

# English Translations

## The World Day of Town Planning Amsterdam-Amersfoort 1961. p. 6

Before the creation of the World Day of Town Planning by Carlos Maria della Paolera, the city planning architects did not belong to the same intellectual fatherland, but since 1949, when it was adopted by all nations, Carlos Maria della Paolera seems to have reversed that situation. The accomplished transformation made it possible to adapt the city builders cooperation to the necessities of city planning.

Carlos Maria della Paolera founded an international organization in the aim of connecting all the forces to promote the development of towns, implantation of new cities, management of territories. In 1961 the celebration of the World Day of city planning will take place conjointly in Amsterdam and Amersfoort (Netherlands), organized by the city planning architect A. Olivier from Nimègue, President of the Permanent Committee of the World Day of City Planning in the Netherlands, by the "Nederlands Instituut voor Volkhuysvesting en Stedebouw" (Dutch institution for popular habitation and city planning) and the "Bond van Nederlandse Stedebouwkundigen" (Dutch association of city planning architects). Reports, communications and cables will be addressed to the Municipality of Amsterdam.

In Amsterdam, the general assembly will deal with a very actual topic: the problem of traffic and public transports and its influence on city planning. After a reception at the Mayor of Amsterdam, the assembly will go by special train to Amersfoort for the opening of the Exhibition of City Planning.

Alberto Sartoris

## The remodelling of towns p. 12

The architectural work is no longer considered as an isolated and independent work. It is an integrated part of the country whose aspect it helps to determine. In the Netherlands, this evolution is very progressive. In Western Europe, the remodelling of towns seems to be the great task of city planning architects in the forthcoming years. The remodelling has to take into consideration not only the situation inside of the town, but also outside, far from the city, which may have an international bearing. The problem is mainly commanded by the demography and the standard of viability. One point is of main importance: the traffic. At first sight, the modern traffic appears like an extension of man's freedom. But the modern traffic has not adapted itself harmoniously yet to the cultural life of the modern man. Therefore the city planning architect must endeavour to satisfy the desire of people in towns to see nature recreated in their surroundings. Evidently the modern traffic has to be accepted as a fact, and it must be possible to establish a valuable basis to get to a scheme of traffic. But one has to keep in mind the foundations given by science, art, and particularly a long experience. The general outlook of the desiderata looks nowadays like a network of ways spreading

from the highways to the streets in towns. In this frame, the town itself, the residential areas, are knots in a larger network, as well as regions with a proper network. If one finds living structures for such a display, it is possible to consider the town as a work of art.

The points of contact and the transitions from speedy traffic to slow traffic are very important. The speedy traffic wants to be absolutely segregated. When the traffic slows down, it gets to the realm of the pedestrian, where the biological organic world and the technical inorganic world meet. The city planning architect will have to determine the meeting points not only for the traffic, but also for the commercial centers. At last one has to consider the norms. A long experience of city planning teaches that with time, the value given to the norms changes to be finally considered like a prescription. The norms are indispensable and may often be adopted as limits. But art must provide the synthesis and talent supply the analysis.

C. van Eesteren

## The style of Nervi p. 14

Among the most remarkable animators of contemporary architecture, Pier Luigi Nervi exerts such a deep influence in the whole world, that his emulous rivals are today as numerous as his admirers. He is for the boldness the most valuable antagonist in the spirit of Alessandro Antonelli, the greatest architect of the 19th century. Further, like Felix Candela, for whom he was an example, he is all at one architect, engineer and builder. Though their works are quite distinct, Pier Luigi Nervi has things in common with Eduardo Torroja. Like the eminent Spanish engineer, he gives a great importance to the intuitive vision of the static systems in the creation of modern architecture. Inventor of genius of multiple and multipliable shapes, builder of enormous architectural masses of utilitarian, industrial, sporting, commercial, naval, aeronautic, railway, religious, road, military, public, cultural, representative and monumental nature, Nervi created processes for the prefabrication of structural elements, and a new material: the iron cement. He elevated the highest carrying column in history, met and solved many inedited problems. Pier Luigi Nervi takes more and more a determining part to the formal expression of future architecture by binding the originality of the conception, the technical inspiration, the necessity of the structural condition, the redeeming of the builder's personality and the character of the edifice, the plastic beauty, and the unlining of the function. Though they are instinctive, the artistic and aesthetic senses also take part to the imperative harmonies of the science of building. The symptomatic variety of the themes treated by Nervi and the magistral unity under which they vibrate often tend to a vivid architecture of eloquence and majesty. In a time when building seldom mentions the greatness of architecture and the indispensable contribution of the plastician, it is necessary to note that Nervi expanded a field almost

