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The most imaginative intellects of the twentieth century chose physics as their field of play. Games of light and chance. Episodes of inferences, relationships without certainty, effects without cause, interdependence of time and space, mysteries of matter thoroughly explored, but retained as mysteries. An epoch of conditional truths. In a sense the 400-year history of modern science culminates and ends in these physics, having outrun its premises. A new epoch has opened, though few of us have reached its threshold.

Certainly modern architecture has not. Architecture more than ever clings to history and language for its origins. Visions of ethereal energies and exotic matter have not yet roused architects from their comfortable ruminations in the past. And let us not forget that language merely circumscribes what has been. Only perhaps when the rest of the world is utterly transformed by new understandings of its substance and dynamics will architecture be released from questionable certitudes of an imagined history.

History—Voltaire called it the lie commonly agreed upon. History is a fiction. It is necessary, but not unconditional, not true. It is useful, practical, instrumental, but illusory as a tender song, sung by drunkards, illusory as an electron cloud hovering near the core of matter. Modern physics has no use for fictions disguised as fact, for a sacrosanct history. Today, physics prefers a special kind of undisguised fiction. Today physics

invents the instantaneous history of the Now. It closes in on an instant of being, touching but not seizing an essence of motion, of change, in flashes of light crossing infinite and infinitesimal space, at once. Can architecture exist so dangerously?

Physics is theory and experimentation, vision and construction. Apparatus exists only to verify the elegance of an ideal. Everywhere in nature, the same laws apply—so it says. Everywhere in nature, truth is only instantaneous—it is only Now. The machines physicists build—accelerators, interferometers, radio telescopes—are an architecture of the elusive instant, the ephemeral Now. Can architecture also certify mere being?

The influence of modern physics on architecture has hardly begun. Architecture is slow to receive the new, especially when it is dangerous—how much safer to dwell in an idyllic past circumscribed by walls of literature and poetry, music, painting, and sculpture. Architecture, at its best today, seeks always the healing touch of art, the always warm Mother-embrace of art, which protects and comforts and saves us from the cold, relentless Father of science, threatening with the indifferent glance of eternity. Architecture as we know it rightly fears the austere glance of objective vision, which would tear it from every consolation, every comfort, every protective domestic illusion that softens the dread of universal mortality.

Introduction for the catalogue
CENTRICITY: The Unified Urban Field
(Berlin: AEDES/SEIGEN, 1987).

When architecture finally feels the difficult and disturbing influence of modern physics, how will it be manifest? Immediately the thought comes up, like some terrible indigestion, of a Wellesian “Things to Come”: the reign of the Airmen and the Engineers, conquest and technology, a millennial military-industrial civilization. But this is a fear-image, a shrinking back from the cruelly enlightening Father. Science may lead to technology, but it begins in understanding. The origin of science, and of an architecture of science, is an instinct to comprehend, to know the world comprehensively, and “without interest,” as Schopenhauer said, without desires that bend knowledge to a limiting purpose.

The influence of physics on architecture, when it comes, will be more fundamental than the influence of technology. Tools increase human capacity by extending the senses and by adding mechanical strength to the inherited organic. Science changes the very ideas of what is natural and human, of what human capacity and strength really are.

The influence of Relativity, when it comes, will be to restore being to the center of a cosmos of its own experience, leading to a new, dynamic humanism of urban life, and to new architectural responses, which will be new centers and new kinds of centers at every scale of the city.

