

THEORY I (ARCH. 100): THE TIMELESS WAY OF BUILDING

The course begins with the presentation of a general theoretical framework for all design. This theoretical framework rests on a particular definition of what is valuable, as what is "life giving" - and proceeds to develop from this a comprehensive account of the structures which must be present in the environment, and in any particular specific building, in order to make it able to function, and also includes an account of the design processes which allows a person to introduce these structures most easily into a building.

First half: In the first half of the quarter, students will be introduced to these structures via the general theory of pattern languages.

Second half: In the second half of the quarter, students will be introduced to the general geometric principles, which underlie these structures.

Assignment: Write a paper of 10-15 pages on the following topic.

The ideas, philosophy, methods, and ideals presented in this course are missing from the world today, partly because the structure of the world--social system, politics, economics, mainstream ideals of building, construction, money, and so on, are all making it difficult for these things to happen. In order for these things to happen, it will therefore require a slow structural revolution: a gradual change of attitude, change of procedure, change of economics, change of politics, change of social agreements, contracts, ways of building, etc. Try to describe, as concretely as possible, what would be

happening in a city of 100,000 people (the size of Berkeley), where all this was happening in a completely developed and full-fledged way. What would it be like? How would the underlying structures of society, of the architectural and building professions, the banks, the social norms, be different? You must write as concretely as possible, with realistically described changes, what you imagine.

To make it perhaps even more concrete, imagine that several years from now, having passed Architecture 100 with flying colors, you are actually in a position, either alone or with some group, to undertake concrete projects in the world. What would you do?

ARCH 100
Chris Alexander
FALL 1978

~~Arch~~ A-
thoughtfulness
This is impressive. But up
You must come
write more solid
conclusions.
CA
IK

Artemis Anninou
Nov. 30, 1978

"They say the houses of Mòlu in Tomboké
are fine

That the houses of Mòlu are fine
In Mòlu the houses have storeys
But it is the men who are fine
Not the storeyed houses"

song of the Dogon

Utopia and its role

When there is trust to the human dignity and to the power people have, to bring forward changes that improve their lives, then the idea of futility that has been dominated disappears. So the mind and the soul stay pure and strong to look for changes. And when it is carried away from the reality, and it touches the utopia, it needs tolerance and encouragement, because every desired condition can remain in the realm of utopia, up to the point that people will endeavor and strike to bring it in reality.

It is true that sometimes utopia causes people to loose the right way, but from the other hand we have to consider its own positive aspects. That, it tries to demonstrate a possible dissenting action against an existing authoritarian formula of problem solving, clarifying the limitations of the system within which we live and act as well as the subordination of our individualities to the authorities. And although an utopia doesn't engage in direct battle against the power of the status quo, —so it is not a revolution—, it defies the rules and values of the status quo and in this way is an expression of revolt. At best, it is a spontaneous "contained revolution"

This, as a preface.

The changes

What science does, is to think of changes. So does architecture. But the question is, what kind of changes, in the interest of whom?

As architects we want to make everything possible to change the quality of the built-environment, to bring it in the scale of the human being, because, we strongly believe that, the impact it has on human life, is very important.

From the other point of view, we know that, if human life becomes more dignified, more creative or alive, the influences of these changes on the spatial form of the environment will be very strong and decisive. Finally, we know that, the interactions between the spatial forms and the social life, are as deep as complicated they are. And none of them comes first or last. They coexist.

The values

Therefore, to start with, I'll use a question Feuerabend asked, trying to clarify the goal of the sciences. - Instead of the word science we can put Architecture -

"What values shall we choose to probe the sciences of today? To what extent the happiness of individual human beings and to what extent their freedom has been increased?"

"The happiness and the full development of an individual human being is now as ever the highest possible value."

Extending this statement, I would like to add that, not only the happiness of an individual human being but simultaneously the happiness of the whole society has to be the highest possible value. Ways for attaining this value can be analyzed both in a more general and theoretical level, as well as in a more specific and practical level related with architecture.

Biography versus History

On the first level I want to exaggerate the importance of the individual integrated through social life. The more the individual penetrate into the society, the more each individual life means for

the social life, we are led to situations where the biography of each person affects and determines history, and is integrated within it.

Simply through this way, the social and historical events, are not merely happenings somewhere in the world, but are strongly related to the individual lives. Their essence and their meaning is nothing else but the meaning each one individual gives to them according to the effects upon oneself.