exclusively reserved to the traditional reasons of building. Pier Luigi Nervi recently spoke of the blooming of a style of truth where the structural schemes able of resolving the most considerable static themes will not be invented, but discovered. Every authentic creation will then be the direct interpretation of the natural laws that command the equipoises between the opposed shapes of material things. Consequently, the proceeding architecture will objectively become true and immutable in time. Of this style of truth, we already partially possess an example. With the Palace of Work in Torino, where the reinforced concrete, the steel, the marble and the cristal have been wisely conjugated following the strictest functional rigor, Nervi has just erected an inimitable, upsetting architecture that competes in greatness with the gigantic masses of the Colosseo and St. Peter of Rome.

Alberto Sartoris

## Towards a style of truth? p. 45

I often wonder whether all of us who concern ourselves with architecture, the educated people who take an interest in it and the vast mass of the public who enjoys its products, realize how radical has been the revolution which has taken place in building in less than a hundred years.

The principal factors involved in this revolution are numerous and amongst them one may mention general technical and social progress and the availability of new building materials. None of these factors, however, nor all of them taken together would have been sufficient to effect such a complete change in the form, the style and the dimensions of buildings, without the discovery, made about the middle of last century, of the science of building. Before this discovery the static study of buildings was based on intuition and empirical knowledge.

It is obvious that on such weak bases, in spite of the efforts, the courage and the superior intelligence of great architects and builders, static styles evolved extremely slowly; once a structural style had been defined, it remained virtually unchanged for centuries until by a stroke of genius a more efficient one was found, which in turn went through the same slow cycle of development.

The great, the enormous new advantage presented by the science of building, is that it allows us, by means of a previous study of the internal forces in a system of resistances, to find the most suitable static plan for every building project, and thus new architectural forms, with an almost inexhaustible richness.

But in my view, there is a second and less apparent consequence, which has a determining conceptual importance.

The static styles which best solve the vast building problems posed by the continuous increase in dimensions of the most representative buildings, are those which most faithfully obey the physical laws governing the equilibrium between active and resistant forces, within a structural organism. Indeed when a building's dimensions go

beyond a certain limit (many of our building types are already fairly close to it), the strictest obedience to these laws becomes an unquestionable condition of life.

The brickwork arch of limited size was able to be designed and built in various forms, with changing times and conditions: the full arch, the pointed arch, the raised arch, the multiform arch and so on, according to aesthetic taste and style. However the huge arch of today and tomorrow will either exactly reproduce the shape corresponding to its maximum static efficiency or will not exist. The same may be said for all other possible structures.

The new, basic fact is that the shape of the great arch, or the structure needed to solve a vast problem of building, can no longer be invented, only discovered; the inventors are those laws governing equilibriums between forces and possible resistances in the materials.

That is why buildings will become objectively true and immutable according to the time and the place (except for details of greater or lesser significance).

Moreover this evolution towards true forms is in a very advanced stage in those fields which deal with great dynamic forces, such as fast means of transport, especially aeroplanes.

The shapes of the first inefficient aeroplanes, which were due to the imagination and the creative intuition of their inventors, were extremely varied and different one from the other; today the great commercial aeroplanes have the same formal characteristics. Given the general style of plane (dynamic flight, sub-sonic, the air acting on fixed surfaces), these characteristics can only be modified by moving towards the form of maximum efficiency, which is determined by the perfect agreement of the work of man and the laws of nature. Granted that in building this evolution will be slower and confined to buildings of vast dimensions, there is nevertheless a common basis of obedience to non-human laws, which in a more or less obvious way unites the purity of form of the great aeroplane and of the great building. It seems inevitable that this basis will create an atmosphere of taste or in other words a style in the same way as contact with foreign races, or a return to the past, or ill-defined accidental reasons, have in the past modified or determined the aesthetic atmosphere of various ages.