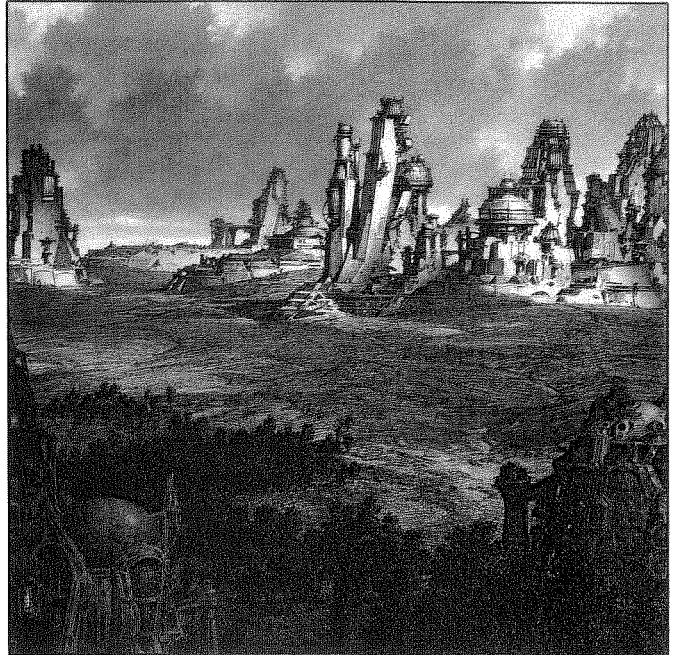
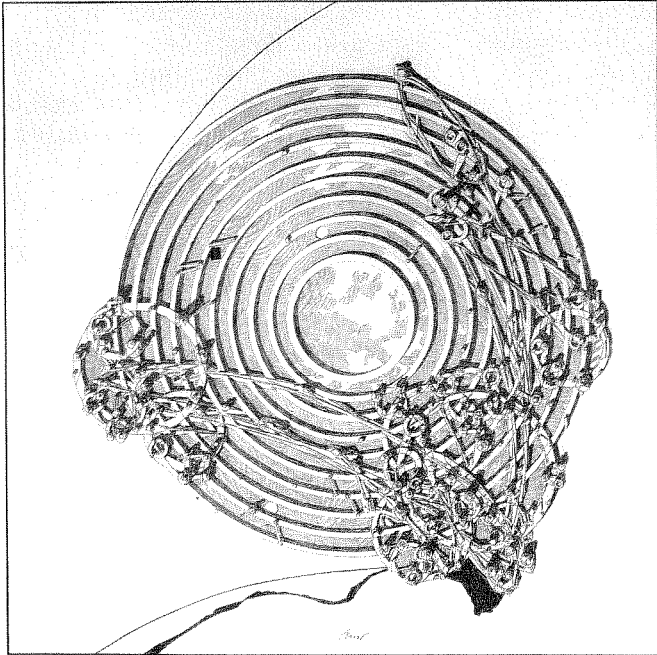
The influence of quantum theory and mechanics, when it comes, will

be to release social existence and its architecture from rigid boundaries and forms, to free thought and action from specious certitudes of both history and prediction. Uncertainty and probability are concepts from physics that will give the present moment supremacy in things conceptual and material. And they will revolutionize the meanings of these two words relative to each other. The visionary world of wave phenomena will become palpable, present, and material.

Physics will affect architecture not by the notions of scientific methodology as they are commonly believed, but by the paradoxical synthesis of imagination and mathematics revealing the atom and cosmos. In fact, the changes to come are entirely synthetic in nature and method, to be supported by fragmentary analysis, but occurring in a realm beyond it. This is the realm of ordinary experience, the realm in which architecture can become the instrument and laboratory of a humanistic science whose outline and workings can today only be imagined.

I would like to propose at least an image of this science, which I have called a universal science. It is an image of poised intensity, of great inward tensions held in dynamic equilibrium by even greater inner strengths. These are the strengths of knowledge, gained by a universal science practiced on the fields of human experience. Knowledge of this order comes from the individual's command of primitive inner forces of being through

successive transformations of experience. Freud spoke of sublimation. Even earlier, Schopenhauer raised to the highest an ideal of the Sublime. Beauty, he said, is the knowledge we gain through pleasure; the Sublime is more difficult, more cold and fearful, being the knowledge gained through common human suffering. A civilization of science and the sublime will create through command of every pain of being an architecture of indifference to consolation and comfort, an architecture of resistance to every domesticating fear, in order to turn its gaze, fearlessly, into the immense void of being.



