



MASTER OF ARCHITECTURE SEPTEMBER 2002

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
BLACKSBURG, VIRGINIA

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MOMENTUM

THESIS SUBMITTED TO THE FACULTY OF **VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY** IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

COMMITTEE:

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MASTER OF ARCHITECTURE



MOMENTUM

THE THESIS

DISCUSSES WAYS OF **TRANSFORMING MOTION**, FOUND IN **BODIES**, INTO **ARCHITECTURE**, BY CLARIFYING COMPLEX **STRUCTURAL SUPERIMPOSITIONS**. IT ADDRESSES THE **RELATIONSHIP** BETWEEN **MOVEMENT** FOUND IN **NATURAL** BODIES AND **URBAN** STRUCTURES AND ITS PARALLELS IN **ARCHITECTURE** IN RELATION TO TIME AND EXTERNAL FORCES. TRANSFORMATIONAL MOTION CAN BE FOUND IN EVERY ELEMENT. THE **THESIS** DEFINES AND **STRUCTURES** SITE-SPECIFIC **PARAMETERS**, AND **TRANSFORMS** THEM INTO **ARCHITECTONIC** GUIDELINES. THROUGH THE INTEGRATION OF A SPECIFIC PROGRAM, THESE GUIDELINES ARE TRANSLATED INTO A **SCHOOL OF PERFORMING ART**.

M O M E N T U M

NATURAL FORCES

ARE TRANSFORMING EVERY ELEMENT THROUGH TIME AND SPECIFIC NATURAL CIRCUMSTANCES OF A PARTICULAR PLACE. THE RESULT IS A WIDE VARIETY OF BEAUTIFULLY FORMED BODIES WHICH ARE A REFLECTION OF THEIR SITE-RELATED OUTER INFLUENCES.



M O M E N T U M

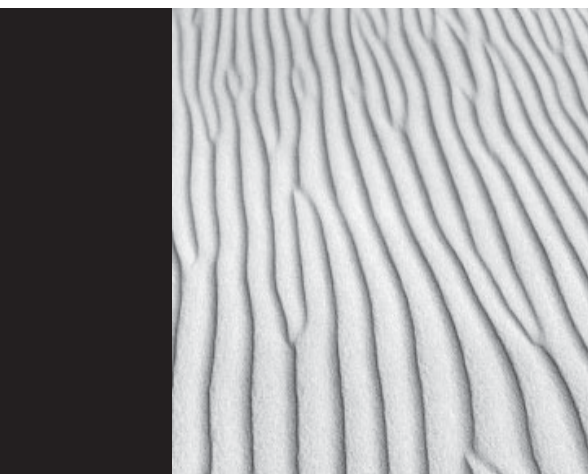
SEASONS

ARE EXPRESSIONS OF **FORCES IN MOTION**.

ORGANIC BODIES INFLUENCED BY CIRCUMSTANCES AND **SPECIFIC SITE CONDITIONS** CHANGE THEIR STRUCTURE AND APPEARANCE IN RELATION TO TIME.

FORCES OF NATURE **FORM ENDLESS WONDERFUL BODIES** THROUGH MOVEMENT AND TRANSFORMATION.

WIND, WATER, LIGHT DEVELOP CONSTANTLY CHANGING BODIES



MOMENTUM



WIND, WATER, LIGHT DEVELOP CONSTANTLY CHANGING BODIES

TRANSFORMATION OF

SEASONS ARE SEEN IN LEAVES OF TREES BY CHANGING THEIR SHAPES AND STRUCTURAL BODIES.

A LEAF CHANGES ITS SHAPE THROUGH **TRANSFORMATION** AND **MOVEMENT** DEPENDING ON **THE SITE** AND TIME-SPECIFIC FORCES OF NATURE. IT FOLLOWS A CERTAIN NATURAL PATTERN, DEFINED BY SPECIFIC CONDITIONS: E.G. LOCATION, ORIENTATION, ETC. THE STRUCTURE AND PATTERNS COMBINED WITH CIRCUMSTANTIAL FORCES DEFINE THE FORM IN UNITY WITH NATURE.

M O M E N T U M

MOVEMENT:

CHANGE OF POSITION THAT DOES NOT ENTAIL A CHANGE OF LOCATION

THE ACT OF CHANGING YOUR LOCATION FROM ONE PLACE TO ANOTHER

A NATURAL EVENT THAT INVOLVES A CHANGE IN THE POSITION OR LOCATION OF SOMETHING = **MOTION**

GESTURE:

MOTION OF THE BODY TO EMPHASIZE OR HELP TO EXPRESS A THOUGHT OR FEELING.

THE USE OF **MOVEMENTS** TO COMMUNICATE FAMILIAR OR PREARRANGED SIGNALS, AND EXPRESS AN IDEA OR A PASSION

SOMETHING DONE AS AN INDICATION OF INTENSION

SEQUENCE:

ARRANGEMENT IN WHICH THINGS FOLLOW IN LOGICAL ORDER OR A RECURRENT PATTERN

A FOLLOWING OF ONE THING AFTER ANOTHER IN TIMELY PROPERTY OR CONDITION OF OCCURRING AT **FREQUENT** INTERVALS,

THE NUMBER OF OCCURRENCES WITHIN A GIVEN TIME PERIOD

AN ORDER SET OF QUANTITIES

MOTION:

A MEANINGFUL OR EXPRESSIVE CHANGE IN THE POSITION OF THE BODY OR A PART OF THE BODY; A **GESTURE**.

MANNER IN WHICH A BODY **MOVES**

FLOW:

TO **MOVE** OR RUN SMOOTHLY WITH UNBROKEN CONTINUITY,

AS IN THE MANNER CHARACTERISTIC OF A **FLUID**.

FREQUENCY:

THE PROPERTY OR CONDITION OF OCCURRING AT FREQUENT INTERVALS,
THE NUMBER OF OCCURRENCES WITHIN A GIVEN TIME PERIOD

THE NUMBER OF REPETITIONS OF A COMPLETE **SEQUENCE** OF VALUES OF A PERIODIC FUNCTION PER UNIT VARIATION OF AN INDEPENDENT VARIABLE.

FLUX:

THE RATE OF **FLOW** OF **FLUID**, PARTICLES OR ENERGY THROUGH A GIVEN SURFACE.

CONSTANT OF **FREQUENT** CHANGE: **FLUCTUATION**

THE ACT OF FLOWING, A CONTINUOUS MOVING ON OR PASSING BY, AS OF A **FLOWING STREAM**,
CONSTANT SUCCESSION.

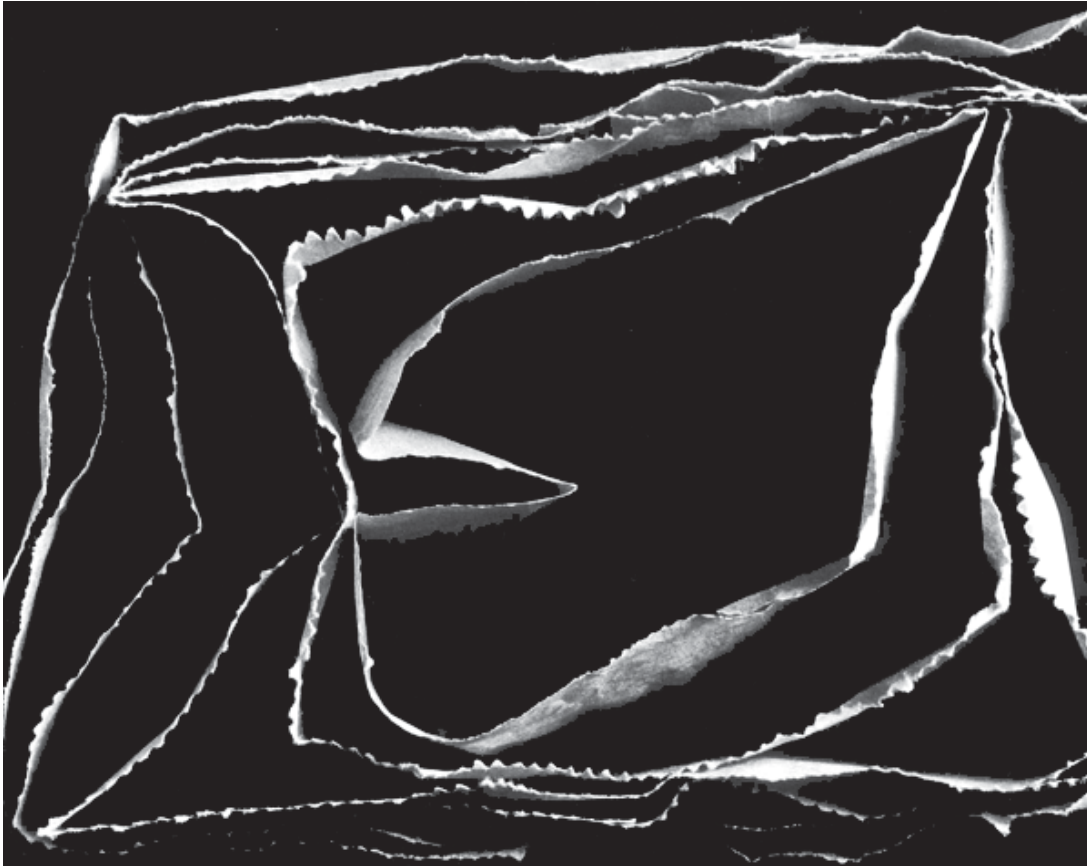
MOMENTUM:

