I. Our Subject

When I was invited to address the international meeting of the World Peace Through Law Center, I felt that the case I was compelled to present to lawyers and judges striving for a peaceful and better world was that of the urban crimes which are sanctioned by law. We all share the enormous obligation to recognize these crimes, investigate their causes, and proceed with finding solutions which can put a stop to them.

There are many such crimes. On this occasion, however, I shall confine my remarks to two crimes which I am convinced create the most serious problems for everyone and which are responsible for the gravest injustices suffered by weaker citizens, permitting the affluent and powerful to profit at the expense of all others. These crimes are:

1. The exploitation of urban land and the immense profits obtained from inflated land values. These profits are by no means equal for all landowners, despite that the majority of constitutions proclaim equal rights for all citizens.

2. The exploitation of urban space by a minority who build high-rise buildings for their own financial gain.

In our cities we suffer from the effects of many crimes which are still not fully understood. These two urban crimes are not the only crimes of injustice and exploitation in our changing world, but in the urban field, they are the most serious and serve to indicate what action is necessary.

To achieve our goals in such a difficult matter that we should consider it our duty to speak quite openly and to admit our own responsibility and guilt. Two years ago I began by making a statement entitled "Confessions of a Criminal" in which, as an architect, I accused myself of my profession's contribution to these and related crimes.(Ref. 1) This statement brought very satisfactory results in terms of the discussion it provoked on that occasion, as several experts have since remarked.(Ref. 2) But discussion is not enough. We need action. Such action is the responsibility of the law. For this reason, my confession is now made before judges and covers the legal aspects of these urban crimes.(Ref. 3)
Citizens

A city (or, in modern terminology, an urban system) belongs to all citizens in many senses, ranging from their common participation in daily urban life, with all its benefits and disadvantages, to their contribution to the cost of the city’s development and daily operation. The obvious conclusion is that every citizen should profit from the use of all urban land and urban space. This is not true in practice, and conditions which allow a small number of landowners to benefit from the total human effort made by all citizens result in the greatest of urban crimes.

On the basis of the previous statement, let us examine the two crimes I have mentioned and attempt to understand why they are the most distressing examples of injustice in urban life and how they came to be crimes which, in essence, are no different from rural feudal practices of bygone ages.

The first crime is the exploitation of land for the benefit of the few. This does not stop for many reasons, some of which are as follows:

1. With the continued and inevitable growth of urban systems, land prices increase much more sharply in areas selected for the city’s expansion.

2. The cost of land is much higher in areas designated for urgently needed highways, roads, water, and power networks, etc.

3. Since growing cities need consistent remodeling, land values are higher in areas destined for publicly financed urban renewal schemes.

As a result, a small number of people become very rich. This is a grave injustice because:

1. These landowners do not contribute any more than other citizens to the city’s growth.

2. If they do also contribute to growth, it is in a different way; e.g., as parents, industrialists, inventors, etc.; but then they also receive other benefits from all these contributions.

This is unjust and a criminal offense because these landowners:

1. Do nothing, yet gain much more than other hard working citizens.

2. Quite often do disservice to the city for the sake of personal profit by putting pressure on public authorities to buy their land, although it may not be in the most suitable
location for the proposed project.

No other group of citizens can gain so much by doing nothing. Those who invest in industry or who merely deposit their money in a bank can never make comparable profits. The crime is even more serious because it is not punishable. Land speculation is far worse than any other kind of speculation. Only in this instance can a small minority make huge profits with no effort, simply because they happen to own land in areas destined for development in city plans or because they were gambling (honestly or otherwise) with this in mind.

Many studies describe the size of profits made from sale of land in certain locations but make no mention of the unfairness of such practices and its causes. Now is the time to raise the question because this game is beginning to become very dangerous all over the world, as is attested by many cases in Europe. It was probably in the United States that the problem first became a serious one, but it is now spreading to western Europe and will soon be a world-wide phenomenon.

The second very grave and much more dangerous crime is that of the exploitation of urban space. From urban land as a two-dimensional surface we move to the three-dimensional space created by the height of buildings. There was no urban space problem until the 20th Century, when technology gave birth to skyscrapers. High-rise buildings create the following major problems:

1. They work against Nature, or in modern terms, the environment. They destroy the scale of the landscape and obstruct normal air circulation, so causing automotive and industrial discharges to collect in pockets of severe pollution which cannot easily be dispersed. The most successful cities of the past have been those where Man and his constructions were in a certain balance with Nature.

2. High-rise buildings work against Man, himself, because they isolate him from others, and this isolation is an important factor in the rising crime-rate. Children suffer even more because they lose their direct contacts with Nature and other children. Even when contact can be maintained, it is subject to parental control. Both children and parents suffer as a result.

