

OSCAR RIERA DJEDA  
LUCAS H. GUERRA

INTERACTIVE  
CD-ROM EDITION

# HYPER-REALISTIC

COMPUTER GENERATED  
ARCHITECTURAL RENDERINGS



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OSCAR RIERA OJEDA    LUCAS H. GUERRA



ABOVE: BANYOLES HOTEL LOBBY. PETER EISENMAN ARCHITECTS.  
RENDERED BY DAVID JOHNSON

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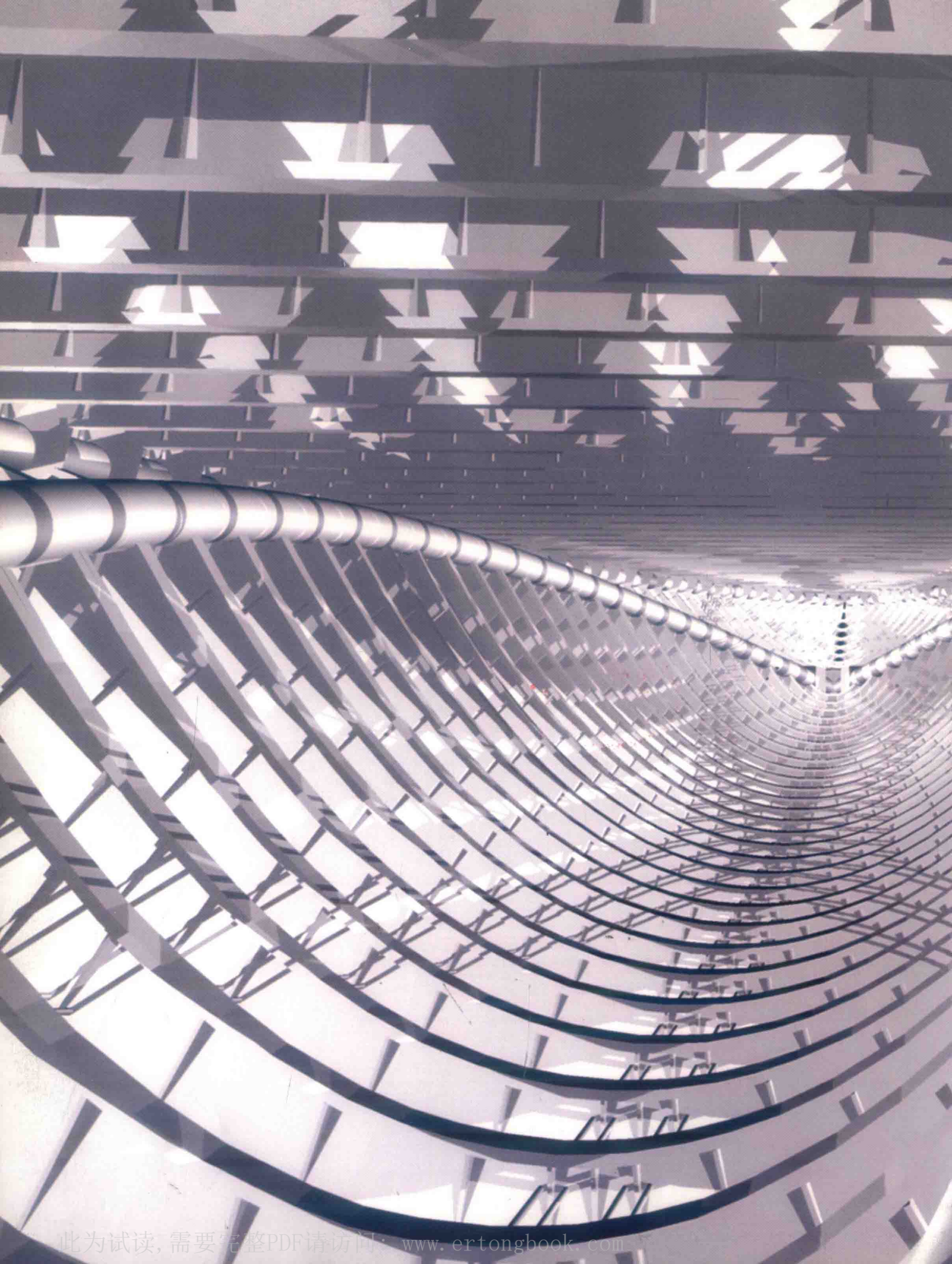