Only if the individual takes an active part in the social processes, only if he acts dynamically upon these, and strongly affects them, only if a social process can acquire a special meaning for each individual and is able to stimulate and activate its personal life, only then the social life can become a whole, and consequently the built space, creature of everybody.

The role of architecture

Just at this point the role of architecture is becoming ultimate. Because is not only that the ending products of architecture are essential, but more essential is the process that generates them and gives them their meaning. Through such a creative process each one individual can touch the earth, the stones and the wood, can feel the creation and the growing up of the structures, and even more he can see his own human creative power to be joint in a social process. And through this way he is able to know and feel more of himself, more of the others, more of the whole social life. The question is, if the form that architecture has taken in nowadays, leaves any possibility for such a joyful creative process.

The anomaly

In our days there is an unbridged gap between what architecture serves and what he has to serve. From a tool, that had been handled by all the ordinary people, to satisfy their need for a shelter, it has ended in becoming a profitable profession exploited by some experts, as well as a powerful way of producing and controlling space. And the final result is that architecture has been reduced to an emptiness: it is empty of meanings, of feelings and of beauty. It is dead.

The hopes for its regeneration are dominated in the minds of the young architects, in the writings of some teachers, in the classes of some architectural schools. The discussions concerning the desirable structural revolution not only in the level of the production of the environment, but in all the levels of the social life are endless. What is missing is action, powerful and decisive actions which will bring the changes.

Hundertwasser's approach to the anomaly

Trying to clarify the character of the structural revolution in the architectonic level, I'll use some extracts of Hundertwasser's "Verschimmelungs Manifest", read on 4 July 1958

"Everyone should be able to build, and so long as this freedom to build does not exist, the planned architecture of today cannot be considered an art at all." "What are put in execution are merely wretched compromises standing in isolation and created by people with a bad conscience, whose minds are dominated by the foot-rule!" "Merely to carry a straight line about with one ought to be, at least morally, forbidden. The ruler is the symbol of the new illiteracy. The ruler is the symptom of the new sickness of decadence." What he believes is going to urges on the changes: "When rust settles on a razor blade, when mould forms on a wall, when moss grows in the corner of a room and rounds off the

geometrical angles, we ought to be pleased that with the microbes and fungi life is moving into the house, and more consciously than ever before we become witnesses of architectonic changes from which we have a great deal to learn. "... Only these technologists and scientists who are capable of living in mould and creatively producing mould will be the masters of tomorrow. It will be a very naive reaction if the reply to Hundertwasser's provocation is restricted to how microbes, fungi and mould can bring forward the revolutionary changes. The connotation of his words is great, and he really touches the essence of architecture, and of the required changes.

The essence of architecture

And primarily his statements lead to a way of emancipating architecture from its conventional meanings acquired through the unilateral nature of its relationship to functionalism, art, utilitarianism. For, if architecture is utilitarian, except in the case of monuments, then utility is not its essence.

If it may be treated as sculpture except where practical needs interfere, as in underground buildings or necessities like bulkheads and chicken houses, then sculptural values are not essential to it.

If functional interests can ever be adequately served without beauty, then form may follow function with all the happy effects in the world, but functionality is not the measure of beauty.

This terminologies formed per se, do nothing but sticking on architecture, dominating on it, changing its purposes and making it to wander.

Giving in architecture each one of these meanings in isolation from the others, the negative consequences of its implementation are being increased and the positive ones are being eliminated.

All these lead to the hypothesis, that architecture could be integrated under a balanced and harmonic interaction of these aspects.

Up to a point it is not false. But architecture

Architecture and culture

is something more. It needs roots and a direct contact with what it serves. And it is capable to acquire this, only if it becomes again an ethnic domain, a physically present human environment that expresses the characteristic rhythmic functional patterns which constitute a culture.

In other words, the shaping of space that goes on in architecture has to be symbolic of our culture, symbolic of the existing social order, symbolic of our aspirations, our beliefs, our needs and fears. And even more this shaping has to embody the feeling, the rhythm, the passion or sobriety, frivolity or fear with which any things at all are done. That is the image of life which is created in buildings, the symbol of humanity founded in the strength and interplay of forms.

Then the architects will need not to be in anxiety looking for establishing beauty. The beauty will be emerged by itself, since all these situations contain beauty.

The deep interaction between architecture and culture presupposes as well as implies: 1) the historical and cultural continuity and 2) the confrontation of architecture both as an important individual affair penetrating in everybody's life and as a common affair since it determines the common spaces of towns and neighborhoods, that are shared among groups of people.