3. High-rise buildings work against Society because they prevent the units of social importance - the family, the extended family, the neighborhood, etc. - from functioning as naturally and as normally as before.

4. High-rise buildings work against the Networks since they lead to higher densities, overloaded roads, difficult and more expensive provision of water supplies, and, even more important, they form vertical Networks which
create many additional problems (again, crime is just one of them).

5. High-rise buildings destroy the urban landscape by eliminating all values which existed in the past. Human symbols such as churches, mosques, temples of all kinds, city-halls, which once rose above the city, are now below the skyscrapers. We may not agree that God or Government should rise above Man, but are we ready to agree that symbols of capital gain should rise above everything else? Similarly, we are beginning to obliterate many traditional villages and cities with the soaring hotels we build for those who come to see and admire them. Does this make any sense? Another danger stressed by some experts should not be overlooked: earthquakes may cause unforeseen problems both for the skyscrapers and their surroundings.

6. The conclusion is that high-rise buildings (representing Shells) are in opposition to the other four elements of human settlements (Nature, Man, Society, Networks). This is also true from the economic point of view (the city is overloaded with people and costs); from the social and political points of view (the few, the owners of this land, benefit at the expense of the many); and from the technological and cultural-aesthetic points of view. These problems are ecological, humanistic, social, technological, and cultural. Experts from all disciplines have met in Greece to discuss them and to suggest possible solutions. (Ref. 4) Here I want to deal with one basic aspect related to law and peace among people: although high-rise buildings create many problems for the City of Man, a minority can make profits from them with incredible ease. Initially they buy a property where five stories are permitted, but then a new regulation allows twenty stories. Instead of only five units of urban space, they now have a bonus of fifteen more.

This again is a grave injustice, the worst of all the injustices committed in land marketing and property development. This constitutes the most severe pollution of urban space, but we make no mention of it. Air and water pollution can be controlled for a short time by stronger winds and currents and in some decades they will certainly be dealt with by modern Man. But what is going to happen to the permanent air and urban space pollution created by skyscrapers. Is there any reason why they should be allowed to scrape the air, the space, and the sky which belong to all of us?

The result of the two crimes mentioned above is that, in many countries, land values may well range from $10 per hectare ($4 per acre) in outlying parts of the countryside to over $20 million per hectare ($8 million per acre) in city centers with high-rise development that is up to 2 million times more. This means that some people gain
huge profits from expanding cities, although each citizen contributes to urban growth, even farmers from outlying areas who supply the city with goods.

III. The Causes of the Crimes

After defining the two most serious urban crimes, we must now discover their causes. Even before doing this, we must clarify whether they are really crimes and whether they should be punished. When I first presented these cases as crimes, and even confessed my own part in them (Ref. 5), the response was a positive one, although not everybody agreed that we could call them crimes. Some people simply called them stupidity, others lack of maturity. I can now affirm that I was not at all convinced by these suggestions. I firmly believe that we are dealing with crimes. The fact that inhuman towers are built does not necessarily mean that those who build them are criminals. It may simply be that these people are following present-day trends without realizing the effect of these trends. We should not confuse the builder and the building. In the past, mankind has built very humane cities. There are some medieval cities which are greatly admired, yet the feudal lords who built them may well have been inhuman and criminals.

In our discussion in Greece, others preferred to call the phenomenon a case of epidemiology to be treated by pathological means; that is, an urban disease for which a cure must be found. Others saw it as intolerance of crime. Finally, Margaret Mead stated that even if this phenomenon had not been considered criminal up to now, it certainly would be from now on. These discussions reminded me of other instances of the manifestation and awareness of crimes. It is very probable that cannibalism may have been quite prevalent in many parts of the world some 200 to 500 thousand years ago when the species of homo erectus known as Peking Man (Pithecanthropus pekinensis) inhabited the earth. One might well contend, therefore, that cannibalism was not a crime until Man recognized it as such. But this contention does not change the substance of our subject. Cannibalism was and still is a crime, no matter when Man became aware of it as such and started punishing it. Similarly, the construction of high-rise buildings for the benefit of the few is definitely a crime, and it is time that we realize it.

Is it really the first incidence of this crime in history? Taken to such an enormous scale in terms of height and volume, it certainly is the first manifestation. At a much smaller scale, however, it often occurred in feudal times. When only one lord held the reigns of power, it was his tower which dominated the city, the tower of power and government which was later taken over by the people. Sometimes several less powerful feudal lords with conflicting interests erected their own towers, remains of which are still to be seen in the Mediterranean and the
The fact that these symbols of rivalry neither became widespread nor managed to survive, demonstrates the inhumanity of such phenomena. Nowhere in the world has a city ever developed successfully with such towers of rivalry.

