

voices of the future past

Make no small plans for they have not the power to stir the soul.

Niccolo Machiavelli (1469-1527)

Expositions are the timekeepers of progress. They record the world's advancements. They stimulate the energy, enterprise, and intellect of the people, and quicken human genius. They go into the home. They broaden and brighten the daily life of the people. They open mighty storehouses of information to the student....

President William McKinley, 1901

The African Pygmy, "Ota Benga." Age, 23 years. Height, 4 feet 11 inches. Weight, 103 pounds. Brought from the Kasai River, Congo Free State, South Central Africa, by Dr. Samuel P. Verner. Exhibited each afternoon during September.

plaque at Bronx Zoo, 1906

A country's culture can be assessed by the extent to which its lavatory walls are smeared. In the child this is a natural phenomenon...but what is natural to the Papuan and the child is a symptom of degeneracy in the modern adult. I have made the following discovery and I pass it along to the world: *The evolution of culture is synonymous with the removal of ornament from utilitarian objects.* The time is nigh, fulfillment awaits us! Soon the streets of the city will glisten like white walls. Like Zion, the holy city, the capital of heaven. Then, fulfillment will come!

Adolf Loos, 1908

No architecture has existed since 1700. A moronic mixture of the most various stylistic elements...that idiotic flowering of stupidity and impotence that took the name of neoclassicism. Architectural prostitutions.... This is the supreme imbecility of modern architecture, perpetuated by the venal complicity of the academies, the internment camps of the intelligentsia.... The search for new frontiers and in the solution of the new and pressing problem: the Futurist house and city. Architecture must break with tradition. It must perforce make a fresh start. The decorative must be abolished. The decorative value of Futurist architecture depends solely on the use and original arrangement of raw or bare or violently colored materials.... Everything must be revolutionized. The broader concerns of bold groupings and masses, and large-scale disposition of planes.... Let us overturn monuments, pavements, arcades and flights of steps; let us sink the streets and squares; let us raise the level of the city.... Every generation must build its own city.

Futurist Manifesto, 1909

Make no little plans, they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with growing intensity.

Daniel Burnham, 1910

Happiness without glass—
What an absurdity!
Bricks pass away
Glass colours stay.
The joy of colour
Is only in glass-culture.
Larger than a diamond
Is the glass-house's double wall.
Glass brings a new age—
Brick buildings are depressing.

Paul Scheerbart, 1914

Hurray, three times hurray for our kingdom without force! Hurray for the transparent, the clear! Hurray for purity! Hurray for crystal! Hurray and again hurray for the fluid, the graceful, the angular, the sparkling, the flashing, the light—hurray for everlasting architecture!

Bruno Taut, 1919

There are no architects today, we are all of us merely preparing the way for him who will once again deserve the name of architect, for that means: Lord of Art, who will build gardens out of deserts and pile up wonders to the sky. Let us then create a new guild of craftsmen, without the class distinctions that raise an arrogant barrier between craftsman and artist! Together let us desire, conceive and create the new structure of the future, which will embrace architecture and sculpture and painting in one unity, and which will one day rise toward heaven from the hands of a million workers like the crystal symbol of a new faith.

Walter Gropius, 1919

Architecture is the will of the age conceived in spatial terms. The materials are concrete, iron, glass.... No noodles or armoured turrets. ...Buildings consisting of skin and bones. ...The individual is losing significance; his destiny is no longer what interests us.

Mies van der Rohe, 1923

Architecture or revolution

Le Corbusier, c. 1920s

Hygiene and moral health depend on the lay-out of cities. Without hygiene and moral health, the social cell becomes atrophied. If you are dying of heart disease or consumption you are not likely to spend time doing five-finger exercises on the piano. Yet such words as Fatherland, Poetry, Ancestor worship, the Ideal, are eloquent phrases flung about by numbers of people occupied in writing for the papers, whose mission is to direct public opinion. But when it comes to a question of demolishing rotten old houses full of tuberculosis and demoralizing, you hear them cry, "What about the iron-work, what about the beautiful old wrought-iron work."

Le Corbusier, c. 1924

There is only one right angle.... The right angle, therefore, has superior rights over other angles.... The right angle is lawful, it is a part of our determinism, it is obligatory. Suppose there were a decree requiring all rooms in Paris to be given a coat of whitewash. I maintain that that would be a police task of real stature and a manifestation of high morality, the sign of a great people.