A MEASURE OF THE MOTION OF A BODY EQUAL TO THE PRODUCT OF ITS MASS AND VELOCITY (DEGREE OF MOTION)

IMPETUS OF A NONPHYSICAL PROCESS, SUCH AS AN IDEA OR A COURSE OF EVENTS

AN ESSENTIAL OR CONSTITUENT ELEMENT = A MOMENT

MOMENTUM



MOVEMENT AND ITS RELATION TO ARCHITECTURE

SIMILAR TO **NATURE**, A BUILDING IS ALWAYS **INFLUENCED** BY ITS IMMEDIATE **SURROUNDING**, AND LIKEWISE THE **SURROUNDING** INFLUENCES A BUILDING, BASED ON A RELATION OF **SITE** AND **PLACE**, WHEREBY **SITE** INDICATES **GEOGRAPHY**, AND **PLACE** COULD BE DESCRIBED AS **CULTURE**.

IN ORDER TO **INTEGRATE** A BUILDING WELL INTO EXISTING CONDITIONS, IT IS NECESSARY TO FIND THE RELEVANT **FORCES**, FOR EXAMPLE THE **MAJOR MOVEMENT** AT A SITE, TO **TRANSFORM** IT INTO **ARCHITECTURE**.

UNDERSTANDING OF MOVEMENT AND ITS **FREQUENCY**, PROVIDES THE **EXTERNAL** CIRCUMSTANTIAL **CONDITION** OF A SPECIFIC PLACE; IT IS **EQUIVALENT** TO THE FORCES OF NATURE.

M O M E N T U M



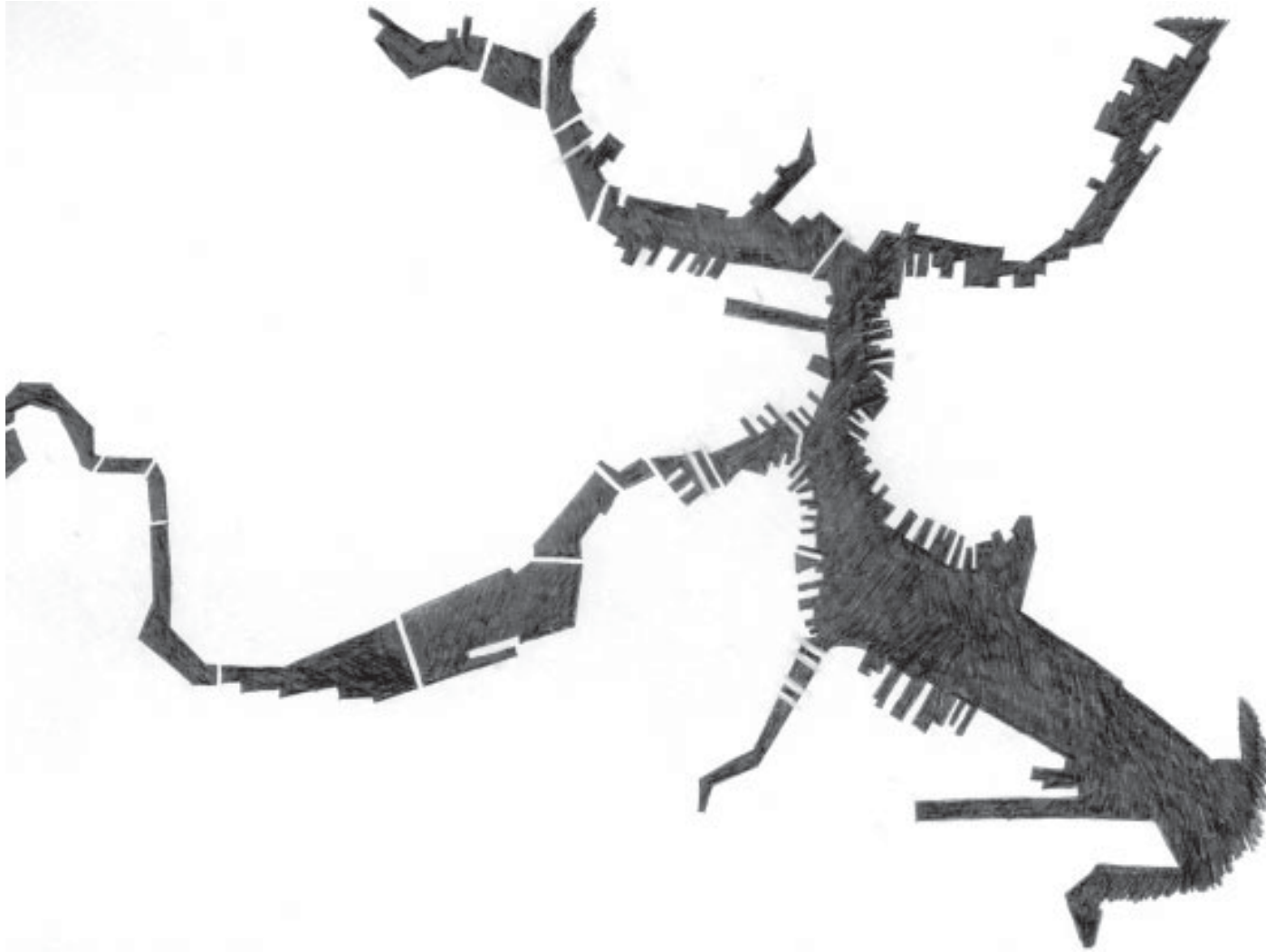
WATER

A RIVER CAN BE SEEN IN THE SENSE OF ITS FLOW. IT FORMS SPACES WITHIN ITS FLUCTUATION.

BY TRANSLATING THE RIVER INTO MOTION CLEARLY DEFINED ZONES WITHIN THE STREAM BECOME VISIBLE. THE FLOW REACHES ITS MAXIMUM IN THE AREA OF NO OBSTACLES.