In human cities property owners always had equal rights. Buildings rose to a certain height, varying from one story to four or five stories in walled cities where greater density was necessary. This "normal" height was exceeded only by the edifices of the church or government or by fortresses, which were for the protection of all citizens. This is true both of ancient and medieval cities.

Why, then, for the first time in history, have we become criminals in our cities? Because it is only in modern times that cities have experienced such rapid growth, are so vast, require so much space, and have an income and technology which permit any type of construction. Only now do cities have populations exceeding one million, which until 1800 A.D. was the limit. Only in our age are there so many cars that each citizen needs more and more space.

The causes of inflated land values and increased building heights are many. There is no valid reason why the few should profit at the expense of the majority. This exploitation of inevitable city growth is a result of:

1. Greed for economic gain.

2. Ostentation and desire to achieve greater status, as in the case with many corporation towers.

The phenomenon really began in our century. When the Eiffel Tower was built in Paris 1889, it reached a record height of 300 meters (984 feet), but it belonged to the nation. No individual was exploiting the city. Unfortunately, some great masters of the first half of our century like Le Corbusier in Europe and Frank Lloyd Wright in the United States put forward the high-rise as a solution to urban problems(Ref. 7) without taking a stand on the social and legal aspects of their proposals. As a result, all towers now belong to private groups or very special services, even in socialist countries where land belongs to the state.

It is interesting to note that among the land-ownership battles I witnessed in a professional capacity, one of most severe was in a socialist country where the management of a steel factory opposed the interests of the city, represented by mayor and city-council, and finally won their case. When I learned that land exploitation, caused many problems in a touristic area of Poland(Ref. 8) I was amazed, until I saw that even the character of Moscow's
Red Square in Moscow has been spoiled by the skyscrapers rising around it. One could understand the erection of a building above the old Kremlin of the Czars to present the new political system, but to spoil a historic square for the sake of a few buildings of secondary importance is a pity. The cases I have mentioned, however, confirm the two motives behind these crimes: even when people do not own the land, they still want to exploit the land they occupy and want to create a landmark. Man is no different, whatever the political system.

How are all these crimes occurring? Why do city and national governments yield to pressures for greater exploitation of some areas? Forty years of professional experience in 37 countries and in all five continents, and the study of many other countries and their problems, have taught me that in most cases landowners take the initiative. Governments agree either because they are not aware of the crime, or because they are under various pressures, which are usually based on statements made by so-called experts that skyscrapers are beneficial to the city. Finally, of course, in a few cases there may be indirect and concealed financial interests which can lead to mafia-like exploitation of urban space. The fact is that no matter how educated and honest the city leaders, this phenomenon continues to spread.

We can, therefore, ask whether we should oppose such urban developments, particularly since we are aware that although high-rise buildings may not be acceptable for families with children, they may be quite suitable for offices, hotels, or other uses. The answer is the following:

1. Very often high-rise buildings are harmful to their own inhabitants. In this respect alone they are criminal and inhuman structures which should not be permitted.

2. In other cases, these buildings may serve their inhabitants but do harm to the city. In such instances, it must be clearly stated why high-rise development of one property is preferable to renovation of many others. Frequently, the erection of a high-rise causes many other buildings to become slums. So much new space is provided by one building that there is no incentive to renovate or rebuild other properties which fall into disrepair as a result.

3. Even if the high-rise is considered the best solution for the city as a whole (this may happen in rare instances), we are still faced with one serious problem: why should only one property gain all the profit?

In concluding this section we can therefore make the following assertion: with the onset of the 20th Century, humanity has entered a new feudal era in terms of urban land development; these practices are criminal, and it is
V. The Need for a New Urban Land Policy

What is the solution we need? What is the policy we can implement, and why?

In matters like these we should learn from the past and find out what Man has done in similar situations. Several cases in human history can help us to open our eyes. Whenever the first farmers did not have enough land for all the village families, they established a new village and gave land to those who needed it. Whenever the ancient Greeks felt that their cities were overcrowded by an increasing population, their first thought was to conquer their neighbors and take their land. But usually they asked the advice of the oracle at Delphi. The answer was always that they should create a new city on uninhabited land somewhere in the Mediterranean. In the new city each citizen would receive a farm as well as a piece of land and one room so that life could start normally. There are many other instances of this kind of solution and the lesson is clear: when a change is necessary, all citizens must be given equal rights and no individual should be allowed to exploit the others.

