

THE NEW PERSPECTIVE

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By

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THE NEW PERSPECTIVE

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## SUMMARY

Included in this thesis are three separate but intertwined parts. The document begins with a main, generative text which discusses the ideas embodied in the architecture of the New Perspective, including the work of Frank Gehry, Bernard Tschumi, and Rem Koolhaas, and its connection to developments in New Physics. This text is followed by a discussion of the history of Richmond, Virginia: the events, strategies, and theorems which form the pattern of the city's past development and the blueprint for its future. The third part is an exploration of the themes previously developed in the form of a written allegory and a series of drawings. The drawings, generated by a cross section cut through Richmond, were superimposed, and a section cut through the resulting web of images provided the basis for a bridge connecting two islands in the James River. The bridge becomes a complex, multivalent, and ambiguous construction in which components from the existing reality of the city are kidnapped from their original context, transplanted, and reassembled into a new reality. The bridge is an atemporal catalogue of the city's history, spaces, and events. Only through a process of transformation, estrangement, and forgetting can we remember what a place is really like.

## CHAPTER I

## INTRODUCTION: NEW PHYSICS AND THE NEW PERSPECTIVE

On the one side...there stands the real world, in from the point of view of the ideal, its prosaic objectivity: the contents of ordinary life...on the other side, it is the subjectivity of the artist, which, with its feeling and insight, with the right and power of its wit, can rise to mastery of the whole of reality.<sup>1</sup>

Architecture gives expression to an understanding of a culture's conception of the larger cosmic order. It reflects a period's basic attitudes, aesthetic sensibilities, and particular way of experiencing space. It is a paradigmatic model for the way in which men perceive their relation to the external world. In it, thought itself is made visible and tangible. It is a microcosm of the macrocosm. It is an attempt at meaning, giving form to what we believe the world to be. Architecture represents the world to us.

But the artist does not exist entirely within his epoch's paradigm or society's superstructure. Art is not produced by the cultural, philosophical, and scientific conditions of the time as a product of a primordial, deterministic structure, based on linearity and continuity. The artist operates outside of society's superstructure, subverting, opposing, and building his own reality through creativity and discovery. Art is a free creation of the

human imagination. It results from the interplay between the spirit of the times, a society's zeitgeist, and the individual creativity of the artist.

Philosophers and philologist's should be concerned in the first place with poetic metaphysics, that is, the science that looks for proof, not in the external world, but in the very modifications of the mind that mediates on it.<sup>2</sup>

The artist does not explain or attempt to master the world. He dances with the contents of the world, the things we call commonplace, in such a way that our self-imposed limitations are expanded. The artist creates the world and brings it into being. Our reality is what we choose to make it. There is no absolute objectivity. We cannot exist without a point of view and we cannot observe without altering.

The Wu Li Masters move in the midst of all this, now dancing this way, now that, sometimes with a heavy beat, sometimes with a lightness and grace, ever flowing freely. Now they become the dance, now the dance becomes them... The Wu Li Masters perceive in both ways, the rational and the irrational, the assertive and the receptive, the masculine and the feminine.<sup>3</sup>

#### Newton Can't Explain Gravity

...that one body may act upon another at a distance through a vacuum without the mediation of anything else...is to me so great an absurdity that, I believe, no man who has in philosophic matters a

competent faculty of thinking could ever  
fall into it.<sup>4</sup>

Isaac Newton

We are in the midst of a cultural paradigm shift. In the wake of anomalies introduced by Post-Einsteinian relativity and quantum mechanics, the Newtonian view of the world as a static, predictable space, a clock with interlocking parts has given way to a more fluid, dynamic conception of the world as a network of events.<sup>5</sup> In such a view, the whole is conceived as a synchronous field, characterized by mutually interacting component parts; and notions of harmony, unity, linearity, and closure dissolve in a kaleidoscope of shifting patterns and relationships.

Developments in the natural sciences have altered the physicist's conception of the world. "New physics" expands the view of the universe proposed by classical physics. Newton, Descartes, and Galileo saw the world as a static, atomistic, and predictable space governed by absolute and objective laws of logical analysis and linear determinism. Classical physics, seeing the universe as structured in a rationally comprehensible way, extracted certain unifying concepts from the endless diversity of the world and abstracted them into mathematical expressions. Expanding this authoritarian, ideological view, new physics offers a more encompassing, open-ended, and critical view.

### Wu Li: Patterns of Organic Energy

David Finkelstein has proposed that developments in "New Physics" can be seen as expansions of our mode of perception in three directions, which he terms Relativity One, Relativity Two, and Relativity Three.<sup>6</sup> Questioning the presumption of a fixed position from which one sees, Relativity One expands our perception to include multiple readings of an object simultaneously. Relativity Two or Quantum Relativity questions the separation between the observed and the observer. It expands our perception to include a recognition of the involvement and interaction of the viewer with the object viewed and the existence of different possibilities for the same system. Abandoning the classical goal of formulating a complete theory which would predict all individual events and in which every occurrence in the real world is accounted for by a corresponding element in the theory, quantum mechanics concerns itself instead with potential probabilities governing collections of events. Recognizing the inadequacy of rational thought in understanding reality, it anchors itself not in abstract construction, but in observable concrete reality. Relativity Three questions further the act of observing by taking into account the relationship between observers. It widens our perception to include changes in the actual system itself.



### Tactics for Resistance

Although the more limited conception of the world which classical physics offers remains firmly entrenched in our culture, the repercussions of the changes in our perception which new physics proposes have begun to be explored in the arts. Literature, film, and music have moved from a realist approach aimed at representing the world as viewed by classical physics, to one based on the interruption and subversion of the unity of realist techniques. The disruption of traditional representation is achieved through a process of deconstruction, fragmentation, and reforming.

Abandoning notions of a unified, homogeneous composition, architects of the "New Perspective" fuse and interweave discordant forms and diverse materials. Their works cannot be seen as coherent organic unities. In them there is nothing complete. There is always a portion of something missing. There is no nucleus. Boundaries are broken and shattered. Instead of contradictions being rationally resolved into harmonies, divergent propositions and fragments accumulate, intertwine, and define each other. Oppositions arise between homogeneous terms and new relationships arise between disassociated ones. Terms are read simultaneously and scrambled in such a way that meaning is derived not from an a priori narrative, but through the order of experience. The result is a chain of diverse and

complex units, each refusing to align into a resolved compositional whole, yet held in check by a tenuous synthesis and reconciliation of opposing forces. Homogenization is rejected. Diversity and multiple reading are exalted.

The architects of the New Perspective attempt to upset the traditional linear manner of perceiving space and objects through ruptures, distortions, compressions, fragmentation, and juxtaposition. Multiple transparencies generate an interdependence of forms and a mutuality of component interactions. We glimpse details through apertures, lattices, and filters. Volumes are not organized through a rigid optical perspective. Surfaces and forms are altered and bent. There is no objective point of observation. Multiple viewpoints evoke multi-directional space. Intervals are explored through gaps, incisions, and spaces between.

From this burst forth an architecture  
that symbolizes the continuous flux and  
transformation of things in time.

Gehry Client7

In the work of the New Perspective there is an emphasis on incompleteness and process, what Gehry calls "the expressive potential of raw structures."<sup>8</sup> Raw structural techniques and the process of construction are revealed. The schism between container and contained is abolished as

Interior meets exterior. The participation of the viewer is solicited through open-ended, ambiguous, and unresolved forms.

The work of the New Perspective is not based on an artificial, logical mental construction, but on reality, the dialogue of the city itself. Constructing a network of connections, the work dances with the reality of the city and participates in its change and flux. Its images and typological forms converse with those of the city around them. Architecture becomes an actor participating in the life of the city.

#### The Pyramid and the Labyrinth

The concept of the space is not space.  
It is impossible to both question the  
nature of space and at the same time  
experience special praxis.<sup>9</sup>

The world of the pyramid removes us from reality and experience, projecting us into the realm of reason. It involves the dematerialization of architecture into a mental construct, a product of the rational mind, free from real life and sensuality. Architecture represents something other than itself.

In the world of the labyrinth we remain in the grip of immediate sensual reality and spatial experience. We cannot leave its realms to subject its total structure to mental scrutiny.

Space is real. It affects my senses long before my reason. The materiality of my body coincides and struggles with the materiality of the space, its energies and impulses, its rhythms and its flux. It is felt. It affects the inner nature.<sup>10</sup>

When inside the labyrinth we see corridors and walls, but no overview is presented. Its dark corridors activate our senses. We feel the materiality of architecture, its solids and voids, its sequences and its collisions. The labyrinth stands against reason, against absolute truth. It is architecture as sensual experience and spatial praxis.

Everything leads us to believe that there exists a certain point of the mind from which life and death, the real and imaginary, past and future, the communicable and the incommunicable, high and low, cease to be perceived as contradictory.<sup>11</sup>

The works of the New Perspective sit between the Pyramid and the Labyrinth, two worlds that we have traditionally seen as antithetical. They exist in the shadowy area of the boundary between abstract space and spatial praxis, logos and mythos, truth and experience. Their creators penetrate the substance of the world and discover forgotten affinities and sympathies between elements from these antithetical worlds. They celebrate what has previously been rejected by architecture, the borderline, the domain of eroticism and transgression, dedicated not to the rational gods of meaning, truth, and

timelessness, but to the irrational gods of death, decay, and pleasure, crimes against order. It is through transgression, the violation of prohibitions, that architecture mingles with the unconscious and becomes an image of the recesses of the mind. Through transgression and the examination of what the borderline covers architecture explores the human psyche, the underworld of thought.

Transgression opens the door into what lies beyond the limits usually observed, but it maintains these limits just the same. Transgression is complementary to the profane world, exceeding its limits but not destroying it.<sup>12</sup>

Through transgression, the work of the New Perspective bridges the gap between the rational and the irrational. We reach the point where the paradox equivocates, weaving in and out between concept and reality, reason and sensuality, the universal and the personal. We touch both worlds. We stand between two mirrors, each reflecting the other in an infinite sequence of interconnections, caught between reason and desire and overcoming the false dialectic of natural phenomena imposed by logocentric thought. The work of the New Perspective provides a point of tangency where spatial praxis meets mental construct, pleasure meets reason, and the real touches the ideal.

It is the theoretical work of Bernard Tschumi which has best explored the point of tangency between the worlds of

the pyramid and the labyrinth. In his work, the components of architecture, elements, fragments, and images from the reality of the city, are broken down, recoded, and rebuilt along different axes. The nature of space is questioned and explored through spatial transformations. The relationships between spaces and their use, between type and program, and between objects and events are disrupted and explored. Spaces, movements, and programs, treated independently, are seen in new relationships to one another, relationships which give rise to contradictions, indifference, reciprocity, and conflict. Places witness contradictory events and programmatic impossibilities. "The quarterback tangoes on the skating rink and the battalion skates on a tightrope." Movements and sequences are transformed through repetition, superimposition, distortion, inversion, compression, insertion, and transference. In Tschumi's work, the encoded images of order, architecture's mask, are exposed.

Sequestered behind solid walls, behind facades, the arcades, the squares, lie dark and unconscious streams of pleasure, the sensuality supporting and undermining the rational order of architecture.<sup>13</sup>

## CHAPTER II

## RICHMOND, VIRGINIA, A RETROACTIVE MANIFESTO

Richmond appears as a complex network of interrelations, like the surface of a tightly woven fabric, marked by spaces built and imagined. The city is a rich mosaic of memories and places, an urban canvas with the traces and scars left by a constant bombardment of projections, misrepresentations, transplants, and grafts. It is a summary of the phases of its urbanism, featuring the strategies, theorems, paradigms, and ambitions that have sustained its progress. Changing fortunes and shifting fashions have left their mark and produced a city of irony and pluralism, with its own transcendent pattern. The layers of its past, like numerous overwritings, persist as urban archeology. Builders do not achieve their own ideal. Elements of harmonious ensembles are destroyed. The harmony of individual buildings is disrupted. The city is flawed, but the underlying pattern transcends and shines through. Enough fragments remain so that the pattern is not lost, but slowly evolves, never static, sterile, and homogenized. The city presents itself as evidence, like a twentieth century Rosetta Stone of recorded events, seemingly discontinuous and irreconcilable episodes, architectural mutations, utopian fragments, and phantom architecture, aborted

projects and fantasies, alternatives to the Richmond that exists.

Richmond has generated its own form of metropolitan urbanism, an unformulated theory with fundamental axioms and strategies, permanent and legible through its perpetual animation and change. The axioms and strategies are both a map of Richmond's past performance and a continually valid blueprint for the future. Through them the city's early pattern of development has been supplemented and made denser.

#### A Cross at the Falls

In 1607, one-armed Captain Christopher Newport led a small band of intrepid English explorers upriver from Jamestown, hoping to find a route to the South Seas and El Dorado. On May 24th, he planted a wooden cross at the falls of the James, bearing the legend "Jacobs Rex, 1607". Years later, Captain John Smith and Francis West set out from Jamestown with six months of supplies, to establish a settlement. With the aid of firewater and the prophecy of a hangover, they persuaded the Indian leader, Little Powhatan, to sell them Powhatan Village for some copper. When the Indians sobered up, they attacked the settlers, who also fought with each other. Smith eventually died from a wound sustained when his powder bag ignited while he slept.

The domain of the savages was thus invaded by strangers



who laid the foundation for a new society. Gradually barbarism gave way to European refinement. In 1645 the Virginia Assembly directed that Fort Charles be constructed near the falls of the James as a stronghold against the Indians. In 1659, Thomas Skegg contracted for 1000 acres at the Falls of the James and called it "Falls Plantation". His nephew, William Byrd, later established a trading post. The trading post later became known as Richmond, a name derived from a town in Surrey on the outskirts of London.

The Prince of Wales was born in Richmond, Richmond, England of course. He didn't have enough ancestors to be born in Richmond, Virginia.

Will Rogers

#### Decentered Origins

To be Southern is to be already "decentered;" to grow up with an acute awareness of plurality and difference; to possess almost by instinct an ironic consciousness...

The South, a society full of social and racial paradoxes, one lacking an economic center and cultural capital,...has concrete experience of the notion that nothing in the postmodern era possesses a center, or else it possesses a multiplicity of semi-illusory centers...

Every effort to define a single organizing center for any system fails simply because all systems are complex networks of interrelations, in which one idea pursued far enough is likely to yield paradoxical or ironic results.<sup>14</sup>

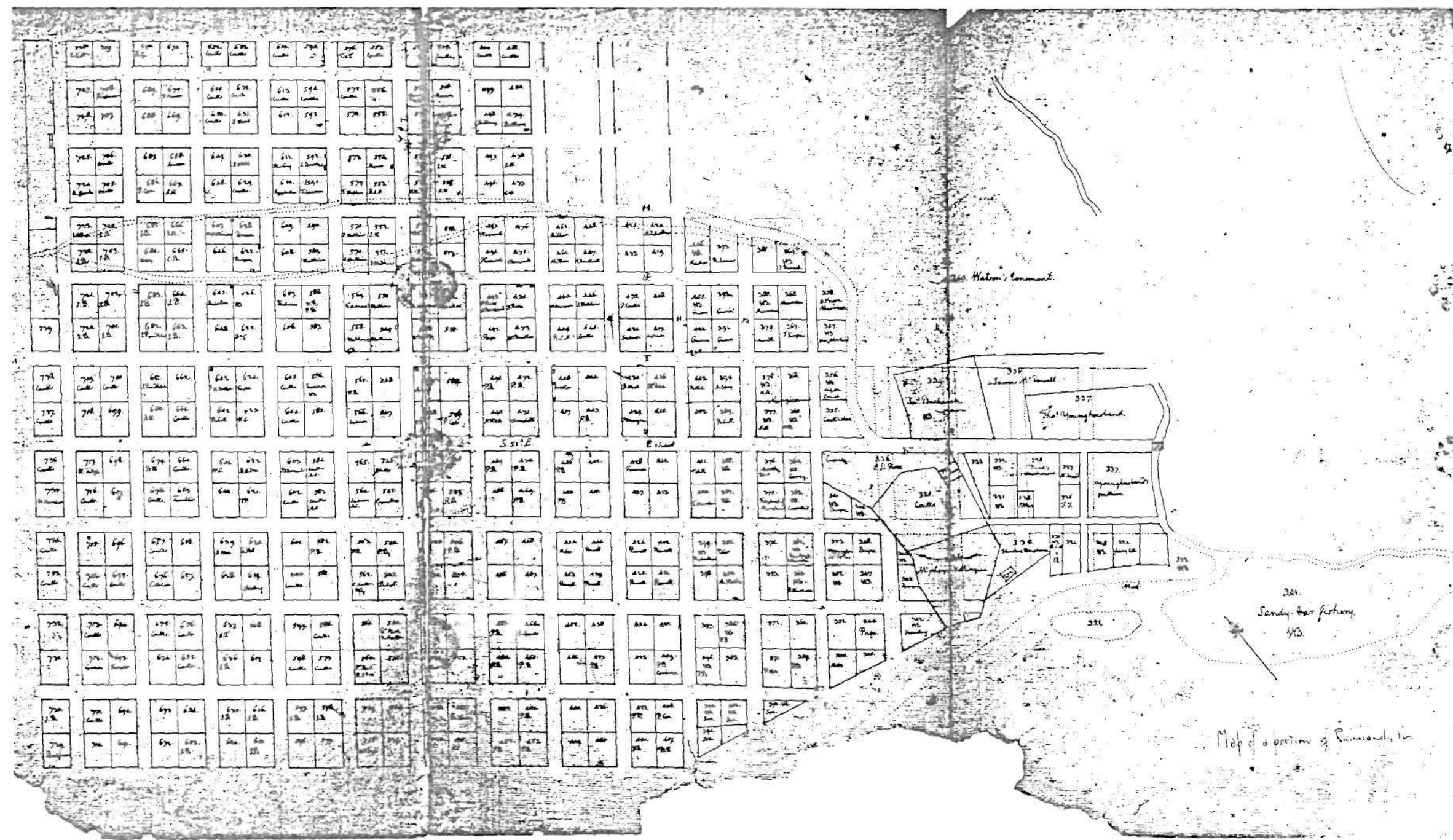
A fundamental axiom of Richmond's transcendent pattern stems from its early history. The city has developed

without a single organizing center. Instead, it is a complex, rhizomelike network of interrelations. Richmond's began as an oval. In 1780, it was a small hamlet located at the falls of the James, with a cluster of houses near what is now the 17th Street Market and a second cluster at 22nd Street.

### The Apotheosis of the Gridiron

Thomas Jefferson redesigned Richmond as the capital of the Commonwealth of Virginia. He attempted to remake the village into a city which would represent his theories concerning the architecture of the New American Republic. It was an attempt to reach a mythical point where the world is completely fabricated by man so that it absolutely coincides with his desires. The map which he devised is an artificial construction based purely on theory. At its root is the grid, a purely mental construction.

The grid is conceptual speculation. It implies an intellectual program. Indifferent to topography and to what exists, the grid proclaims the superiority of mental construction over reality. Its ambition is the subjugation and obliteration of nature. It extends uninterrupted, without accident or incident, across and over the City of Seven Hills (Church, Gambles, Oregon, Shockoe, Libby, Chimborzo and Maddox). Using the grid, Jefferson created the streets from 1st to 17th and from Clay to the River and



Thomas Jefferson. Original grid layout for the City of Richmond, Virginia

set the boundaries of Capital Square. The plan was intended to be "final and conclusive".

Richmond is a city laid out in space, not time. It is a counter-Paris, an anti-London. Jefferson's grid was a new beginning in the form of a structured system of identical blocks. The grid invalidates all systems of articulation and differentiation that have guided the development of traditional cities.<sup>15</sup> The grid can extend indefinitely to capture all territory and future activity, the land on which it is laid unoccupied, the population it describes conjectural, the architecture it locates merely phantoms, and the activities it frames nonexistent.

In 1837 Major Mayo laid off the town again, designating the north-south streets with letters which eventually became names and the east-west streets with numbers. The new plan created thirty two squares, each consisting of four lots, with the streets sixty five feet wide. Lots were to be sold for seven pounds, with the condition that a twenty four feet by sixteen feet building be constructed within three years, fronting within five feet of the street. Sixteen other lots, from eight to seventeen acres, designated by letters, were established to the west of the town limits to serve as sites for country villas, the beginning of the West End suburbs.