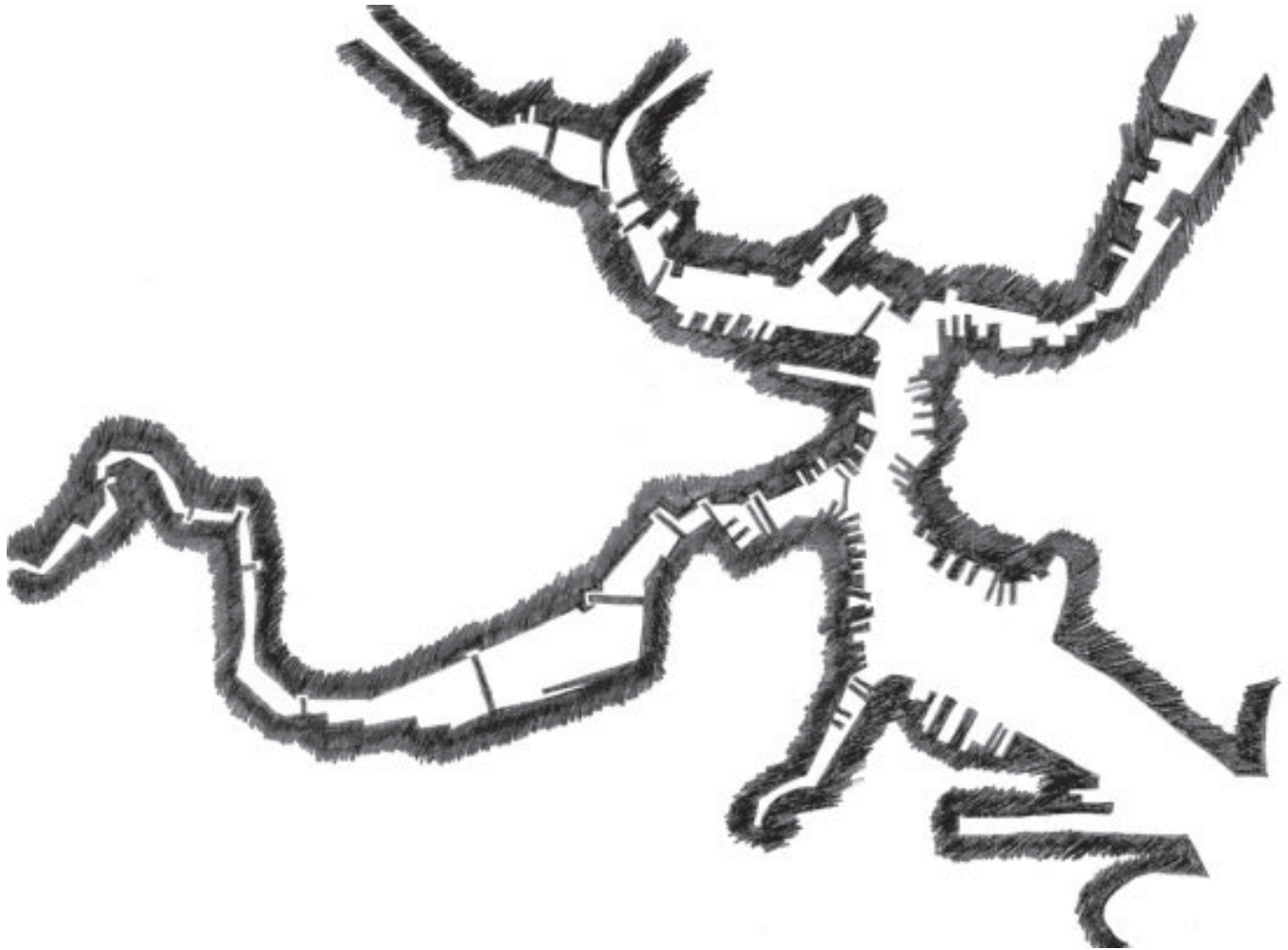
STONES WHARVES ARE BODIES OF RESISTORS AND FORCE THE FLOW TO CHANGE ITS SPEED PROVIDING AREAS OF RELAXATION. BODIES PLACED IN THE MIDDLE OF THE FLOW TRANSFORM THEIR SHAPE DEPENDING ON THE STREAM OF WATER AND CAUSE RAPIDS WHERE THE WATER KEEPS CHANGING DIRECTIONS.

MOMENTUM



BOSTON STREAM

THE MANY **BAYS** OF **WHARVES** PROVIDE FIELDS OF **SLOW MOTION** IN THE STREAM. AREAS IN WHICH **MOVEMENT** SLOWS DOWN UNTIL IT REACHES THE **TRANSITION** LINE INTO ANOTHER **FREQUENCY**. THE **BOUNDARY** LINE OF THE **RIVER** IS THE CROSSING POINT OF **INTERLOCKING ENERGY CONDITIONS**.



NEGOTIATED BOUNDARY CONDITIONS

THE **NEGOTIATED BOUNDARY** CONDITION CAN BE **TRANSLATED** ONTO THE **CITY** HORIZONTALLY AS WELL AS VERTICALLY. WHEREBY WHARVES REFLECT **PLACES** AND PARKS **BETWEEN** THE **BUILDING**.

THE RIVER....A STREAM



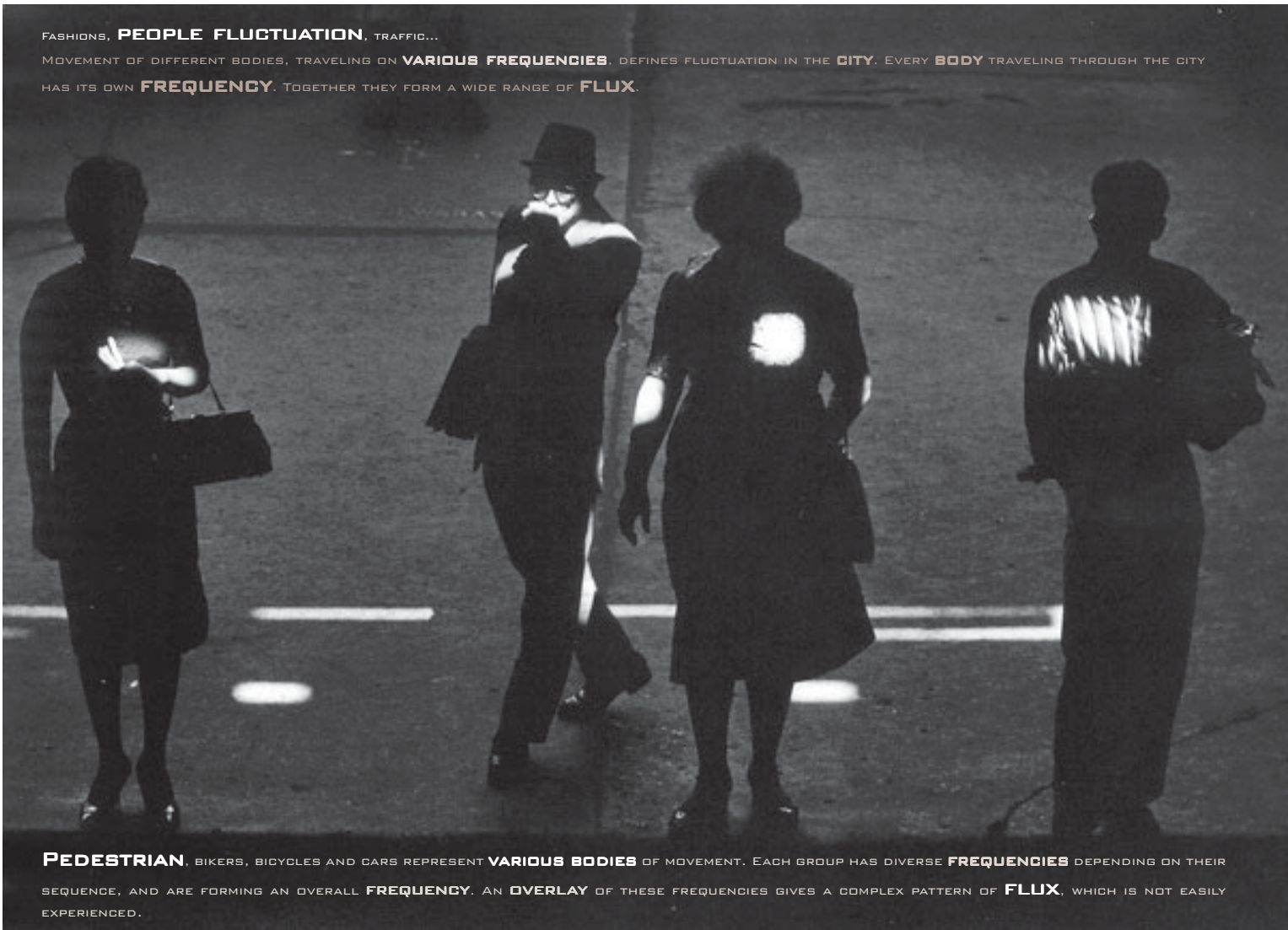
MOMENTUM

BODIES IN MOTION

THE CITY IS A PLACE OF FAST CHANGES:

FASHIONS, **PEOPLE FLUCTUATION**, TRAFFIC...

MOVEMENT OF DIFFERENT BODIES, TRAVELING ON **VARIOUS FREQUENCIES**, DEFINES FLUCTUATION IN THE **CITY**. EVERY **BODY** TRAVELING THROUGH THE CITY HAS ITS OWN **FREQUENCY**. TOGETHER THEY FORM A WIDE RANGE OF **FLUX**.