Is such a change occurring now? Definitely, yes. Man is moving from the era of farming, and inhabiting small isolated villages to the era of urban systems. One or two generations in high income countries and five or six generations in lower income countries will see the elimination of villages. Everybody, including farmers, will live in urban systems whose location, birth, and growth are defined by laws of Nature and Man. Why should a few land speculators profit from these inevitable trends? It makes no sense, regardless of the political system.

In some respects, the present phenomenon can be termed a new type of colonization, except that now it is occurring in every nation and it must take place in a lawful and just manner. All new settlers who come to urban areas should be entitled to land, not to satisfy personal greed, but because the changing economy, society, and the newly forming world demand it.

The time has come to understand that every individual is following new trends established by mankind's evolution. Nobody should have to pay for these universal trends; the few who own land in the path of the developing urban system should not be allowed to profit. A new policy is needed and this should be the following:

Those who come from the villages should be given (and be helped to acquire) basic facilities such as water, electricity, and one room.
If we do not do this, we create a wide gap between those who have and those who have not, and thus allow a grave injustice to continue unchecked. This policy is imperative, but how can any government implement it?

VI. The Need for a New Urban Space Policy

It is natural to ask how governments can deal with the distribution of land to so many people, whether in low or high-income countries. (Please note that I do not refer to underdeveloped, developing, and developed countries because all countries are in different phases of development, as are human beings, and none is fully developed.) Even in socialist countries where land is state-owned, it is not possible for each individual to have his own piece of land: cities would have to expand too much in area, and this is highly dangerous from many points of view.

What, then, is the solution? Here we must come to the realization that we are all victims of a great misunderstanding: a misunderstanding of the meaning of landownership.

When Man defines his own territories, first as a hunter and then as a cattle-breed and farmer, there was no problem at all; every group, family, or individual, had their own territory. When Man started building villages and cities, legislation became necessary entitling every landowner to ownership of the whole space above and below his property. Each landowner possesses a cone that begins at the center of our planet, passes through the boundaries of his property and extends into outer space. This was quite a natural and practical concept in the past, when it was not possible to build water-supply or sewerage systems deeper than few meters (4-5 meters or 13-17 feet), and nobody wanted these networks to interfere with the construction of his basement. Similarly, nobody was able to build higher than 2 or 3 stories (up to 10 meters or 33 feet) except in times of war and danger when the city would have to be more densely inhabited. At that time, there was no objection to the individual's claim to ownership of the space and air above his property. What could the city do above any property?

In modern times this traditional concept of ownership is losing its initial significance and is becoming an impracticable theory. The reasons for this are:

1. Ownership of land down to the center of the earth has not been possible in practice since the advent of the first underground railways. Landowners can really penetrate down only a few stories.

2. The concept of ownership reaching into outer space has also been impracticable from the time the first balloons flew over everybody's properties, and especially now that
airplanes fly everywhere

3. Now that many stories of offices or apartments are built and sold to different individuals, even landowners themselves admit that the notion of landownership has changed.

In all these and other respects the traditional concept of landownership is no longer valid and the following changes have occurred:

1. There are now limits to the height and depth of landownership.

2. The notion of landownership has really become that of space ownership.

We must realize that we have entered the era of space ownership and that new legislation and a new policy is required. My suggestions are as follows:

1. Every landowner should be termed a space owner.

2. This means that besides length and breadth, the height and depth of the land belonging to each landowner must be defined. Based on the lesson of history, height should be limited to 10 meters (33 feet), which corresponds to the three stories that every farmer or urban dweller may need; and depth to 6.60 meters (20 feet) permitting two underground stories. Five stories for each family is not unfair.

3. Cases where the law has already condoned greater heights for certain properties produce an additional problem. These properties may have to remain as they are; or, better still, the number of stories could be reduced gradually over a period of years.

4. Theoretically, the space above private property should belong to the human community as a whole, but this is not possible in practice because you cannot turn to the United Nations or to a national government to purchase space for construction which need greater height, such as water towers, wheat silos, city-hall, cathedrals, or minarets.

5. The space above private property should belong to the human community as a whole, but in a hierarchy of ownership ranging from the small neighborhood to the city and national government to the United Nations. The world community can be divided into 12 administrative levels. (Ref. 15) In ascending order of own importance, each administrative unit would own one layer of space. It can now be assumed that each layer would equal 10 meters (33 feet). Each hierarchical unit of space can be organized in several other ways (see Appendix).
6. The space below private property, should be organized in the same way, in a hierarchical system of depths which every type of human community can use. If a city can build its underground railway (its "metro") at a depth of 30 meters (100 feet), the national government can lay its future railways 3-5 times deeper and the international lines can go 10-20 times deeper.