This style of adherence to natural laws will be common to the whole of humanity and will be able to be changed only by a voluntary, catastrophic renunciation of the ever more complete rule of nature which has been the constant aim of the efforts of mankind ever since he appeared on the earth.

Nor should it be thought that all this will lead to unbearable monotony or the destruction of the personality of individuals or races.

However restricted the limits of a style, a school or of the natural laws themselves might be, there is always a minimum of freedom in the working out of details, of proportions and finally of decorations. This is more than sufficient to set one construction apart from others like it.

If these observations are valid, we are witnessing the most grandiose phenomenon

which has ever occurred in the development of human culture: the birth of a style common to the whole of mankind, determined by the laws of nature, a style which cannot be altered, but can only evolve by drawing ever nearer to immutable truths.

Pier Luigi Nervi

### The exhibitions "Italy 61" in Torino-Millemonti

City planning general scheme

Architect Nello Renacco

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The general scheme of the exhibitions of Millemonti had to answer to two fundamental demands. It had to choose straight away the sites for the International Exhibitions of Work and for the Exhibitions of Regions. Then one had to create a supple enough project to be constantly adapted. The site of about 500,000 m<sup>2</sup> was divided in three parts.

The SW area was the most suitable to shelter the Palace of the International Exhibition by its shape and size. In the ground comprised between the new Palace of Exhibitions and the Palaces of the International Exhibition of Work are the "Circorama" and the Pavillion of the Ministry of Work. The indispensable general buildings were placed between the entrances North and West. The lakes set between the areas of verdure make with the roads a link between the parts East and West of the Corso Unità d'Italia, and are a very interesting scenery. All the areas free of edifices became green. About 4,000 trees were planted.

### Exhibition of the Regions

Architect Nello Renacco

For this exhibition was chosen the third big area comprised between the Corso Unità d'Italia, the ring of the stream Sangone, and the left bank of the Pò. This was a very irregular ground of 150,000 m<sup>2</sup> of extraordinary panoramic suggestion with a wood of high poplars. Before all, one had to think of an adapted structure to the themes imposed to every region. Further, the pavillion illustrating the history of the first century of the Italian unity. At last, the whole had to be harmonized with the Exhibition of Work and with the Palace of Exhibitions. The regional pavillions find their conclusion in the pavillion dedicated to the first century of the Italian unity that has been conceived by the architect Carboni under the personal supervision of Mario Soldati.

N. R.

### The Highways

p. 50

One of the main mistakes of our 20th century, and of the end of the previous, is to have refused to admit the importance and

the urgency of an especially studied network of roads for the newcomer automobile was. Why such an attitude in most countries, mainly the old and traditional ones? For several reasons, the automobile being responsible for the main one. Born of the marriage of the old carriage and pair, with the fashionable railway steam engines, the automobile had to be satisfied with the ways on which the coaches had jolted. Apparently, the difference was slight: mechanical traction instead of animal traction. But that slight difference was to change the known quantities of the problem in less than one generation. Today, everywhere in the world or almost, one endeavours to make up for the delay by giving the automobile the means of traffic it deserves. Fluid traffic, increased safety, saving time and money are the advantages of the highways. In Europe, Germany and mainly Italy are well ahead by the constructions and works of art embellishing and modifying nature they have achieved. One can wonder if the highways, with their gorgeous bridges and long tunnels, will not be considered the main testimony of our civilization by future centuries, like the cathedrals for the Middle Ages.

