieve the minimum material conditions for the development of Christian virtues.

It was in this sense that "Cuadernos" advised: "...one should be careful not to be too rigid while applying the principles of minimum circulation spaces in proportion with the useful ones" (which was also Klein's doctrine), and it added, "...in order that the overall conception of the house as a home, a Christian home, would not be threatened".

In 1956, the National Architectural Magazine published the housing types proposed by the architects of eight "Absorption Settlements" in Madrid. The article which introduced them, signed by the then General Director for Housing, Luis Valero, included the following commentaries:

- 1.- We were warned about the fact that "if we had plenty of money, enough adequate land, the necessary building materials, and good workers...the housing problem would just be a technical one...on which professionals would work at their ease, presenting to the public their capacity and good taste for which they would be probably praised". Later on, he added "How thankless is the architect's job!".
- 2.- Spanish architects should "display their abilities and exploit their capacities in order to give a Spanish solution to the generalized patriotic anxiety to provide every one of our unfortunate countrymen with a decent and happy home".
- a.- Although it is true that "we must improve our methods... we are very satisfied with these young architects who have made the contribution of their youthful enthusiasm to solve one of the most difficult housing design problem".

To sum up, Spanish administration considered the housing problem just a technical issue. Architectural professionals could just collaborate in a Spanish way, offering their enthusiasm and capacity.

But is it rather significant to notice how, as it happened with the types of the mentioned C.O.A.C.B. contest, this eight solutions repeated a constant design: in all of them, the living room, which also served as an access space was to be traversed in order to go to the rest of the rooms in the house.

It is even more surprising to find, within the same article, reproductions of Fernando Chueca's drawings for his study "Lowincome housing in United States". In fact, Chueca considered the mentioned solution as "unacceptable" and proposed instead the "excellent" device of placing a vestibule separating the living and cooking spaces from bedrooms and bathrooms.

The contents of the mentioned introduction do not imply any critical design

in using Chueca's diagrams. It seems that the clear contradictions between them and the other works there published were not even noticed.

How was it possible that, within a single article, Saenz de Oiza's solution for Fuencarral A should be highly praised as a "sensible choice" and a "healthy example" while the same solution is clearly depicted as unacceptable by Chueca's diagrams? If we consider the scarce resources of the projects as their most determining characteristic, then how was it possible for Alejandro de la Sota to include in his two storey housing types for Fuencarral B a double height living room?

It was also possible to notice contradictory features in different works by a single architect: for example when the housing type considered was a two storey scheme. In such cases the problem of separating the two main groups of rooms was nearly avoided; the staircase was normally adjacent to the kitchen and service rooms near the access. The living room, which occupied the rest of the lower floor was thus secluded from the bedroom area on the higher floor. But when the house had just one floor this separation was not considered so essential.

In the Vista Alegre, Caño Roto, San Fermín, Canillas and Fuencarral A settlements, the two storey solution, very similar to that discussed at the Frankfurt's CIAM congress, was present along with the single storey one which represented a completely opposed type of housing scheme.

All these contradictions were probably just the necessary outcome of the generalized tension present in Spanish post war society and mainly caused by the Administration's interest in segregating material values from spiritual ones. Consistently, the investigation aiming at defining the minimum material conditions that would make possible the spiritual advancement of the less favored was almost considered a kind of theological task in which science had nothing to say According to the official rhetoric, enthusiasm and ability were the only necessary conditions that would make possible "the urgent task of saving the bodies and souls of millions of our countrymen who are now living in a wretched environment". It is rather significant that in such a context, the expressions "minimum house" or "economic house" should be replaced by that of "decent home"

The Christian home, the center and source of spiritual life, materialized itself in the sheltered (by the bedrooms?) living-room. The living space had become a center in which the familiar drama took place; a meeting and passing through space; the inescapable point which was also an image of the union of the family.

Common life, determined by family rituals, was something clearly opposed to any sense of privacy which was only considered as the necessary outcome of a mechanical concept of "dwelling" which segregated groups and activities.