.... The street is the well-trodden path of the eternal pedestrian, a relic of the centuries, a dislocated organ that can no longer function. The street wears us out. And when all is said and done we have to admit it disgusts us. Then why does it still exist? What are these small houses doing in dramatic Manhattan? I haven't the slightest idea. It is incomprehensible. It is a fact, nothing more, as the debris after an earthquake or bombardment is a fact. Imagine all this junk, which till now has lain spread out over the soil like a dry crust, cleaned off and carted away and replaced by immense clear crystals of glass, rising to a height of over 600 feet! Look over there! That stupendous colonnade which disappears into the horizon as a vanishing thread is an elevated one-way *autostrada* on which cars cross Paris at lightning speed. Our fast car takes the special elevated motor track between the majestic skyscrapers.... Our car has left the elevated track and has dropped its speed of sixty miles an hour to run gently through the residential quarters. The uniformity of the units that compose the picture throw into relief the firm lines on which the far-flung masses are constructed. An overwhelming sensation. Immense but radiant prisms. We watched the titanic rebirth of the traffic. Cars, cars! Speed, speed! One is carried away, seized by enthusiasm, by joy...enthusiasm over the joy of power. When night intervenes the passage of cars along the *autostrada* traces luminous tracks that are like the tails of meteors flashing across the summer heavens...the street as we know it will cease to exist.

Le Corbusier, 1925

Maria: "We shall build a tower that will reach to the stars!" Having conceived Babel, yet unable to build it themselves, they had thousands to build it for them. But those who toiled knew nothing of the dreams of those who planned. And the minds that planned the Tower of Babel cared nothing for the workers who built it. The hymns of praise of the few became the curses of the many - BABEL! BABEL! BABEL! - Between the mind that plans and the hands that build there must be a Mediator, and this must be the heart. The mediator between hands and head must be the heart!

....

Freder: It was their hands that built this city of ours, Father. But where do the hands belong in your scheme?

Joh Frederson: In their proper place, the depths.

Fritz Lang, Metropolis, 1927

Buildings like crystals. Walls of translucent glass. Sheer glass blocks sheathing a steel grill. No Gothic branch: no Acanthus leaf: no recollection of the plant world. A mineral kingdom. Gleaming stalagmites. Forms as cold as ice. Mathematics. Night in the Science Zone. All "set-backs" of buildings have been aligned and made into automobile highways. One could drive at will across the facades of buildings, at the fifth, tenth, fifteenth or twentieth story. Automobiles below one, automobiles above one! A paradise, perhaps, for the automobile manufacturer! Furthermore, there will be the aeroplanes. One further discovery remains to be made: on a close scrutiny of the streets, certain minute, moving objects can be unmistakably distinguished. The city apparently contains, away down there—human beings! Are those tiny specks the actual intelligences of the situation, and this towered mass something which, as it were, those ants have marvelously excreted? Or are these masses of steel and glass the embodiment of some blind and mechanical force that has imposed itself, as though from without, on a helpless humanity? Those vast architectural forms are only a stage set. It is those specks of figures down there below who are, in reality, the principles of the play. But...how great is the influence which the architectural background exercises over the actors—and is it a beneficent one? It is impossible to say that it did more than come to be built; we must admit that, as a whole, it is not a work of conscious design. And nevertheless it is a faithful expression! Architecture never lies. Admire or condemn as you may.... Architecture invariably expresses its Age correctly.

Hugh Ferriss, 1929

Science Finds, Industry Applies, Man Conforms
slogan for Chicago World's Fair, 1933-34

As day fades into night, each man seeks home, for here are children, comfort, neighbors, recreation—the good life of the well-planned city...a brave new world built by united hands and hearts. Here brain and brawn, faith and courage, are linked in high endeavor as men march on toward unity and peace. Listen! From office, farm, and factory they come with joyous song.