**Centricity is Adjective and Noun,
Modifier and Modified.**

New patterns of urban form and living arise from concepts of time and space considered as one, as *timespace*. The interplay of metrical systems establishing boundaries of material and energetic form is the foundation of *a universal science whose workers include all individuals, whose principal instrument of research is architecture, and whose interactive field is centricity.*

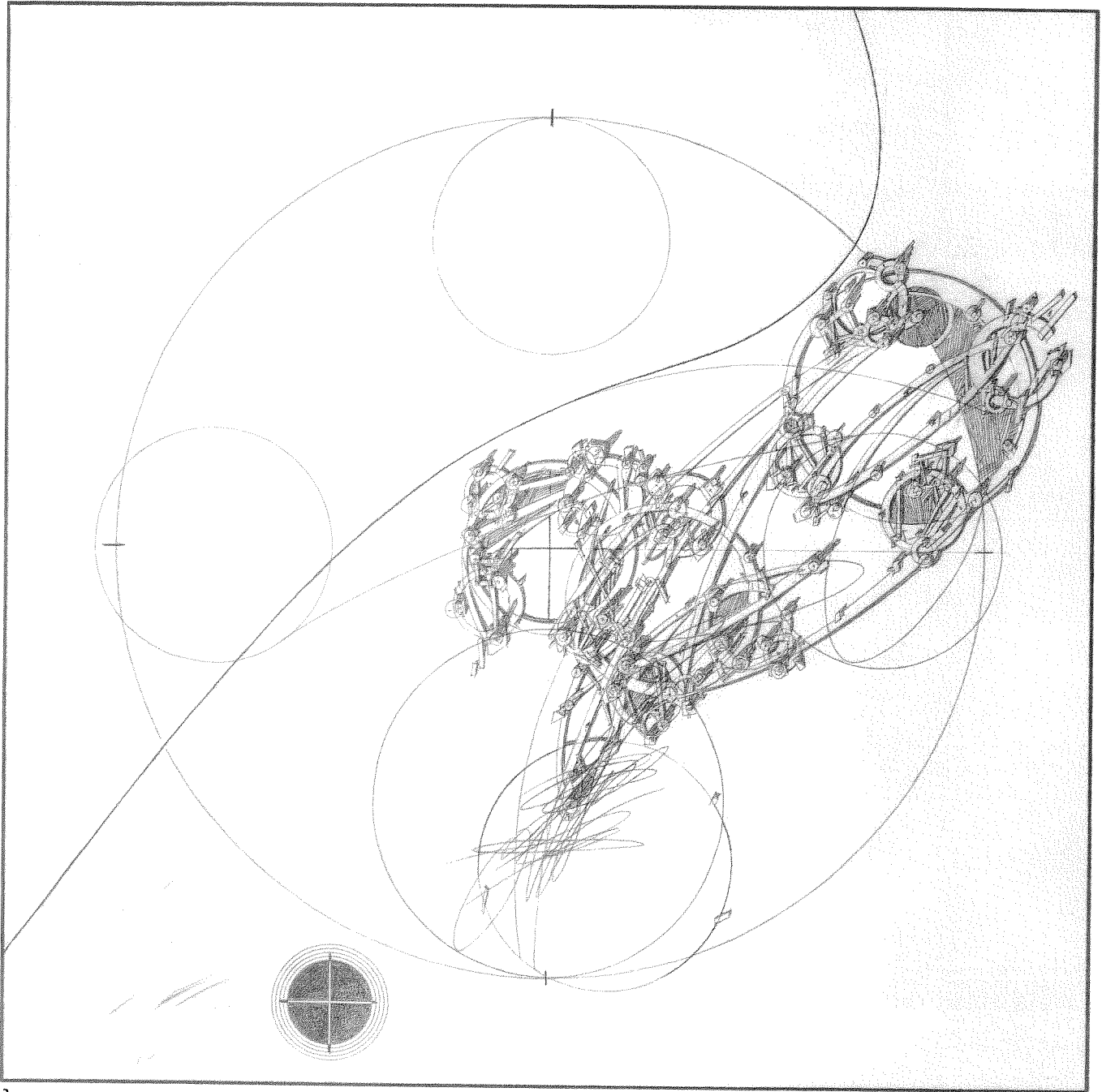
**The Aim of Research Is Knowledge,
and That of Knowledge,
Achievement.**

A universal science seeks general principles whose discovery *continuously* reunifies all fields of knowledge on a universal plane, toward the achievement of an egalitarian and humanistic *culture* of universality. This universal plane is the urban field, universally experienced and within which the timespace continuum is universally perceived and understood.