If we try to apply Klein's principles to most of the type-plans proposed for Madrid's Absorption Settlements, instead of "decent homes" we could just talk about "improper housing". It is not even possible to find consolation in the supposed fact that the best possible solutions with such scarce means

were used. On the contrary, the simple addition of a vestibule between the living room and the bedroom area would have completely changed the types' qualities.

The punctual information received by Spanish architects about the Berlin ITERBAU project was neither a clarifying factor. The different projects published by Spanish architectural magazines seemed to be as contradictory as were the examples of our architecture. In Walter Gropius' project, for example, "all the rooms faced a corridor and could be, therefore used indistinctly as living rooms, study rooms or bedrooms" as "Cuadernos" explained. In Aalto's, however, "there are folding walls separating the living room from the bedroom".

Among these INTERBAU projects, reproduced in Spanish magazines, we can distinguish two different housing development types: in the first one, which includes the projects by W. Gropius, Günther Gottwald and Otto H. Senn, dwellings comprise a group of independent rooms connected by the access' vestibule; in the second one, including A.Aalto and Eustar Hassenpflug's buildings, the living room is the only distribution device of the whole house and one needs to traverse it in order to go, from the entrance, to the rest of the rooms.

Again, the living space conceived as the center of family life appears as something completely opposed to the "functional" housing scheme which is based on a certain "dwelling technique".

The Spanish architects of the fifties, who had not had the opportunity to have a deep knowledge of avant-garde theories, could not propose a critical approach to the matter. The polemics between "moderns" and "traditionals", something rather usual in the Critical sessions organized by the National Radio Broadcast, were as confusing as the works of some of the architects involved in the discussions. It should not be surprising then that, in these doubtful atmosphere, the schemes submitted to the "First Contest on Experimental Housing Projects" organized by the National Housing Institute would not present any novelty.

The aim was then to adapt housing developments to new building techniques and thus reduce construction costs; to this effect the contest proposed the comparison between different building techniques applied to "the same common basic project"... "But the participants, taking most advantage of the freedom guarantied by the contest rules, designed plans which differed completely from the Institute's proposed scheme and even from the very spirit of the contest". (R.N.A., January 1958). By taking a look at the few proposals estimated by the magazine we will find that the above mentioned contradictions had not been overcome.

This was probably one of the last opportunities lost by Spanish institutions to initiate a rigorous and systematic approach to the low-income housing issue in Spain. While the INTERBAU made of the problems of the modern city the main point of architectural debates, the terrible situation which made necessary the first Absorption Settlements began gradually to be controlled. The mentioned attitude of "taking advantage of an uncontested freedom" will we from then on the main obstacle in trying to reach a general agreement on the issue.

Francisco Cabrero, the poet of architectural essence "Good architecture cannot be opposed, but it is very difficult to do"

Paloma Barreiro

Francisco de Asís Cabrero (Santander, 4th october 1912) is an architect interested in essence and, like Antonio Machado is, "in the good sense of the term, good"... In 1990 he received the Spanish Architecture Golden Medal, together with Oriol Bohigas, after a silent but glorious career, based on creativity, rigor, honesty, generosity and simplicity, words which are all due to a single person who seems to overlook them all. The Syndicates' House would have been on its own a sufficient reason for his fame; but he also made two other masterworks which complete his trilogy: the Arriba building and the Glass Pavilion in the Casa de Campo, an example of simple perfection, formal strictness and monumental quality in the words of Antón Capitel.

This interview took place in two long sessions held in the architect's studio. It is the record of a life "full of adventure and knowledge" Francisco Cabrero's home in Madrid, in the district of Puerta de Hierro is a kind of image of its owner. Its pure style, functionalism, formal pureness make you think about Japanese traditional architecture: "Indeed, that's what they say: that this house is very Japanese... the mystic sense of wood...Japanese say that wood has a profound spirit". Large and illuminated spaces; steel beams painted in red in contrast with the natural color of wood; naturalness, nudity and, to sum up, a sober elegance... Francisco Cabrero is an enthusiast of crafts, so important in a good work of architecture (one just has to think about the importance of this issue for the European architects of the twenties and thirties beginning with those of the Bauhaus. "Architecture is an art which looks for beauty in utility, it is a tool while painting is just an artistic activity (art for art's sake). A Chinese theoretician said: "Display your heart without shame and your brush will be inspired. That is the way I understand architecture...Good architecture cannot be discussed. It is not polemic. The creator has to center himself. But architecture is very difficult. Everything is so difficult.