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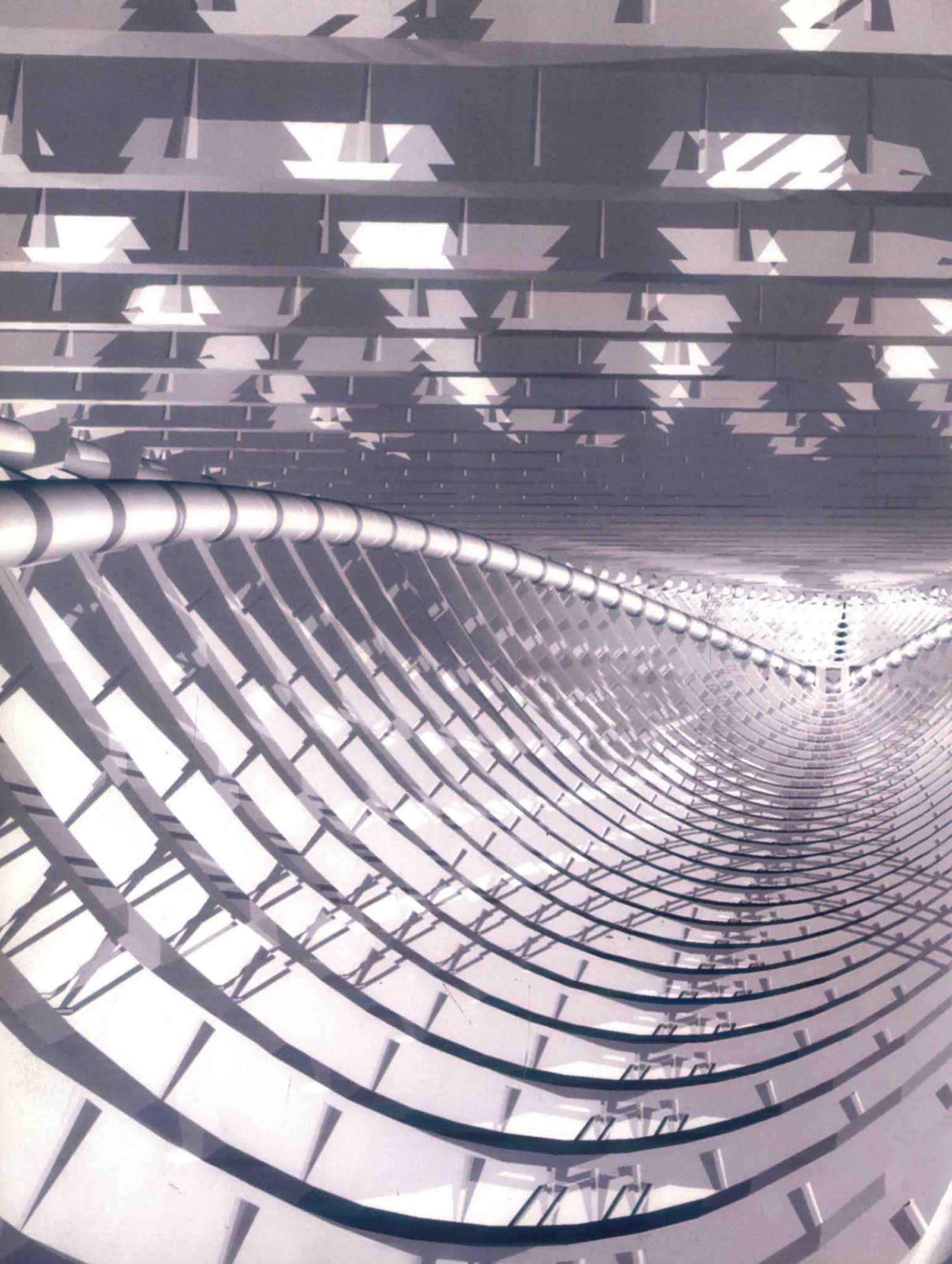