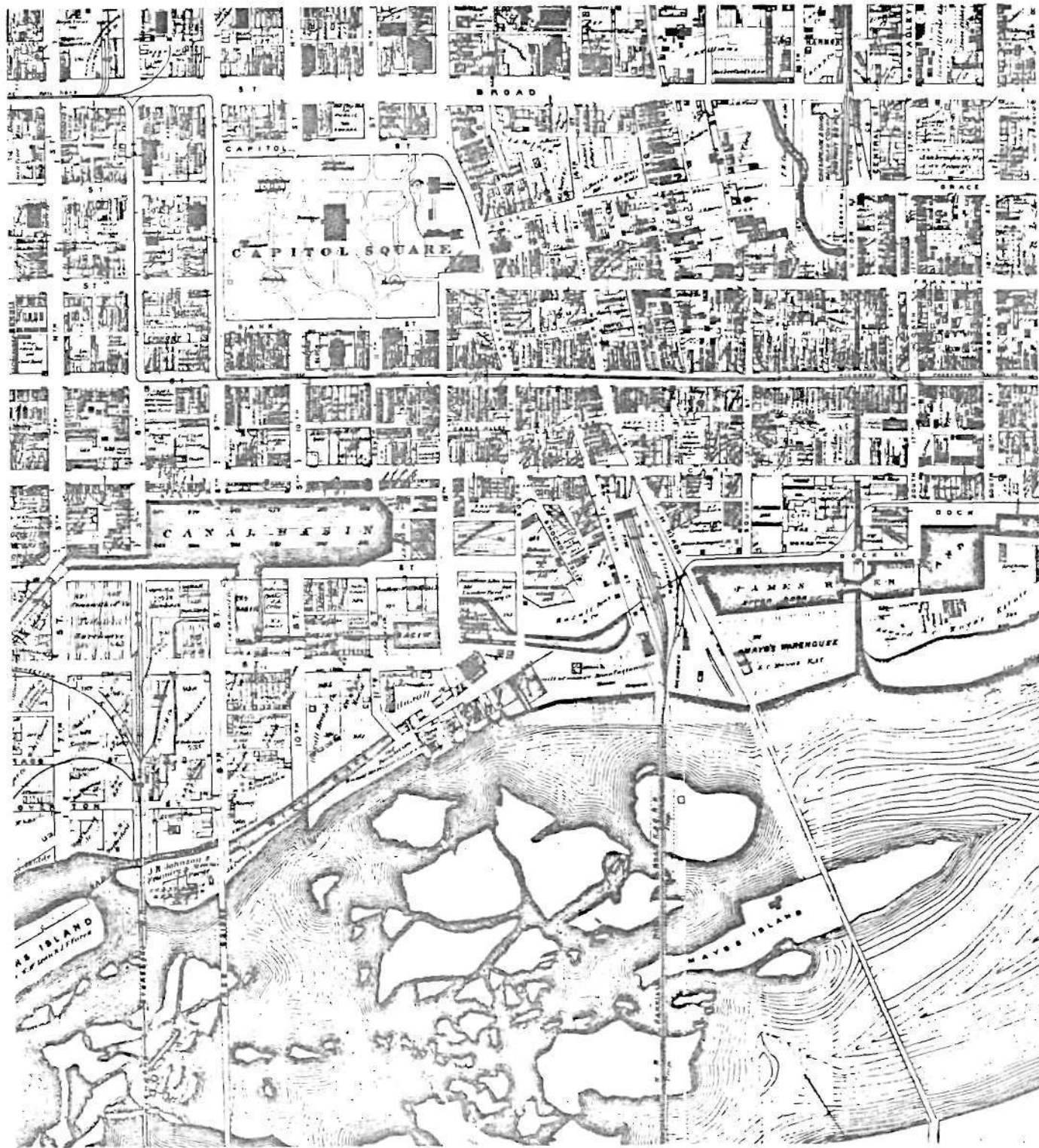


City of Richmond, Virginia. Topographic Survey



### The Grid is a Lie

Richmond developed from its two original settlements toward the west. As a result, the east-west streets became the most significant thoroughfares and the sites of the city's most important buildings. The north-south streets became relatively insignificant. Richmond thus developed through the subdivision of the metropolitan territory into horizontal increments or strips oriented east-west, parallel to and reinforcing the axis of the James River. This pattern is the fundamental axiom of Richmond's development. It culminated in the construction of the east-west Downtown Expressway which cut the city off from the riverfront. The pattern has been supplemented and made denser over the years, with each district: commercial, governmental, financial, and industrial, expanding horizontally around its historical boundaries. The city has become a systematic archipelago of stratified horizontal bands, "cities within cities." Each district celebrates different values and each has its own "folklore." Each district is a "house," a private realm representing a different lifestyle and ideology. Change is contained within each component band. The uniform grid makes the districts superficially identical and equivalent, but each is actually a self-contained enclave, and together they transform the homogeneous texture

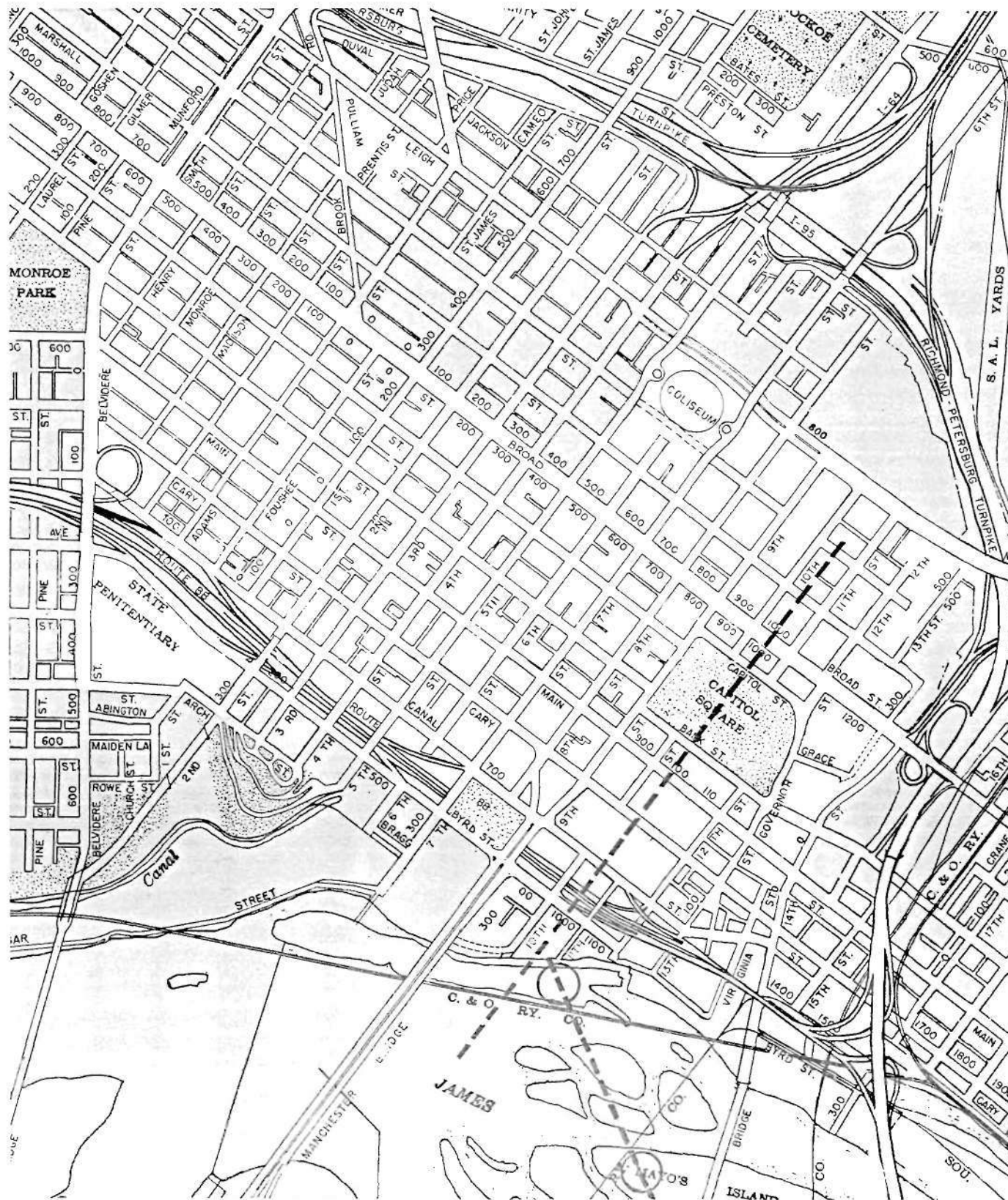


James River and Kanawha Canal, Capitol Square and Environs. From F.W. Bears Lithographic Maps of Richmond, Virginia, 1876

of the city into a mosaic of complementary stratified layers.

#### The Strategy of the Cross Section

A cross-section, cut perpendicular to the city's major arteries, becomes an allegorical plot, a cybernetic device with its own laws, generating random but fortuitous collisions between people, events, and spaces that would otherwise never have been connected and suspending irreconcilable differences between mutually exclusive elements. A cross-section through the urban fabric offers a richly textured interface between social groups, clashing traditions, and discordant events. Richmond began with the cross and the grid, but it has lost its crosspiece and its intersections. A cross section through the city reinstates the cross and completes the grid.



The Cross Section and Bridge Location



## BROAD STREET

The City does not consist of this but of relationships between the measurements of its spaces and the events of its past...A description of Zaira as it is today should contain all Zaira's past. The city, however, does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lighting rods, the poles of the flags, every segment marked in turn with scratches, indentations, scrolls.<sup>16</sup>

Broad Street presents itself as the mythical American Main Street. In its heyday of gay blades, blushing belles, trolley rides, and oyster men with charcoal burners, it was vibrant and alive. It was the entertainment center of the city. Its taverns, brothels, and inns provided numerous diversions: cards, dice, horseraces, cockfights, street brawls, prostitutes, and, according to one visitor, "vices and enormities of every other kind". The fronts of its shops divided into arcades, their rooflines broken by finials and dormers, and their surfaces decorated with signage and the elaborate, almost excessive ornament. Broad Street was a world dedicated to variety and discord, the unresolved, and the fragment. It stood against unity, coherence, and order.

When the suburban malls opened, Broad Street became "a gap-toothed old woman in ragged clothes, patched in places



Broad Street; Richmond, Virginia

with cheap, new, brightly colored materials, hastily sewn with clumsy stitches."<sup>17</sup> Stores pulled out, and merchants went under. In the mall there are no distractions, no architecture to get in the way of comparison shopping, only protection and security and the vapid expression of mindless prefabrication. Today, Broad Street is worn out, its character gone. It stands sterile and vacant, ready to be made cute by gentrification, the victim of the "malling of America". While once Broad Street was the heart of Richmond and provided the city with its sense of community, now "everything happens at the mall".<sup>18</sup>

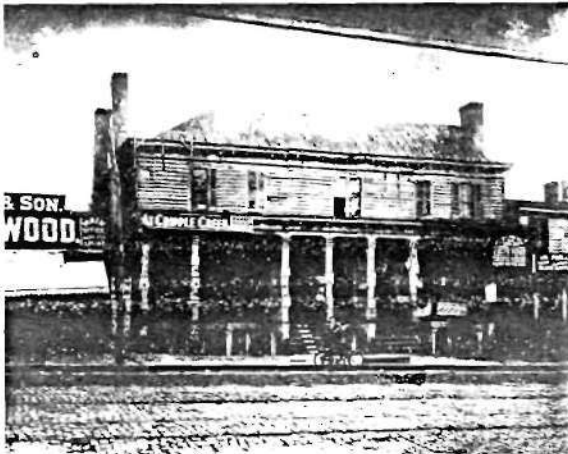
Broad Street's deteriorating condition belies its powerful and sinister role in the division of the city between Black and White communities, a schism which has plagued and paralyzed the city since its beginnings. The north side, "the wrong side of Broad Street" and the edge of Jackson Ward, a low income Black residential community, is lined with deteriorating specialty shops: wig shops, liquor stores, greasy spoons, and saloons. The south side, only slightly tarnished by the exodus to the suburbs, is lined with more "respectable" stores. It is the domain of the department store, the modern cathedral of consumption, dedicated not to gods, pharaohs, or Caesars, but to the mighty American consumer. Broad Street is the recording of the history of Black/White relations in Richmond, a constant



"The Wrong Side of Broad Street;"  
Richmond, Virginia



reminder of interracial tensions: the slave auctions held in Bell Tavern; the tyranny of white supremacy upheld through poll taxes and the grandfather clause; the sixty-one Black lynchings between 1880 and 1894; a White man being fined twenty five dollars for shooting a Black, while a Black received a five year sentence for merely threatening a White man, the discrimination in education, health, and welfare; the massive resistance and violence resulting from the Brown vs. The Board of Education decision; and the "white flight" to the suburbs and private schools, which left the inner city eighty percent Black.



The Swan Tavern, Broad Street; Richmond, Virginia, 1900



2-6 East Broad Street; Richmond, Virginia, 1881

## THE FINANCIAL DISTRICT

The machinery clanks, the chain catches hold, and the cars jerk forward.<sup>19</sup>

Richmond is a city of the past, not the future. There has always existed a tension between the Southern past, the inherited values of the Southern tradition, and the pressures of the modern world. The South has always remained hopelessly mired in its mystical, mythologized past and has remained detached from a meaningful contact with its true history, unable to deal with modernization and the future and continuously re-enacting the same subconscious themes in new reincarnations. The South has always felt a need to mythologize its past and rewrite its history with disregard for the facts and a discrepancy between actual and stated intentions. It has symbolized its past in monumental portraits of the heroic generation who defended their homeland against the Yankees and the aggression of Reconstruction. It has always perceived itself and projected an image of itself as "a paragon among stable hierarchical societies, an enclave of order in a chaotic world".<sup>20</sup>

The South's view of the past is a lie that has become the truth, a dream from which there is no waking up. Southerners are victims of a self-imposed amnesia which they use as a defense mechanism against the ravages of Modernism



Thomas Crawford and Randolph Rogers.  
The Washington Monument, 1849-1869.



and the dizzying changes to which they have been subjected. Richmond has always desperately clung to its heritage through an obsession with preserving and improving its historic landmarks and by erecting monuments, which it sees as physical manifestations of its abstract ideals. Richmond's monuments are the city's desperate attempt to remain oblivious to change and to embrace permanence, solidity, and serenity. They are nostalgic symbols of the "lost cause".

The men who talk most about the valor of Lee and the blood of the brave Confederate dead are those who never smelt powder. Those dead stand as a legacy to treason and blood to future generations. The loyalty so often expressed penetrates no deeper than the surface.

John Mitchell, Jr.

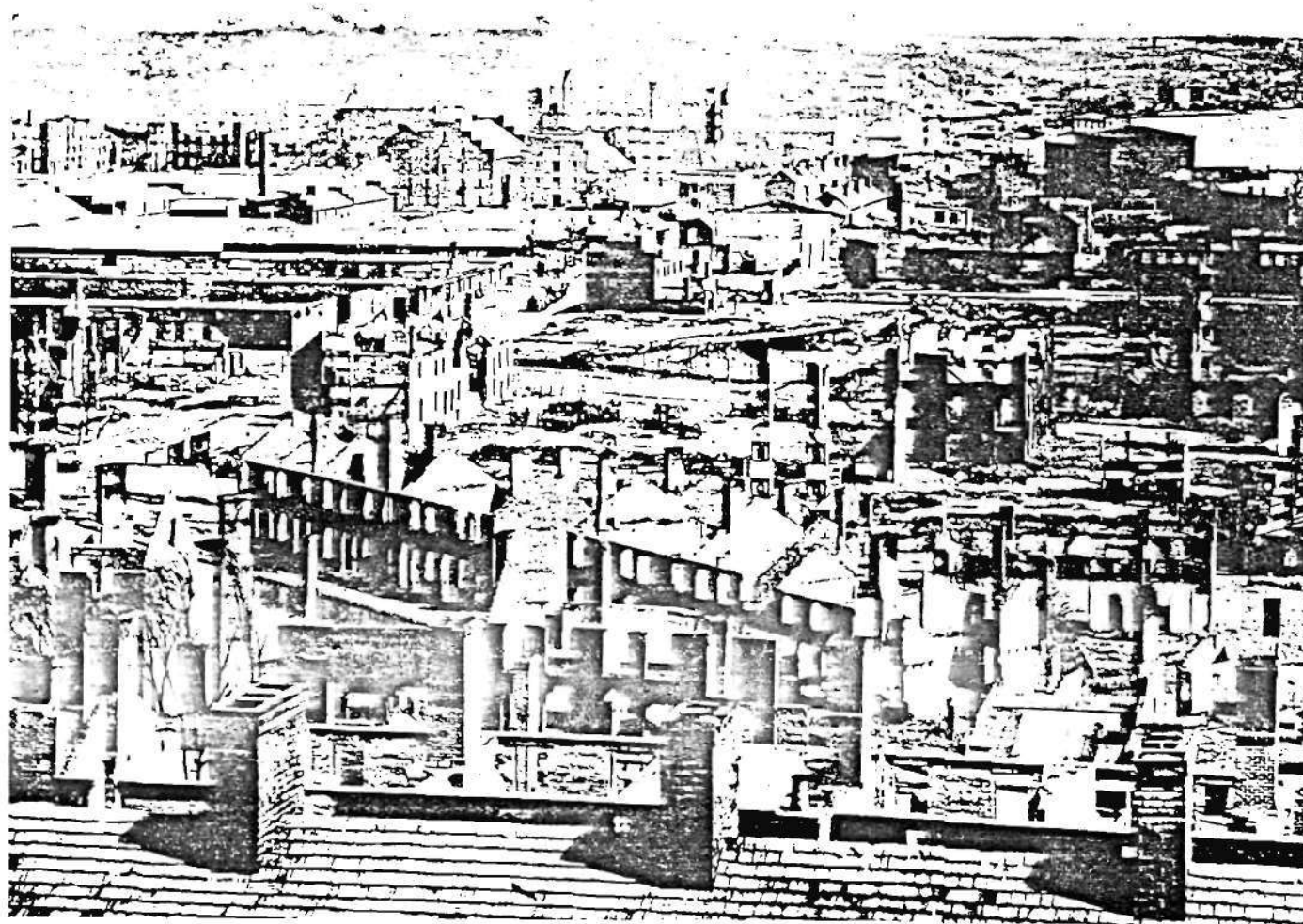
The essence of metropolitan culture is change, a state of perpetual animation underlaid by a legible sequence of various permanence.