H.-F. Berchet

### My thinking, worries, hopes p. 54

The physical sciences and their offspring, industrial technology, are in their stupendous progress characteristic for the past hundred years of our western civilization. Every month an architect is alerted by the advertising pages of his trade papers and the professional magazines, for which he subscribes, that "progress" is on the march. Our world is full of enticing frills and studded with technical novelties. Assembling them is an ever new breathless job, almost like the job of a fashion designer.

But the architect's and city planner's work is very different from that of a designer in the ladies' apparel business, which calls for something new every spring and fall season. The architect's work is concerned with long range investments; — whether it is now a vast development, or only a simple house he is working on. Here, people use all their available funds, all their savings, strain all their credit, and often enslave themselves for a lifetime to pay debts and interests. If architectural satisfactions are not eternal, they at least should be very long lasting. The architect has a perpetual humanitarian responsibility to the community. The larger community around his project always is his second, silent client, whoever the first one may be, that came to vest confidence in him.

Designing buildings into the landscape should mean, above all, dealing wisely with nature and natural factors, which change only very slowly over thousands of years. Alive human nature, within us, as the outer nature around human beings for endless ages, is remarkably steady, and it is in reality the main, the most fascinating

and sensitive material under the hands of the architect of human setting. Man is no onlooker but integrated into its entity. Last year almost a hundred thousand research papers were published in serious journals around the globe in the vast field of the life sciences alone. We know immensely more about the reactions of human beings and their organic responses to the setting we design for them and which we call buildings, neighborhoods and towns. To "know man" has been an ancient recommendation. We know man much better than Aristotle or even the 19th century knew him. We must support and supplement our intuition with this knowledge, if, as architects and planners, we want to serve man and be contemporary about it. To serve him truly, we must respect nature. As a scene for living and thriving she cannot be recklessly replaced by a fast and fashionable jumble of fabrications. Only design, most understanding of nature in us, will not make her rebellious or wither.

To fit a house into a landscape and to a well understood inhabitant is much more than engineering. It is a task of engineering to know and distribute the strains and stresses in steel and concrete. To appraise the strains and stresses in a nervous system in all the senses, in the miraculously fused organic entity —, the soul of a human being is very much an architect's job. He, by design, arranges all the many stimuli of a constructed environment around us. He will harm or help life processes. He will aid the appeal of a given setting, or he may ignorantly, insensibly barbarously defile it. It is a worthwhile, a wonderful life, to be an architect and — with all intuition and knowledge one can muster — serve life and happy survival.

But how does it apply? Called to consult and to study human setting around this troubled globe, I have been often asked similar questions. What is that Biological Realism, that "Bio-Realism" you speak of and want to bring to our doings? What are the main benefits of your "physiological approach" to design, and design appraisal?

Design acceptance by client and public is the fundamental issue in the much needed sanitation of our famous physical progress. Progress is jammed to collision and perpetual irritation and fatigue — like a freeway that once seemed so promising! Profound disturbance brings annually twelve millions to cool their too hot heels in psychiatric waitingrooms — in this "know-how" country.

To recognize — apart from all billboards — what of "progress" is truly biologically bearable — this is exactly what we must take seriously in the long run. We must be less speculative about it, in spite of glamour or gain.

I have tried by my interpretation to establish and demonstrate: The provable fallacy of separating the "utilitarian" from the "esthetic". It is vague speculative nonsense and has no precedent in nature to which human experiences, after all must be referred as our arch precedent.

Where exactly does a tree stop to be beautiful and begins to be utilitarian?

I have tried hard and sometimes success-

fully to discredit the boisterous contemptuous contraposition of the "long hair", concerned with "pure appearance" on one hand the supposedly "hard headed" practical on the other. The observant naturalist view makes this contrast tough to maintain or to defend. There are even solid naturalist statistics which deflate spurious Dollar and Cent statistics.

One has to accomplish, in those who begin to trust, a shake-up of clichés. Or more often it was a gentle uprooting of the first cocksure attitude to discount such superficialities as shape, "Gestalt", form, as anything but, at best, "following form". I could show right from nature that "shape" is more than a "culturalty tolerated trailer". From natural precedent, I should shape to be most instrumental to start with.