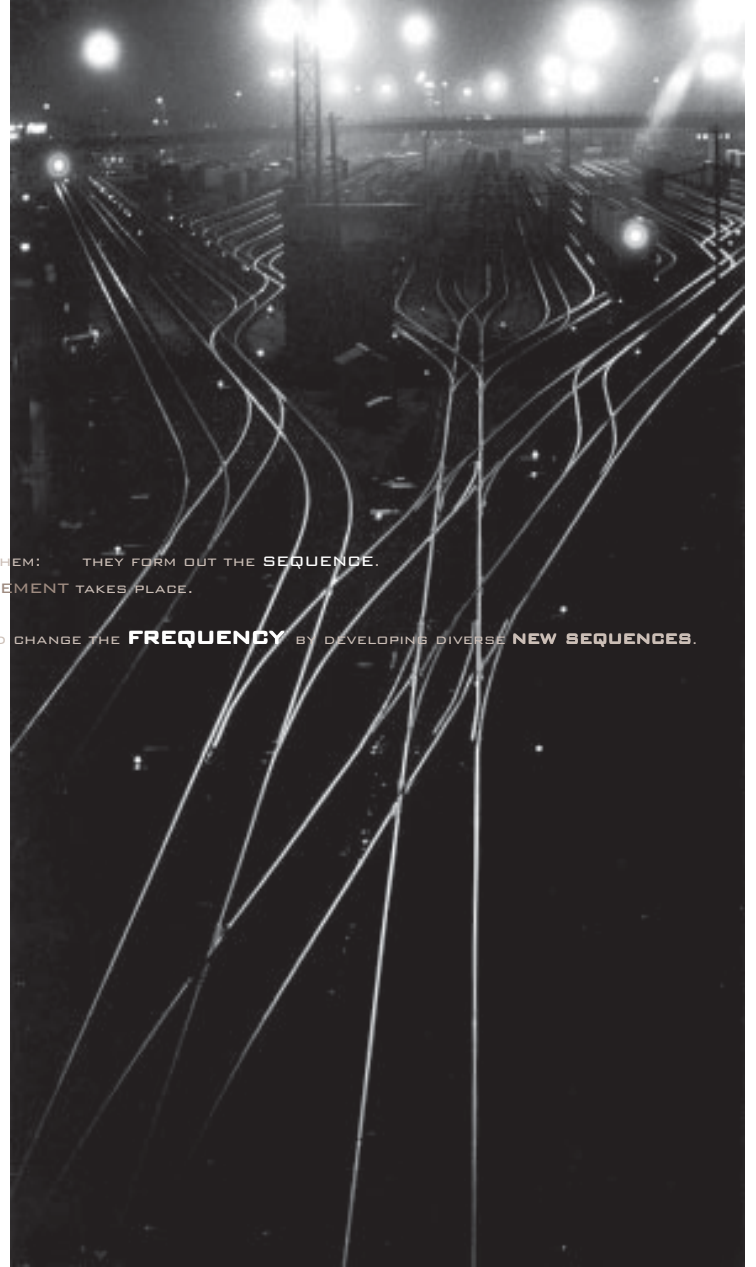


PEDESTRIAN, BIKERS, BICYCLES AND CARS REPRESENT **VARIOUS BODIES** OF MOVEMENT. EACH GROUP HAS DIVERSE **FREQUENCIES** DEPENDING ON THEIR SEQUENCE, AND ARE FORMING AN OVERALL **FREQUENCY**. AN **OVERLAY** OF THESE FREQUENCIES GIVES A COMPLEX PATTERN OF **FLUX**, WHICH IS NOT EASILY EXPERIENCED.

FIXED BODIES

BUILDINGS, **STREETS**, AND FIXTURES OF A **CITY** AFFECT THE SPECIFIC **SPEED** AROUND THEM: THEY FORM OUT THE **SEQUENCE**.
THEY ARE THE **STATIC** POINTS OF THE PLACE THROUGH AND AROUND WHICH ALL THE **MOVEMENT** TAKES PLACE.

A NEW **BUILDING** IN A CITY WILL AFFECT THE **FLUCTUATING BODIES** AROUND IT, AND CHANGE THE **FREQUENCY** BY DEVELOPING DIVERSE **NEW SEQUENCES**.
IT DEMANDS THOSE **BODIES** TO ADJUST TO ANOTHER **FREQUENCY**.



M O M E N T U M

BOSTON GROWS SIMILAR TO EUROPEAN CITIES

WITH AN **IRREGULAR CITY GRID** OVERLAYING AND GROWN TOGETHER FROM **DIVERSE** DIRECTIONS, WHICH FOR AMERICAN CITIES IS RATHER UNUSUAL.



MOMENTUM





DIVERSE DISTRICTS WITH DIVERSE DIRECTIONS



DIVERSE MAIN STREETS CONNECTION DISTRICTS



OVERLAPPING GRID SITUATIONS

BOSTON

IS AN **ISLAND** IN A **STREAM** OF **FLUCTUATION**. THE CITY IS **BUILT** ON THE **WATER**; BRIDGES CONNECT THE ISLANDS WITH EACH OTHER. THE **RIVER** AS IT APPEARS TODAY WAS **FILLED IN** BY TRANSFORMING THE FORMER **"TRY-MOUNTAIN"** INTO NEW LAND.

ALONG THE RIVER A IMMENSE **VARIETY OF PIERS** HAVE DEVELOPED WHICH ARE **INTERLOCKED** WITH THE STREAM. EARLY IN ITS HISTORY THE VARIOUS PARTS OF **BOSTON GREW TOGETHER**. DIVERSE **DISTRICTS** DIFFER IN **GRID** DIRECTIONS AND FORM AN **IRREGULAR, OVERLAPPING CITY GRID**. MAIN STREETS ARE THE **DIAGONAL** CONNECTION BETWEEN EACH DISTRICT. **MASSACHUSETTS AVENUE** CONNECTS **DOWNTOWN** WITH **MIT** AND **HARVARD** UNIVERSITY.

MOMENTUM



THE SITE

IS LOCATED ON A **Y-INTERSECTION** ALONG MASSACHUSETTS AVENUE, BETWEEN **MIT** AND **HARVARD**. THE AREA IS MARKED BY **OVERLAPPING URBAN CONDITIONS** ON AN EDGE OF **CHANGING ZONING**.

TOWARDS THE NORTH AND IN THE DIRECTION OF THE RIVER THE BUILDINGS CHANGE INTO **WOODEN**. MID-LEVEL INCOME FAMILIES WERE PUSHED OUT OF THE AREA BY RISING RENTS AS A RESULT OF THE GROWTH ALONG MASSACHUSETTS AVENUE. **NEW OFFICE BUILDINGS** HAVE RISEN UP BETWEEN **OLD** TYPICAL FOR BOSTON. AT THE END OF THE BLOCK TOWARDS THE WEST IS AN OLD RENOVATED **BRICK** SITE, A NEW **COMMERCIAL** BRICK BUILDING HAS GROWN UP. IN THE BLOCK TOWARDS THE WATER THE OLD **SHOPS**, RESTAURANT AS WELL AS GIFT **SHOPS** HAVE ALREADY FOUND THEIR PLACE.

THE **Y-INTERSECTION** IS ALSO DEFINED BY TWO 15 FLOOR APARTMENT BUILDINGS FRAMING THE SITE. 10 FEET CHARACTERIZE THE SITE. AS THE SITE IS SITUATED BETWEEN TWO **HIGHLY FREQUENTED** OF **MOVEMENT**; OF **CARS**, MOVEMENT OF **PEOPLE** IN THE STREETS, MOVEMENT IN THE **SHOPS** RELATED **FREQUENCY** OF HAPPENINGS, AS **URBAN CULTURE**. BY TURNING AROUND THE **CURVE**, **ELEVATION** IN THE SURROUNDING AREA. THIS **MOVEMENT** OR SPEED IS TO BE RECOGNIZED AS YOU LEFT HAND SIDE FRAME THE SITE.



UNIVERSITY.
DISTRICTS.

RESIDENCES, MOSTLY USED BY HARVARD AND MIT STUDENTS. FORMER
OF THE STUDENT COMMUNITY.
WOODEN STRUCTURES AND OLD RESIDENTIAL STONE BUILDINGS
CHURCH WITH A HIGH BELL TOWER EAST OF IT, MOVING TOWARDS THE
WOODEN BUILDINGS HAVE BEEN RESTORED. AROUND THIS AREA COFFEE

A TRIANGULAR SHAPE AND A TOPOGRAPHICAL DIFFERENCE
STREETS, THE LOCATION REFLECTS AN ISLAND IN BETWEEN A STREAM
AND IN THE RESTAURANTS. THE AREA DEVELOPED A EUROPEAN CITY
COMING FROM DOWNTOWN BOSTON, THE SITE APPEARS ON THE HIGHEST
COME UP MASS AVENUE. THE TWO 15 STORY BUILDINGS ON THE RIGHT AND



M O M E N T U M

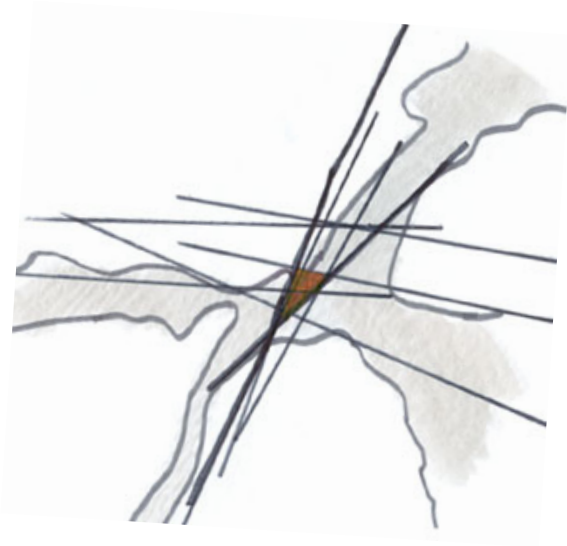
MASSACHUSETTS AVENUE

AND MT AUBURN STREET MEET AT THE HIGHEST ELEVATION OF BOTH STREETS, WHICH IS AT THE SAME TIME THE LOCATION OF THE STUDIED SITE AND ITS FLUCTUATION AROUND IT.