Clarice, the glorious city, has a tormented history. Several times it decayed, then burgeoned again...Each new Clarice, compact as a living body with its smells and its breath, shows off, like a gem, what remains of the ancient Clarices, fragmentary and dead.<sup>21</sup>

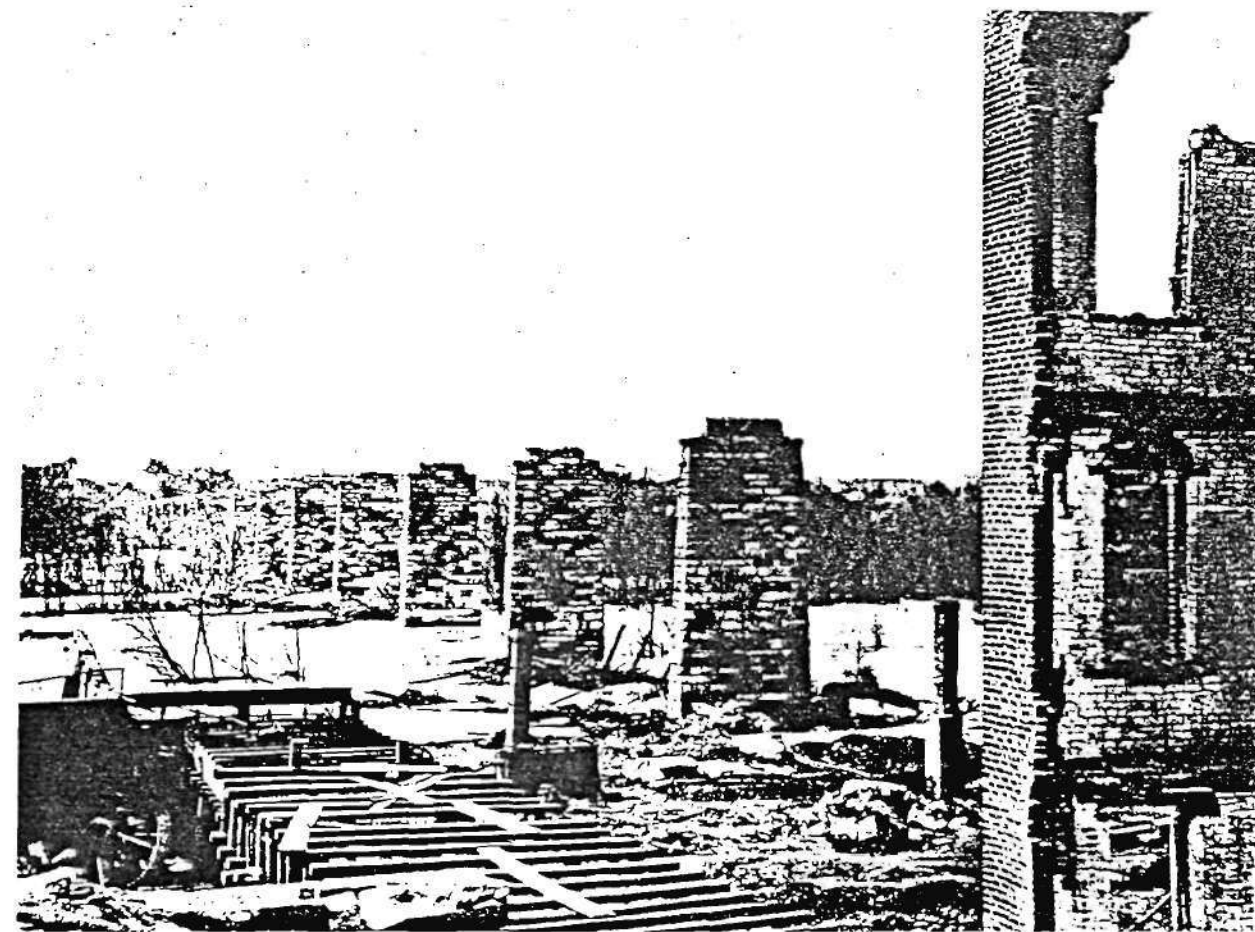
Change in Richmond has been characterized by the cyclical restatement of various themes in economics, culture, and politics, themes in which creation and destruction are irrevocably interlocked and endlessly re-



View of the ruins after the Civil War,  
looking south from Capitol Square;  
Richmond, Virginia, 1865

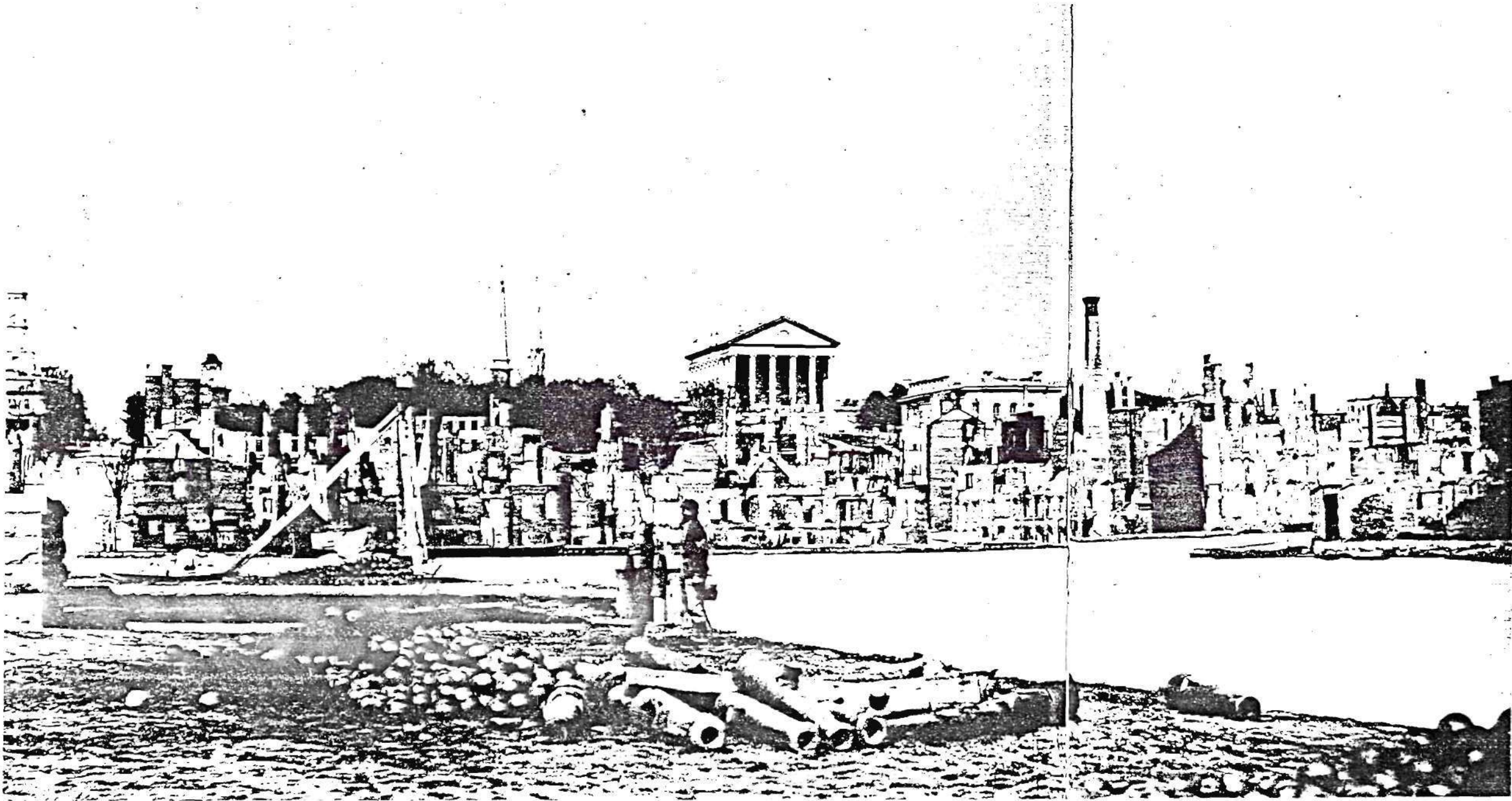


View of the ruins after the Civil War;  
Richmond, Virginia, 1865



The destruction of the Richmond and  
Petersburg Railroad bridge; Richmond,  
Virginia, 1865





View of the ruins after the Civil War,  
from the south side of the Canal Basin;  
Richmond, Virginia, 1865





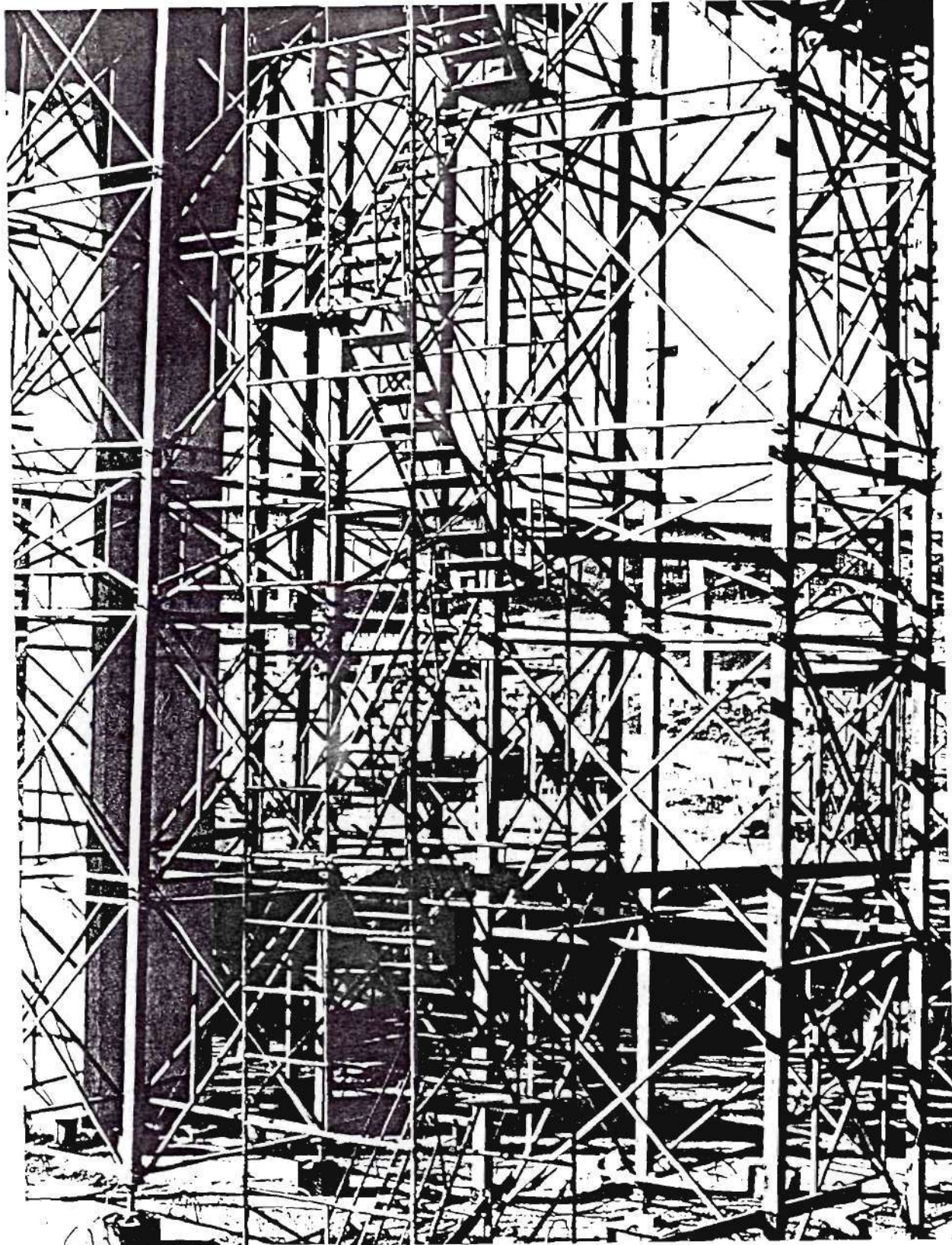
Construction of the Mutual Building;  
Richmond, Virginia, 1902

enacted. Floods have ravaged the city since 1771. In 1781, Richmond was partially burned by Benedict Arnold. The most devastating conflagration came in 1865 when the Virginia legislature, after the fall of Petersburg, the last bastion in front of Richmond and the key to its survival, voted to burn the city rather than let it fall into enemy hands. As the city was evacuated, large stocks of tobacco and cotton were burned, but a strong wind blew sparks and burning fragments toward the business district, which turned into a roaring inferno, kindled by exploding projectiles from the powder magazine and arsenal. Riots and looting broke out as refugees huddled in Capital Square. The devastation spread from 5th to 15th Street and from the River to Capital Square. The business district was wiped out; nine hundred buildings and two hundred thirty businesses were destroyed. The burned-out district took on an eerie appearance, with phantom spaces, ghostly rooms open to the sky, and empty window frames.

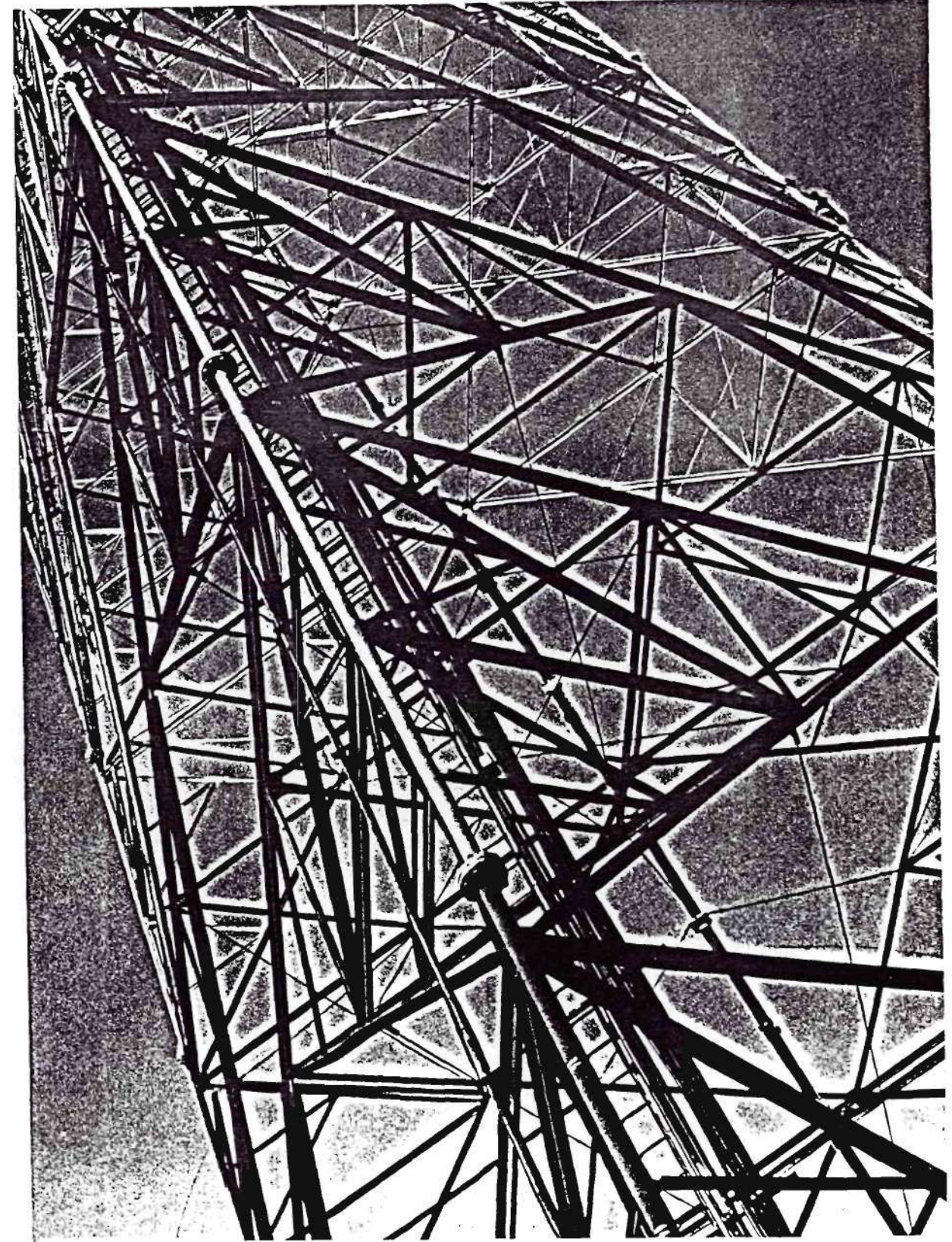
By 1865 the ruined district was being rebuilt and there were one hundred buildings under construction, most financed by Northern capital. The former capital of the Confederacy became a primary focus of the South's post-bellum recovery. The weakness of the South, its economy, gradually became its strength and the vehicle for its assertion of cultural and moral leadership. Richmond today is in the midst of

dizzying change. The victim of unsettling economic forces,  
It is now being bought as a commodity for transnational  
investment consortia. The changes in its skyline are rapid  
and continuous, presenting a rich spectacle of architectural  
masturbation and speculative ejaculation.





Scaffolding



Broadcasting Tower



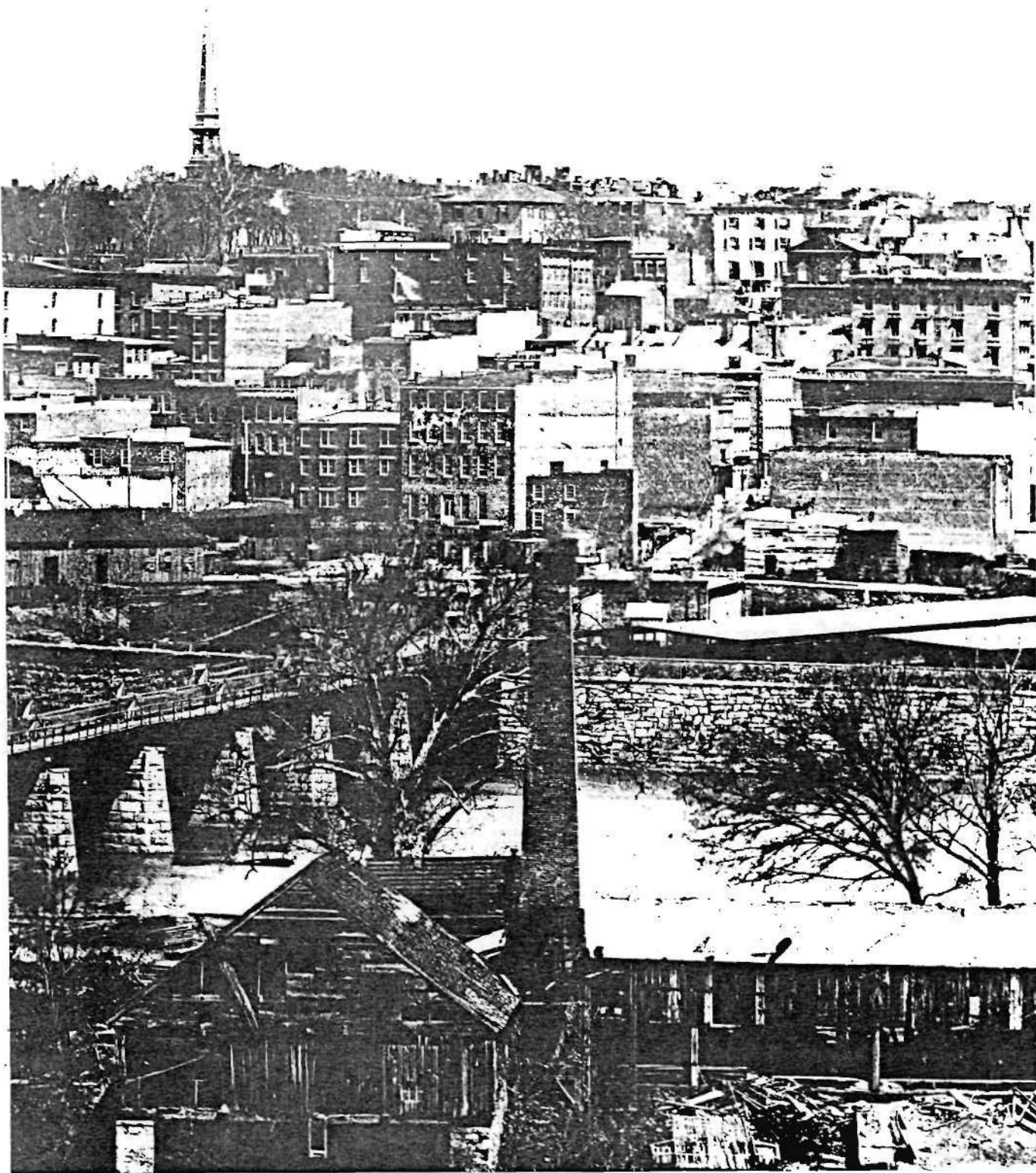
## THE WATERFRONT

In Esmeralda, city of water, a network of canals and a network of streets span and intersect each other...the ways that open to each passerby are never two, but many...the network of routes is not arranged on one level, but follows instead an up and down course of steps, landings, cambered bridges, hanging streets.<sup>22</sup>

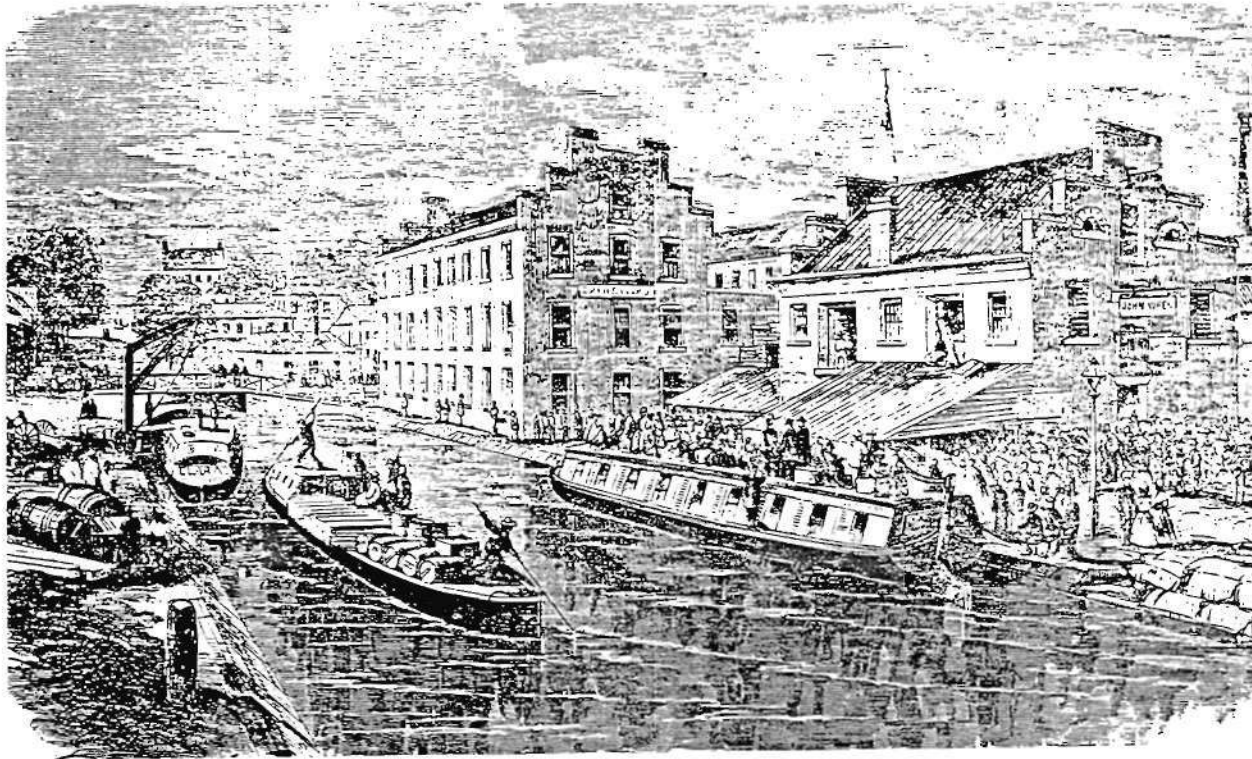
The waterfront in Richmond presents itself as a web of fragments of washed away waterways, flumes, spillways, elevated railways, viaducts, partial rows of piers and remnants of canals. Such images conflict with the written accounts of the Richmond waterfront, which portray the area as a bucolic, pastoral setting, with a shady river promenade running the length of the town and serving as a site for fairs, picnics, boat clubs, and beer gardens with rides and masquerade balls "dangerous to virtue".