7. Based on this concept, whoever wants to use the space above or below his property must buy it from the real owner. If a person claims that it is in the city's interest to build a 100-meter (333-foot) tower, he will have to pay for 9/10 of the space it occupies, 1/10 to each administrative unit owning the space; that is 1/10 to the commercial street, 1/10 to the central market neighborhood, 1/10 to the downtown district, etc. If this procedure is followed, motivation for building becomes honest. Space cannot be invaded without payment. Each administrative unit is much more objective in its response and can evaluate its gains and losses.

The space we live in will no longer belong to a minority - which does not make sense- but to everybody in a way which corresponds to our institutions (in the anthropological sense) and to the hierarchical organization of our society. The invasion of the air and the land space which belong to all of us must be stopped. How else can we survive? It is time for Man to take control of his resources once again, to respect the rights of landownership for the benefit of every individual and to keep the air and space for Man the master of us all.

The implementation of this policy will not only prevent many crimes in the urban space. It will also bring all profits from the use of urban space to the city as a whole. Then the city will have the funds to implement a policy by which urban land would be given to those who have not. A new policy for control of urban space is thus of prime importance, because it also leads to the solution of the problem of urban land ownership.

VII. Africa can Take the Lead

Many people will dislike these proposals because they cherish a personal dream of building a tower to display their own power and status. Others will dislike them just because they are radical and they mean a great change in many concepts and laws.

I am aware of the possible reactions to my proposals because I have experienced them all over the world, in cities which are my clients, or which simply represent love-affairs, as is the case with my own city of Athens. I am aware of these reactions and I have to live with them, but I also feel compelled to tell the truth. The truth is that I do not propose a radical change.
The real change, a very important and radical one, has been made by Man, himself, who for the last two centuries has introduced a new science and technology into his life. In so doing, he has progressed immensely, but he has also made, mistakes. This is quite natural: any radical change brings mistakes with it and the present change is a veritable explosion.

What I propose is merely an adjustment of the changes in urban development to Man's real desires. I dedicate it to the continent of Africa for two reasons:

1. As the continent which has suffered least harm from air and space pollution, it can be the first to avoid these urban crimes and thus conserve many of its traditional values.

2. By doing this successfully, it can set an example and influence other nations, and thus do a lot of good for Man on the earth.

**APPENDIX**

The Height of Our Buildings

I do not have any doubt that the basic height of buildings should remain at 10 m. (33 ft.). History demonstrates that Man has never needed more space for his individual needs. On the other hand, there are many approaches to the hierarchical scale of community space, and this question requires proper research before it can finally be answered.

To illustrate this point, a few possible solutions are listed below:

1. The hierarchical distribution of space can take the form of a gradual increase in height by equal levels, each corresponding to the basic one of 10 m. (33 ft.). The maximum height in a city of 50,000 people would therefore be 60 m. (197 ft.). Since a city of this size represents a community class V, the first 10 m. would belong to the landowner and the remaining five space units of 10 m. each would belong to the five community classes. Similarly, in a city of 2 million, representing a community class VII, the maximum height would be 80 m. (262 ft.). This is not very high when we recall that the tallest skyscrapers reach 435 m. (1427 ft.).

2. If we believe that the United Nations should build a higher skyscraper in the future world capital, then we should allow 40 m. (131 ft.) for each unit. This means that a city of 50,000 people can build a skyscraper 210 m. (689 ft.) high and a city of 2 million, 2,90 m. (951 ft.) high. This solution is not satisfactory.
3. Instead of establishing equal units, the levels could increase according to a logarithmic scale. Starting with 10 m. (33 ft.), the next level could be 22 m. (72 ft.), the third 36.4 m. (119 ft.) and so on in ever-increasing units.

My conclusion is that, depending on how high humanity decides to build and why, a scale of 13 levels can be established which will serve all needs, from the human scale (Level 1-10 m. or 33 ft.), to the global one (Level 13 or community class XII).

References

3. See statements made at the Athens Ekistics Month in July, 1972, and published in various newspapers and journals; e.g., The London Times (July 7, 1972), and in 34 Ekistics, No. 203, October, 1972.
4. The meeting of the ninth Delos Symposium held in Greece from July 12-19, 1971 discussed "the state of emergency in human settlements" and proposed methods and policies for dealing with it. See 32 Ekistics, No. 191, October, 1971.
7. Le Corbusier, The City of Tomorrow and Its Planning (tr. by Etchelli) at 192; and Frank Lloyd Wright on many occasions.
15. Doxiadis, op. cit. n. 6.