The Family

The history of his family has been decisive for this quiet and domestic man. His father's branch was rather artistic while his mother belonged to the Torres Quevedo in which the 19th century Basque engineering prevailed: "My father (Ramón Gómez de la Serna described him as "a mysterious regular at Pombo cafe") was a good amateur painter. He lived in Paris and met Picasso, Zuloaga, Toulouse Lautrec etc... I joined the Beaux Arts Academy and took classes with the painter Gerardo Alvear but I preferred architecture. And I have somewhat mixed both arts because I have painted a little bit and architecture has taught me how to make an ordered painting... I even exhibited my works in the Macarrón Gallery. Of all the painters, my favorite one is Goya. My family has no writers. My mother wrote very well, though, and tried to teach us

all: but I wasn't good at writing... In Santander, my brothers and I used to play music (quintets and trios). I played the cello (I have kept it all these years) and took classes with Dersch who was a member of the Pereda Theater Orchestra... But any art requires absolute dedication and I had to leave it, although I am still very fond of music, specially Beethoven's... But going back to painting, I have always thought that Picasso was a disastrous personage because he made a merchandise out of painting. I went once with my father to visit Gutiérrez Solana, who used to live in a miserable house in Madrid's outskirts. When we got in, Solana told us that Picasso had copied from him the horse in the Guernica..."

His master José Antonio Coderch

From his childhood and adolescence in Santander, he recalls, besides the mentioned musical sessions, the Pereda Walk, "the synthesis of a city". Once in Madrid he always longed for Santander... Francisco Cabrero belongs to that first generation of post-war architects, self-educated to a great extent, and who had to face international isolation and the lack of materials: "I entered the Superior School of Architecture in 1934 and, after the break due to the Civil War, I finally graduated in 1942. My classmates were Bastarreche, Peña y Peña, Mirones, De Miguel, Fisac, Ruperto Sánchez, Faquineto, Alustiza, Carbonel, Rebollo, Garrido, Fernández del Amo and Rodríguez Losada. I enjoyed, above all, the "projects" class. Afterwards I recovered this pleasure by joining the School as a projects' teacher...

Independent and intuitive, Francisco Cabrero would not point out any of his teachers as his real master; but he likes to insist on the influence due to his close friend José Antonio Coderch: "My friendship with Coderch hasn't been enough valuated. He was a real model for me. Aburto, Coderch and I used to spend the whole day together, secluded in a tiny room, always talking about architecture. Of course we were all bachelors then... I can affirm that my real master was Coderch, even though his architecture was so different to mine; but he was the first one to go abroad. He was very open-minded and talked us about Italian architecture; my whole generation followed him in some way or another. I even worked with him for some years in the Syndicates' Home Bureau

Coderch tried to integrate national and even regional elements in modern architecture, "probably more of a Rationalist than of a Picturesque, more interested in the final image than in any visual effect"; in 1949, the Italian architects Gio Ponti and Alberto Sartoris, who were in Barcelona attending the Fifth National Architectural Assembly, were astonished by the Garriga Nogués House, designed two years before by Coderch and Valls in Sitges...

The Impact of Italian Rationalism

Francisco Cabrero had soon a puissant personality: "I embraced with decision the modern movement; I was to a great extent a

self-educated architect, I was very interested in the Rationalist architecture of Madrid's University City, the architecture of Pascual Bravo and Luis Lacasa... Luis Lacasa was an exiled, he was in Moscow in 1958, attending the International Architectural Congress; the Spaniards who met there gathered to make a toast to Spain... Along my whole life I have met great architects. I visited Le Corbusier, Mies van der Rohe and Frank Lloyd Wright. And I had Alvar Aalto as a guest in my house in Madrid: one day Carlos de Miguel phoned me from the COAM and asked me to bring Alvar Aalto to visit Madrid, he came to my house and I brought him and his wife to see Goya's paintings at San Antonio de la Florida and afterwards to a tavern to taste every single wine which Aalto enjoyed so much. I have always admired his architecture, the neat quality of his lines and, above all the simplicity of his works...