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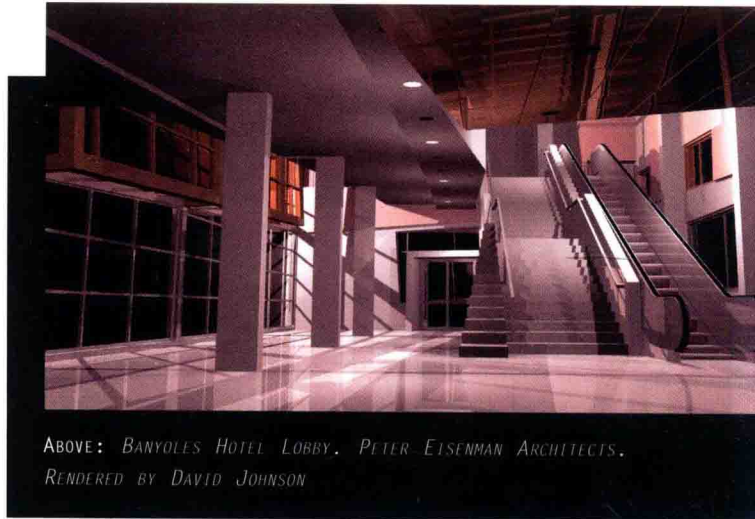




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# Just the Beginning of The Change

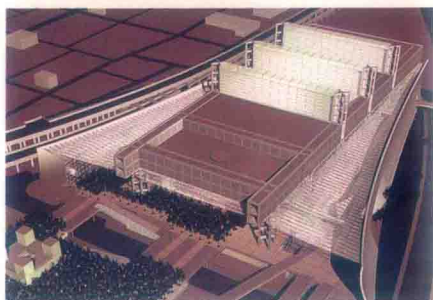
Oscar Riera Ojeda

HISTORICALLY, THE TURN OF A CENTURY HAS ALWAYS BEEN A PERIOD MARKED BY ENORMOUS ANXIETY AND A SEARCH FOR CHANGE. AT THE END OF ONE CENTURY AND THE BEGINNING OF THE NEXT, NEW GEOPOLITICAL AND ECONOMIC CONFIGURATIONS EMERGE, WITH THEIR CONSEQUENT INFLUENCES UPON ART AND SOCIETY. NOW ONLY FOUR YEARS BEFORE THE NEW MILLENNIUM, A POWERFUL CURRENT OF INNOVATION APPEARS TO FLOW IN THE MOST TRADITIONAL OF THE ARTS:

ARCHITECTURE. THE DAZZLING CHANGE THAT I PERCEIVE WILL NO DOUBT TRANSCEND FAR BEYOND MERE COSMETIC, LINGUISTIC, OR TECHNOLOGICAL ISSUES.



WE COULD POSE SEVERAL QUESTIONS CONCERNING THE GESTATION OF THIS ADVANCE. IS IT POSSIBLE THAT A NEW MODE OF REPRESENTATION CAN BE A DECISIVE FACTOR IN ARCHITECTURE'S RADICAL CHANGE? AT FIRST, THIS MAY APPEAR TO BE WILD CONJECTURE. BUT, IF ALTERNATIVE METHODS OF EXPRESSING OUR CREATIVE IMAGINATION HAVE PROFOUND EFFECTS UPON ITS REALIZATION, THE CONCEPT WOULD NOT APPEAR TO BE SO WILD. WE ARE REKINDLING AN ANCIENT SUPPOSITION: THAT EVERY TECHNOLOGICAL ADVANCE IS ACCOMPANIED BY A NEW STRUCTURE OF THOUGHT.