1 **Centricity:** concentric field

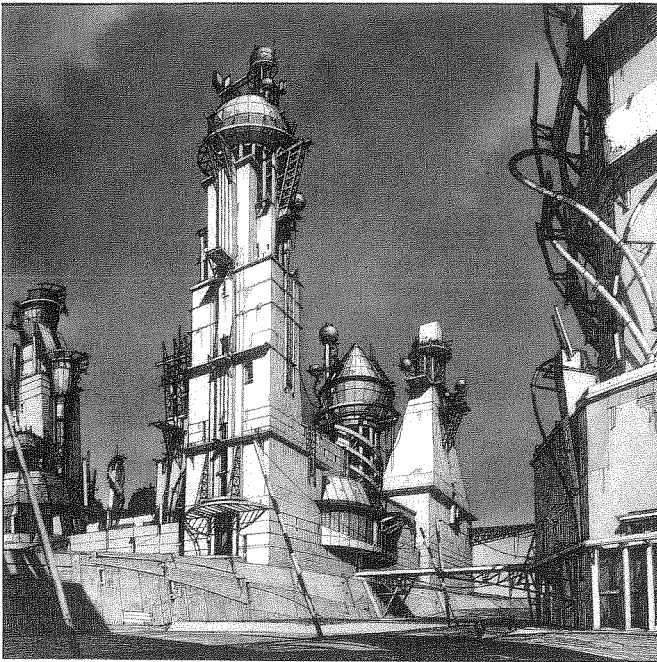
2 **Citylimit:** towers and rings

Drawings by Lebbeus Woods, 1987, 23" by 24",
pencil on paper



3

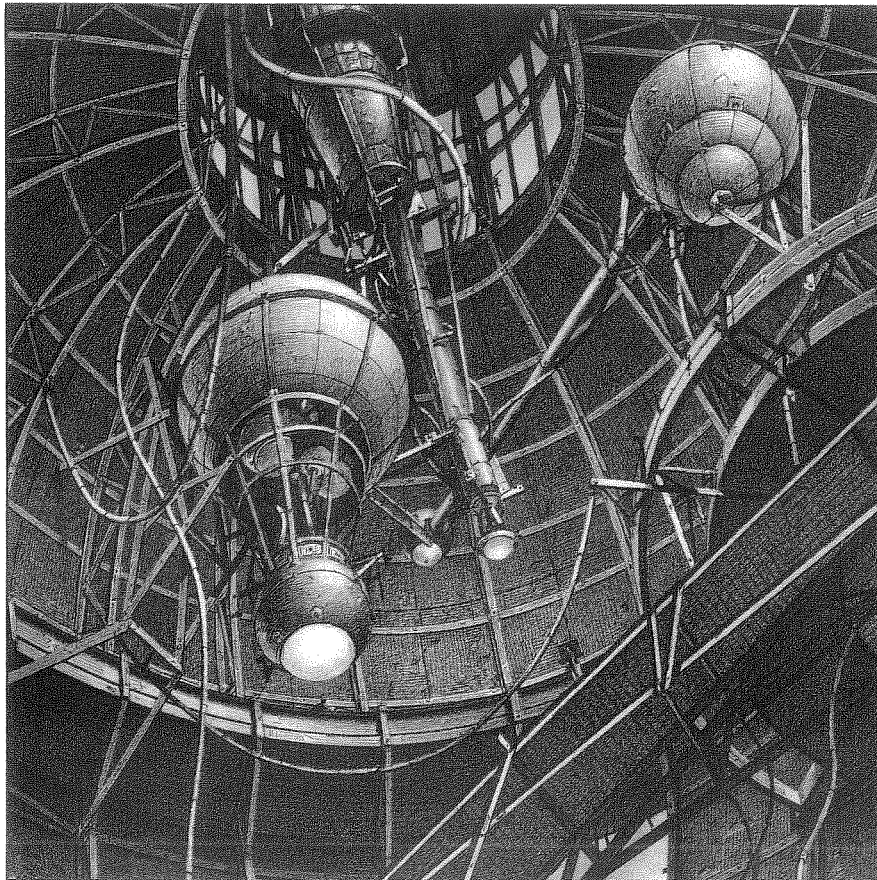
3 Unified urban field: centricity



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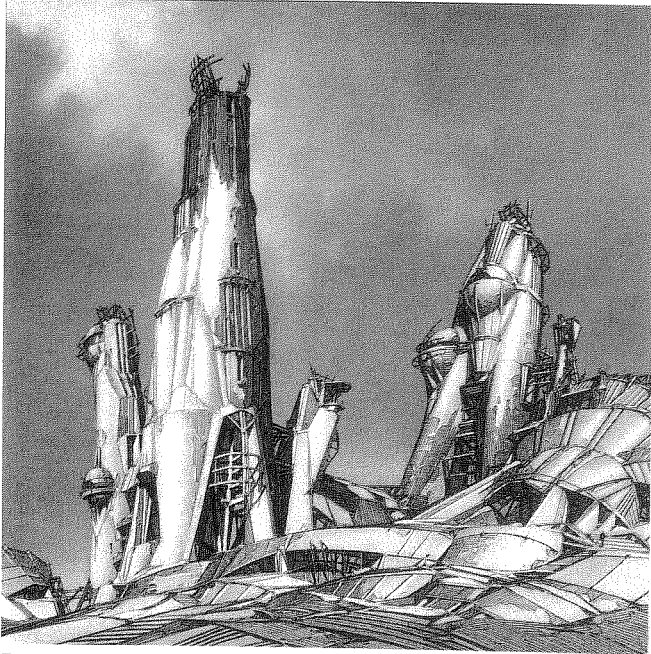
4 **QUAD.9A:** square with geodynamic towers

5 **Geomechanical towerbase,** with wave interference screen

6 **Centrum chamber,** with kinetic light machines

The Roots of a Universal Science Exist Within Present Knowledge.

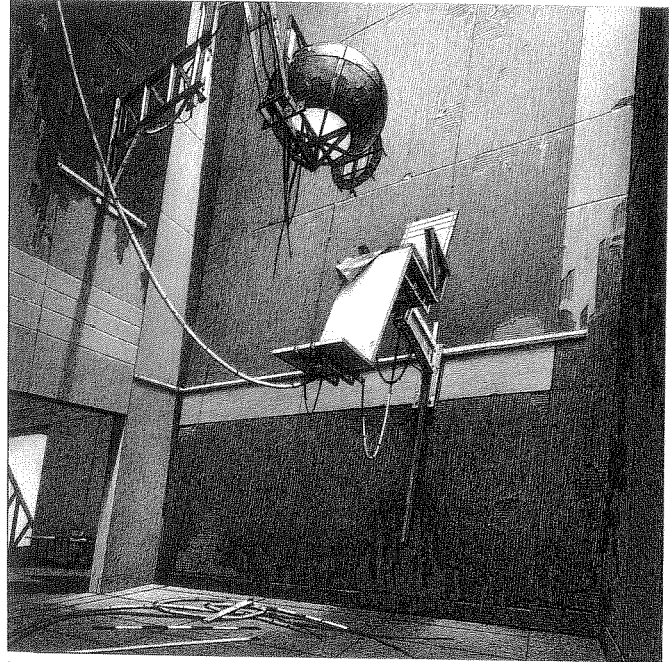
Visible light is the wave phenomenon constant to matter and energy in the universally perceived urban field. Visible light is *formed* by architecture that reveals an intrinsic order, that is, a form of visible light's metrical transformations. The architectonic mathematics (Archimatics) of visible light is the foundation of the general principles of a universal science. *The architecture and urban forms of a universal science reveal the timespace transformations of metrical light* (cf., Le Corbusier's "Architecture is the masterly, correct and magnificent play of forms assembled under light").



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**A Centricity of Universal Science
Exists Within the Present
Timespace-Overtaken.**

The architecture of dynamism (geodynamism, biodynamism, mechanodynamism) moves recursively toward order and disorder as unity, and is composed of the dual metricalities (geometric, biometric, mechanometric) of unified timespace, the centrisymmetrical and eccentricsymmetrical (circular and elliptical), corresponding respectively to quadrapolar (QUAD.) and deformed-quadrapolar (D-QUAD.) timespace rings, according to visible light distribution and relativistic distortions.