In an African nature preserve lions sound their roar and birds their call. These are most expressive auditive shapes and something quite real happens in consequence. We wald over a evening meadow and see fireflies zigzagging and blinking — a locomotor visual shape pattern.

Its noted by the she firefly. They meet and mate and here — characteristically — the light goes out. A shapely dance has brought about the most vital function that makes fireflies survive in this world.

I have hard tried to counteract the misappropriation of the slogan "form follows function" which was so necessary and fresh 1890-1900, a time full of imported bric-à-brac and "classical" canons, with no true life left in them. But form can lead, it does in Butterflies and in Birds; and Bees soar straight towards white azaleas — What follows what? Often the same expressive forms lead even us, who marvel in the Oceanarium and the tropical aviary — somewhat like St. Francis, who could understand fish and birds. No, form does not simply follow; and forms have been understood by man and children for tenths of thousands of years.

I found this lucky that forms speak better and more basically than big words and big numbers.

Long I had no "contacts" or supporters, or connections in good suburban or club society or anywheres. My explaining had to have an entirely fresh start. I had to upset with that "biorealistic" crowbar barricades of biases of those who read advertisements galore, how to spend their funds on the instalment plan. These people invested in unstable "progress" and inadvertently in fast obsolescence. I have been profoundly happy when clients told me that my building designs have amazingly endured for schools, houses, communities, — I believe, because they were conceived on a lasting biological foundation. Human responses are at bottom venerably old. Many of them can be deduced from precedent in prehuman and human organic nature. This makes our ground safe to walk on. It furnishes an elementary proving method for any valid proposal in design of environment. And something must be provable to doubting Thomases, and to clients above all!

"We design environment for no other reasons, but for organic responses" which are observable, testable, provable. Or else it all has no sound basis, or is not

save against being continuously discarded for "economic" and sundry looming outer facts.

"Facts" and "figures" must not be left as armament of "the other" opposing front! The facts of life — and subtle and coarse damage to it — can be used to bolster "Biorealism". It is the true realism of life itself, versus any other hardboiled realism which proves in this light not realistic at all. A dead customer is a bad one. My career as designer of living environment since "Rush City reformed" to more wholesome living, in 1925, and the "Health House" of 1927 would not have been possible in any other way when the entire western hemisphere still was fully indifferent, and later even became bristling with opposition against modern architecture. What helped was when prospective clients were made deeply thoughtful about their own fundamental requirements; and more so when they were warmed by intuitive and clinical empathy and sympathy, which is usually not even expected in a supposedly merely technical or "artistically" self willed architect. They gave, in their amazement about his penetrating understanding, more and more of their confidence and finally, after a unique experience, proclaimed their satisfaction, even enthusiasm to others. Any architects' life work depends on just this. If a "theory" works that well as it has worked with a man who came from nowhere and worked himself out of loneliness, it is truly practical and hardly a "theoretical" theory.

Richard J. Neutra

## The holy cities in the virgin forest of Yucatan

p. 58

Among the great civilizations who gave to mankind its wealth of architectural creations, the part of the Mayas is capital. The thousands of works achieved between the years 320 and 1160 of our era in the virgin forest of Yucatan were deserted before the arrival of Europeans and did not undergo the plundering of conquests or the turmoils of wars. Alone the tropical vegetation disunited the walls and splintered the staircases, and today the archaeologists only have to set back this gigantic puzzle. Among the most remarkable monuments, one must distinguish two kinds of edifices: the temples and the pyramids. With their abrupt staircases, the pyramids reach 100 to 120 feet height, and carry at their peak a sanctuary. The temples, more often called "palace" or "convent", are described by their horizontal lines. Erected on terraces, their façades open by square doors, surmounted by friezes with geometrical designs, above a perfectly flat countryside that they overlook from their enormous mass. Let us also mention the absence of curved lines, except for the "Caracol" of Chichen-Itza, the only circular building of Yucatan Maya, and presumed to have been an astronomy observatory as well as a temple of the wind. Technically, the Mayas (who ignored the wheel, or carriage animals, or beasts of burden), have accom-