IF WE ANALYZE THE POPULAR RESISTANCE TO MODERN ARCHITECTURE (OR ANY OTHER SIGNIFICANT MOVEMENT IN ARCHITECTURE) IT APPEARS THAT ONE OF THE REASONS FOR THIS RESISTANCE WAS IN MODERN ARCHITECTURE'S ARCHAIC AND DEFICIENT REPRESENTATION. GRADUAL CONSTRUCTION WAS THE TOOL OF MODERNISM'S DIFFUSION. BUT HAD IT BEEN POSSIBLE TO USE A MORE EFFECTIVE MEDIUM TO COMMUNICATE ITS PRINCIPLES AND IDEAS, ITS HISTORY WOULD SURELY HAVE BEEN DIFFERENT. THE WISHES OF LE CORBUSIER TO DEVELOP ARCHITECTURE ON A PAR WITH (OR PERHAPS AHEAD OF) THE PRODUCTS OF SCIENCE AND INDUSTRY MIGHT HAVE BEEN REALIZED, WITH A CLEARER AND MORE DIRECT CRYSTALLIZATION OF HIS NOTIONS OF SPACE.

IN EXPRESSING AN AVANT GARDE IDEAL THROUGH TRADITIONAL MEANS, SOONER OR LATER WE WOULD ARRIVE AT ITS LIMITATIONS, WITH THE CONSEQUENT LOSS OF FORCE AND CONSISTENCY OF THE MESSAGE. WE HAVE LEARNED THIS FROM HISTORY, AND IT CORRESPONDS TO THE GROWING INTEREST TO FIND THE APPROPRIATE TOOL TO GIVE FORM TO OUR NEW IDEAS.

WITH THE MASSIVE USE OF COMPUTERS IN ARCHITECTURE, EVERYONE QUICKLY ASSUMED THAT "THE SOLUTION" WAS AT HAND. HOWEVER, IT HAS TAKEN SEVERAL YEARS FOR THE DIGITAL AGE TO PRODUCE, AMONG OTHER THINGS, AN APPROPRIATE WAY TO CONFIGURE ARCHITECTURAL SPACE. BUT NOW THAT WE HAVE BEGUN TO UNDERSTAND ITS ESSENCE, THE CONNECTING THREAD AMONG IDEA, DEVELOPMENT, AND CONSTRUCTION SEEMS TO BE ESTABLISHED, EXPLOITING EVERY TECHNOLOGICAL ADVANCE THAT PERMITS IMPROVED VISUALIZATION. WHAT JUST A FEW YEARS AGO WAS A HESITATION TO USE THREE-DIMENSIONAL COMPUTER RENDERINGS HAS BECOME AN VERITABLE FURY. ARCHITECTURAL OFFICES BEGAN TO PHASE OUT THE HIRING OF FREELANCE COMPUTER ARTISTS OR ILLUSTRATORS TO DESIGN THESE SUPERREALISTIC IMAGES, IN FAVOR OF INCORPORATING IN-HOUSE PERSONNEL AND TECHNOLOGY THAT WOULD PERMIT THIS TANGIBLE METHOD OF VISUALIZATION. WHAT HAD BEEN AN OPTION THAT PROVOKED LITTLE CONFIDENCE, THAT WAS SCORNE AND UNDERVALUED, HAS TODAY BECOME PRACTICALLY INDISPENSABLE.

IN THE THREE-AND-A-HALF YEARS OF COMPILING THIS BOOK, I RECALL WITH AMAZEMENT AND WITH DELIGHT HOW THE EARLIEST IMAGES CREATED BY THE ARCHITECTURAL FIRMS REPRESENTED HERE IMPROVED IN ONLY A MATTER OF MONTHS FROM A CARICATURESQUE QUALITY, TO THEIR SUPERREALISTIC PHOTOGRAPHIC APPEARANCE TODAY. HOW DIFFERENT OUR PERCEPTION OF THE UNREAL IS, WHEN WE BECOME CONSCIOUS OF THE FACT THAT TODAY IMAGINATION ITSELF CAN BE REPRESENTED AS AN "AUTHENTIC" PART OF REALITY, NO LONGER AS IF IN A DREAM, OR AN IDEA VAGUELY ROAMING IN THE MIND OF ITS CREATOR.