The Syndicate's House. The first Challenge.

The first work by Francisco Cabrero was a group of economical houses in Béjar, called Virgen del Castañar (1941); but his fame began when he won the Architectural Contest for the Syndicate's House in Madrid's Paseo del Prado: "I first though in making the project with Rafael Aburto, but I finally did it alone. Of all the projects in the contest I would like to mention that by Antonio Corrales and Luis Cabrera Sánchez which was very interesting. I also liked very much that by José Antonio Coderch and Manuel Valls... In my project for the Syndicate's House I based myself on an image of my student's period in Madrid: I attended an Academy in the last sector of Gran Via and, from the window, I could see the "Cine Azul Building", a very well conceived brick building, very simple, very modern, very well arranged..

The Syndicate's House (a building with a deep Expressionist stress) has been considered by many critics Spain's best work of architecture in the forties. In the written dossier, the authors stated: "Its modular arrangement has two aims: building economy (rigorous discipline in plans and works) and aesthetic rhythm; individual and collective offices, archives, meeting rooms and public spaces..., the location of these dependencies and their respective relationships, built up an organic programme which is controlled by means of the central offices located in the main floor just in the building's axis of symmetry..., a symbolic entrance, underground parking lot, cross services' road, triple vertical core, minimum horizontal circulation; an open plan which avoids inner courts... The fact that the Prado Museum is just in front of our building is, obviously a problem. Modern architecture has little to do with Villanueva's aesthetics. The new possibilities and needs have changed many aspects of architecture... The fact that two buildings be conceived in different periods does not mean that there could not be some kind of continuity between them. Forms cannot be the same, but other concepts as proportion, arrangement, the play of masses, which are the real components of the project can be repeatedly used ... '

To sum up, the aim was to express the "functional needs of the building by translating inner space into an exterior volume", looking for a sincere volumetric expression, the equilibrium of masses, the

simplicity of form, proportion and geometric harmony. Francisco Cabrero designed the facades with a solid granite basement over which the impressive brickwork central body grows; on top of it, he placed a Colmenar stone crowning. This emblematic building clearly embraces the tradition of the European (specially Italian) Rationalism of the thirties, whose main premises were somewhat coincident with those belonging to Spanish traditional architecture of which El Escorial was probably the most significant example: "El Escorial has been for me a most inspiring image. This work of architecture contains the three essential elements of a good building: a good client, a good builder and a good architect. It is very interesting to learn that just when we were building El Escorial, the French were erecting baroque fantasies. There is a rather significant anecdote about it: one day Juan de Herrera showed Philip the Second a very flat vault, a feat in stone cutting, and the king just said: "Juan de Herrera, Juan de Herrera, beware of the gallows.

According to Antón Capitel, the main architectural value of the Syndicate's House is: "the way in which the author builds the purest idea of a monument as suitable for the larger urban scale of the Prado Walk as for the smaller space created by its impressive front. Both scales are managed by means of a regular grid, formal pureness and symmetry in spite of its location within an irregular lot of the old city. Cabrero demonstrates his canny instinct in the way he tries to cope with both issues, the apparent regularity and the real unevenness, avoiding the difficulties..., the quality of the building's appearance is obtained by means of the use of different materials, with different colors and textures which account for a rich architectural purpose..." Juan Daniel Fullaondo considered the Syndicate's House, the best architectural work of the forties, "a period in which Cabrero's dramatic coldness, his Pythagorism, would prevail", his "creative, guiet, hermetic, severe, and somewhat nostalgic temper..."

