RICHARD NEUTRA:

NON VISUAL ASPECTS OF CITY PLANNING

All senses collaborate intimately and are fused in a joint effect on our organic system. The world outside is the result of this combined intake by millions of varied sense receptors. Their intake is, with lightning speed, digested and brought to unity by our innermost being. But the responses of our human brains are also delayed and reverberate over very extended periods. A comparatively simple organism like a sea anemone, stimulated for ten seconds may respond for two hours! A complex human brain keeps responding to a phantastic wealth of experienced past. This past reaches back seconds, years, decades.

The planner and architect serves men, women and especially children who are plastic and impressible, while they grow into a next generation of adults.

Man and his prehuman ancestors have lived and evolved by slow adaptation in open natural spaces, long before the designer of our setting moulded us by it.

The urban scene has increasingly meant a great deal to humans. It has become more crowded in spite of all attempts to decentralize, and in about six hundred years there will be hardly standing room on the dry land for more human beings. The globe will be "urbanically saturated". Yet, long before we proceed to a spectacular colonization of other planets, our technological progress to make ever denser usage of townland, introduces also right now problems of more uncoordinated sensorial impacts. The irritating visual jumble which surrounds and envelops us, is only part of this speeded-up incongruity the city dweller is burdened with. It is perhaps no accident or chance that President Juscelino Kubitscheck, I believe, had a medical training and thus an eye for the developing pathology of our urban situation. He cast his eye for remedy. Through a concerted effort of all available arts and techniques may be a vital survival insured by Design. Waiting until the older cities by a multitude of trials and errors will muddle through, becomes less promising as these trials and errors are ever more speeded up beyond any natural "feedbacks" of self-correction, that may give relief or yield slow recovery, as we had hoped so long.

That Rio or Sao Paulo are overtaken by their own rushing development is nobody's fault. It is typical for our civilization, which believes in the technically feasible and in the Realism of technological progresses, but scrutinizes much less what is biologically bearable. Here is a more valid Realism of life and survival: Biorealismus, which the architect and city planner must embrace, defend, while untiringly studying the facts of life, as a Leonardo da Vinci was passionately interested to do. His time of a Humanist Renaissance had the ideal of total artists, who would sustain the admired total human being. We must recover this faith.

But "Conurbation", dense town dwelling, quite apart what of optical disorder or geometrical background we face, has for thousands of years been suspected of reversing and depravating natural trends and necessities. Rural people had deep doubts about towns.

Once upon a time before cities like Sodom & Gomorrha began perverting the paradisical natural scene, there existed for all human senses, through the adjustment of millions of years, something like a balanced ecology of sensorial offerings. We had grown in harmony with natural things near and far. The visual shape and movement of a bird, a bird call in flight, the smell and sweetness of the nectar of a flower, or of a fruit would be enjoyed as one, like hearing the rustle of the leaves in the woods, when we sit on a scented summer meadow with a breeze cooling our skin. These are cherished, undesigned natural situations. But, where arts have to integrate, ever novel things around us and an entire artefact environment setting for masses of men, where we are to compose a city, we cannot hope to draw simply on "Sets" of nervous and emotional responses already established over long periods of time. With us humans design becomes necessary for survival. No vital society of the human kind can survive reflexively, - as a beehive automatically controls its tight space allocations, air supply, humidity - economy, temperature,

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etc. On the contrary. From ever new traffic densities and noise levels, to the varying, stop-and-go interrupted speeds of horizontal and vertical movement as recorded by the inner ear-sense of accelleration or the awareness how much wholesome oxygen, irritating dust or exhaust-gases and volatile odorants reach our organs - with us, all is changing from decade to decade so fast that the evaluation of all of it by an integrating design is indeed as difficult to achieve as it becomes necessary. Mere biological adjustment to all the conflicting novelties would be out of the question, except in many generations. But to absorb novelties of the days, we cannot wait. Man's brains has an explosive inventiveness, which quickly supersedes yesterday's situation. Every morning a new steep climb awaits us to touch the novelties of the day.
The wonderfully, so long reliable automation of nature fails us ever more and has carelessly been upset by the multitude and collision of our glorified progresses. Our make-up is such that we are more aware of what we see with our eyes, than of other sensorial messages and warnings. It is for this reason, I take it, that I have been given the assignment to emphasize sensory significance which are extra-optical, and beyond what we can visually behold.

Whether a street corner or plaza is windswept and thus fast air movement by evaporation affects one of our temperature senses, or whether this street or square is mercilessly unshaded and thus sun radiation troubles another thermal sense, - all belongs into a cluster of telescoped urban design decisions, where all the impacts already earlier alluded to, should have their weight, should play their role, even if we had to close our eyes, to better notice them.
Above all, as living beings are involved, the city and its architecture is not frozen music, but what we experience throbs of energetic dynamism, whether the things move, or our eyes or we ourselves move over the scene. Always stimuli follow each other in quick succession. Always delayed and hold-over responses produce decisive organic processes within us.
Planning of cities is not a calmly geometrical pursuit. Neither planimetrical, nor even volume abstractions will fully serve us; but they may well guide the stream of events around us.

We have unfortunately "the arts" and our techniques so departmentalized that a strategy and an education will have to be devised to arrive again at overall total satisfactions, as so often in nature. We must not dangerously lose ourselves in one sided, lop-sided partial satisfactions. Man is an entity not a cluster of particularistic organs. Receptive and active life cannot be separate.

"Balanced, excited, thrilled and returning again to vital balance", may describe our state, while listening to music. We know it from introspective experience and we guess it by empathy when we intuitively feel, how other listeners in the concert hall share our elevating experience.

While we drive through noisy, stuffy downtown in anxious worry about a parking place, we feel the same irritations and fatigues creeping into others. Perhaps physiological measurements beyond intuition will be necessary to prove to city managers and city fathers what happens to all these people caught in the "jam". We can objectively measure physiological parameters. Here is a man who knows he will have to make a lefthand turn in crowded traffic two blocks ahead. His blood circulation and pressure, his pursrate, heartbeat, his very biochemistry with various endocrine discharges change measurably. It is no less realistic to prove all this and the damages and cumulative costs of sick nerves to the community, than it is realistic to put big figures on paper to show the of a "level-free crossing"! Costs may set each other off.-
Systematic investigation, scientific approach may begin to clear, inmidst of public desperation, the way for the arts and techniques which must intuitively and thus without easy proof work for man in the urban scene. Shape, "Gestalt", form, does not "follow function". The mechanistic way of the nineteenth century to explain a colorful butterfly, shapely tropical fish, a self-expressive singing nightingale in that naive way, is no longer the way of our advanced scientists.

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The New Humanism of Brasilia documents faith in form that may make human beings function anew. It also has faith in combatting sultriness by the triumphs of relocation into nature instead by the most glorious airconditioning. But, above all, by all our arts and techniques, by urban design in fresh air, calmness and a new climate here, the total administration of a great nation, and through its voice the future concert of nations could be profoundly influenced. A really new city may mean much to a suffering world who hears its tale.