THE THESIS DISCUSSES AND SEEKS TO TRANSFORM THESE INTO ARCHITECTURE. THE RESEARCHED ACHIEVEMENT SHOULD VISUALIZE IMPLICIT THE UNCONSCIOUS ENERGY PERCEPTIBLE.



MOMENTUM



THE SITE

AS AN **ISLAND** IN A **STREAM** UNDERLINES THE **MOVEMENT AND SPEED** IN BETWEEN WHICH IT IS **MOTION**, A CONCENTRATION OF THIS OVERLAPPING MOVEMENT AND MOTION AROUND THE SITE.

MOVEMENT AND OVERLAPPING OF **CARS, PEOPLE, SHOPS, OFFICES, RESTAURANTS, PUBLIC** CONDITIONS.

DIVERSE FLUX OF:

CARS IN THE STREET

PEDESTRIAN ON THE STREET

CLIENTS IN THE **SHOPS** AND THE **RESTAURANT, WAITERS** IN THE RESTAURANT AND SHOPS,
PEOPLE AT HOME



SITUATED. IT BECOMES A VISIBLE EXPRESSION OF THIS

AND **PRIVATE SPACES**, DIFFERENT ZONING



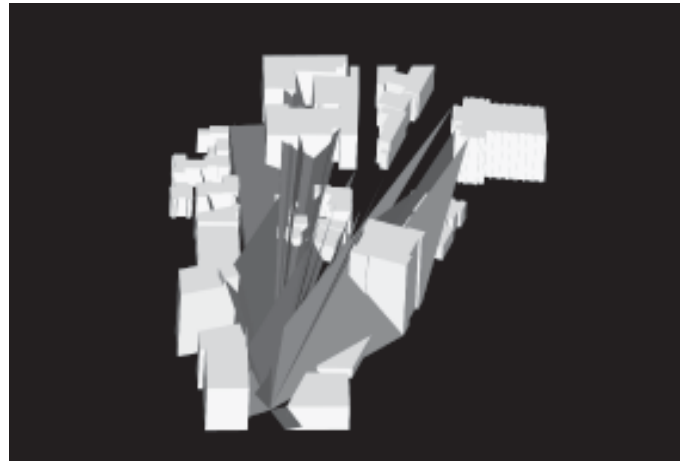


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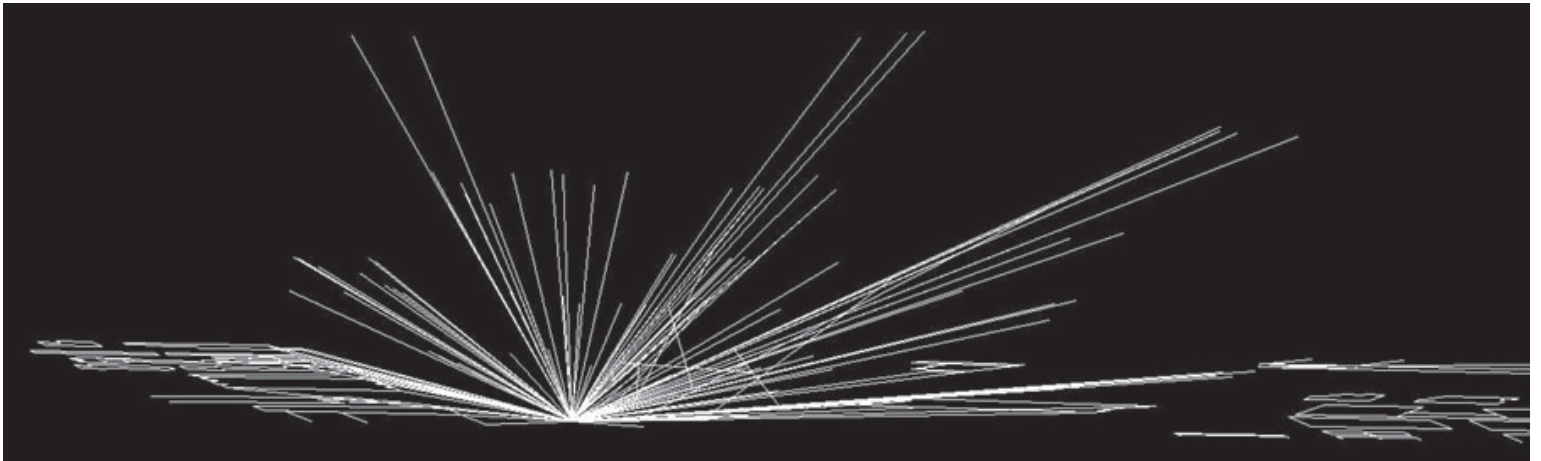
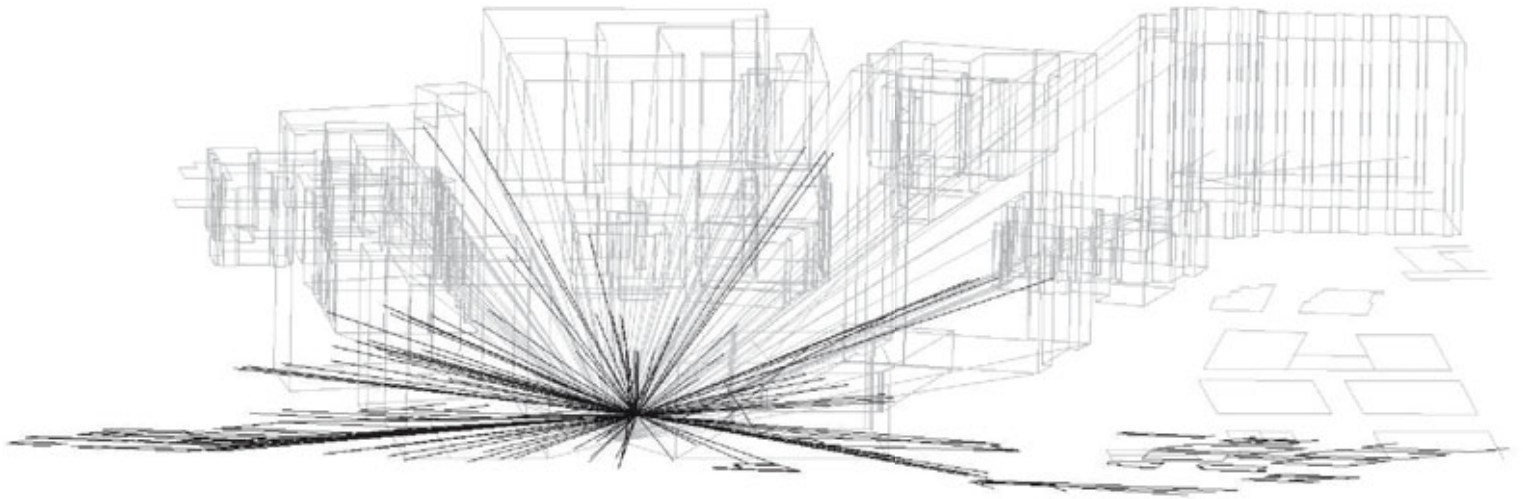
FIRST IDEA MODEL

PERCEPTIONAL MOTION

STUDIED AROUND THE SITE IS CAPTURED AS IMPLICIT ENERGY. IT IS VISUALIZED THROUGH LINES AND SURFACES AS TRANSFORMATIONAL GUIDELINE FOR THE DESIGN. THE REFERENCE POINT, OF ALL SPREADING OUT ENERGY LINES, IS DEVELOPED OUT OF THE **INTERSECTION** OF MASSACHUSETTS AVENUE AND MT AUBURN STREET, WHICH IS ALSO THE **HIGHEST ELEVATION** IN THE AREA.