Historical and cultural continuity

First of all we have to be protected from a possible confusion between a cultural continuity and a nationalistic or chauvinistic tradition. The second has to be avoided as much as possible, in contrast with the first which has to be pursued by all means. A cultural continuity means that everything has to be generated and grown up as a continuation of a past form, that has been proved satisfactory. Nevertheless, the imitation of the past in the present forms and actions

won't bring any improvement. Only if the past is confronted critically, as a pool of experiences, we can use it to evolve our present forms.

To give the same order and the same essence the past forms have had, to the creatures of present times. The forms have to change, since the technology is changing, since the needs are not the same, but this thing that makes the form alive and whole, and gives to it a quality, will spring out from the past, where its roots are.

More generally that means that each culture having its own tradition and beliefs, its own context and materials, will be differentiated from another different culture. It will create its own way of life and its own forms that derive from its evolution. In such a way, each culture will create its own architecture too, and it will be prevented from the modern prevailing forms of the mass producing buildings.

We are not far from making the whole built environment to be a monotonous repetition of the same unit.

Architecture as an individual and common affair of everybody

Architecture shapes the space which we live in. If we don't want such to exist in spaces that happened to exist, but if we want to make our individual spaces to be the mirrors of ourselves and the common spaces to be the mirrors of our common life and of the social order that leads it, we have to be involved in a creative process that ends in the construction of buildings made by people and for people. That is a vested interest that everybody has. It is not a privilege that some experts, called architects or planners, have. And if they want to keep it, it isn't because of their desire to have a tool that wisely used, can serve the people, but rather, because of the profit it yields, the power of control it gives, and the social status it carries.

The distribution of power and resources

The only way for architecture to be approached as an individual as well as a common affair of everybody, is to consider the distribution of power and resources, which determine the production of the built environment.

Nowadays, these fundamental elements of the environmental production are gathered together in large quantities in some, always the same repeated, spots. These spots also are centralized in a big head that does not stop increasing.

That means that the possibilities of making decisions concerning the environmental quality is a vested interest of a very small group of specialists and technologists, who are brought together in the administrative and financial centers. And even more, the implementation of these decisions has become a profitable affair of big architectural and construction businesses, which have been absorbed by the big centers, so that their access to the source of power is much more easier and direct.

Therefore, the situation has been formed in such a way, that the allocation of the decisive power and of the indispensable resources is not in proportion with the overall spread environmental or any kind of problems, which are waiting, in their turn, for a solution invented from above. What's the result of such a kind of heaven-sent solutions we very well know, as well as see. These solutions do nothing, but augmenting the problem, since they don't confront an existing problematic situation, but a fanciful conception of its reality, as it is crystallized in the minds of the decision-makers.

Decentralization and the role of the local authorities.

This very crucial and undesired situation will find its solution, only if whatever is bigger from what is needed starts to be broken into smaller pieces. The result will be a lot of small pools of power and resources, spread

all around, being in direct contact with the people, and even organized and managed by them. That means, first of all, that each town and each community in the town, will acquire an essential local authority, which will be formed by its own inhabitants. Each one will be independent from the Government in the management of its own economical, social and political affairs, as well as in the decisions concerning every kind of problems the community has. The problems will be solved from the base not from the top.

Freedom to build

Hence, the primary goal is the self-government in local affairs. It embodies in it the principle of local and personal freedom to decide for the community works and to implement the decisions with actual building.

So the beauty of our towns, their order and tidiness, the right way of making things and especially the public things of our towns and cities will become an affair of everybody. And it is not only a question of pleasant public buildings, of street cleaning, of controlling advertisement, of making our houses fit for sane people to live in. But, moreover, it is a question of an active individual and public life, that is used in generating and creating what is needed and not in consuming the ready-made products.

The role of education

These thoughts might lead to hesitations, whether ordinary people have the required education, so that they can cope successfully with the arrangement of their houses, their neighborhoods and their towns.

History can prove it utterly. I won't make extended references in the traditional societies and in the masterpieces of the previous centuries, but I want to mention the case of Sienna at the end of the 13th or the beginning of the 14th century, as a very good example.

From reports, that have been saved up to our days, we know that in the first days of May

every year the citizens of Siena held a great assembly in the town hall, devoted to buildings and public works. On May 4th, 1297, it is recorded that the assembly succeeded in discussing and passing no fewer than fifty-four resolutions concerning the town. These dealt with the enlargement of the cathedral, a completely new project for the Palazzo Pubblico, and such minor matters as strengthening the town gates, paving the streets, improving the drainage system and constructing new fountains. Maybe this is the reason why Siena is such a beautiful, perfect and alive town.