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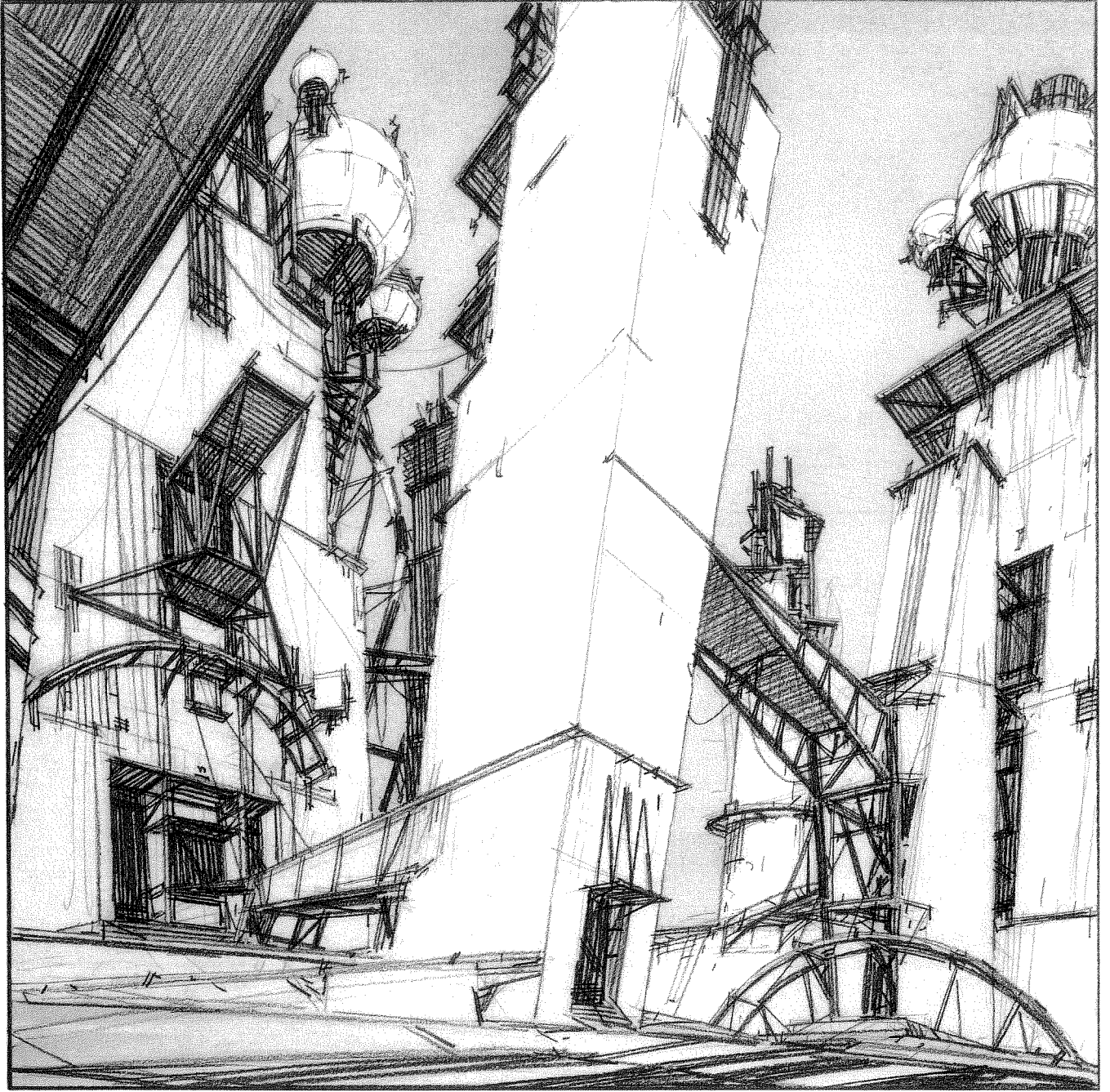
**There Is Nothing to Create But
Vision.**

Visual research yields a unification of reductive knowledge into expansive knowledge sought by a universal science. The visible urban field continuously reunified by vision of metrical light is timespace recursively overtaken by itself. The resulting knowledge sphere is small, but powerfully concentrated by centricity. Centricity expands timespace to the limits of the visible universe, and beyond, to the anti-limits of timespace invisibility: the freefield. There the unknown is but the unenvisioned form of metrical light.