General Motors Futurama exhibit, New York World's Fair, 1939

The architecture is amusing enough, the buildings are big enough, to give the visitor that temporary and exalted feeling of being in the presence of something pretty special, something full of aspiration, something which at times is even exciting. And the exhibition is cock-eyed enough to fall, as it naturally does, in line with all carnivals, circuses, and wonderlands. The buildings (there are two hundred of them) have color and a certain dash, here and there a certain beauty. They are of the type that shows up best in strong light. Like any Miami Beach cottage, they look incredibly lovely in sunlight, adorned with a necklace of vine shadow against a clear white skin, incredibly banal and gloom-infested on cloudy days, when every pimple of plaster shows up in all its ugly pretension. The designers of this twentieth-century bazaar have been resourceful and have kept the comfort of the people in mind. Experience has taught them much. The modern technique of sightseeing is this: you sit in a chair (wired for sound) or stand on a platform (movable, glass-embowered) and while sitting, standing, you are brought mysteriously and reverently into easy view of what you want to see. There is no shoving in the exhibit hall of Tomorrow. There is no loitering and there is usually no smoking. Even in the girl show in the amusement area, the

sailor is placed in a rather astringent attitude, behind glass, for the adoration of the female form. It is all rather serious-minded, this World of Tomorrow, and extremely impersonal. A ride on the Futurama of General Motors induces approximately the same emotional response as a trip through the Cathedral of St. John the Divine. The countryside unfolds before you in \$5-million micro-loveliness, conceived in motion and executed by Norman Bel Geddes. The voice is a voice of utmost respect, of complete religious faith in the eternal benefaction of faster travel. The highways unroll in ribbons of perfection through the fertile and rejuvenated America of 1960—a vision of the day to come, the unobstructed left turn, the vanished grade crossing, the town which beckons but does not impede, the millennium of passionless motion. When night falls in the General Motors exhibit and you lean back in the cushioned chair (yourself in motion and the world so still) and hear (from the depths of the chair) the soft electric assurance of a better life—the life which rests on wheels alone—there is a strong, sweet poison which infects the blood. I didn't want to wake up. I like 1960 in purple light, going a hundred miles an hour around impossible turns ever onward toward the certified cities of the flawless future. It wasn't till I passed an apple orchard and saw the trees, each blooming under its own canopy of glass, that I perceived that even the General Motors dream, as dreams so often do, left some questions unanswered about the future. The apple tree of Tomorrow, abloom under its inviolate hood, makes you stop and wonder. How will the little boy climb it? Where will the little bird build its nest?

I made a few notes at the Fair, a few hints of what you may expect of Tomorrow, its appointments, its characteristics.

In Tomorrow, people and objects are not lit from above but from below. Trees are lit from below. Even the cow on the roto-lactor appears to be lit from below—the buried flood lamp illuminates the distended udder.

In Tomorrow one voice does for all. But it is a little unsure of itself; it keeps testing itself; it says, "Hello One, to, three, four. Hello! One, two, three, four."

Rugs do not slip in Tomorrow, and the bassinets of newborn infants are wired against kidnappers.

There is no talking back in Tomorrow. You are expected to take it or leave it alone. There are sailors there (which makes you feel less lonely) and the sound of music.

The living room of Tomorrow contains the following objects: a broadloom carpet, artificial carnations, a television radio victrola incessantly producing an image of someone or something which is somewhere else, a glass bird, a chrome steel lamp, a terracotta zebra, some veneered look cabinets containing no visible books, another cabinet out of which a small newspaper slowly pours in a never-ending ribbon, and a small plush love seat in the shape of a new moon.

In Tomorrow, most sounds are not the sounds themselves but the memory of sounds, or an electrification. In the case of a cow, the moo will come to you not from the cow but from a small aperture above your head.

Tomorrow is a little on the expensive side. I checked this with my cabdriver in Manhattan to make sure. He was full of praise about the Fair, but said he hadn't seen it and might, in fact, never see it. "I hack out there, but I got it figured that for me and the wife or go all through and do it right—no cheapskate stuff—it would break the hell out of a five-dollar bill. In my racket, I can't afford it."

Tomorrow does not smell. The World's Fair of 1939 has taken the body odor out of man, among other things. It is all rather impersonal, this dream. The country fair manages better, where you can hang over the rail at the ox-pulling and smell the ox. It's not only that the sailors can't get at the girls through the glass, but even so wholesome an exhibit as Swift's Premium Bacon produces twenty lovesick maidens in a glass pit hermetically sealed from the ultimate consumer.