LET US IMAGINE THAT OUR VISION OF AN NONEXISTENT BUILDING MIGHT BE SHOWN IN PHOTOGRAPHS, VIDEO, OR SOME OTHER DIGITAL FORM, AS IF IT WERE ALREADY CONSTRUCTED, AND THAT IT MIGHT BE POSSIBLE FOR US TO STROLL THROUGH IT AND ALTER ITS CONDITIONS — A SORT OF TOUR THROUGH VIRTUAL REALITY. WE COULD VISUALIZE, IN AN UNLIMITED WAY, ITS INTERIOR AND EXTERIOR FROM VIRTUALLY ANY ANGLE, FROM DIVERSE HEIGHTS AND POINTS OF VIEW, AND EXPERIENCE IT UNDER VARIOUS ATMOSPHERIC AND LUMINAL CONDITIONS. PROCEEDING ON OUR TOUR, IT WOULD



LEFT AND ABOVE: THREE IMAGES OF THE SAITAMA ARENA IN JAPAN, DESIGNED BY ARATA ISOZAKI & ASSOCIATES, RENDERED BY THE CAD CENTER CORPORATION (TOKYO). ISOZAKI IS ONE OF THE ARCHITECTS WHO HAS MANAGED TO EXPLOIT THE POWER OF THESE IMAGES, WITHOUT ALTERING THE SPIRIT AND LANGUAGE THAT HAVE CHARACTERIZED HIS WORK IN THE PAST.