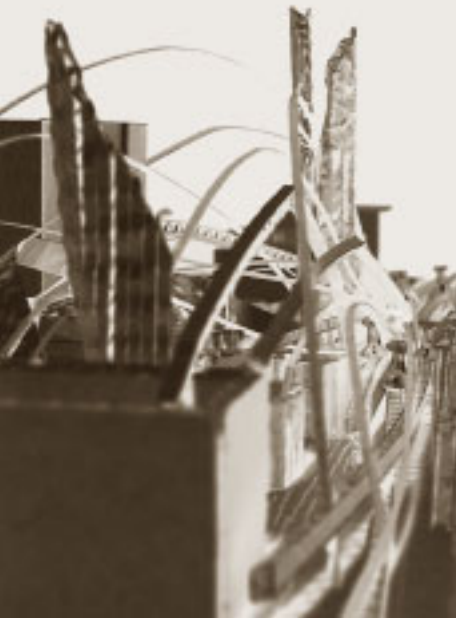
ENERGY STUDIES



PERCEIVE MOTION

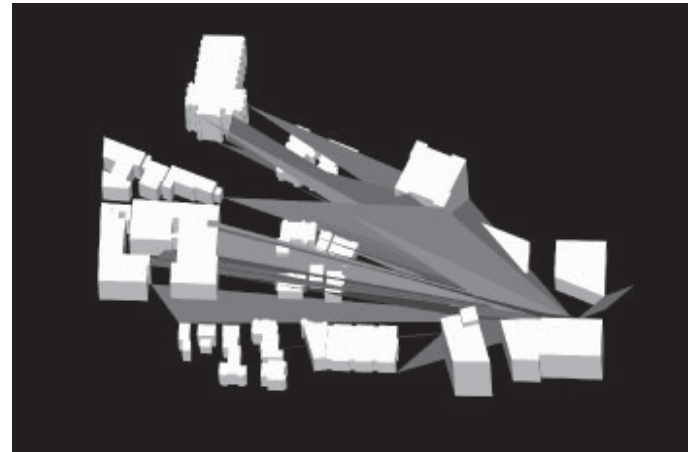
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FIRST IDEA MODEL

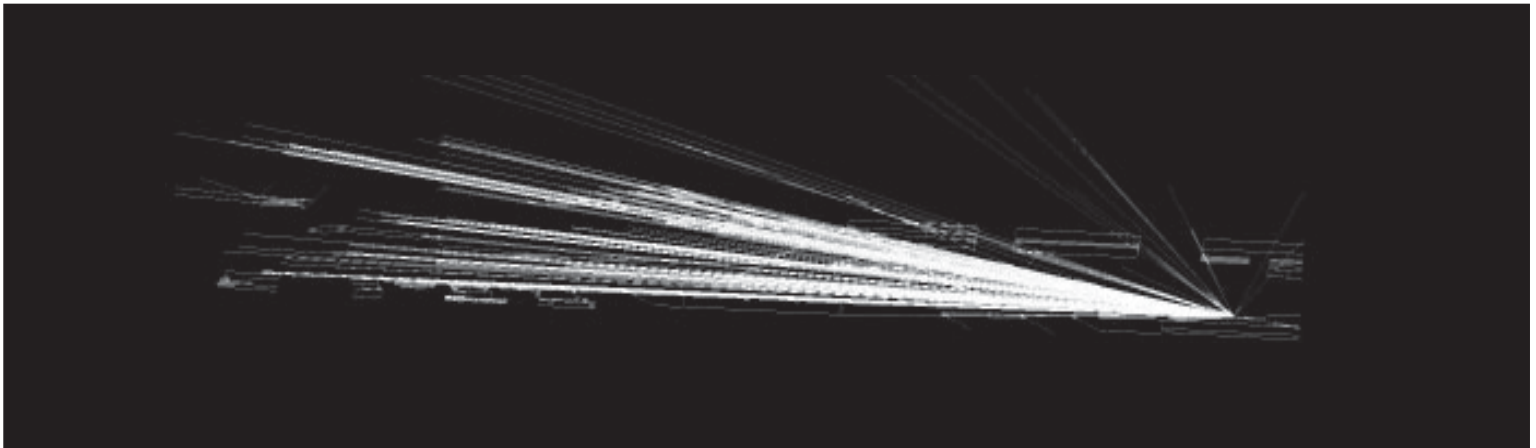
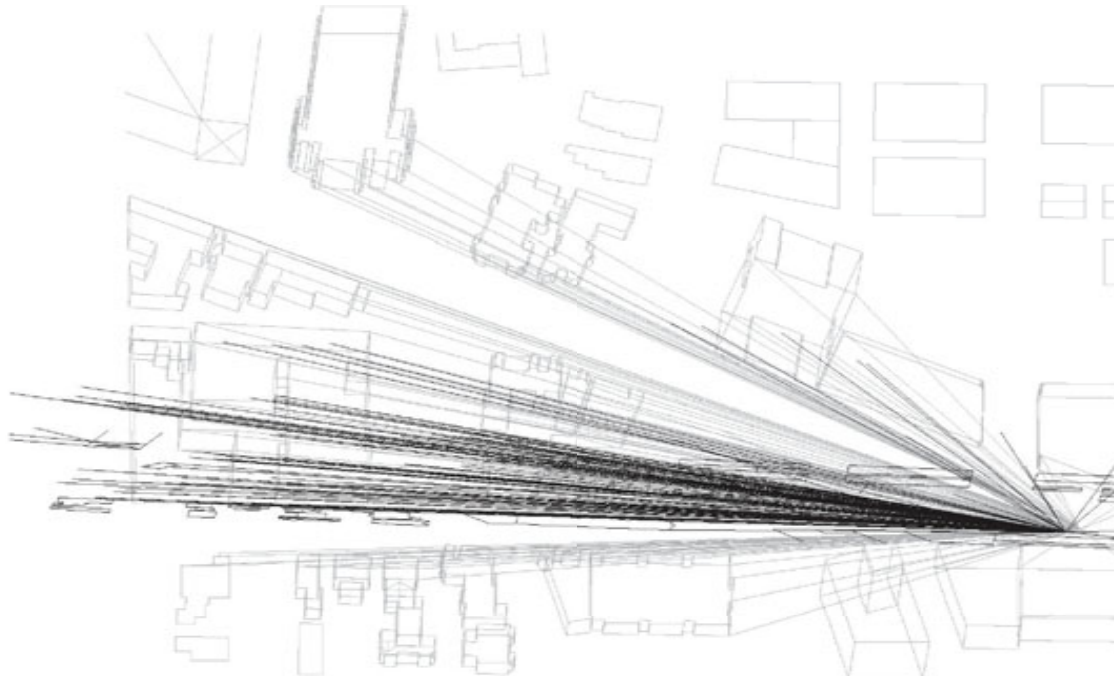


THE CAPTURED MOVEMENT

IS SPREADING OUT FROM THIS PARTICULAR POINT FILLING IN ALL THE SURROUNDING **POSITIVE** AND **NEGATIVE EDGES** AND **VOIDS**. WITH THE HELP OF **LINES** STARTING FROM THE INTERSECTION TO THE **MAJOR EDGES** OF THE SURROUNDING BUILDINGS THE **SURFACES** OF THE CAPTURED MOTION, DESCRIBED AS **ENERGY**, WAS DEVELOPED.