Richmond's strategic location at the fall line of the James was the catalyst for the city developing as an industrial and transport center. At times in its history the city has been the second largest flour milling center in the country, the largest manufacturer of tobacco, and a leading coffee and spice port, with square-riggers, packet boats, and schooners taking on and discharging cargo.

In the early 1700's, the seven miles of falls on the James presented an obstacle to water-borne traffic. To circumvent the falls, an elaborate series of locks, canals,



View of the Waterfront; Richmond, Virginia, about 1900



The James River and Kanawha Canal;  
Richmond, Virginia



Remains of a canal boat found at an  
excavation site; Richmond, Virginia,  
1984

and turning basins was developed. In 1780 work began on the first canal and the Great Basin, under the auspices of the James River Company, whose first president, George Washington, was a major proponent of the creation of a water system which would connect the James and Kanawha Rivers to the Ohio and Mississippi. By 1800, the seven mile canal system around the falls was completed. Boats were pulled through the canal by mules or horses along a towpath. The canal system became a state enterprise in 1820 and in 1835 the James River and Kanawha Company was founded. The Civil War spelled the demise of the canal system. In 1880 the canal was sold to the C & O Railroad, which laid its tracks along the canal towpath. The turning basin became railyards. In 1869, eighteen million, seven hundred twenty five thousand pounds of rail freight passed through the city.

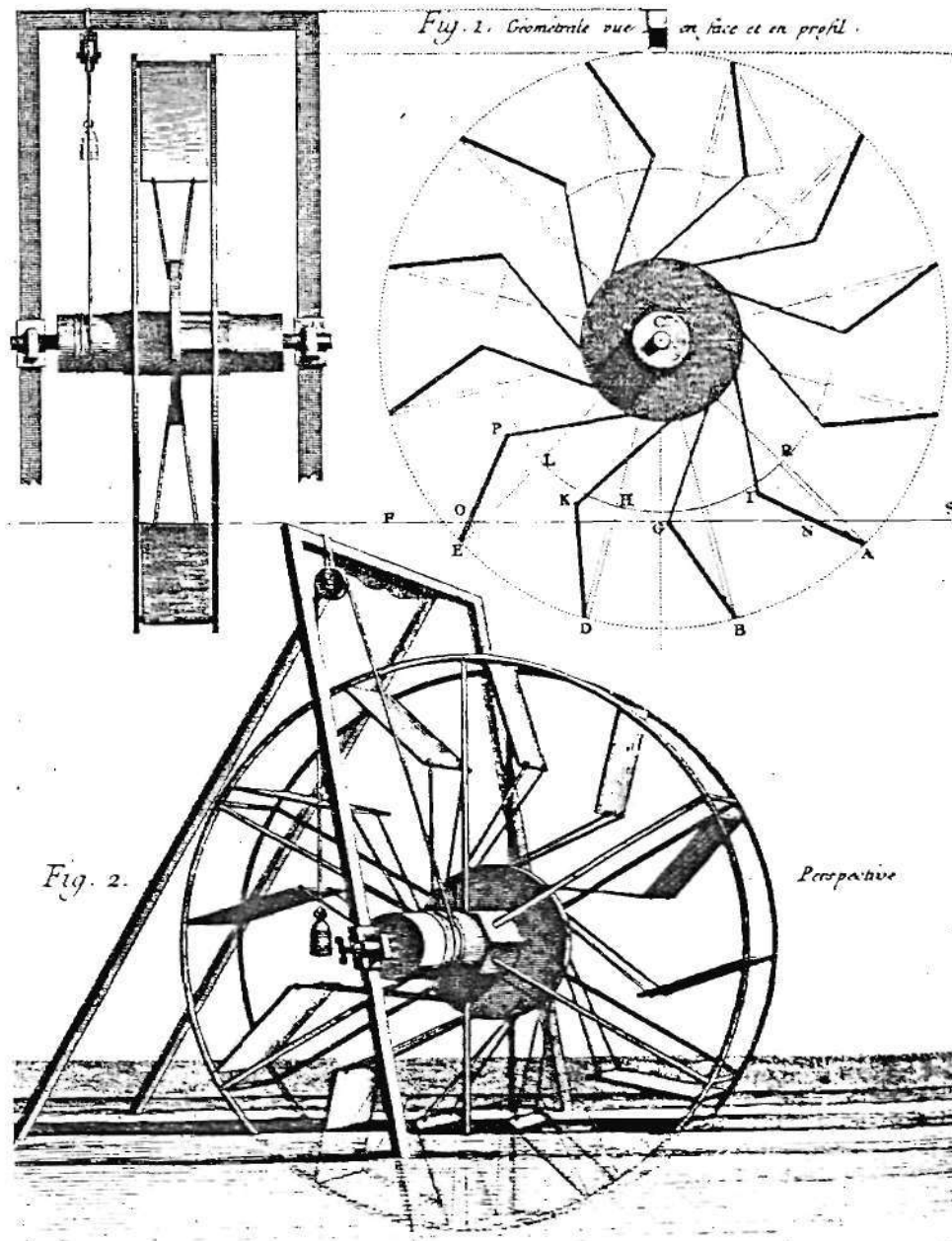
The falls also provided the opportunity for power generation. Millraces built in the 1780's catapulted the city into a leading milling center. Before the Civil War, massive mill structures, up to seven stories, produced an output of four hundred thousand barrels annually. Tredegar Iron Works, founded in 1838 was the largest foundry in the South. It was the mainstay of the Confederate war effort, producing eighty percent of the cannon used by the South. In 1891, one hundred twenty tobacco factories employed



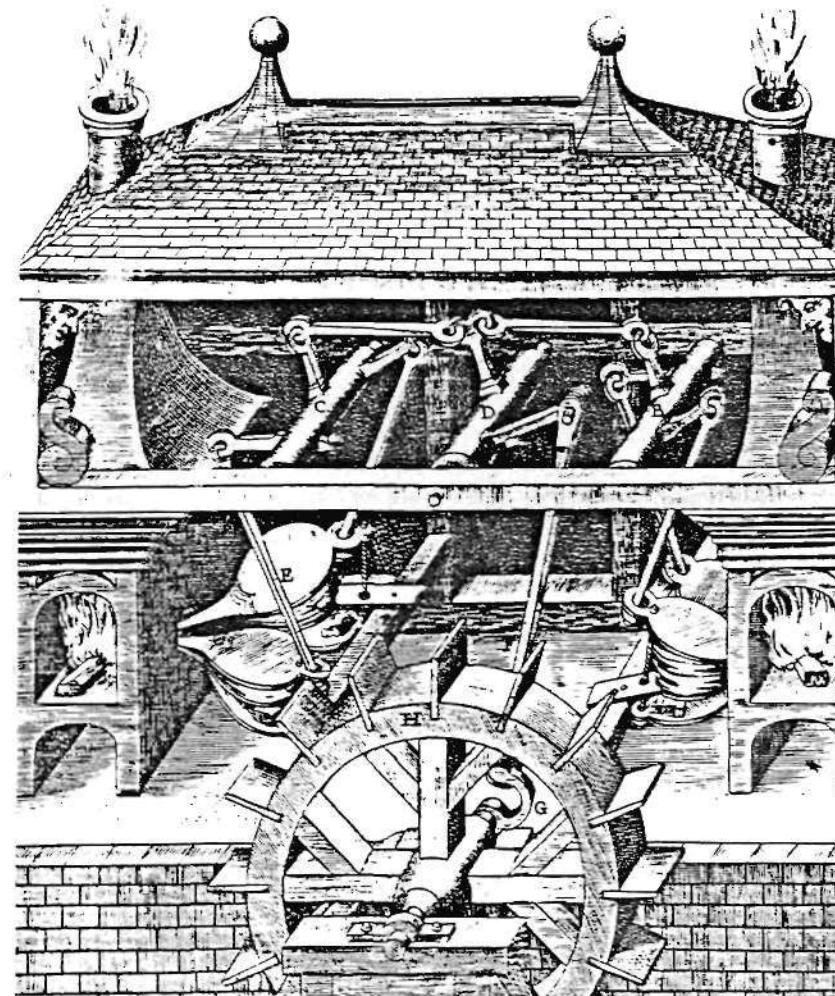
nearly nine thousand hands. In the 1880's as the Industrial South rose from the ashes of its agrarian past, the smokestacks and chimneys of Richmond's Industry created a pall of smoke which hung over the city, a pall which was taken as an indication of Richmond's modernity.

The new order has taken its place, and foremost among its promoters and supporters stands Richmond, roaring with progress and a leader of the Industrial South, as 25 years ago she was of the Confederate South.

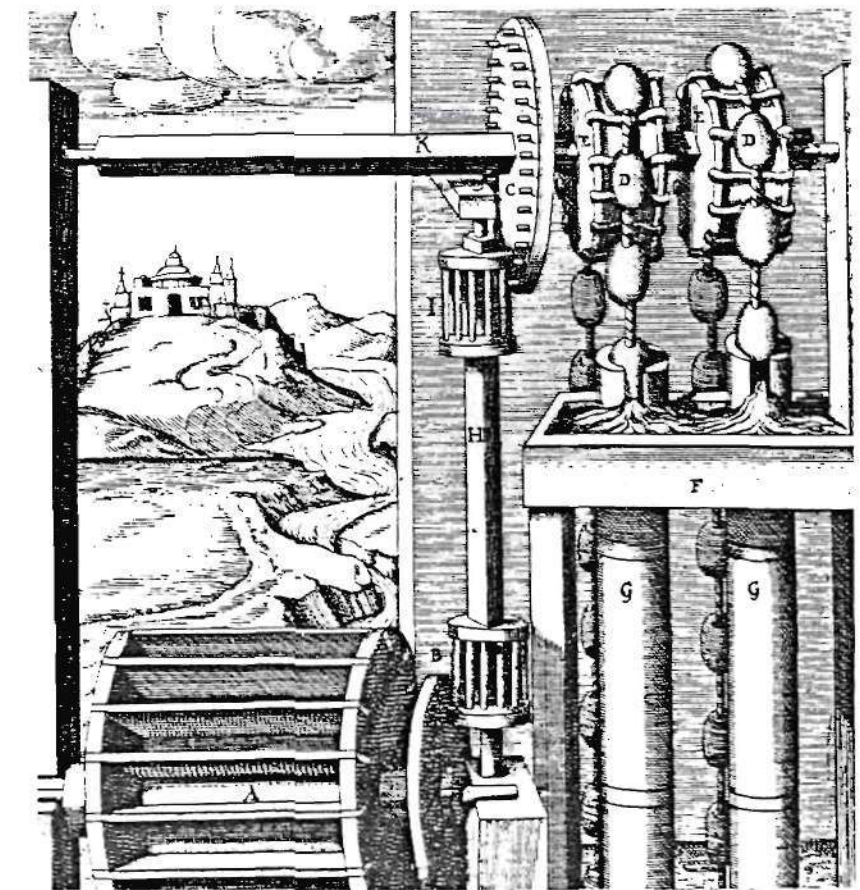
Harpers Weekly



De Parcieux's apparatus for testing the comparative effect of radial and tangential blades, 1759

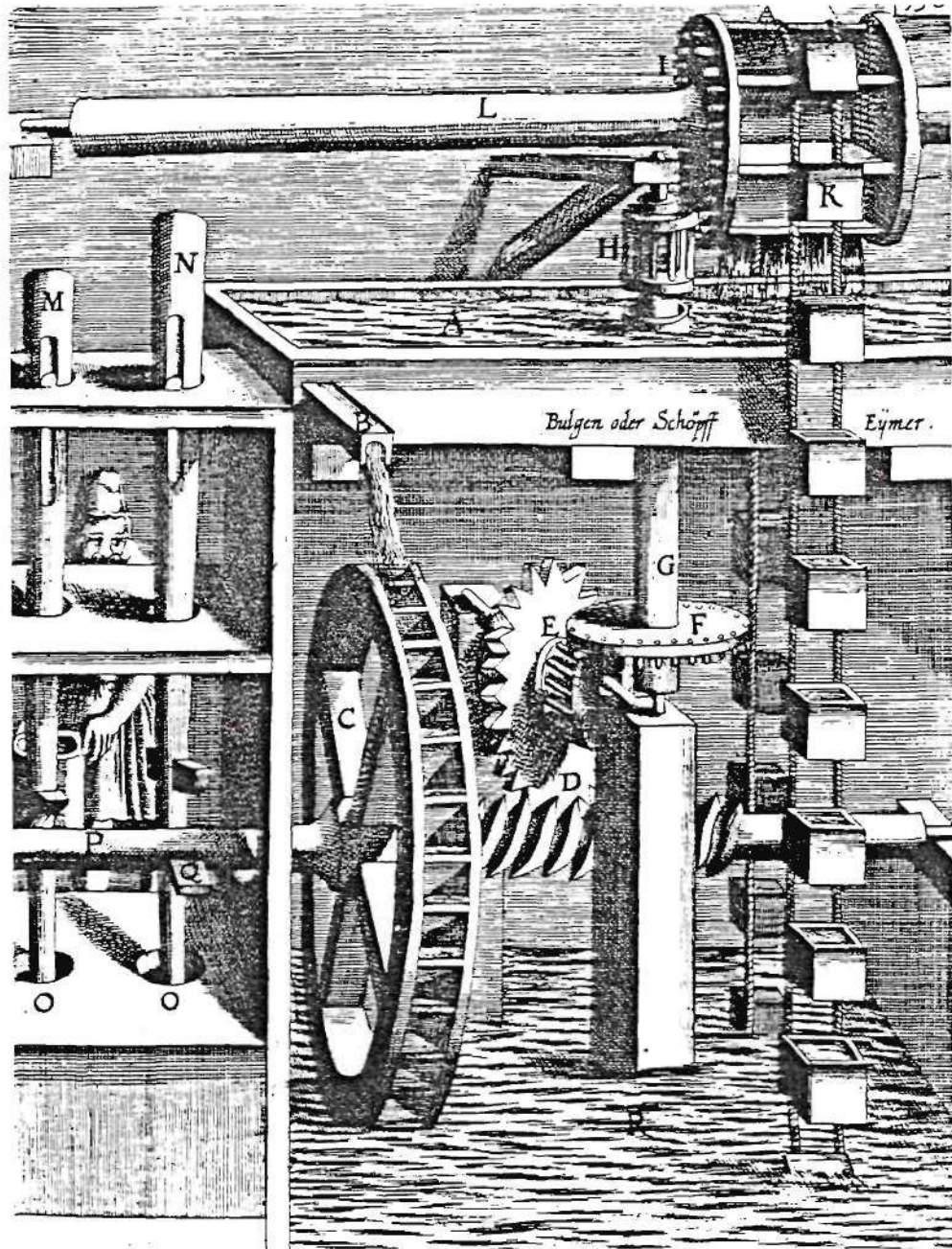


Water-activated bellows in a forge hearth from Ramelli, 1588



Water-powered rag-and-chain pumps from Bockler, 1661

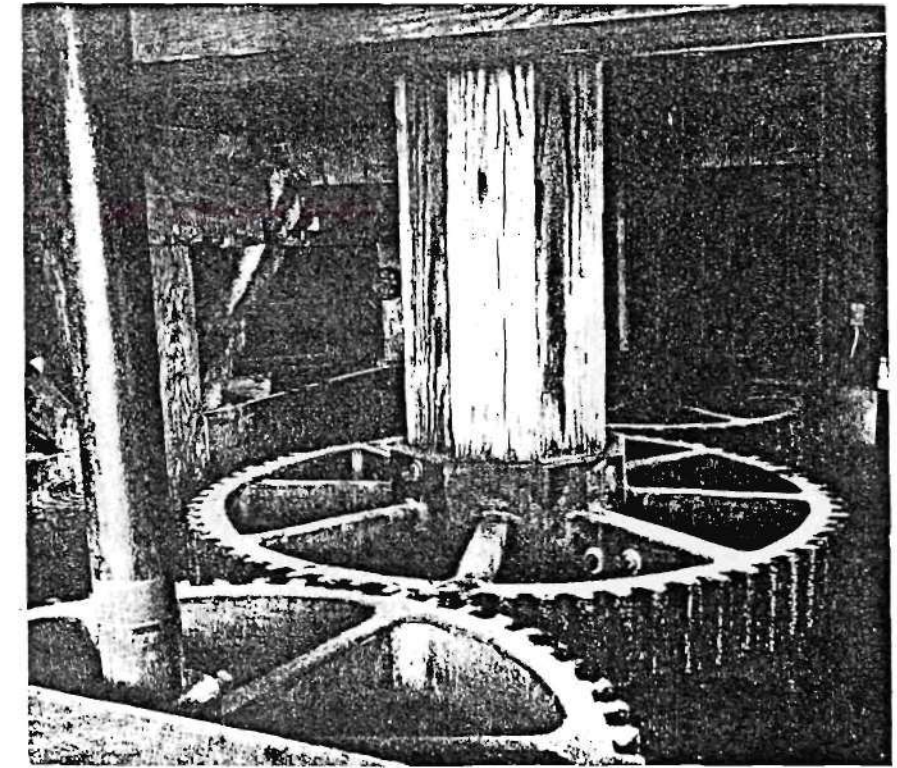




Perpetual motion system utilizing over-shot water wheel



Water-powered piston force pumps using crankshaft and rocking beam, Ramelli, 1588