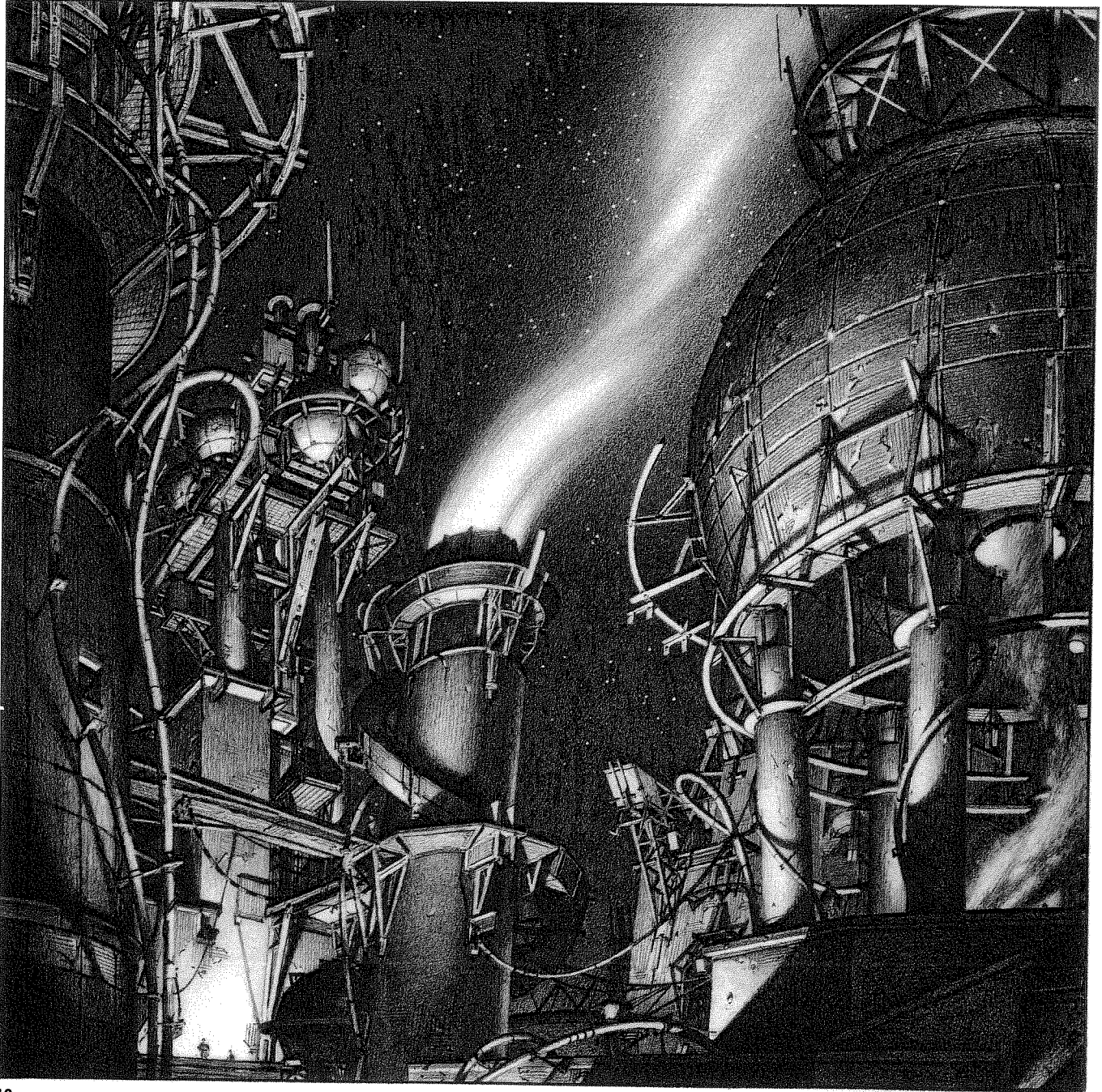
**There is beauty of form only where
there is beauty of idea.**

7 D-QUAD.9M, with groundshields

8 Neomechanical tower (upper) chamber



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10 QUAD.19, with central photon accumulator

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