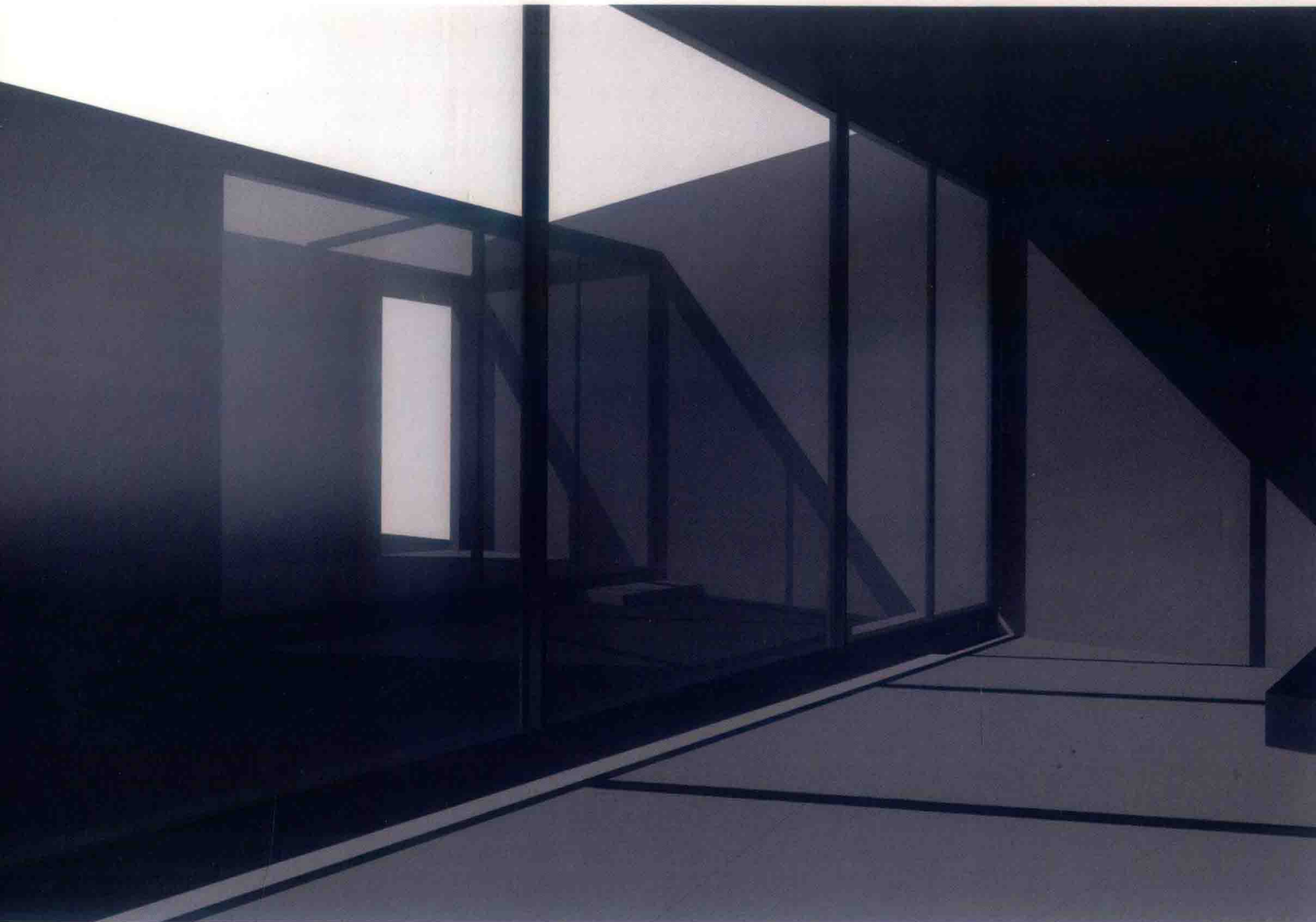


ABOVE: LOBBY OF THE SHANGHAI STOCK EXCHANGE IN SHANGHAI, CHINA, BY KAPLAN McLAUGHLIN DIAZ. SUCH SUPERREALIST REPRESENTATION OF PROJECTS IS BUT THE FIRST STEP THAT THE DIGITAL REVOLUTION IS DEVELOPING, IN ITS SEARCH FOR A MORE COMPLETE AND CONTINUOUS EXPERI-

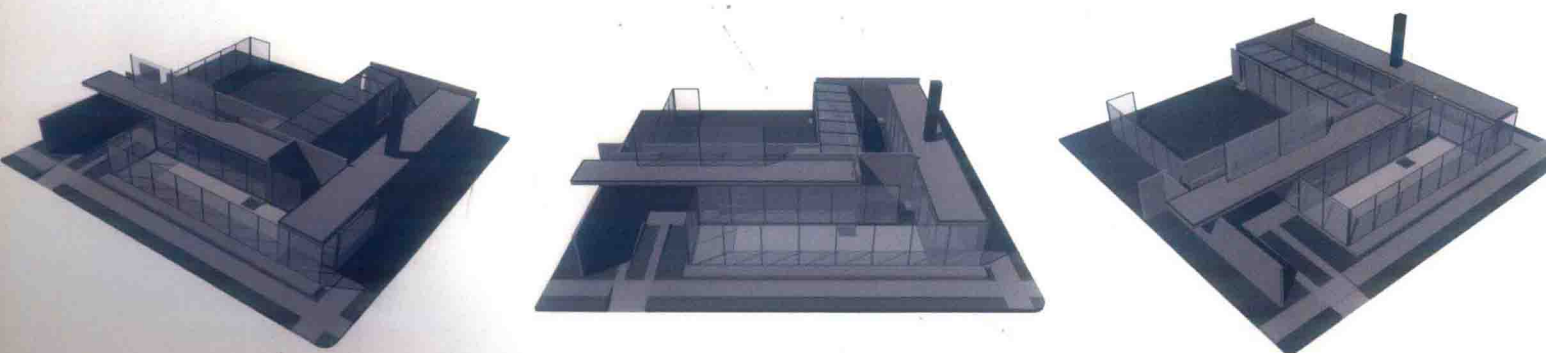




ENCE OF SPACE. CAPTURING THE ESSENCE OF LIFE AND MOVEMENT IS ONLY ONE OF THE GOALS OF THIS NEW METHOD OF VISUALIZATION FOR OUR CREATIVE IMAGINATION, WHOSE OBJECTIVE IS TO EXCITE AND ALLOW THE USE OF ALL FIVE SENSES.



