ARC 386K—Theory I

NOTES ON *TOWARDS A NEW ARCHITECTURE* by LE CORBUSIER

I. On Engineering and an Analytical Way of Thinking

p. 1 "The Engineer, inspired by the law of Economy and governed by mathematical calculation, puts us in accord with universal law. He achieves harmony."

p. 2 "Working by calculation, engineers employee geometrical forms, satisfying our eyes by their geometry and our understanding by their mathematics …"

p. 4 "Standards are a matter of logic, analysis and minute study; they are based on a problem which has been well 'stated.' A standard is definitely established by experiment."

p. 15 "Our engineers produce architecture, for they employ a mathematical calculation which derives from natural law, and their works give us a feeling of Harmony."

p. 102 "The creations of mechanical technique are organisms tending to a pure functioning, and they obey the same evolutionary laws as those projects in nature which excite our admiration."

p. 16 "Today, it is the engineer who *knows*, who knows the best way to construct, to heat, to ventilate, to light."

p. 17 "Certain relationships are born which work upon our perceptions and put us into a state of satisfaction (in consonance with the laws of the universe which govern us and to which all our acts are subjected), in which man can employ fully his gifts of memory, of analysis, of reasoning and of creation."

p. 19 "We claim, in the name of the steamship, of the airplane, and of the motor car, the right to health, logic, daring, harmony, perfection."

II. On Harmony/Abstraction

p. 102 "Harmony is the result of work governed by *economy* and conditioned by physical necessities. This harmony is of a logical construction and congruous with the world around it."

p. 47 "Architectural abstraction has this about it which is magnificently peculiar to itself, that while it is rooted in hard fact, it spiritualizes it."

p. 72 "Axes, circles, right angles are geometrical truths, and give results that our eye can measure and recognize; whereas otherwise there would be only chance, irregularity and capriciousness."

p. 29 "Our eyes are made to see forms in light; light and shade reveal these forms;

cubes, cones, spheres, cylinders and pyramids are the great primary forms which light reveals to advantage."

p. 2 "Primary forms are beautiful forms because they can be clearly appreciated."

p. 143 "Decoration is of a sensorial and elementary order, as is color, and is suited to simple races, peasants and savages. Harmony and proportion incite the intellectual faculties and arrest the man of culture."

III. On Materials and Building Methods

p. 92 "The use of thick walls, which was in earlier days a necessity, has persisted, although thin partitions of glass or brick can well enclose a ground floor with 50 stories above it."

p. 93 "Today the construction of facades in which soft stone is used in large blocks leads to an absurd result–that the windows, originally intended to introduce light, are flanked by deep embrasures which completely thwart the intention."

p. 93 "On the valuable ground of our great cities, you can still see masses of masonry rising as foundations for a building, although simple concrete piles would be equally effective."

p. 94 "The roofs, these wretched roofs, still persist, an inexcusable paradox. The basements are damp and cluttered up."

p. 7 "In the last fifty years steel and concrete have brought new conquests, which are the index of a greater capacity for construction, and of an architecture in which the old codes have been overturned."

p. 232 "Steel girders and, more recently, reinforced concrete, are pure manifestations of calculation, using the material of which they are composed in its entirety and absolutely exactly…. Natural materials, which are infinitely variable in composition, must be replaced by fixed ones."

p. 233 "Massive timbers, as thick as you please and heavy for all eternity will still spring and split if placed near a radiator, whilst a patent board 1/8 inch thick will remain intact."

p. 237 "A house will no longer be this solidly-built thing which sets out to defy time and decay, and which is an expensive luxury by which wealth can be shown; it will be a tool as a motor-car is becoming a tool."

III. On Emotion

p. 19 "The purpose of construction is to make things hold together; of architecture to move us. Architectural emotion exists when the work rings within us in tune with a universe whose laws we obey, recognize and respect. When certain harmonies have been attained, the work captures us. Architecture is a matter of 'harmonies,' it is 'a pure creation of the spirit.'"

p. 26 "The emotions that architecture arouses spring from physical conditions which are inevitable, irrefutable and today forgotten."

p. 110 "Architecture has another meaning and other ends to pursue than showing construction and responding to needs (and by 'needs' I mean utility, comfort and practical arrangement). Architecture is the art above all others which achieves a state of platonic grandeur, mathematical order, speculation, the perception of harmony which lies in emotional relationships. This is the AIM of architecture."

p. 153 "You employ stone, wood and concrete, and with these materials you build houses and palaces. That is construction. Ingenuity is at work. But suddenly you touch my heart, you do me good, I am happy and I say: 'This is beautiful.' That is Architecture. Art enters in."

IV. On the Plan

p. 2 "The Plan is the generator. Without a plan, you have lack of order and willfulness."

p. 3 "Modern life demands, and is waiting for, a new kind of plan, both for the house and for the city."

p. 5 "The Plan proceeds from within to without; the exterior is the result of the interior."

p. 48 "The plan calls for the most active imagination. It calls for the most severe discipline also. The plan is what determines everything ; it is the decisive moment. The plan is not a pretty thing to be drawn; it is an austere abstraction."

p. 179 "To make a plan is to determine and fix ideas. It is to have had ideas. It is so to order these ideas that they become intelligible, capable of execution and communicable."

V. On Construction as a Source of Expression

p. 101 "The time is ripe for construction, not foolery."

p. 110 "One commonplace among Architects (the younger ones): the construction must be shown."

p. 217 "The architect should have construction at least as much at his fingers' ends as a thinker his grammar."

p. 180 "From the very start the plan implies the method of construction to be used; the architect is above all an engineer."

VI. On Architecture of the Past

p. 3 "Architecture is stifled by custom."

p. 7 "If we challenge the past, we shall learn that 'styles' no longer exist for us, that a style belonging to our own period has come about; and there has been a Revolution."

p. 271 "We do not appreciate sufficiently the deep chasm between our own epoch and earlier periods."

p. 3 "Our own epoch is determining, day by day, its own styl

VII. On a New Way of Living

p. 101 "Machines will lead to a new order both of work and of leisure."

p. 61 "The transformation of domestic economy demands a new type of plan for dwelling houses, and an entirely new organization of services corresponding to modern life in a great city."

p. 277 "The family is everywhere being killed and men's minds demoralized in servitude to anachronisms."

p. 6 "Industry on the grand scale must occupy itself with building and establish the elements of the house on a mass-production basis."

p. 4 "The house is a machine for living in."

p. 18 "We are well aware that a great part of the present evil state of architecture is due to the *client*, to the man who gives the order, who makes his choice and alters it and who pays."

VIII. On Urbanism

p. 153 "Ancient Rome was packed within walls always too narrow; a city is not beautiful when it is huddled together."

p. 54 "It is time that we should repudiate the existing layout of our towns, in which the congestion of buildings grows greater, interlaced by narrow streets full of noise, petrol fumes and dust."

p. 180 "In considering the effect of buildings in relation to a site, I shall show that here too the *exterior* is always an *interior*."

p. 193 "On the Acropolis at Athens the temples are turned toward one another, making an enclosure, as it were, which the eye readily embraces."

p. 242 "America has given us an example by the elimination of hedges and fences,

rendered possible only by the modern feeling of respect for other people's property which took its rise over there; such suburbs give a great sense of space; for once hedges and fences are removed, light and sunshine reign over all."