Milling gear system



## CHAPTER III

## THE CROSS-SECTION: AN ALLEGORY

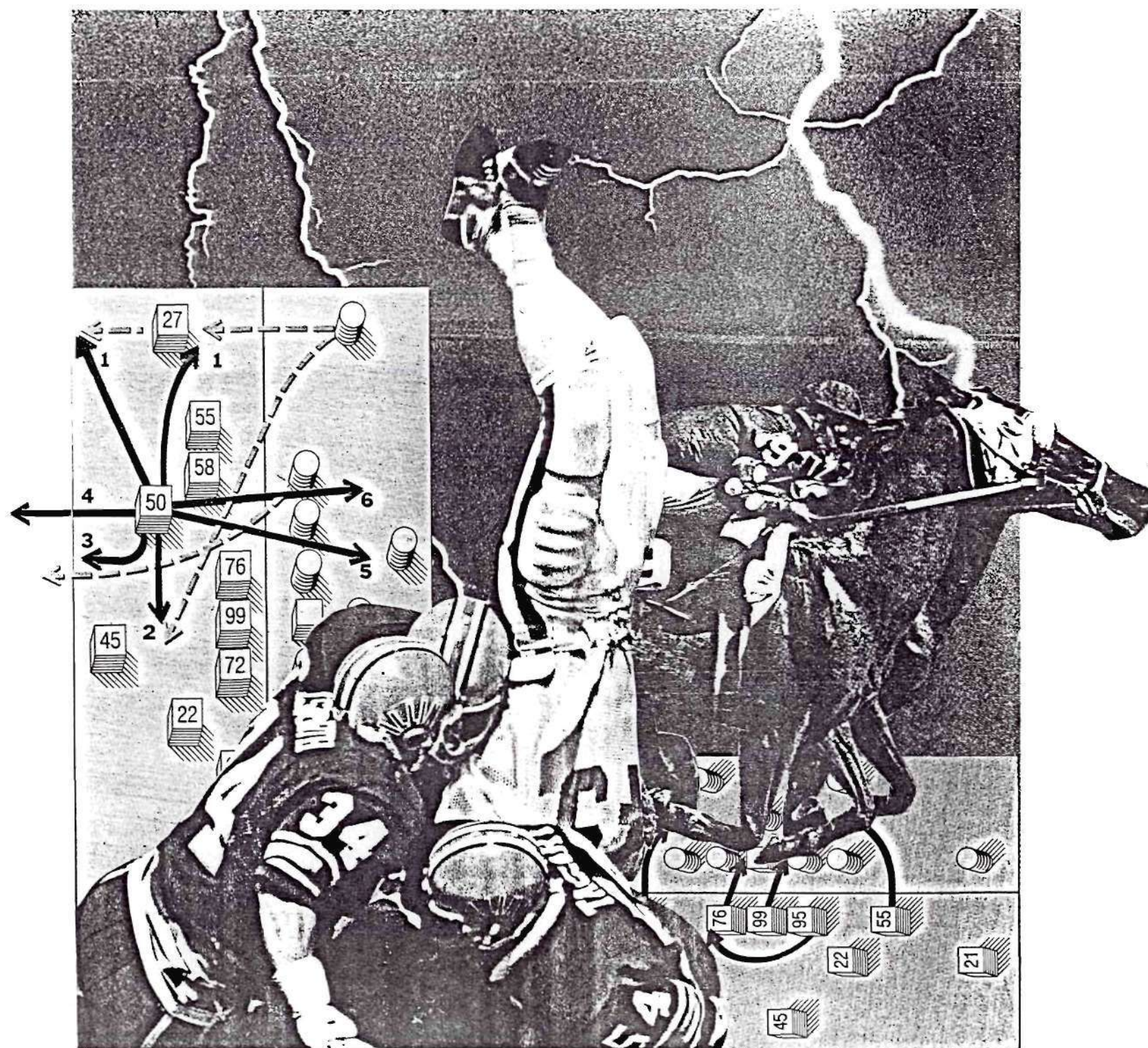
## Act I

(Fade In: Exterior, Broad Street)

There are banners stretching across the street with advertisements for local businesses. People line the sidewalks, stretching their necks in the direction of the sound of marching drums, anticipating the start of a parade which expresses the ideals and values that hold the loftiest place in their imaginations and the pride and nostalgia which they feel for what they imagine they once were.

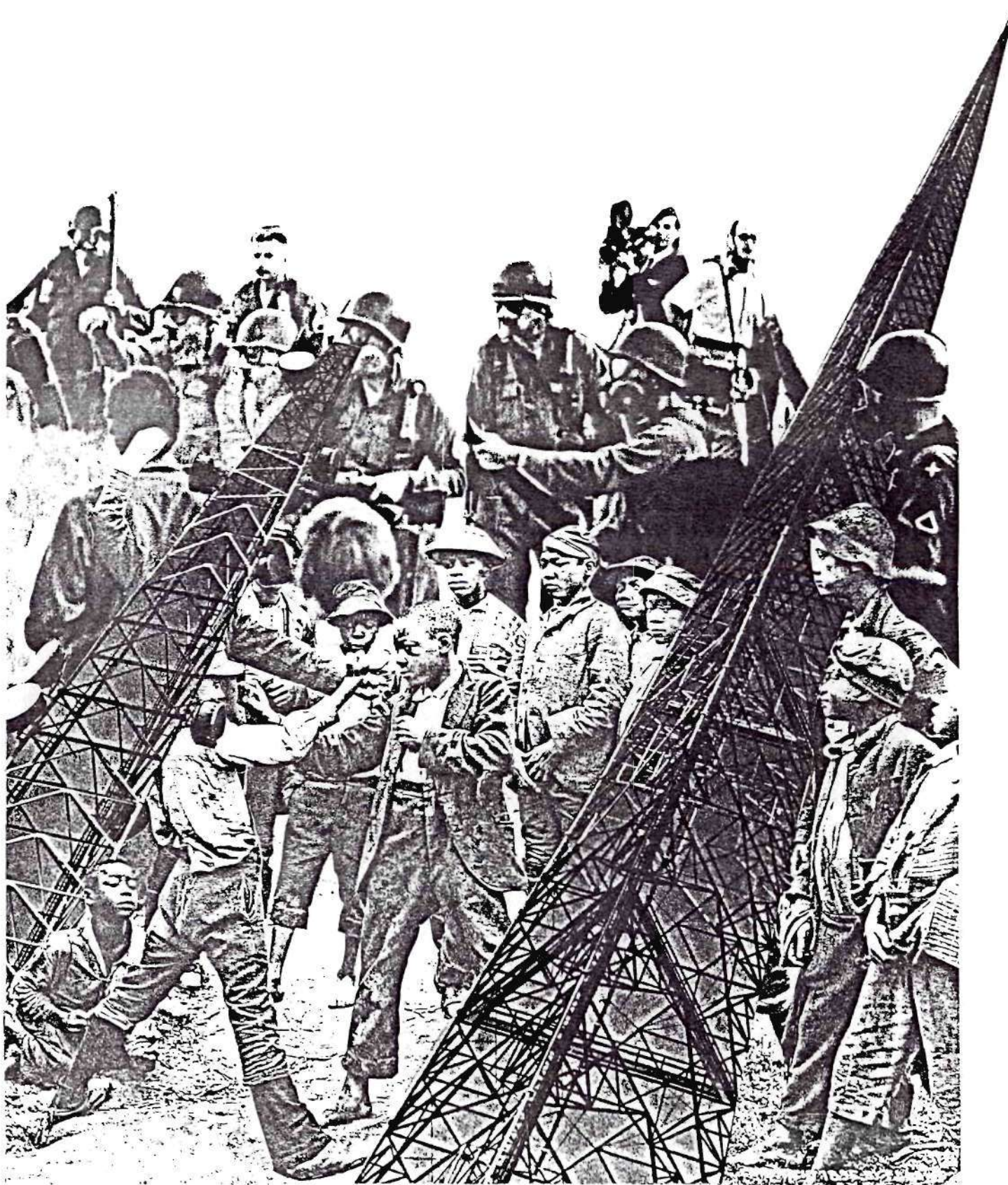
Leading the parade is an honor guard of three uniformed figures. The central figure, a Boy Scout, carries a huge confederate flag. Several paces behind, comes a pair of cub scouts, carrying smaller American and Virginia State flags.

The grand marshal of the parade appears, seated on top of the back seat of a white convertible. He is waving and smiling at the crowd along the sidewalk. Seated in the car below him are his wife, with her bleached blond hair in a 50's style bouffant which has not been washed since 1979, and his three small children. The man is the President of the Richmond Chamber of Commerce. He owns a chain of used car dealerships, all located in the West End suburbs. This is the first time he has been downtown since last year's



Broad Street events





Broad Street events

parade. He is under investigation for income tax evasion.

The car is followed by a group of marching baton twirlers in miniskirts and confederate army hats. Their movements, intended to be precisely synchronized in a beautifully choreographed routine are just slightly off-sync, producing a painful tension between the actual and the ideal. A group of marching drummers follow behind. Their drumming is completely out of sync with the movements of the twirlers.

Next, a group of burly men with gnarled, stubby fingers, wearing robes with hoods pulled back to reveal their weathered faces, ride a flatbed truck scattered with styrofoam snow and decorated with white paper streamers and a sign saying, "I'm dreaming of a White Christmas." It hasn't snowed for Christmas in Richmond in ten years.

The float is followed by another truck, bearing the initials F.F.N.V. (First Families of Negro Virginia). In the back, several black couples are seated around a folding card table, sipping tea and playing bridge.

The next float carries a chicken wire and crepe paper replica of the Richmond City Hall, built from 1887 to 1893 by Elijah E. Myers in the High Victorian Gothic style. The project exceeded its budget by four hundred percent. Its architect was indicted for the misappropriation of funds. The float, like the building, was intended by its creators



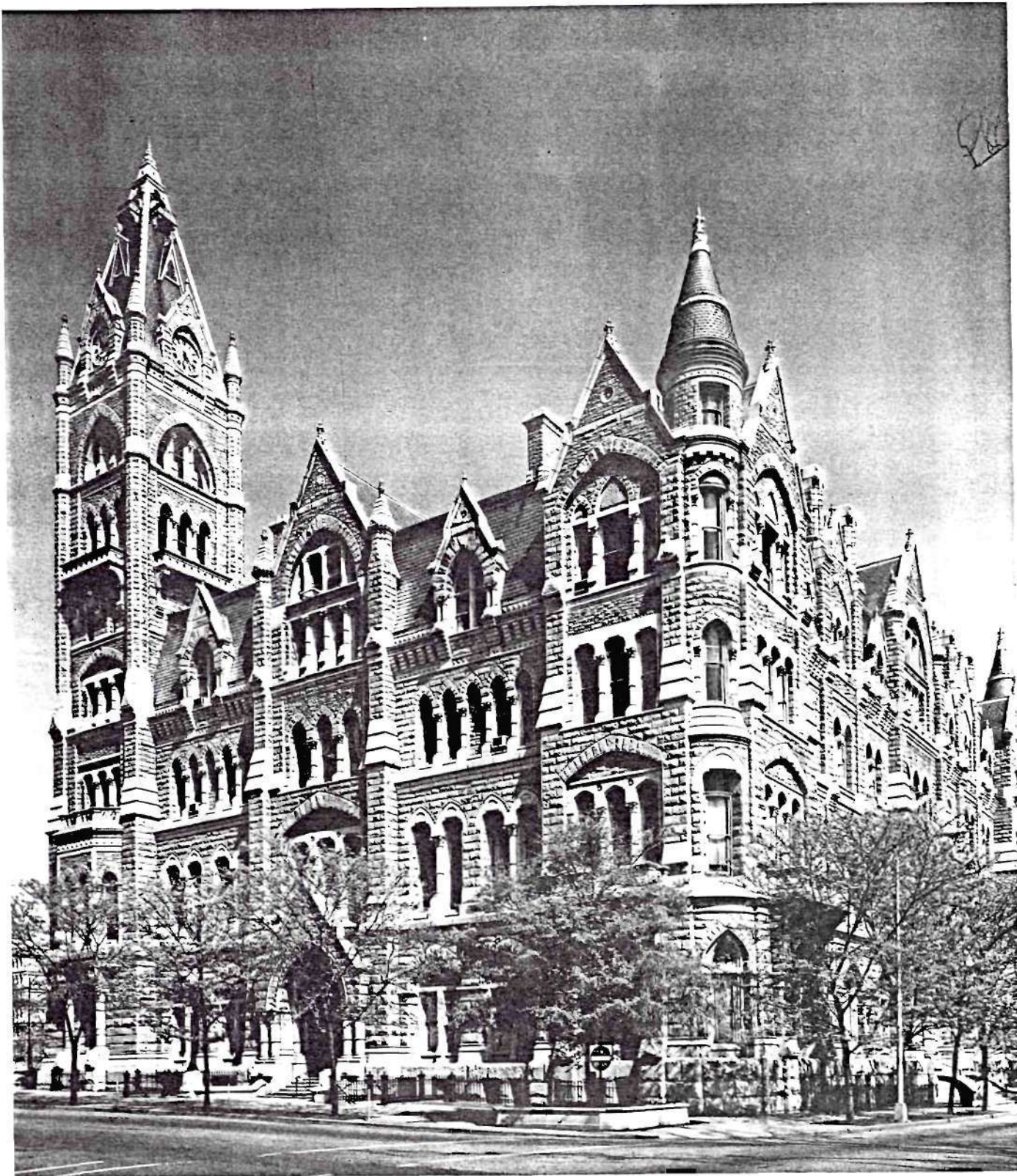
to be a proper expression of the virtue and vitality of the city's government. Walking beside the float is a security guard who was recently fired from the police department for stealing parking meter money.

The float is followed by a group of dancers, the men dressed as Rhett Butler and the women as Scarlett O'Hara. In pairs, the dancers whirl, swoop, and reverse, making various patterns, to the rhythms coming from a speaker playing polkas, schottishes, waltzes, polonaises, muzurkas, quadrilles, and varsolienness.

As a dancing couple breaks the ranks to retrieve a dropped bonnet, they're almost hit by a wagon disguised as a nuclear power reactor. A sign on the side of the wagon reads, "Virginia, roaring with progress" and below it "The Virginia Electric and Power Company." The wagon is pulled by horses dropping road apples.

A wood paneled Winnebago, bearing Minnesota license plates and plastered with decals from places all around the country breaks through the line of the parade, causing a short pause in its progress.

Eventually, a float appears, carrying local children of all nationalities. The float's inscription says, "Peace and goodwill throughout the world." The children are wearing costumes from their native countries. Underneath they are all dressed in alligator shirts and topsiders.



Elijah E. Myers. Richmond City Hall;  
Richmond, Virginia, 1887 to 1893



Next, a group of motorcycle riders, all wearing black leather jackets and fezes, weave in and out at random among each other, waving at the crowd. A near-miss collision causes a gasp from the crowd.

The motorcycles are followed by the Fighting Indians High School Marching Accordion Band, strutting in formation. They are wearing brand new Confederate uniforms, paid for by a gift from the Grand Marshall's used car business and are playing a medley of commercial jingles

You deserve a break today...  
I'm a pepper, you're a pepper...  
This Bud's for you...

The grand finale of the parade is a star shaped float, the largest and grandest of all. Seated on it is the winner of the Miss Virginia Pageant. She smiles at her uncle in the crowd, a local country music singer who was the head judge of the competition. She is clothed in classic costume and wears a crown. A bundle of plastic tobacco leaves rests upon her lap. She carries a scale in her left hand and a sword in her right. At her feet is a river, made of shiny blue cellophane, on the banks of which are a miniature mining operation and a steam engine. The words, "sic itur ad astra" form an arch above her head.

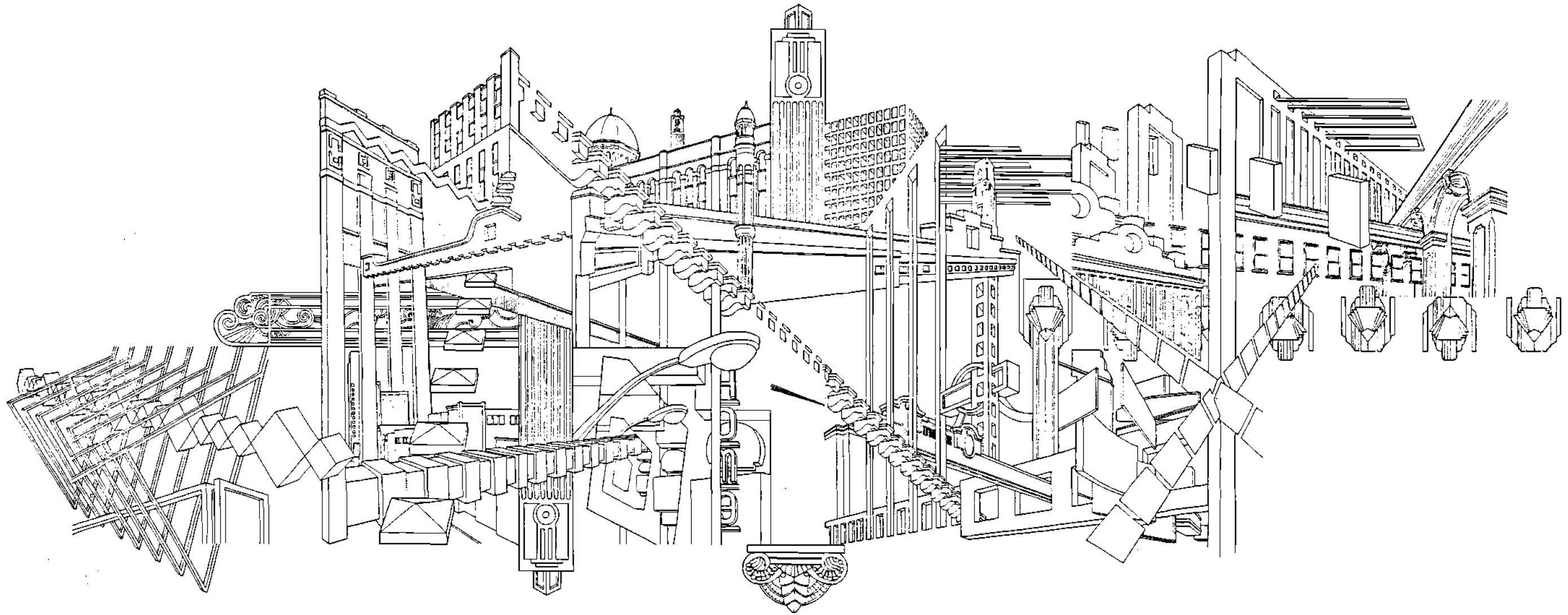
At each point of the star there are men on horseback, costumed to represent various Richmond monuments. Their faces are frozen in expressions meant to project serene



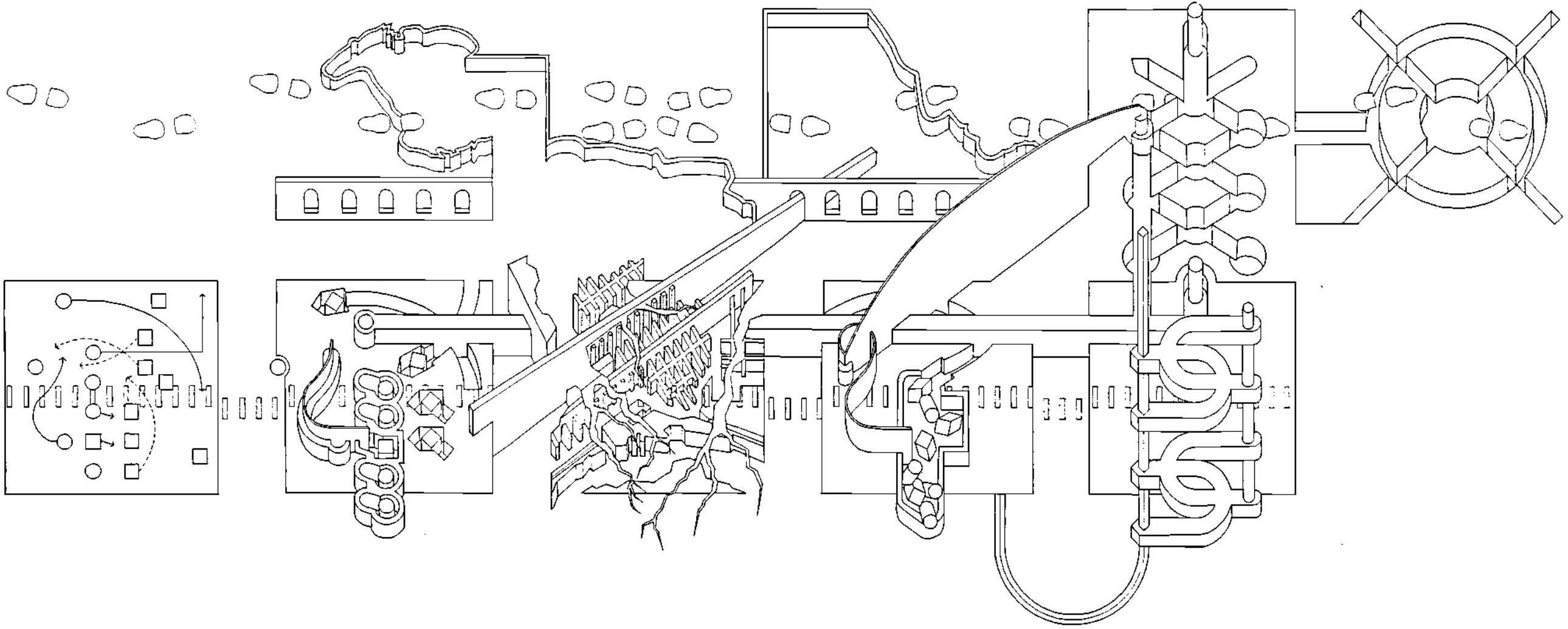
Richmond Heroes: Patrick Henry, Richard Henry Lee, John Marshall, George Mason, George Washington