Even if this case seems to be very far away, and we think of it as a lost dream, another phrase from Hundertwasser's "Verschimmelungs Manifest" might persuade us for the need of citizen involvement in the creation of environment.

"The material uninhabitability of the slums is preferable to the moral uninhabitability of the functional utilitarian architecture. In the so-called slums only man's body can perish, but in the architecture ostensibly planned for man his soul perishes."

Insisting in doubting people's possibility and capability to arrange and create the spaces they live in, we could reach at the point of denying the simple reality that they know better what they need, than a planner or an architect pretends he knows.

People have a great skill, an immense creative power and a pure spirit, virtues that give to their creatures beauty. They try to fit themselves to whatever they do. Though the prevailing images of the consuming and ready-made society penetrate in their lives and influence their attitudes towards the environmental quality, they can find easily their lost selves when they are let to deal with values very important for their life. The buildings designed by architects miss these virtues. They are pretentious, for

architects believe that, where the buildings they have designed stand, they stand there also.

So if we still keep worrying for the missing of appropriate education from ordinary people dealing with the creation of space, it might be good to add some more worry for the kind of the institutional education of the architects. Surely the solution to this problem is not another kind of academic education or more education. What is really needed is to bring together people and architects where the problem lies, and to let them interact and exchange experiences and ideas, to give and to take, to be involved in a creative process with the intention not only to improve the environment, but themselves also.

The role of the architect in the community

How can the architect help this situation emerge, what his contribution might be?

I'll insist on the idea of decentralization, and on its implications on the work of architects. The architects, following the idea of decentralization, have to return back there, where their roots are. If only they could abandon their isolated luxurious and impersonal offices, gathered in centers, and if they could transfer the core of their activities in all the towns, in all the communities and the neighborhoods, only then they could be able to confront the environmental problems in their real context.

And these roots might be the native towns, or places that have problems and need help. There the architect has to organize his own life and his own work, facing the problems not only as an expert but also as a member of the community influenced by it.

The importance of this kind of work lies on the fact that each act is first of all well defined by both its animate and inanimate context. And then that, each act aiming on changes and resolutions of the environmental problems, is added to another previous one,

is influenced by it and related to it, as well as, it is a stimulator and a starting point for other changes to follow.

So within a decentralized networks of architectural work, there will be pools of creative power, which will become cells of changes. And the changes, helping each other and integrated each other, will create a new whole, that might be the seed for another cell of changes to be generated.

My purpose is not to exaggerate the role of architect in the social changes, but to eliminate his actions to a well-defined and a well-known context, where these should be fruitful, as well as a concrete and real offer and service towards the people.

A process to create
versus a process to
produce

And the first question that claims answer is this concerning the modes of production of the built environment. Or, to put it more clearly, what are the differences between a process that creates and another that produces built units, which shelter the human beings and their functions? What is the impact of these processes on the quality of the forms and their geometry?

I'm afraid the problem I've just posed is too complicated. Its importance embarrasses me and eliminates my intentions just to deal with some aspects of it, that are included in the following truisms.

The productive process of building makes architecture an industry for fabricating ready-made goods in a consuming market, unlike the creative process of building handles architecture as a tool that covers human needs. In a productive process the user is absent, unlike in a creative process that is based on him. A productive process implements decisions, executed by people called labourers, unlike in a creative process is generated a creature from the work

of its participants. A productive process exploits labor and alienates the man from his product, unlike in a creative process human energy is deliberated and work is enjoyed. The result of a productive process in the form of space is the monotonous and endless repetition of the same unit, unlike a creative process generates new forms.

To clarify the positive influences of the creative process to shape space, I want to analyze the role of work, materials and technology is such a process.

The role of work in a creative process

Work properly conducted in conditions of human dignity and freedom improves those who do it and equally their products.

I believe that this sentence encloses the real essence of work and according to it I'll try to identify the relationships between the man who conducts a work and his self, his fellows and his product. To do this I'll use a Buddhist point of view used by Schumacher, according to which the function of work is at least threefold.

1. It gives a man a chance to utilise and develop his faculties.
2. It enables him to overcome his egocentredness by joining with other people in a common task
3. It brings forth the goods and services needed for a becoming existence.