ENERGY STUDIES



PERCEIVE MOTION

MOMENTUM

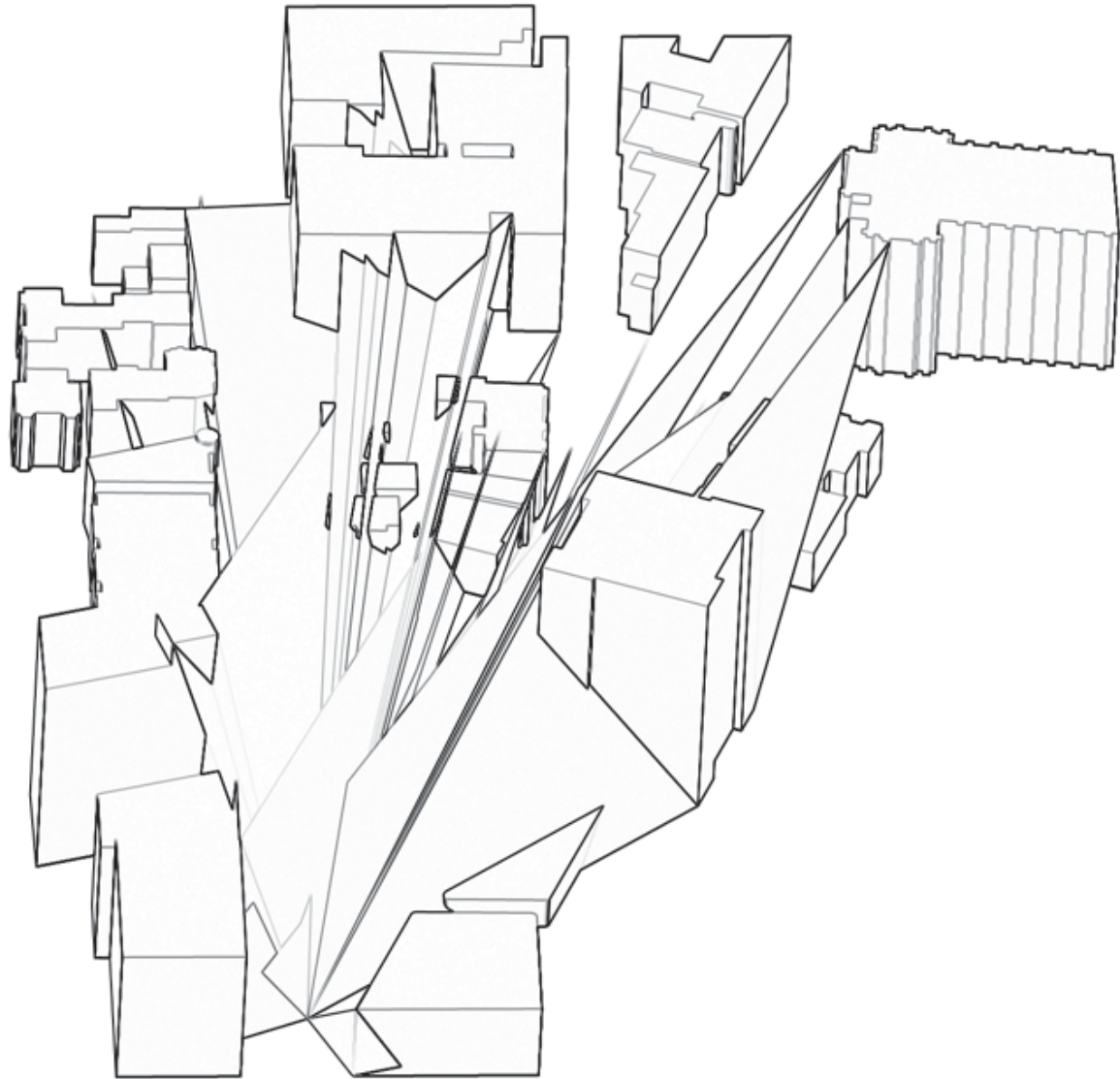
ENERGY SURFACE STUDIES



THE MOVEMENT

IS **INFLUENCING** THE **SURROUNDING** AREA AND **DEFINES** THE SITE AS A PARTICULAR PLACE OF EXISTING BUILDINGS, AS THEY HAVE INFLUENCED THE **MOTION**.

THE DIAGRAMMATIC DRAWINGS **VISUALIZE** THIS **REACTION** OF. THE ENERGY SURFACES **CUTTING**.



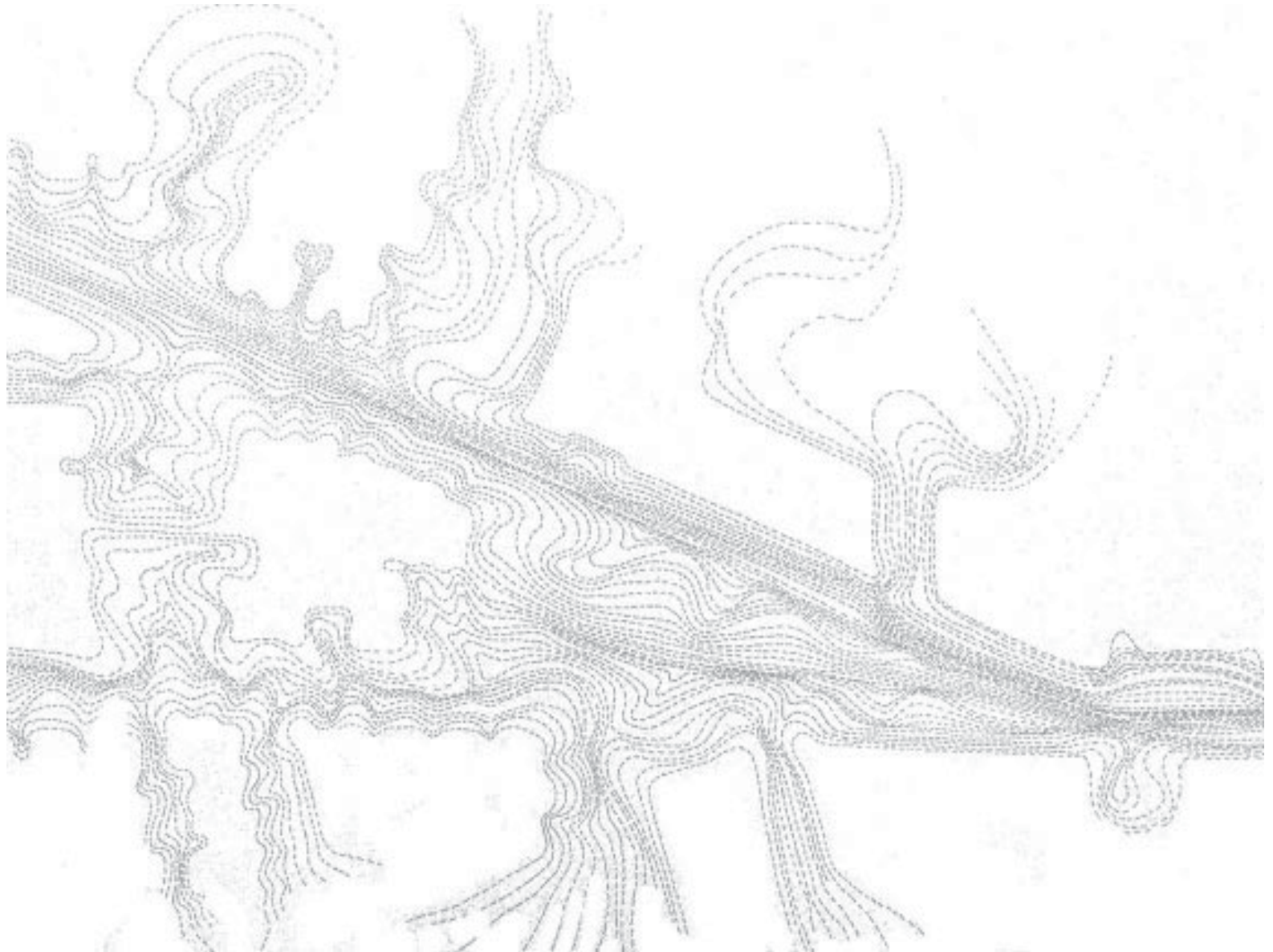
THE CITY. IT INFLUENCES THE
INTO ARCHITECTURE.

PERCEIVE MOTION

MOMENTUM

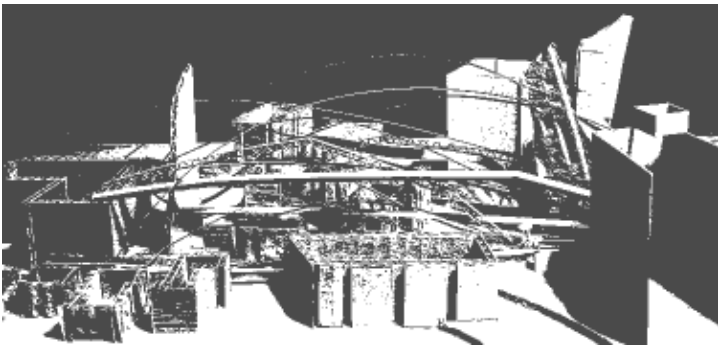
MOTION STUDIES IN THE HORIZONTAL DIRECTION OF MOVEMENT IN THE STREET.THE DRAWINGS UNIFY FLUCTUATION OF MOVING BODIES THROUGH THE SPACE.