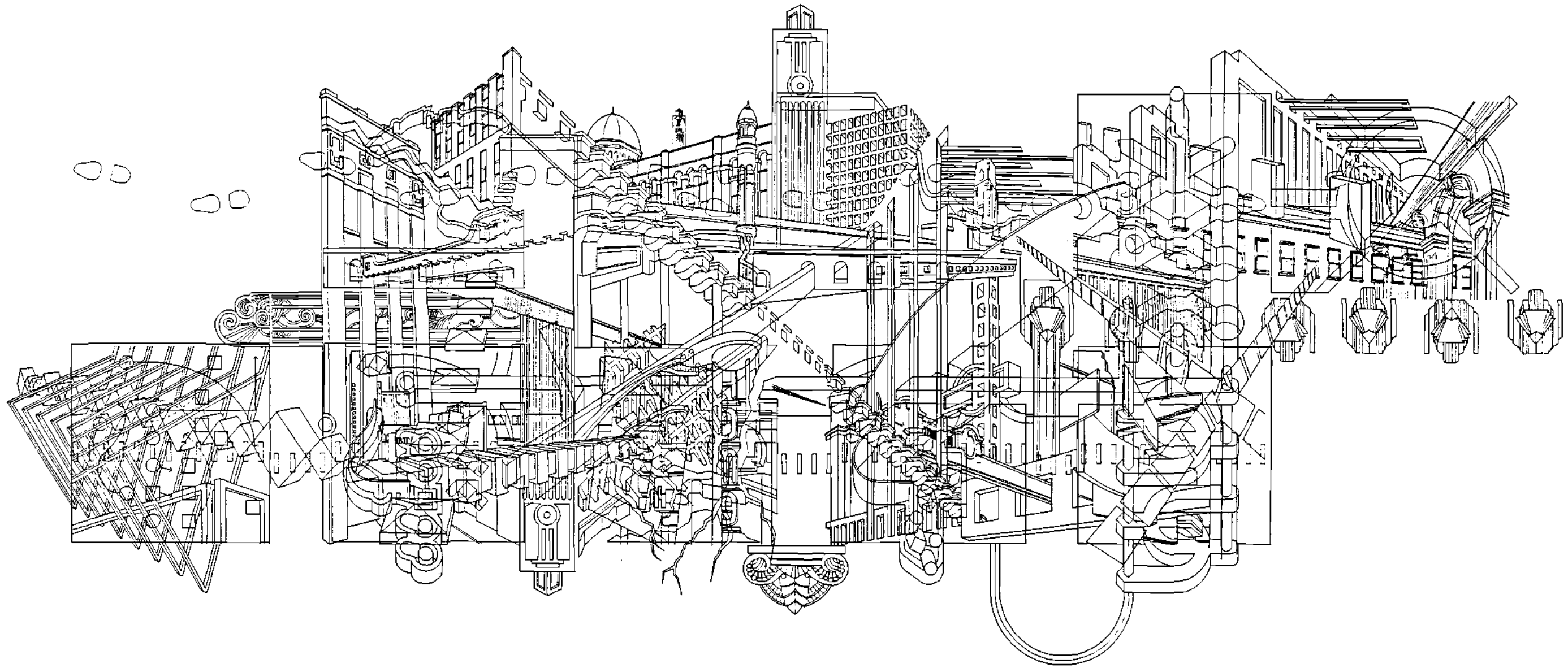
strength and indomitable character. They are intended to represent George Washington, Stonewall Jackson, J.E.B. Stuart, Jefferson Davis, Robert E. Lee, and Bill "Bojangles" Robinson, the famous tap dancer and the first Black to be commemorated with a monument in Richmond.



Broad Street Boogie-Woogle



Broad Street Events



Broad Street, Composite

## Act II

(Pan: Office tower lobby, Main Street)

A canyon of polished granite stretches before us, its walls lined with elevator doors. A door opens and we enter the claustrophobic cab, which reeks of tobacco smoke and cheap perfume. We find ourselves standing between two mirrored surfaces, trapped in a series of infinite reflections. The doors close and reopen.

## Fourth Floor, The Virginia Historical Society

We exit the elevator, entering a time warp. We are surrounded by memorabilia from an idealized era of charm and valor, an era that has never existed. We are confronted with an exhibit of Confederate small arms, the cradle in which the infant Jefferson Davis was rocked, a fork used by Robert E. Lee, and an assemblage of historical portraiture of mythical confederate heroes. We enter a room and are surrounded by a phantasmagoria depicting a Civil War battle, with bugles sounding, cavalry charging, and canons firing. We retreat and re-enter the elevator. The doors close and reopen.

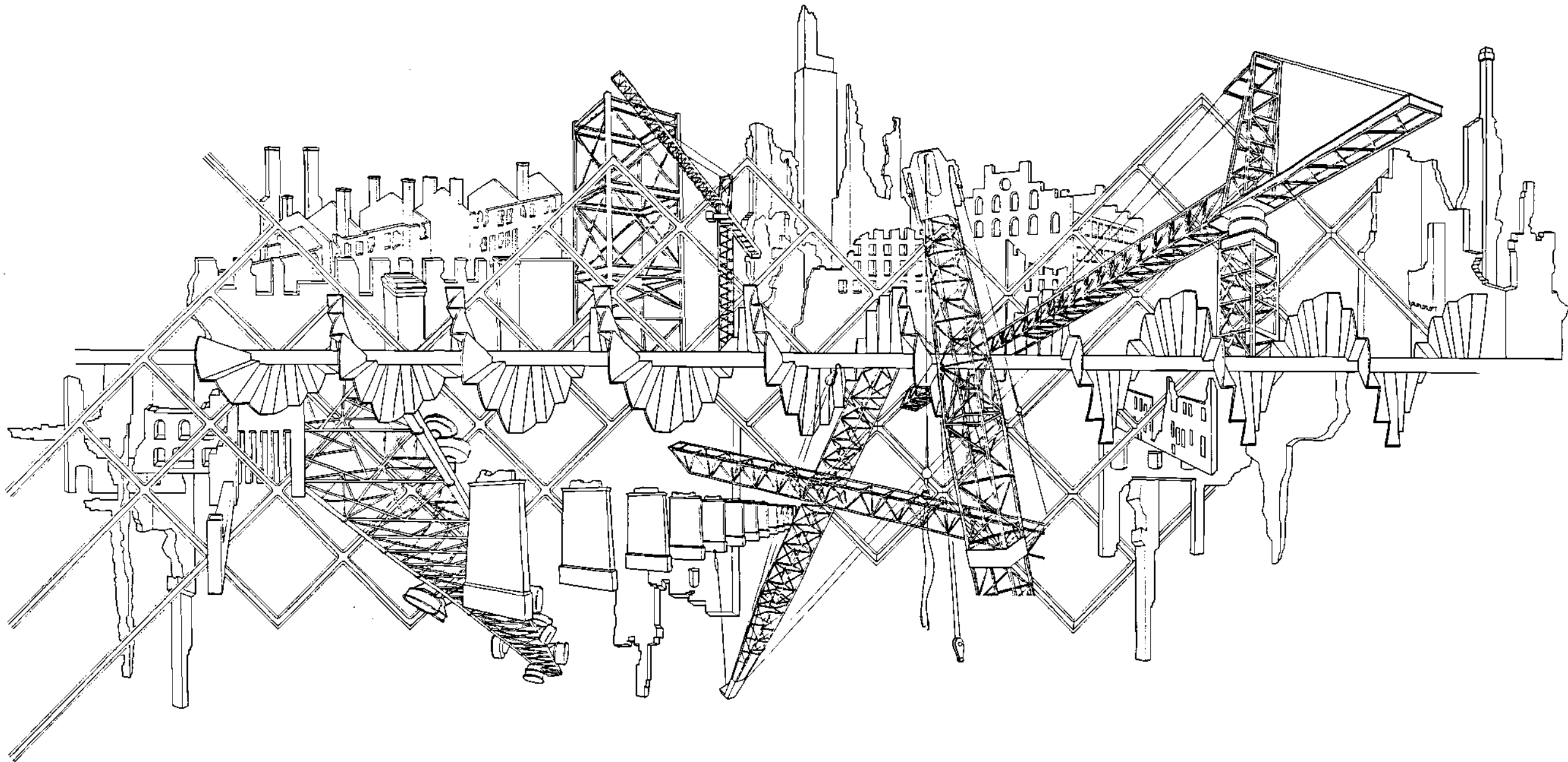
## Thirteenth Floor, The Virginia Court of Appeals, April 27, 1870.

We find ourselves in the middle of a heated debate. Hundreds of people have crowded every foot of space in the

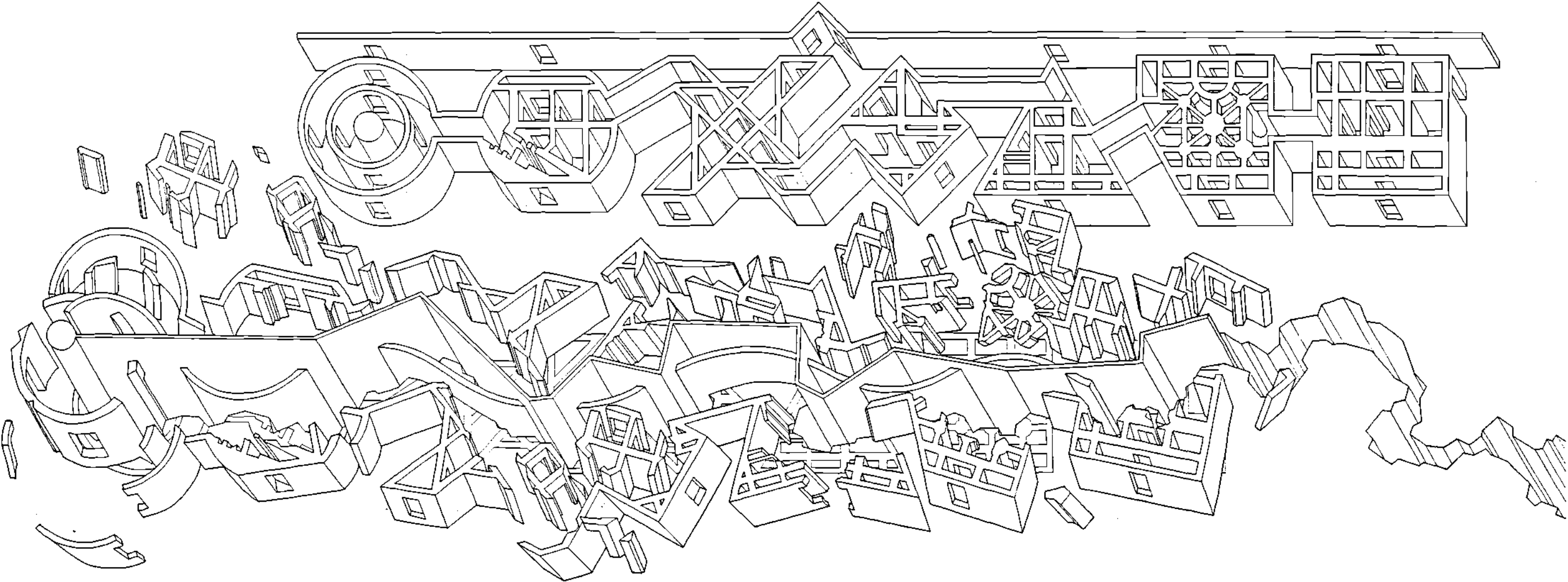
courtroom and gallery. We gradually learn that George Chahoon, Richmond's acting mayor has refused to vacate the office after the conservative controlled General Assembly authorized the governor to appoint a new city council. Suddenly the gallery gives way and the floor collapses into the Hall of the House of Delegates. Pandemonium reigns. Sixty two people are killed, two hundred fifty one injured in a miscarriage of justice, the literal collapse of government, and the destruction of the separation of power. We escape into the elevator. The doors close and reopen.

#### Twenty second Floor, A Tobacco Stemming and Manufacturing Plant

Four hundred Black men stand over huge trays of tobacco, painstakingly separating the leaves from the stems. A monotonous recitation by a single voice begins. A slow and solemn chorus joins in, dozens and dozens of voices, each perfect in its part, together forming a bass vibration that fills the room, seeming to rise from the heart of the earth. The initial single voice begins to dominate, weaving in and out over that deep, continuous base line. From that rock solid base, other voices raise cusps, columns, and pinnacles which become enfolded back into the chorus. The orchestration of voices becomes an allegory of liquescent sounds, expressing the joy, grief, and sorrow of too many years of suffering.

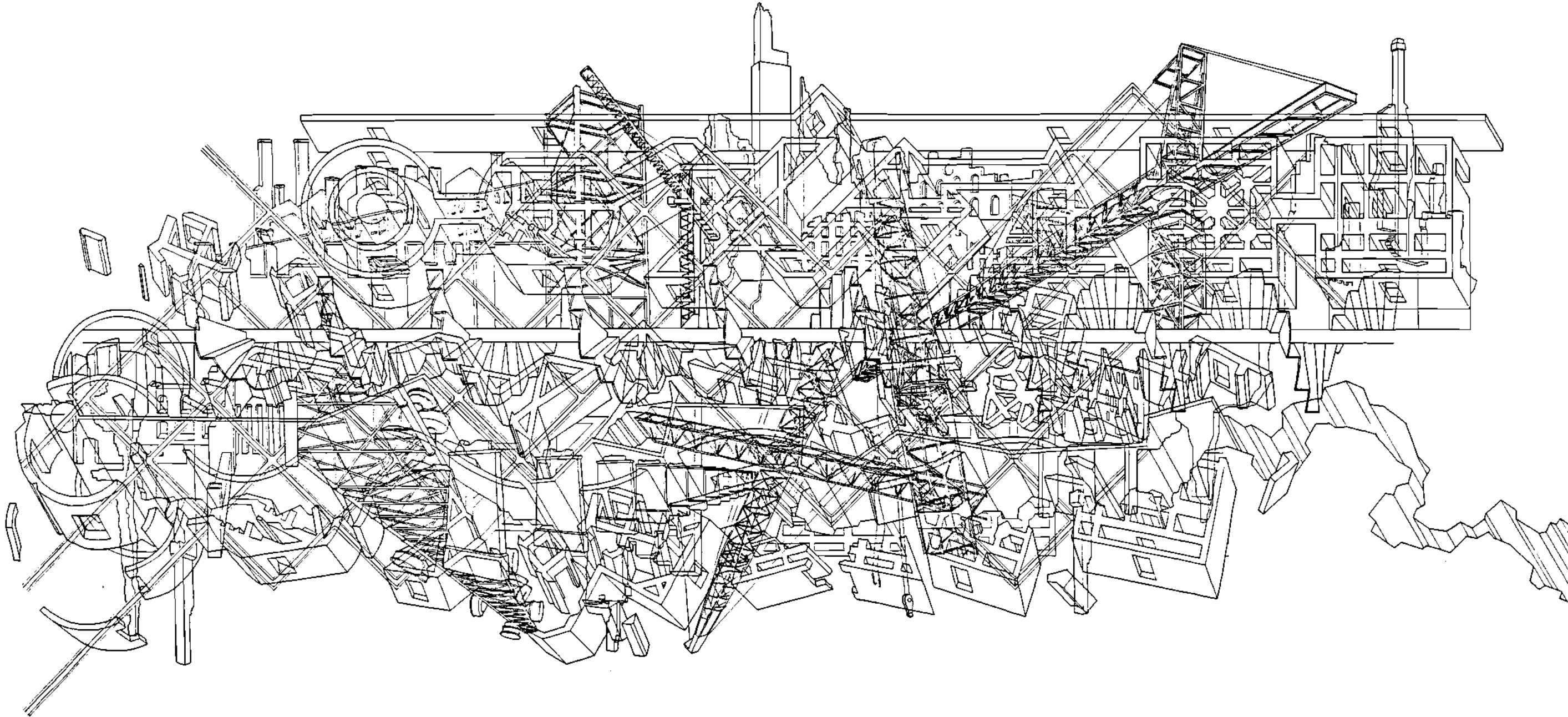


Financial District; Cycles of  
Construction and Ruin



Masque of the Red Death





Financial District, Composite

## Act III

(Close-up, The machinery of the foundry of Tredegar Iron Works, which produced eighty percent of the cannon used by the Confederacy.)

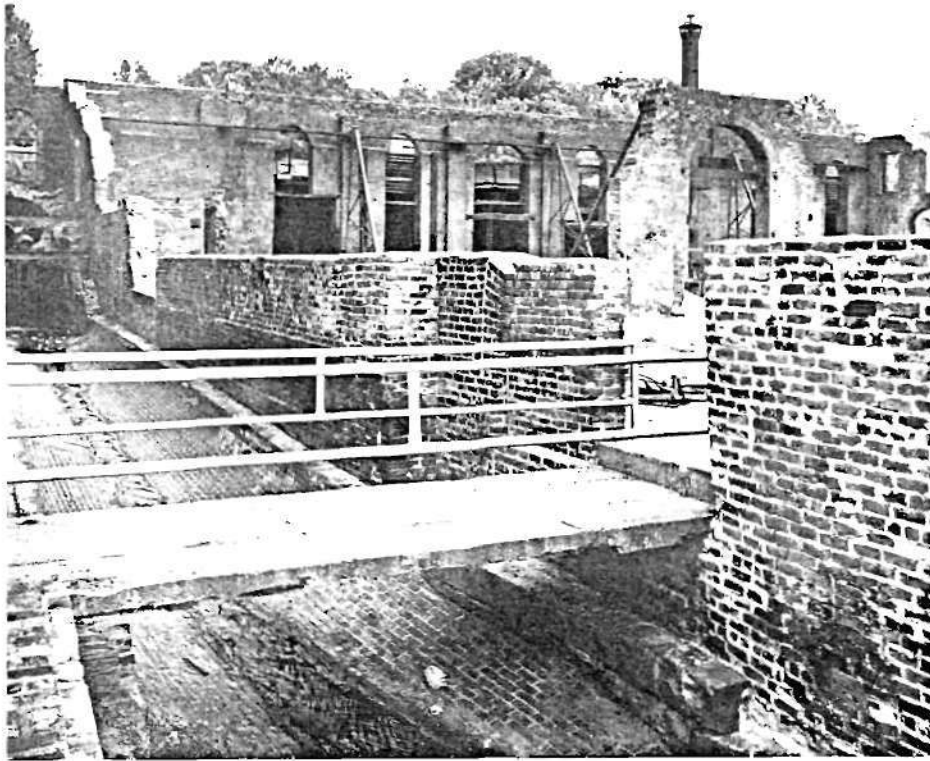
The mechanomorph, an amalgam of mechanical and humanoid components, exists as a technological fantasy, an anatomical diagram of reproductive plumbing. It sits on the boundary between the secular world and the inner cosmic spirit, simultaneously mechanical and metaphysical, trapped between reason and desire, thought and emotion, transgressing the frontier of eroticism. Through a cycle of kinetic activity, a process of displacement, transposition, conduction, interpenetration and primal palpitation, the machine provokes a sexual encounter through which mysterious dual forces are transformed into harmony. The separate realms of male and female, niveau and aplomb, physical and spiritual, inside and outside, earth and sky unite, embrace and make love, undergoing a metaphysical change and giving birth to a new formal state of unchanneled association and unfettered dream, a world of orgasmic irrationality and Machiavellian seduction, beyond physical impediments. The machine distills projected conflicts into a tenuous equilibrium, provoking the conjunction of opposites.