The manual and mental work

Concerning the first point, it has to become clear that each person has to utilise so much his mind as his body. The nowadays prejudices, that brainwork is more precious than handwork and that those who carry out brainwork are the privileged of our society, have to be impugned. Our pursuits have to end only in such conditions, where there are no more different kinds of work, but just creative work as the main necessity of life. In a production process, when somebody uses his hands to make something, he has to use his mind as well, to find out the right way to come up with

his product, to think of the shape and form of it, to judge its usefulness.

The division of labor that has alienated man from his deeds, caused also a passive confrontation concerning the purpose of work. The mind rests useless and the hands move automatically, and certainly no word can be said about how life can be enjoyed.

As to the brainworkers, they have to be conscious everytime on what they say and they propose. Science and philosophy are not ends per se, but they have to be used in the interest of man.

And even more, an understanding contact and contract has to be set up between all brainworkers and the completer men who work both with hands and brain, so that the exchange of knowledge and experience will be spread all over the active places, and will be deliberated from the institutions.

Common task

Work has not to be egocentred, but it has to focus on processes that, having a common task, make the contacts between individuals more intense and strong. This to be achieved, an indispensable presupposition is the existence of common values, shared by people working and living together. The common values, that determine what constitutes progress in every level of the individual and the common life, are not vague and sophisticated values formed and posed by some individuals, but these are the result of a common effort and struggle for an amelioration of life and for the domination of a quality in both the animate and inanimate world.

The relationship between the man and his products.

To earn and to create from our work what we really need, and not to consume what the market is offering, brings forth a new way of life. It's maybe out of time even to say that everybody might do with his hands what he needs. But it is not unreasonable to suggest a deep involvement in the processes through which the necessities of the everyday life are met. If only everybody could be involved in the processes of manufacturing

his necessary furniture and cloths, or in the construction process of his house and his working space.

A great possibility for these to happen would be if all the factories and manufactures, aggregated in industrial zones could be spread in the edges of the neighborhoods and the communities.

The production in these places could be organized, managed and conducted by the community, with the main purpose of the fulfillment of its own needs. The inhabitants of the community could work in these places, being conscious of what they do, what its purpose is, as well as in direct relationship with the process as a whole, and not only with a small part of it.

Under such conditions, work is not to make a sacrifice of one's leisure and confort, and wages are not a kind of compensation for the sacrifice. Work and leisure are complementary parts of the same living process and cannot be separated without destroying the joy of work and the bliss of leisure

The impact of work in Art

This kind of work is a creation, and its products are pieces of art. It is enough to bring in mind Lethaby's thought, that "Art is thoughtful workmanship".

When work and services are kept in veracity and health, the due expression of art is bound to be there, too. By isolating arts themselves too much service and the common understanding, they are laid open to speedy disease and decay. Beauty is the flowering of labor and service. Art then is sound and complete human workmanship. A work of art is a well-made boot, a well-made chair, a well-made picture, a fine book-binding, a well-arranged table for dinner.

Art is not something that can be studied. It is the element of quality in workmanship.

The role of materials in a creative process

The materials used in a construction process characterize it strongly.

A main point is to find out and use the most

appropriate, strong and cheap materials, that at the same time fit perfectly with the character of the building.

Local materials produced in the local market, used materials from pulled down buildings, and when it is judged to be beneficial, materials produced on the site by the participants in the construction process, are some solutions.

The consequences of such a wise use of materials will influence hardly the industrialized production of materials based in standards. The mode of construction, as well as the form of buildings today, is predetermined by the standardized materials.

The construction industry

The construction industry has solved all its problems concerning cost reduction, by the repetition of the same things, as much in the construction details as in the general outlay of building. Mainly it has cancelled the consideration of what the essence of the construction is, of how the improvement of procedures improves the given solutions too, and of which the specific features of each case are, that distinguish it from the others, and claim a specific treatment in order the appropriate solutions to be revealed.

As far as the single effort of the construction industry is the highest possible profit, ignoring its results on the environmental form and quality, and as far as we are conceived that, the profit industry does, is depended on the decisions architects, planners and builders make on issues concerning the construction, it becomes clear that, the influence on the economy of these industries will be very strong and heavy, if all the participants in the construction process start exploring and thinking thoroughly on the possibilities all the raw materials offer, and not only these, consumed in the actual market.

Every building is a unique case, so we have to look for the materials that fit on it in the best way. Materials are not only a means of construction,

but an unseparable part of the building, that plays a great role just from the first steps, when the first images of it are formed in mind.