The voice of Mr. Kaltenborn in the City of Man says, "They come with joyous song," but the truth is there is very little joyous song in the Fair grounds. There is a great deal of electrically transmitted joy, but very little spontaneous joy. Tomorrow's music, I noticed, came mostly from Yesterday's singer. In fact, if Mr. Whalen wants a suggestion from me as to how to improve his show (and I am reasonably confident he doesn't), it would be to snip a few wires, hire a couple of bands, and hand out ticklers. Gaiety is not the keynote in Tomorrow. I finally found it at the tag end of a chilly evening, far along in the amusement area, in a tent with some black people. There was laughing and shouting there, and a beautiful brown belly-dancer.

E. B. White, 1939

Here's a tip for yo-all! Don't miss the New York World's Fair!
poster for New York World's Fair, 1939-40

The anachronistic persistence of the original skeleton of the city paralyzes its growth.
Le Corbusier, 1947

Don't attempt to reform man. Reform the environment—not man. This is reminiscent of the biblical account, "In the beginning was the Word." In my experience...the scriptural statement needs to be modified to read, "In the beginning of industrialization was the word." This includes the sun and moon and all physical phenomena. Although total industrialization's often negatively competitive subsystems may be motivated locally by shortsighted monetary or political profits and ambitions the total inadvertently results in evolutionarily changing the total environment to ever-higher advantage of all men and works toward the ultimate enjoyment of all earth by all men—all both economically and physically successful, without any mutual interferences or deprivations. Industrialization is physical evolution and channeled energy transformations which by the Law of Energy Conservation can never fail. *Energy cannot decrease. Knowledge can only increase.* It is therefore scientifically clear that wealth which combines energy and intellect can only increase, and that wealth can increase only with use and that wealth increases as fast as it is used. The faster-the-more? Those are the facts of science. Those are the facts of life. Humanity's mastery of vast inanimate, inexhaustible energy sources and the accelerated doing-more-with-less of sea, air, and space technology have proven Malthus to be wrong. A design-science revolution is underway. Man was designed with legs—not roots. Man with very short legs and a very big earth came to confuse himself with the botanicals and pretended to himself that he had roots and that he owned the favorable pieces of the earth. The swift evolutionary changes taking place invisibly are about to uproot him—all concepts of urbanization will become obsolete. Only the earth and the solar system will be his temporary home. Urbanization is only temporary as the cities become the launching pads for each human's blastoff into world-shuttling citizenship. In recent months calculations, only feasible by computers, have been made on a 2 ¼ -mile-high tower habitation which will be approximately ten times the height of the Empire State. It is as high as Mount Fuji. Following that design-science clue we find that a tetrahedral city to house a million people is both technologically and economically feasible. Such a vertical-tetrahedral city can be constructed with all of its 300,000 families each having balconied "outside" apartments of 2000 square feet, i.e., 200 square meters, of floor space each. All of the organic machinery necessary to its operation will be housed inside the tetrahedron. It is found that such a one-million-passenger tetrahedral city is so structurally efficient, and therefore so relatively light, that together with its hollow box-sectioned reinforced-concrete foundations it can float. The whole city can be floated out into the ocean to any point and anchored. By 1975, it would be possible to air-deliver geodesic domes able to cover small cities. It is now possible with a number of separate helicopter lifts to deliver large subassemblies to complete a geodesic dome large enough to cover a large city and do so within three months' time. They will operate like a controlled cloud to bring shadow when shadow is desirable and bring sun when sun is desirable.... Inasmuch as there will be no rain or snow in the area, people will live in gardens, or upon garden-terrace skyscrapers needing only local screening for privacy. Such a two-mile-high tetrahedral city will consist of an open-truss-framework "structural mountain" whose sides are covered with parked mobile homes which at night will be ablaze with light as are the great petroleum refineries. Within decades we will know whether man is going to be a physical success around earth, able to function in ever greater patterns of local universe or whether he is going to frustrate his own success with his negatively conditioned reflexes of yesterday and will bring about his own extinction around the planet earth. My intuitions foresee his success despite his negative inertias. This means things are going to move fast.

R. Buckminster Fuller, 1969

To cover the planet with glass would fit perfectly with the cynicism of contemporary architecture. A school, a hospital, or a media center are all variations on the same theme: transparency, neutrality, uniformity. These massive, fluid buildings are conceived without any need to know what they will house. They *could be here* as much as anywhere else. The past has given us far too many bad answers for us not to see that the mistakes were in the questions themselves.

The Invisible Committee, 2007

Either you repeat the same conventional doctrines everybody is saying, or else you say something true, and it will sound like it's from Neptune.

Noam Chomsky (b. 1928)