## The Process - Coniunctio Oppositorum

- Melanosis - The spoked blades of the wheel turn with mechanical precision, predetermined, earthbound, repetitive,



The Tredegar Iron Works and Crenshaw Woolen Mill; Richmond, Virginia



The Tredegar Iron Works Remains



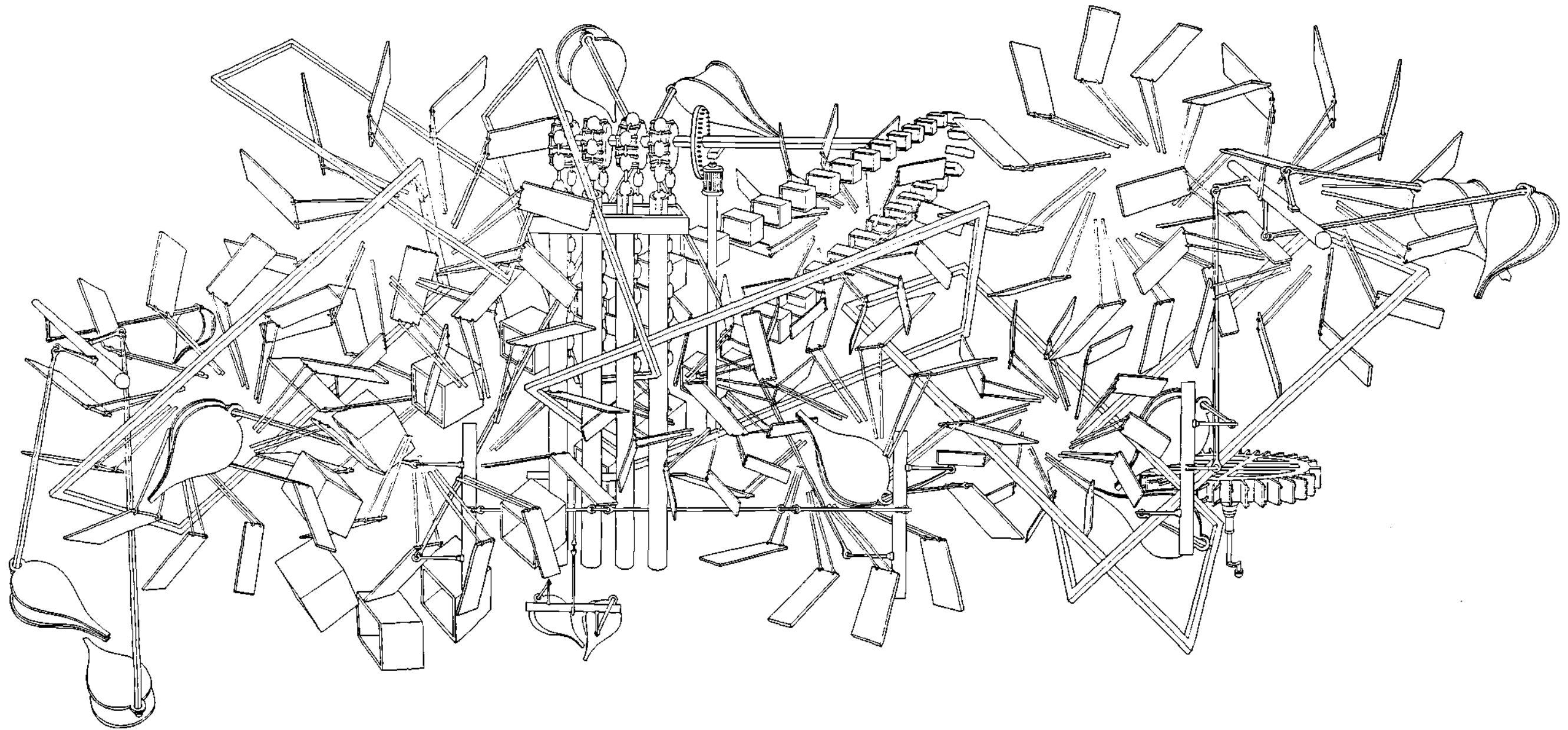
The Tredegar Iron Works Remains

setting the internal combustion process in motion by transforming the horizontal stream of water into an orgasmic splash. Through the motion, the blades change state, losing their individuality. They become scattered and suspended and their passive manipulation is transformed into active autonomy.

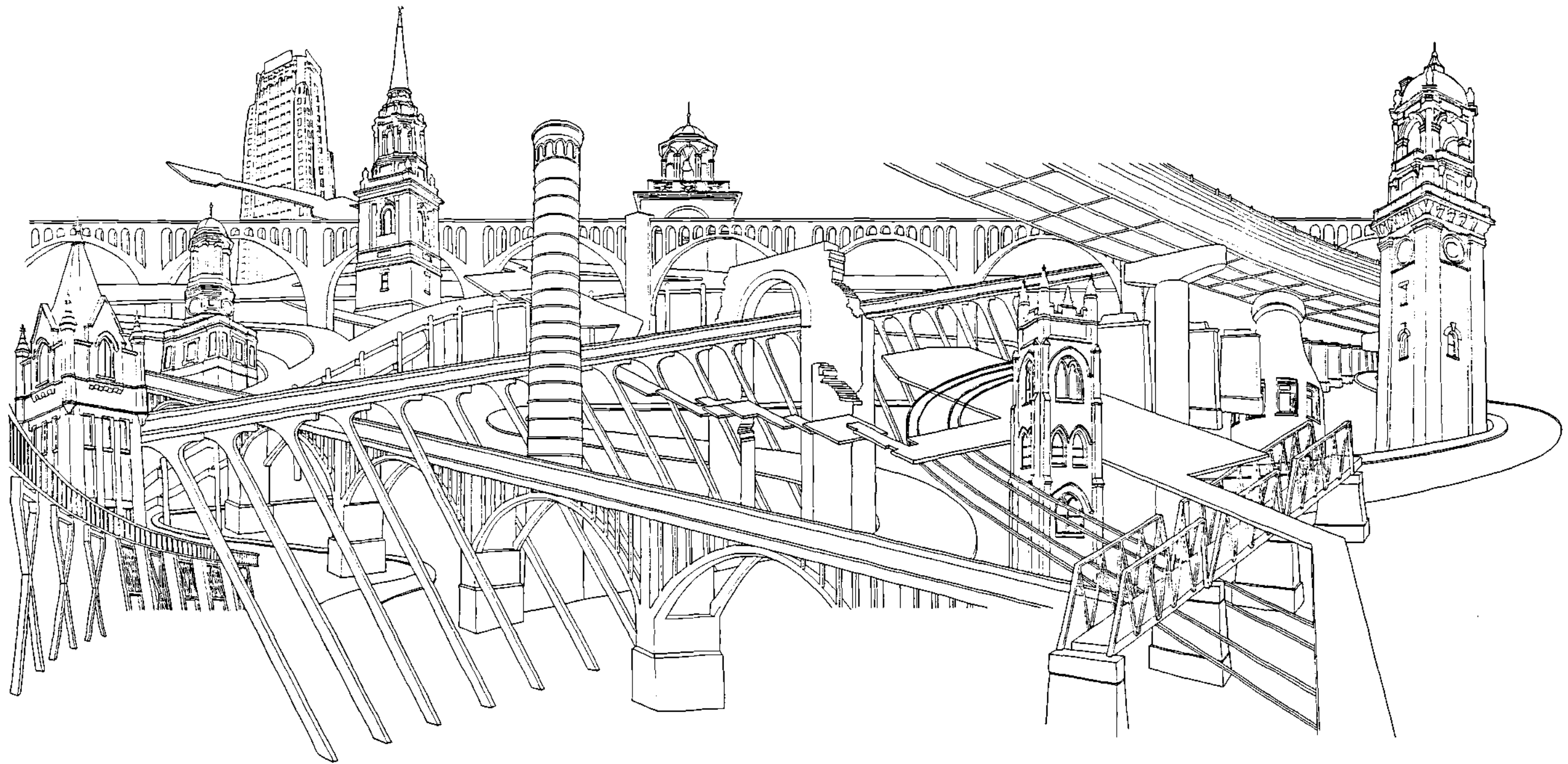
Albedo - Radiating from the wheel's crotch, the crank pumps, converting the rotary motion of the blades to the reciprocations of the drive shaft, the central spline of the sex machine, its axis mundi, mediating between earth and sky and transmitting the desire of the masculine blades to the rotating sex cylinder. The rotation ignites the pistons, provoking the pumping of the arms. These anatomized filaments activate the random, hypnotizing undulation of the ovoid bellows. The mechanical and repetitive is transformed into the lyrical freedom of the imagination.

- Rubedo - The bellows, passively submitting to their fulfillment, suck in the blades' passion, blossoming with the mixture of mercury and sulphur. In a fleeting moment of orgasmic fulfillment and climactic ecstasy, the bellows burst forth their contents, secreting a gas which breathes life into the inert contents of the furnace, transforming them from the vulgar to the philosophic. The cycle terminates in a tenuous equilibrium of reconciliation, resolving for an instant the conflicting dualistic polarity

of the natural phenomenon. Holding destructive forces in suspension, the machine provokes a momentary rite of passage into the sacred yellow world of passion and divinity. Short circuiting our cognitive grasp of reality and bridging the gap between the conscious and the unconscious, the machine transports us beyond time and space. But the moment is fleeting, leaving us exhausted and empty.



The Waterfront, Coniunctio Oppositorum

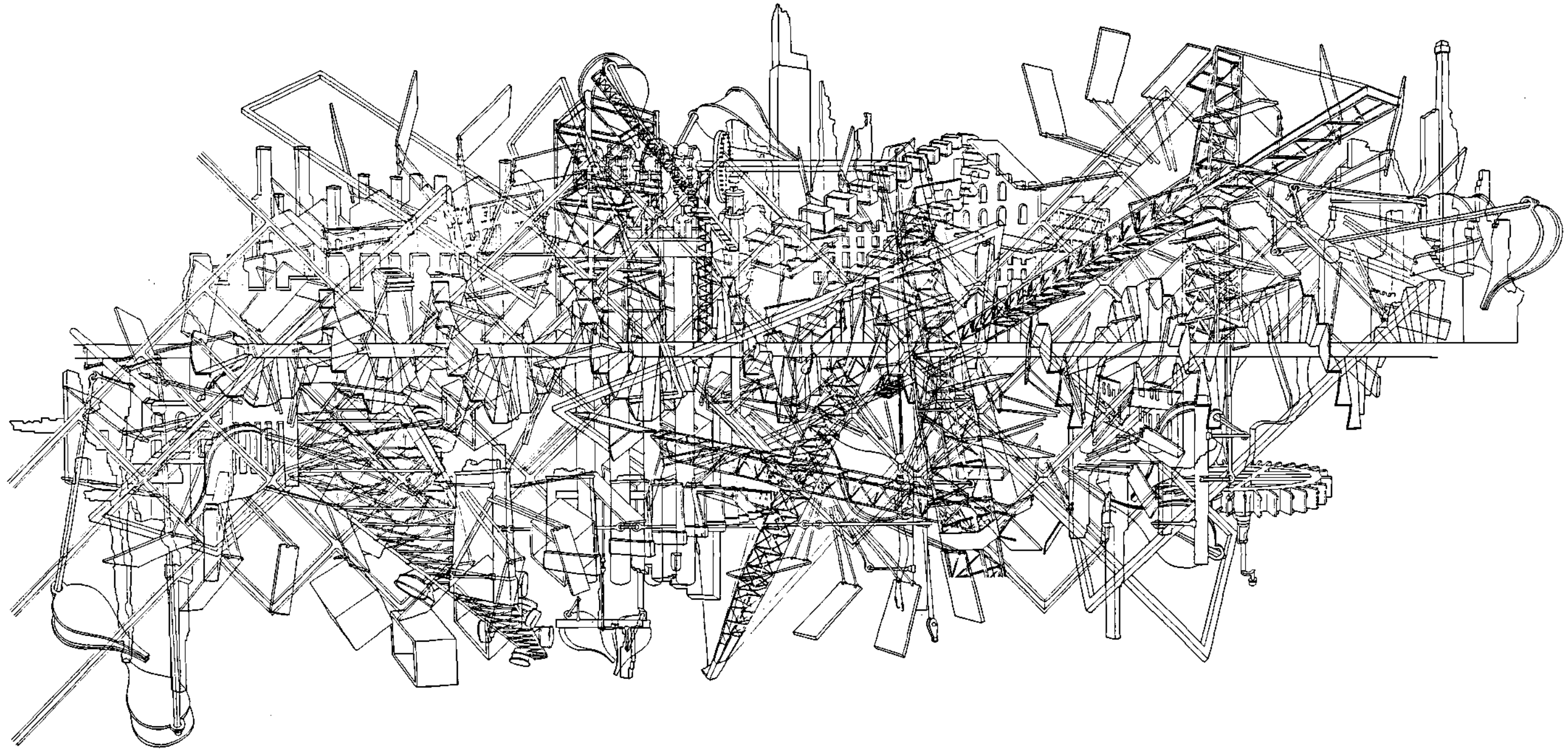


Passage Through the Canal



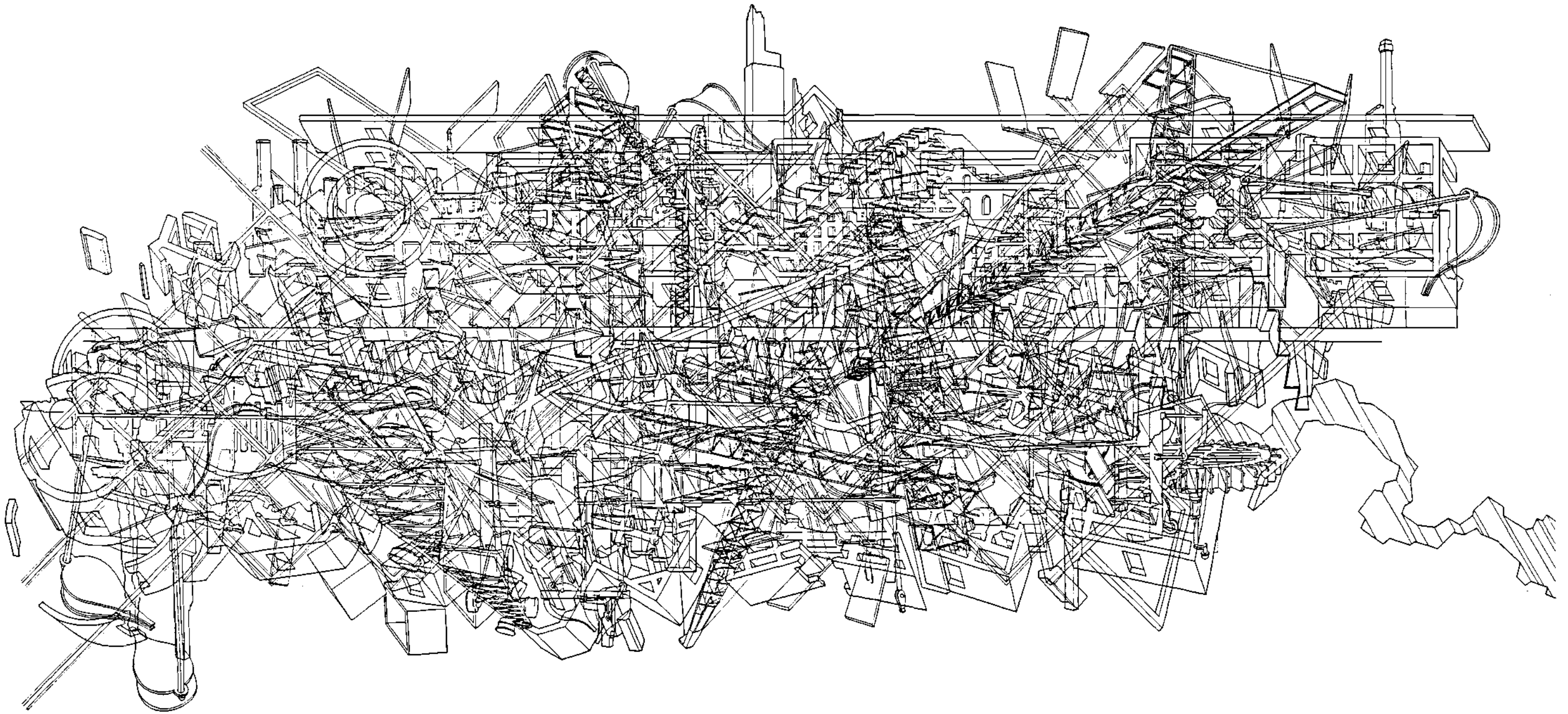


The Waterfront, Composite

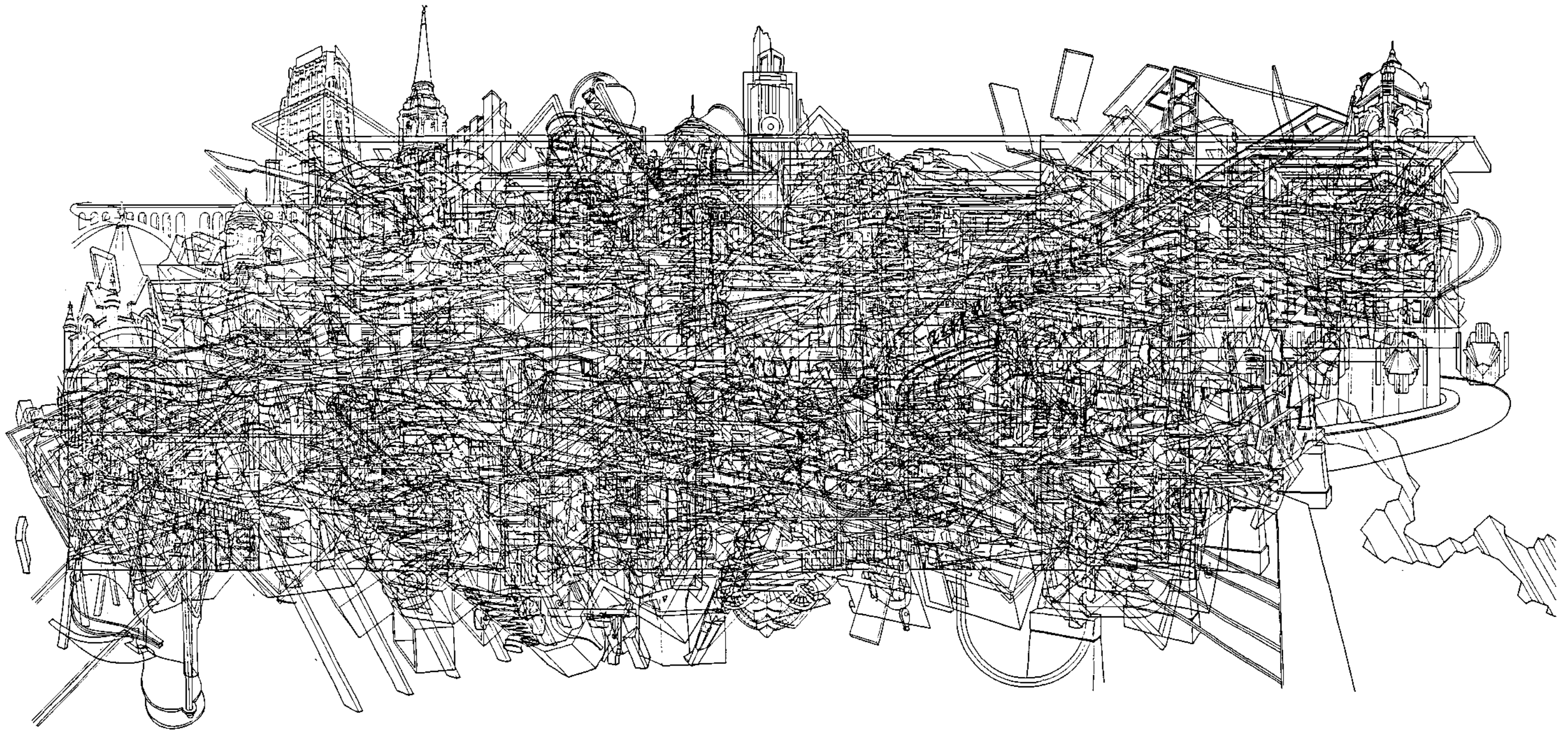


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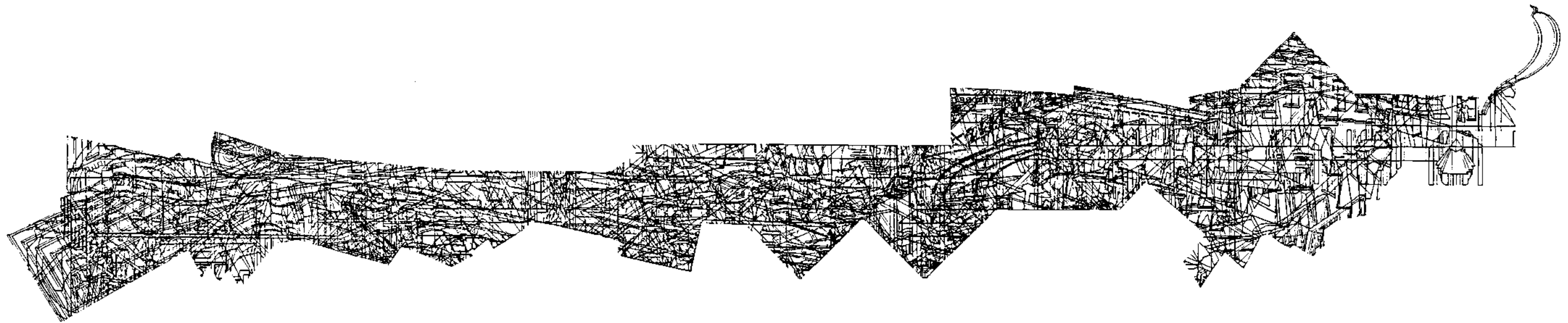