A creative process of building will fulfil its aims, only if it gives opportunities for new materials to be manufactured and for raw materials to be elaborated. It has to be prevented on being adapted in the standardized materials offered by the industries. This confrontation could lead the whole construction industry to wobble and to start changing from a determinant of the construction to a servant of it. And the possible and desired end could be a decentralization of the construction industry, adjusted to local demands. Their products could be raw materials, not fully elaborated ones in standardized sizes, shapes and qualities.

Even more, these industries being spread and covering local demands, could take an active part in the construction process, formulating an essential collaboration with the architects and the engineers and being removed partially in the site where the construction takes place, serving it and covering its actual needs.

Certainly, all these alternatives depend on the size of construction. The only possibility a small-scale construction lets would be the elaboration of raw materials, but in large-scale constructions the manufacture of materials on the site by the participants in it or even by a local industry might reduce the cost of the construction and improve its quality.

The role of technology is a creative process

In a creative process the face of technology changes. A new direction is given to the technological development, intending to reach the needs of man and his actual size.

Today technology is a matter conducted by few experts, but therefore, the most dominant feature in the life of everybody, making the skillful hands

redundant and the creative mind useless.

What is needed is, to give technology its human face, to bring it near the everyday life and to make it the servant of the man. Technology and its machines will fit on the size of man, on his possibilities. Instead of using it as a tool for mass production, we'll adjust it to a production for masses and by the masses.

The control of space

The hope for these essential changes, rests primarily on the way the space is controlled, and on the kind of forces leading it. Only if the production of space is controlled by its actual users for the interest of them, and only if the forces that leads it, are deliberated from profit and professionalism, changes will follow.

The only way is to encourage ordinary people take in their hands this affair of shaping the built-environment, give them the resources they need. And make the architect a servant of them, a precious assistant who will help them formulating the means and tools they need to come up successfully with this task.

In such a way of collaboration between people and architects the goal won't be only the created result but also the process followed to reach it. The process has to determine the result without penetrating in its aim.

A building cannot be useful or beautiful if the process followed in its construction was not a human creative process that generates it, leaves it to be evolved and adjusted to the people who use it.

And the natural consequence of this above mentioned freedom, is the need of the Order that will make every human action to be this, what was needed and to be formulated intuitively as a result of the order. This order will be generated from the shared values people have.

Trying to identify the essence of this order, maybe just trying to touch it, I'll pose some negations

I don't believe that this order, that has to govern a creative building process, can be posed by an individual. Even more, it is not an order that can be decided by some people and be posed by force. And also it is impossible to make plans and programs of how this order can be reached. The only affirmative statement I'm able to do is that, it is needed a lot of time of work and experience trying to achieve this, not clearly defined, order. And surely this achievement is an individual affair, and only if it is attained by each one individually, can become common and shared by the whole. During this process I cannot deny the mutual help and the common work, not at all. In the contrary, I believe it is helpful. Just the effort to understand, and even better to feel, where this order lies is utterly an individual affair.

I have found a thought of Yung-chia Ta-shih in a book of Aldous Huxley that helped me to understand what the essence of this order is.

"The one Moon reflects itself wherever there is a sheet of water

And all the moons in the waters are embraced within the one Moon."

I believe that the same happens with the order we want to reach. The one Order reflects itself wherever there is a soul willing and open to reach it, and all the orders in all the souls, maybe different in forms, as the picture of the moon differs from calm to waving water, from clear to dirty water, are embraced within the one Order.

So the intention is not to form and pose the order, but help it to be emerged in everybody, and everywhere, from the smallest to the largest levels of life.

The construction of a building to be conducted and finished needs not only the architects.

A lot of other persons are indispensable, as the

The form of work in a building process

carpenter, the bricklayer, the plumber, e.t.c. All these specialisations joint with the architects a working team, which undertakes all the projects as a team. The workers are inhabitants of the community where they work. This joint working team belongs to nobody but to itself, and within it there is a genuine participation of all the members to the organisation and implementation of the projects. That means that the decisions, concerning the works won't be made by one or two persons. Everybody knows something better than the others. So, in this case, he will have the first word, and his opinion will be followed, no matter if he is an architect, a carpenter, an apprentice or one of the users.

As concerning the money earned from the projects the team has undertaken, they belong to nobody but to the team. They are shared by the members of the team in equal amounts. So nobody takes profit from the labor of the others. And even more the aim of the working team as a whole, won't be to obtain a certain capital and to invest it in constructions. The main and the only aim of the working team will be to offer its services to them who have a need.

And provided that in a town all the engineers, architects, craftsmen etc, are working under the schema of such working teams, operating in the community level. All these working teams could form a co-operation in the town level, which could help on a coordination of the projects and on an exchange of experiences.