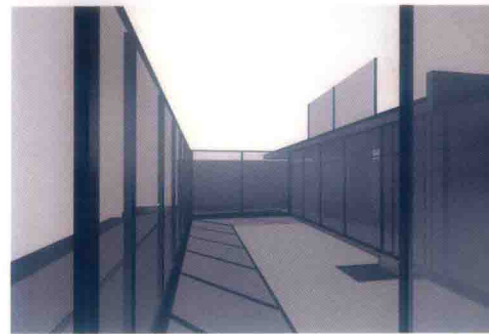
THIS SPREAD: VIEWS OF THE HOUSTON PROJECT, A PRIVATE HOUSE AND STUDIO ON A CORNER SITE IN WHAT IS KNOWN AS MIDTOWN - AN AREA THAT STRETCHES 12 BLOCKS FROM HOUSTON'S DOWNTOWN TO MIES VAN DER ROHE'S MUSEUM OF FINE ARTS, AT THE EDGE OF HERMAN PARK. DESIGNED IN 1994 BY THE ARCHITECT MICHAEL BELL, THIS PROJECT INTENDS, BY USING A FULL SEQUENCE OF COMPUTER RENDERINGS, TO CLEARLY EXPRESS BOTH "MOVEMENTS" PRESENT IN THE HOUSE: THE MOBILE SUBJECT AND THE STRESS/STRAINS/TORSIONS OF MATTER. THE PROJECT WAS AN EXPLICIT ATTEMPT TO WORK ON A KIND OF MOLECULAR ACTIVITY IN THE WALLS AS A SUBJECT ACTIVITY.



BE POSSIBLE FOR US TO CHANGE THE FURNISHINGS; ALTER THE FORM, SIZE, OR POSITION OF ANY ELEMENT, SUCH AS A DOOR OR A WINDOW; OR TO MODIFY COLORS OR MATERIALS. WE COULD PERHAPS GO EVEN FURTHER, AND UTILIZE ALL OF OUR SENSES. WE COULD MANIPULATE THE MATERIALS THAT COMPOSE OUR IMAGINARY EDIFICE, OPEN A WINDOW AND SMELL THE AROMA OF THE VEGETATION THAT ENVELOPS IT, OR LISTEN TO THE SOUND OF THE BIRDS IN THE NEIGHBORHOOD, OR OF BREAKING WAVES, IF OUR SUPPOSED BUILDING WAS NEAR THE SEASHORE.

FOR THOSE ARCHITECTS FOCUSED ON THE ACADEMIC EXERCISE OF DESIGNING ARCHITECTURE ONLY IN TERMS OF PLAN, SECTION, AND ELEVATION, THIS NEW WAY OF REPRESENTING A PROJECT WOULD FINALLY ALLOW THEM TO IMAGINE ITS MOST MINUTE DETAIL. BUT EVEN MORE IMPORTANT IS THE DEMAND IT PUTS UPON ITS CREATORS TO FANTASIZE ABOUT THE POSSIBLE CONDITIONS OF LIFE THAT WILL REIGN OVER THE CREATED OBJECT.

TODAY, TO EXPERIENCE UNBUILT ARCHITECTURE TO THIS HYPERREALISTIC DEGREE APPEARS TO BE A DREAM. HOWEVER, IT IS A NEW REALITY THAT IS NOT MORE PREVALENT ONLY BECAUSE OF TIME AND PRODUCTION COSTS. BUT I HAVE NO DOUBT ABOUT ITS RAPID DISSEMINATION, AND THAT A PROFOUND CHANGE IN COMMUNICATING TIME AND SPACE HAS BEGUN. ITS INTRINSIC VALUE IS THE POSSIBILITY TO EXPLOIT AND DEVELOP A NEW ARCHITECTURE THAT REFLECTS OUR PRESENT SPIRIT. ONLY A FEW YEARS AGO, THE APPROPRIATE FORM OF EXPRESSING ALL OF ITS PRINCIPLES DID NOT EXIST.



THE EXQUISITE AND RIGOROUS RENDERINGS IN THIS BOOK, PRODUCED BY SOME OF THE MOST IMPORTANT ARCHITECTURAL FIRMS IN THE WORLD, AND ALSO BY SMALL STUDIOS OF YOUNG ARCHITECTS, DOCUMENT THE BEGINNINGS OF THIS "NEW WAVE." BEYOND COMPILING A "DE MODE" WAY OF REPRESENTING ARCHITECTURE, HYPER-REALISTIC COMPUTER GENERATED ARCHITECTURAL RENDERINGS CONSTITUTES ONE OF THE FIRST ATTEMPTS TO MANIFEST THE DIVERSE EFFECTS THAT THE USE AND DEVELOPMENT OF THIS TECHNOLOGY WILL HAVE ON ARCHITECTURE'S FUTURE COURSE. THESE NEW TOOLS PAVE THE WAY FOR US.