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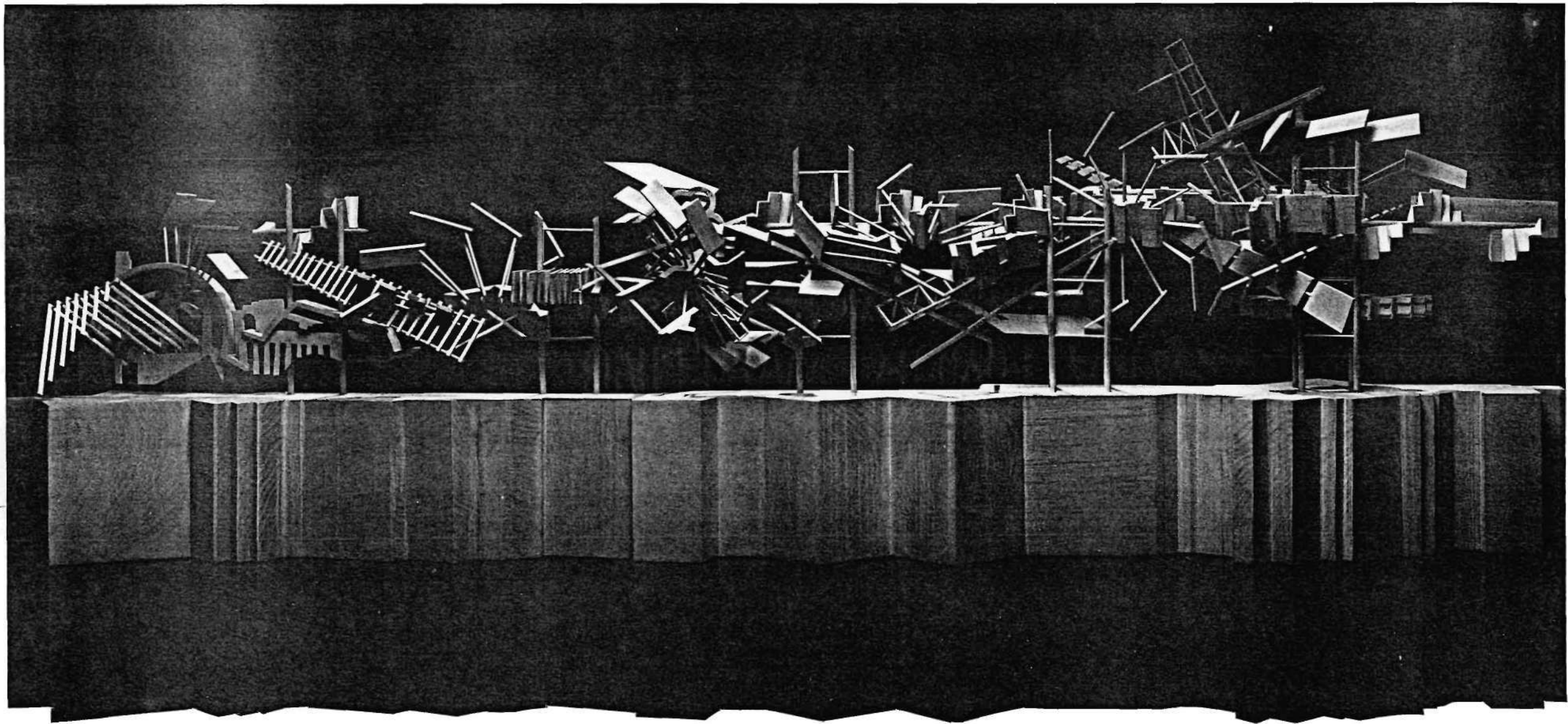


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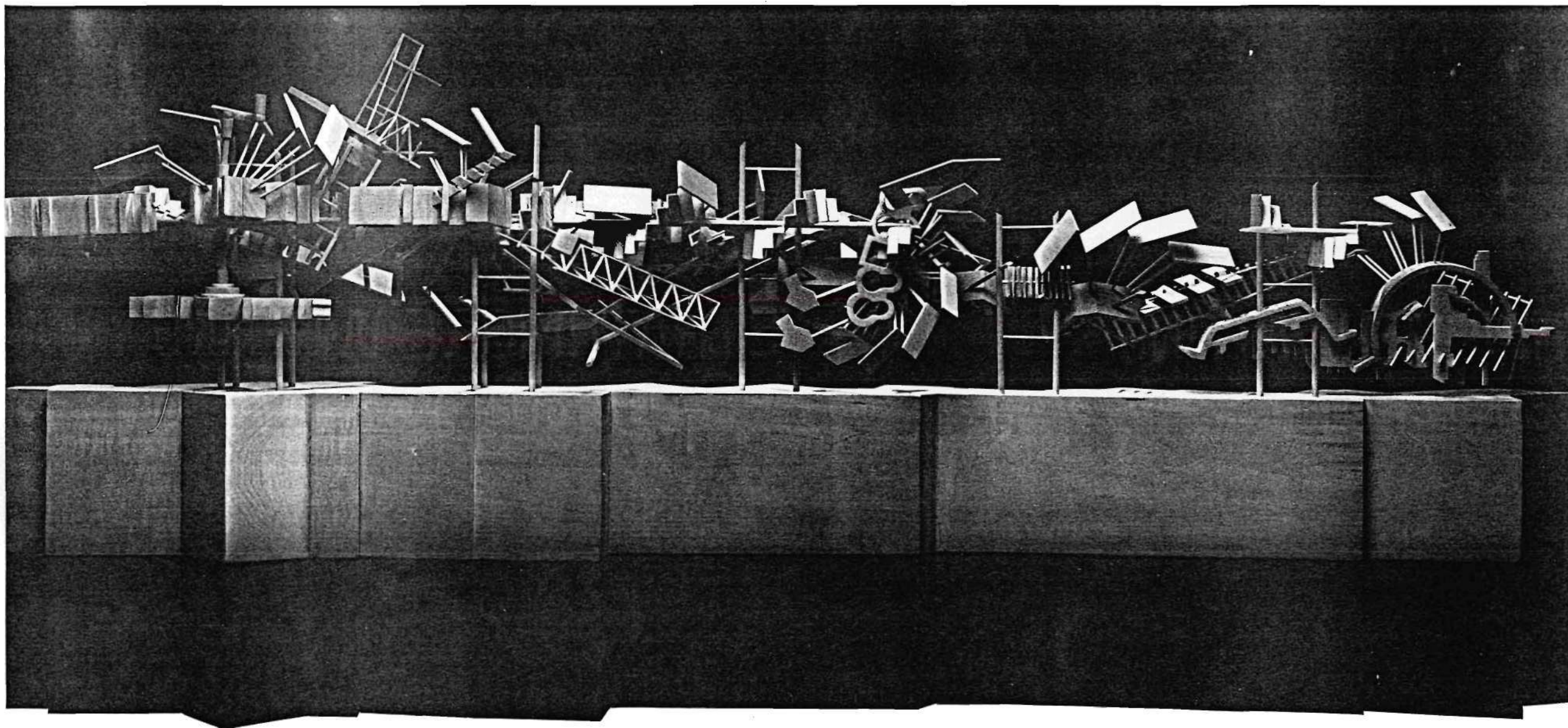
Cross Section





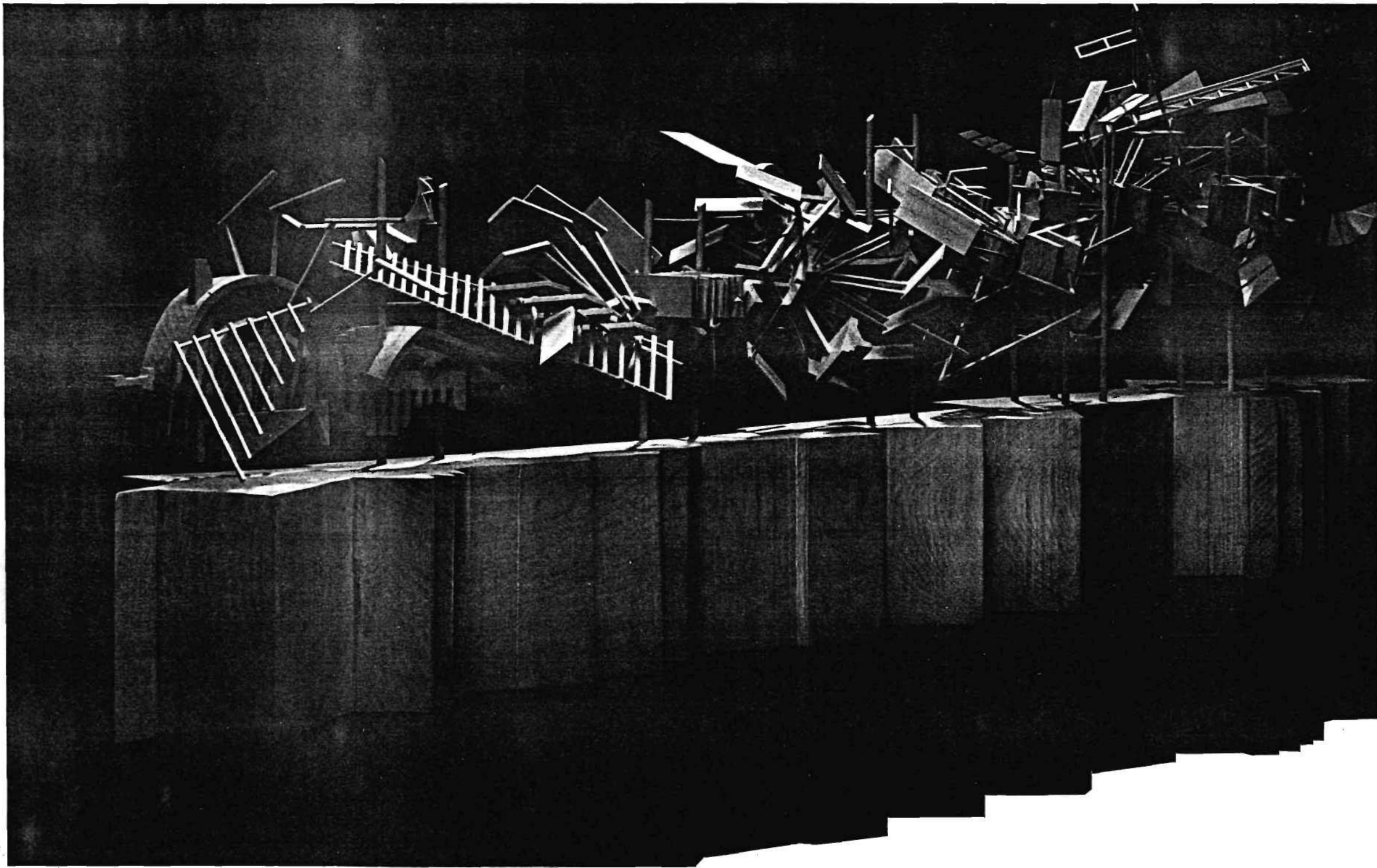
Bridge between Brown's Island and Mayo's  
Island



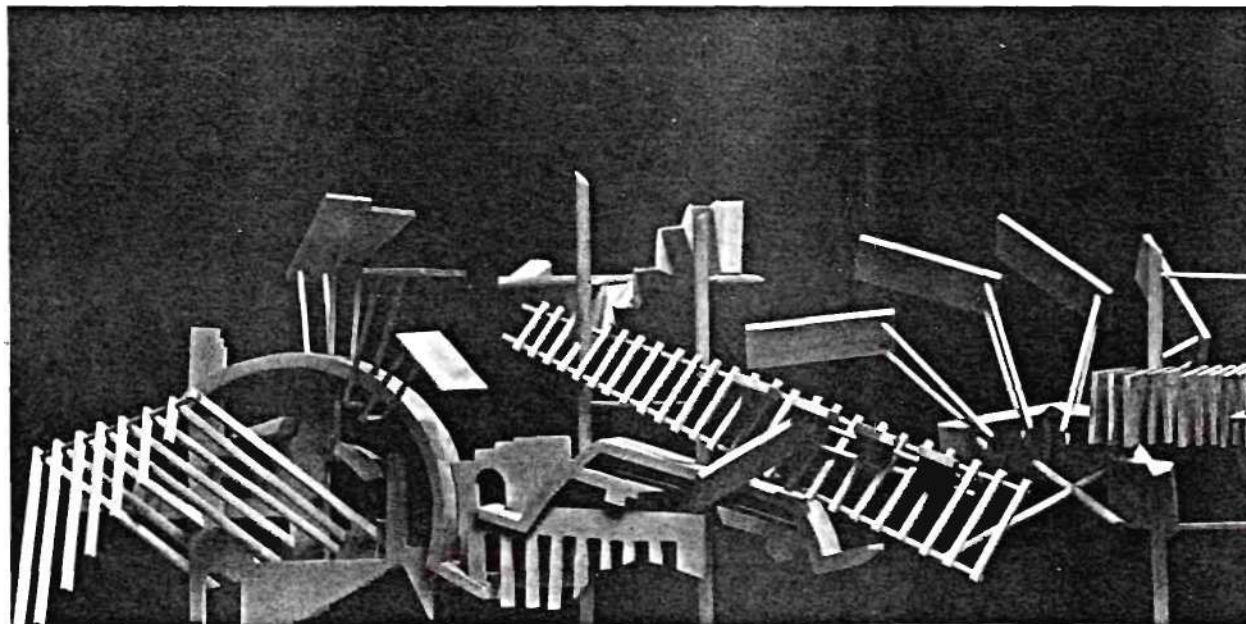
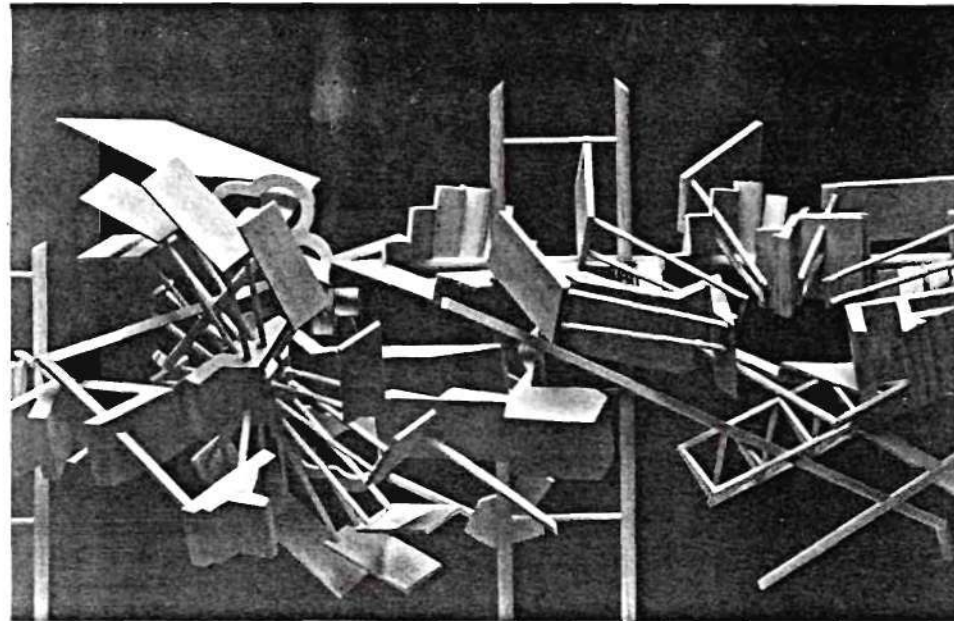


Bridge between Brown's Island and Mayo's  
Island

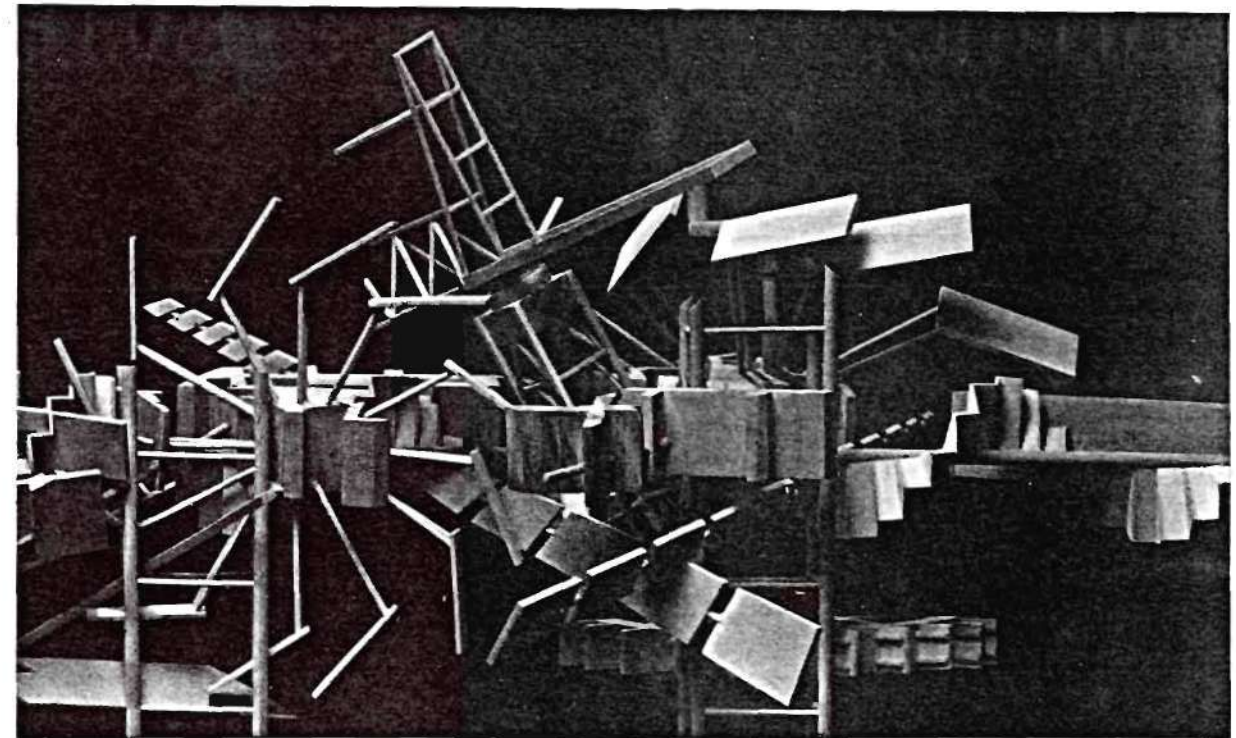




Bridge between Brown's Island and Mayo's  
Island



Bridge between Brown's Island and Mayo's  
Island





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