Another main purpose of the working teams will be the training of students and apprentices, whose intention is to become architects or craftsmen. This way, the education of architecture and crafts will not stay enclosed in schools limited in theory and design, but will be integrated through the actual practice in virtual cases.

The participation and its presuppositions

The working team must ultimately take up the supervision of quality in the common interest. In collaboration with the users, it has to discuss materials and methods, and build up a new tradition of worthy workmanship, aiming on the quality in the common interest.

The construction process will be the field of these pursuits, through a deep involvement of all the interested groups in this process.

Certainly the kind of participation succeeded and the difficulties it carries, depend on the scale and kind of project, as well as on the procedures followed. From one point of view it is true that, it is easier to succeed better forms of users' participation in a private house project, where client and user are identified in the same person, than in public buildings projects where the users are too many and even unknown, or at best identified as groups. What makes the first case more feasible than the second is that it doesn't claim redistribution of power and resources, what for the second case is presupposition of its success. But from the other point of view, both cases have to confront the same crucial problem, laid on the operational level and dealing with the means and tools users dispose, to come up with their urban problems. In this point lies the importance of the role of the architect concerning the users.

A common language of communication between the architects and the users is needed. The problem doesn't end on the formation of such a language, but becomes very important concerning the way this language is used.

Provided that we handle such a language, and that we use it as a very successful tool during the discussions between architects and users, where the latest bring up and reveal their desires. Such a discussion is often

used as the starting point of design. The architect believes that he has put everything he needs in order and he starts designing. What is happened during this process is that the architect adapts the users desires to his own ideas and images, and what is dominated when the design is off, is the architect's ego. Nevertheless he has tried, and he has tried deliberately with the intention not, ^{only to} deceive the others, but primarily himself, that what is designed is determined by the users' needs and desires. It's a very easy way to think that the social and spatial awareness is acquired. Essentially it is miles away.

Design versus construction

The design process becomes a very genuine refuge that permits illusions of changes to take place. So if we want to encourage and support the users participation, and if we believe that it is worthwhile to prevent the built environment from the prevailing images architects and planners have, we have to dispute the importance of the design process as an indispensable step that precedes construction, but we have to integrate it within the construction process, which will be the first and the last step of the whole process where all the decisions will be made.

The first step of a construction process includes a lot of thorough discussions between the architects and the users, trying to formulate within a deep interchange of experiences, knowledges and feelings the main patterns, that have to be followed during the process. When this step of formulating the patterns is in end, simultaneously the general image of the building is in the minds of the architects and the users. Afterwards everybody is ready to be involved in the construction process.

The participation of users in the construction process is not fulfilled only if they work together with the others to bring it in reality. It is the final aim. At the beginning it might be enough if the users could be present frequently in

the construction site, to see the building growing up day by day, to imagine its spaces, to decide for every problem that emerges, to see how the raw materials are transformed and give nice forms, how the common human work can be creative, how the machines and the technology have taken a human face and help the people without oppressing them and rendering their minds and hands useless. If the users, in the first steps of the construction process have been remained apart as observers, as it goes on and approaches the end, they will start be involved in making the finishing work, painting it, planting the trees and the flowers, constructing the fences and the benches. That's a good starting point and embodies all the possibilities to be integrated in a full involvement of the users in the construction process, side by side with the architects and the workers.

Land

At this point arises the question of the land and of the forms of its ownership. Each local community will be responsible for it and will arrange all the problems that will appear.

How a local community could solve this problem. Each citizen who belongs to the local community owns a piece of land where his house stands.

It is not permitted to own more land than needed. The rest of the land is the property of the local community.

As concerning the land, the offices, workshops, manufactures, plants etc need, it will be owned from the local authority, and the people who need it will hire it from the local authorities.

If the hired piece of land has on it the required building, then the rent is augmented. Nevertheless, the rent payed is proportionated to the annual income of the enterprise.

The problem is if somebody wants to hire only the land and to construct a building on it, according to the needs of his work. Who is going to pay for the cost of the construction?

At this case the local authority will be responsible to provide the raw materials, tools and machines necessary for the construction. The renter will be responsible for the construction of the building, which is not his property, but he can use it during his whole life to make his job in it and earn his living.

The question is how the changes are feasible and how can be conducted?

Everybody who rents a house, could buy it from the owner by paying an amount of money proportionated with his annual income. Then the former owner will pay a proportion of this money to the local government.

As concerning the houses who stay empty the local government would buy them from the owners, paying a small amount of money.