Travelling as knowledge

This first challenge forced Francisco Cabrero to meditate seriously on the history of architecture: "I realized I had to study architecture from its very origins, learning about each step, each progress towards modern architecture... In Italy, I was fascinated by their extremely logical Rationalism: cubic flat roofs, big windows and big "loggias". It is, precisely, when one tries to examine history from the present backwards that one feels the real progress of time onwards. Between 1944 and 1946 I decided to study the History of Architecture. My father-in-law had an property in Aragón with a great library in the chapel. And I also began to travel: firstly around Europe; and then Africa, America and Asia... I crossed Siberia by plane, following the Trans-Siberian Rail route. I visited Irkutsk and Tomsk. I travelled around Africa from North to South looking for the origins and evolution of architecture, the way in which materials are used to meet certain requirements, just to stop at my main concern which has always been modern architecture. I even went to South-Africa to see modern buildings (those of the white people as the black people has to survive in miserable shacks)... Some trips were rather hard. I used to bring little luggage, just an knapsack, and I took notes of

everything I saw. In my "Four Books of Architecture" (published by the COAM Foundation in 1992) I study the evolution of architecture from that of the primitive communities of farmers and fishermen up to nowadays. The connection between human ways of life and their architecture is something essential for me... I am not a historian, nor a writer, but I decided to publish those Four Books because I felt the necessity to explain the evolution of architecture in a functional and practical way, studying the way it assumes the needs of each particular culture and each particular period, and, to this effect, I recalled the experience acquired in my trips around the world. My Italian trip was decisive. I had an uncle. Torres-Quevedo, who worked in the Spanish Embassy at Rome and I resolved to go there. Italy was living a rather good moment. In 1941-42 I went to Milan and visited the studio of the painter Giorgio de Chirico (I have a painting by him); I also visited Adalberto Libera in Rome and Gio Ponte in his City's Technical Office. In 1950, I went to Zurich and visited the architect Max Bill who was the author of a book about prefabrication. I travelled around Switzerland with him... Italian architecture was very modern then, flat roofed and white. I had to suffer, though, two air raids in Rome during the Second World War. Terragni was in the front and I couldn't met him. I studied the architecture of the Bauhaus, Le Corbusier's works and Wright's ... It is easy to notice how, while ancient architecture (that of the Romans and the medieval) keeps concrete and definite conceptions of space, time and style, from the Renaissance onwards there are apparent alterations of the norm which result in discontinuities and contradictions and which determine periodic artistic revolutions... The spirit of a crisis is defined by three possible attitudes: 1) either artists want to break with an immediate past; 2) or try to recover ancient forms or incorporate alien models; 3) or they try to make Sophistic alterations in order to modify the system..." (From the 1st to the 21st of april 1992 and on the occasion of the presentation of the "Four books of architecture", published by the COAM Foundation, there was an exhibition which showed oil-paintings, watercolors, drawings, plans and photographs of his most significant buildings...)

The "Arriba" Building: his favorite work.

When I asked Francisco Cabrero about his favorite work he did not hesitate: "The work for which I feel more pride is the Arriba building (1961-61). The Falangists who had made the commission didn't like it and when the building was finished asked me to add some decoration or emblem to it, I resisted and they spoiled my summer vacation, but I didn't do it and soon they forgot about it and critics began to appraise my work. I must admit, though, that I was free to design the building according to my own taste, much more than in the case of the Syndicate's House, and I could make use of a steel structure. I inspired myself on Mies van der Rohe's work, which I had seen in America."

This work has been described by Antón Capitel as: "a narrow block, almost a deep facade, a urban backdrop". It shows Francisco Cabrero's ability to manage the urban environment by means of its apparent arrangement: "The significance of the design

was enhanced by the use of color. Brickwork creates a rosy background whose dye is somewhat strengthened by the structure's bright red. Color has, in this project, a notable, non-conventional role..."

Comparing it to the Syndicate's House, Gabriel Ruiz Cabrero affirms: "In the Syndicate's building the central motif is the brickwork cube with its orthogonal grid of square windows. Its composition is best enjoyed in oblique perspectives from certain points of the Castellana Walk and adjacent streets; but the architect, taking in account the importance of the facade over the Prado Walk emphasizes this front by placing windows just by the corners and closing the first bay of the lateral facades... In the Arriba building the author makes use of the same device by leaving without fenestration the lateral facades. There is an attitude common to both projects which is the resolute search of an essential architecture. Thus, in the Syndicate's House, there is no classical cornice and, in the Arriba building there is not even an attic floor and the building stops short at the last lintel's level... The Arriba building advances towards the essential and abstract and, thus, renounces to the lateral wings in order to present just the front of the offices block. Concealed behind it, the low workshops". And he adds, quoting Gracián: "Good things, if brief, twice good".

The Crystal Pavilion. Mies van der Rohe's Dream.

Cabrero's architectural trilogy is completed by the Crystal pavilion in the "Casa de Campo" (1964, with Jaime Ruiz and Luis Labiano) who was appraised by the very Mies. Alberto Campo Baeza reminds us that Mies' dream was to offer mankind the purest glass box: "and this dream, the architecture which Foster and Rogers and Piano are desperately trying to seek for is already present in Cabrero's pavilion, and made with the minimum means. Just with simple words, as poetry..."

In this almost industrial building it is still possible to notice, according to Capitel, "the qualities of order and geometrical rigor so dear to its author, together with an exterior appearance which is at the same time simple and elegant. The square is again the main geometrical element in the composition but, in this case, it appears divided in two what prevents its direct perception... Color (white and red for the structure and the window studs against the dark shade of the glass) is, also in this case, a significant element in the final image, although probably its main characteristic is the courage and mastery showed by the author is designing a simple facade without intermediate elements...'

The mastered rigor

Francisco Cabrero's activity has been fervent. In addition to the mentioned works, we should also recall the "Virgen del Pilar" economical housing block, Madrid 1948, built with the artisan methods of the post-war period (ceramic vaults); the project submitted at the contest for the new Cathedral of Madrid which was to be located in the empty lot of the old Cuartel de la Montaña (1952, with Rafael de Aburto); the Town Hall at Alcorcón (1973), in which the cunning treatment of the symbolic elements is really remarkable and the Casa del Pastor, in the Segovia Street, Madrid (with Carlos Riaño and José Cabrero).

This last project (accorded the COAM Annual Award in 1990) was extremely difficult because it was a requirement to take "most advantage of the land contour, the steep depression, in order to promote magnificent views from the terraced hill of the Royal Palace or the elevated Casa de Campo on the other side, as had been foreseen by Goya and Regoyos". The building has a balanced facade in which the proportion between wall and fenestration is very correct and whose pleasant appearance makes of it a reference for future operations... The author is also faithful to himself (to his own austere and elegant style) in some of his projects for monuments as the so called "Commemorative Form" (1950), the Contest Project for the Monument dedicated to Calvo Sotelo or that for the Mausoleum at Karachi (1958) based on an elevated cube...

The dream of the future city

In the last volume of the "Four books of architecture", Francisco Cabrero presents the design of a Utopian city in a Polynesia Isle, made with futurist materials as titanium, but which keeps in mind man's deep reality. It is the dream of a quiet man, who has never lost the sense of transcendency: "I am a religious man. Religion is for me a personal experience. It is a terrible thing to die and leave behind your dear life; it is atrocious: you look at the sky, which is so marvelous and you think that there must be something after death. Religion and above all faith make you have some hope, optimism. Besides, I think that making good architecture is a good action. Quality of life is something very related to architecture and urban design". Although he is a man who is deeply involved with down-to-earth reality. Francisco Cabrero keeps the Apocalyptic dream: "I saw new heavens and a new earth because the former heaven and former earth had disappeared; and the Seas did not exist anymore...'

Francisco Cabrero has always been an enemy of polemics. He just concentrates on his own work in a self-demanding way, always trying to keep in touch with the architectural progress and the development of urban planning (to which he dedicated 10 years). His architectural likings are few but selected: "In Spain, within the healthy Neoclassicism of the 70's and 80's, I would mention the Adriatica Building by Javier Carvajal and the Conference Center at Santiago de Compostela by Julio Cano Lasso, a rationalist, white marble building. Yes, I think that Cano Lasso is a remarkable architect (he is a very friend of mine), and his children too. I also like very much Moneo's architecture. He is very intelligent. And also Alejandro de la Sota...'