There might be also another possibility for them who wouldn't like to live in the houses they rent but would rather build their own houses.

The local government will be responsible to sell to them the land they need in low price.

The local government handles the money from the rent of land and from the property taxes, and it uses them for the public works of the community.

Local communities

Each community is self-governed and is responsible for its own resources and problems. That implies that, it eliminates the bureaucratic forms of solving problems by substituting immediate and direct actions at a local level. This way we'll have quicker, more delicate and actually more efficient modes of government, than the prevailing ones.

Primarily, the public realm has to promote free and open discussions on issues, which affect the community as a whole. The benefits of this public realm are not just the obvious ones of self-government - control over decisions affecting oneself - but extended beyond this to areas of enjoyment, which sound almost quaint to our ears: "public happi-

ness", the delight in appearing in public to disclose one's personal identity, the enjoyment of debate, sharing one's opinions with others even including an opposition, the pleasure taken in public speaking, the art of persuasion where artifice becomes a satisfying substitute for physical coercion.

Citizen Assemblies

In such a local community, where every citizen is not scarcely termed citizen, but namely has a voice in his government and a share in public power, is responsible also for everything that takes place in his own community.

Each local community will formulate some assemblies based on its own citizens, which will take care for the quality of the environment of the community.

Each neighborhood might have an assembly responsible for all the environmental problems it confronts, or each assembly might be responsible for some special problems of the community - let's say there might be one group of citizens that takes care of the streets, the traffic and the transportation modes, another of the parks, another of the educational and cultural facilities, another of the market and the shops. Prerequisite for their success is their co-ordination.

Nevertheless the exact form of these assemblies has nothing to do with their essence, which is that everybody in collaboration with others and with the local authorities is responsible to make a diagnosis of an environmental problem in his community, and to find out what is fine and what needs repair, what is missing and what doesn't fit well with its surroundings. This diagnosis will become a continuous process, with the real involvement of everybody.

Allocation of money

According to the results of this diagnosis, the money the local government has from the taxes and the rents, will be allocated in all over the community, with a unique aim: the satisfaction of the needs expressed by its inhabitants, through their own

The role of the working team in the public works

involvement in the implementation.

Where the problem is crucial, where the needs are great, there will be given the money primarily. What will be the role of the working team in these public works?

After the diagnosis has been done and after has been decided the budget dedicated for a special public work in a neighborhood, the working team can be faced as the mediator between the authorities and the neighborhood. It will have the cost control of the budget, and it will try to provide the materials and the tools to the neighborhood, to help them participate in the construction process, or even more undertake it. It will be responsible therefore to bring the work to its end, even if its whole construction is undertaken by the users.

The role of building code.

Under such conditions of decision making and working, I try to figure out what the role of a building code might be. If each case is confronted by its users and by the working team as a special case, having its own context, where will be no reason for profit, since they who have the problem try to solve it, I cannot find what the building code might offer, than restrictions, which eliminate the creativity of the workers in prescribed forms.

The only thing a building code has to do is to care for the safety of the building under construction. Its offer might be great, if it could limit its competence to the fixing of the safety rules.

I try to figure out how the need for a building code has been formed. The inhumane technology of gigantic structures, the mass production of houses as ready-made products for consumption, and the exploitation of land by some privileged groups, had as a result the formation of the building codes, as an excellent tool of controlling the production of environment for the interest of a few people.

The desired ultimate quality of the environment, to become as human as possible and to be fit on the scale of man, has nothing to do with building codes.

This might be more a constraint than a helpful order, because the order we are searching for, doesn't come from imposing laws from outsiders, but is generated from the work and the life of all the participants in the creation of the environment.

The zoning laws

The same more or less confrontation is worthwhile for the zoning laws. They do nothing, but dividing and putting barriers, isolating functions each other, - and as a consequence - mortifying some parts of the towns for a long time each day and making the use of some building less intense.

Geographic and social accessibility

The zoning laws have to be substituted by orders of social and spatial justice, which lead to an allocation of all the functions in a community or town, in such a way that the geographic and social accessibility to them gives the same opportunities to all the inhabitants of it.

The problem of the social and spatial justice in our towns is a crucial as this of their environmental quality. I believe that the quality will dominate our environment only if the social and spatial justice is re-established in our towns.

The main ideas of what is written remain on a theoretical level. Although I have tried to bring them near practice, I have found that's impossible to relate theory and practice in a general level.

Practice is action, and it transforms the theories as it is claimed from its context and its specific features.