Many think of him as a patriarch, although the architectural labor of Francisco de Asís Cabrero has not yet come to its end. It has good ageing, as good wines have, this reliable and precise architecture, strictly faithful to itself, which shows such a masterly use of materials in its constant search of spatial purity, of essentiality.

List of major works

1942 Housing development in Béjar (Salamanca) 1943 Housing in Fuentes de Béjar (Salamanca) 1943 Paintings and Projects' exhibition at Macarrón Gallery

1943 Ribera House (Santander) 1945 Housing in Rua da Sal (Santander) 1945 Housing Block in Francisco Silvela Street (Madrid) 1948 "Virgen del Pilar" Block (vaults)

1948 Proposal for a Monument dedicated to Counter-Reformation, in collaboration with Rafael de Aburto.

1948 Agrarian Fair with Jaime Ruiz

1949 First Prize in the contest for the Syndicate's House

1950 Commemorative project.

1950 Project and Construction of the Syndicate's House with Rafael de Aburto.

1952 Proposal for Madrid's Shrine, with Rafael de Aburto.

1953 Detached house in Madrid.

1954 First Prize in La Habana Biennial.

1955 Monument to Calvo Sotelo in the Castellana Walk (Madrid).

1956 Second Prize in a contest organized by the Ministry of Industry and Commerce.

1956 Proposal for an Open Air Theater in Santander. 1956 Block in Reyes Magos Street (Madrid).

1956 Project of a district built with inflated domes.

1956 Detached house in Valle de Iguña.

1956 Residence and Officer's Center for the Army, Torrejón.

1957 National School of Hotel Trade

1958 Swimming pool at the Syndical Park

1959 Proposal for a monument to Qaide Azam Mohammed Ali Jinnak (Karachi).

1960 Exhibit's Pavilion for the Housing Ministry (Madrid)

1961 Arriba Building

1961 Detached House in Puerta de Hierro district (Madrid).

1962 San Agustín Student's Residence

1964 Crystal pavilion (Madrid), with Jaime Ruiz and Luis Labiano.

1966 Chapel and Residence for the Agustinians in Madrid.

1966 Single family house in Aravaca (Madrid)

1967 Housing block in Capitán Haya Street (Madrid) 1968 Apartment buildings in Maliaño (Santander)

1968 Housing in Villalón de Campos

1968 Dining Rooms in Girón (Barcelona)

1969 Nomination in the contest for the design of the Colón Square (Madrid), in collaboration with Luis Idlesias.

1969 Housing in Los Manantiales (Guadalajara) 1969 Contest for Vienna International Organizations and Conferences Headquarters.

1971 Service area in the Villalba-Villacastín Highway 1973 Town Hall at Alcorcón (Madrid)

1974 Third prize in the contest for Madrid's Stock Market, in collaboration with Gabriel Ruiz Cabrero. 1974 Broker's College, in collaboration with Jaime

1976 Single family house in Cañaveral (Cáceres)
1976 Apartment Building in Madrid, Infantas street.
1978 Contest for the Islamic Cultural Center, in collaboration with Carlos de Riaño.

1978 The architect's house.

1986 First prize in the contest for the enlargement of the Town Hall at Alcorcón.

1986 Enlargement project for Alcorcón's Town Hall. 1986 Invitation to participate in the restricted contest for the Headquarters of Madrid's Autonomous Government.

1986 Contest for the urban design of Madrid's Plaza de Castilla

1987 Invitation to participate in the restricted contest for the Great Theater at the Universal Exhibition in Sevilla (1992)

1988 Effective construction of the Casa del Pastor in the Segovia street, Madrid.

1990 Project for Santander's Court, Ministry of Justice, in collaboration with the architects José Cabrero and Pío Jesús Santamaría.

1991 COAM Award, 20 dwellings in the lot of the old "Casa del Pastor", in collaboration with the architects Carlos de Riaño and José Cabrero Cabrera.