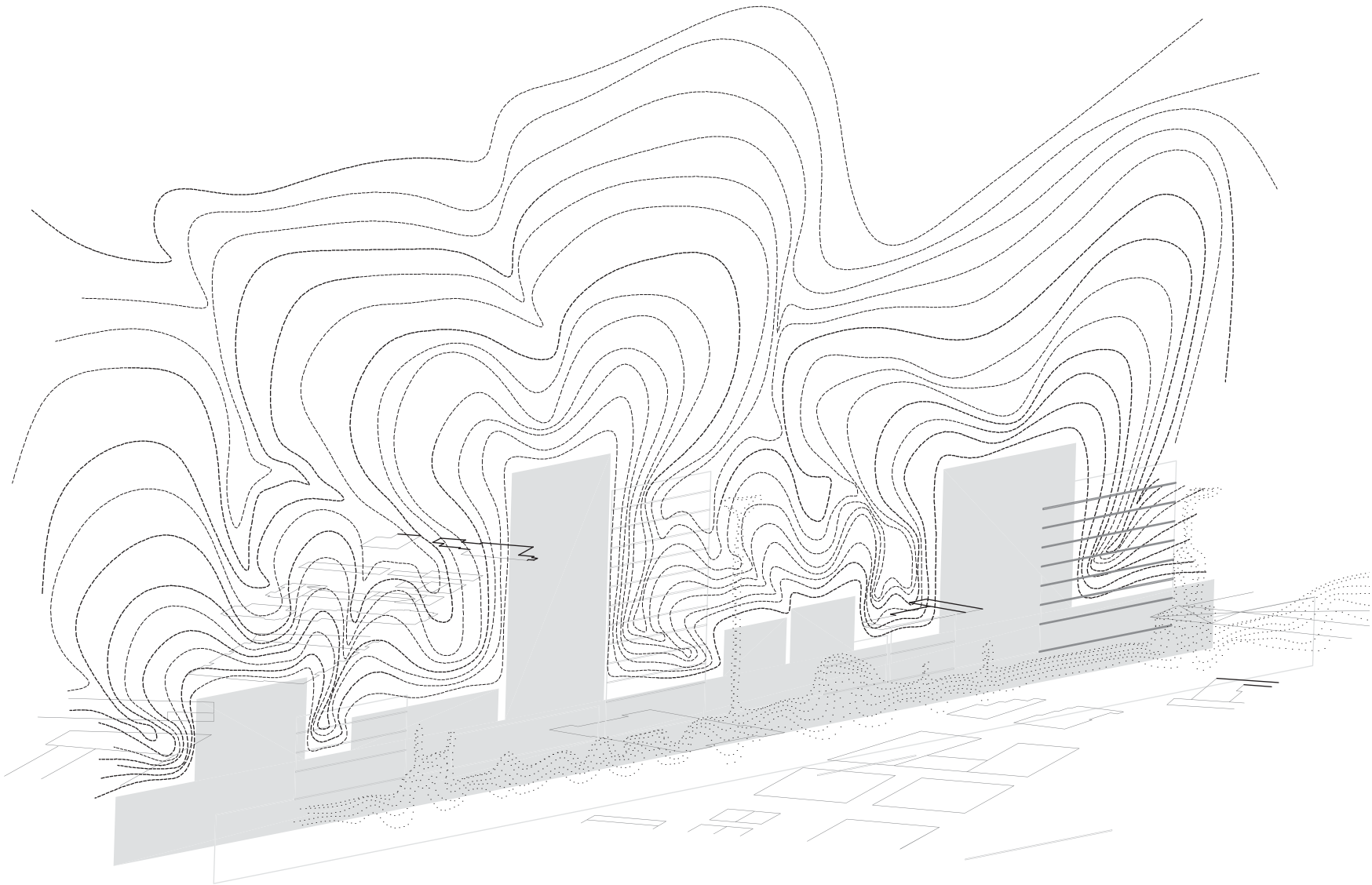




MOMENTUM

MOTION STUDIES IN THE **VERTICAL DIRECTION** OF MOVEMENT IN THE SPACE. DIVERSE **FLUCTUATION** OF **VARIOUS BODIES** ARE **PATTERNED** TO **VISUALIZE**. BODIES MOVING THROUGH THE STREETS AS WELL AS THE BUILDINGS.



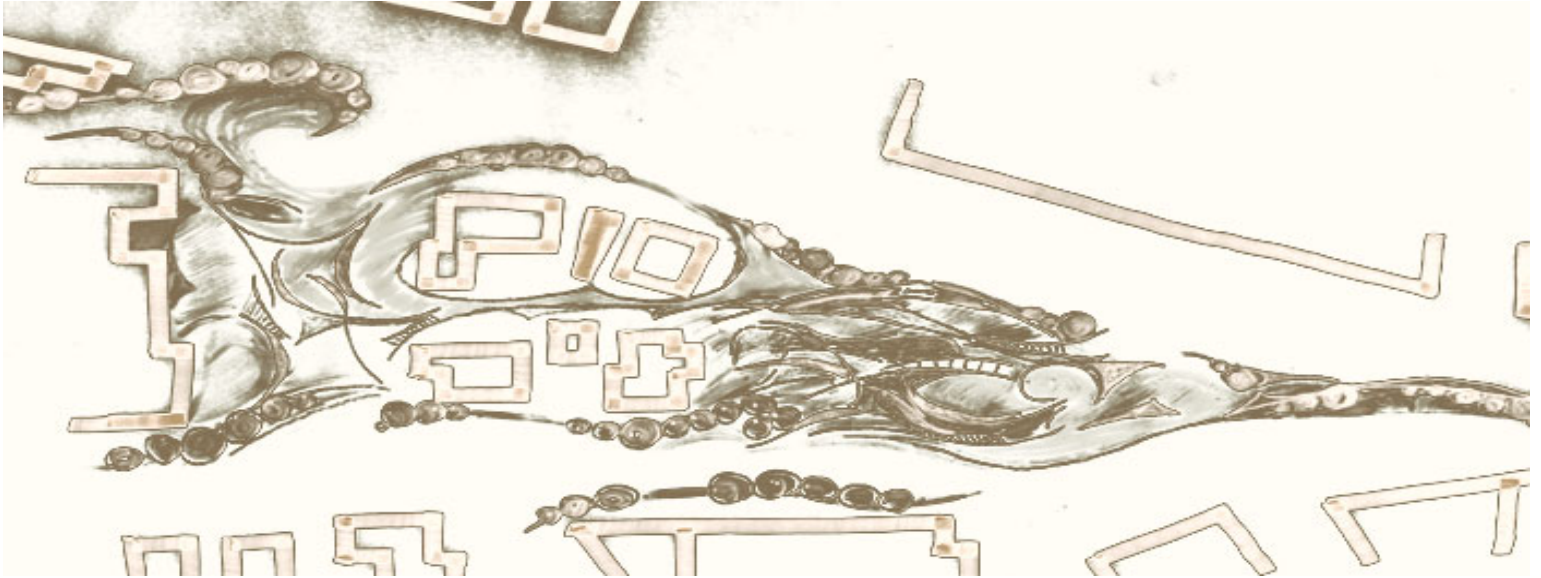


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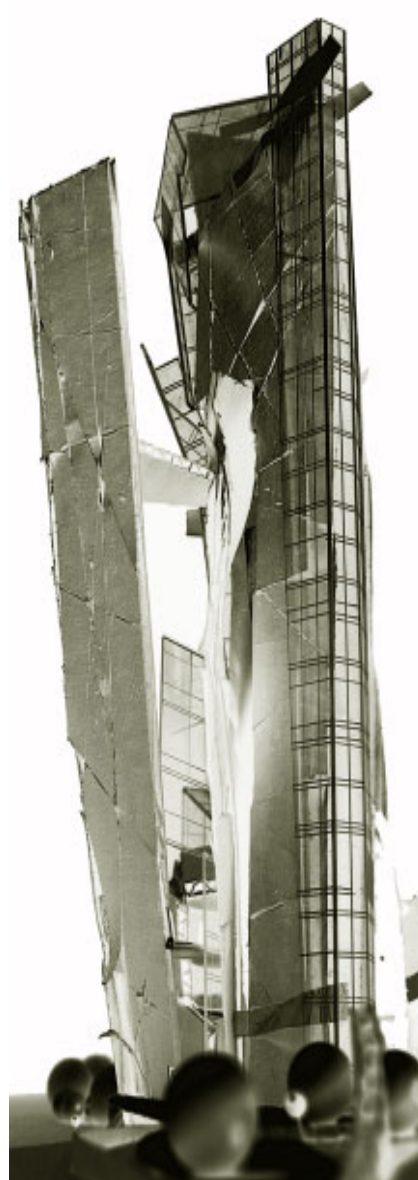
BAYS IN THE STREET

LIKE THE WATER FORM OUT SPACES OF SLOWER MOTION. AREAS OF PUBLIC, SEMI PUBLIC AND PRIVATE PLACES, AND OPENING SQUARES OF RELAXATION.

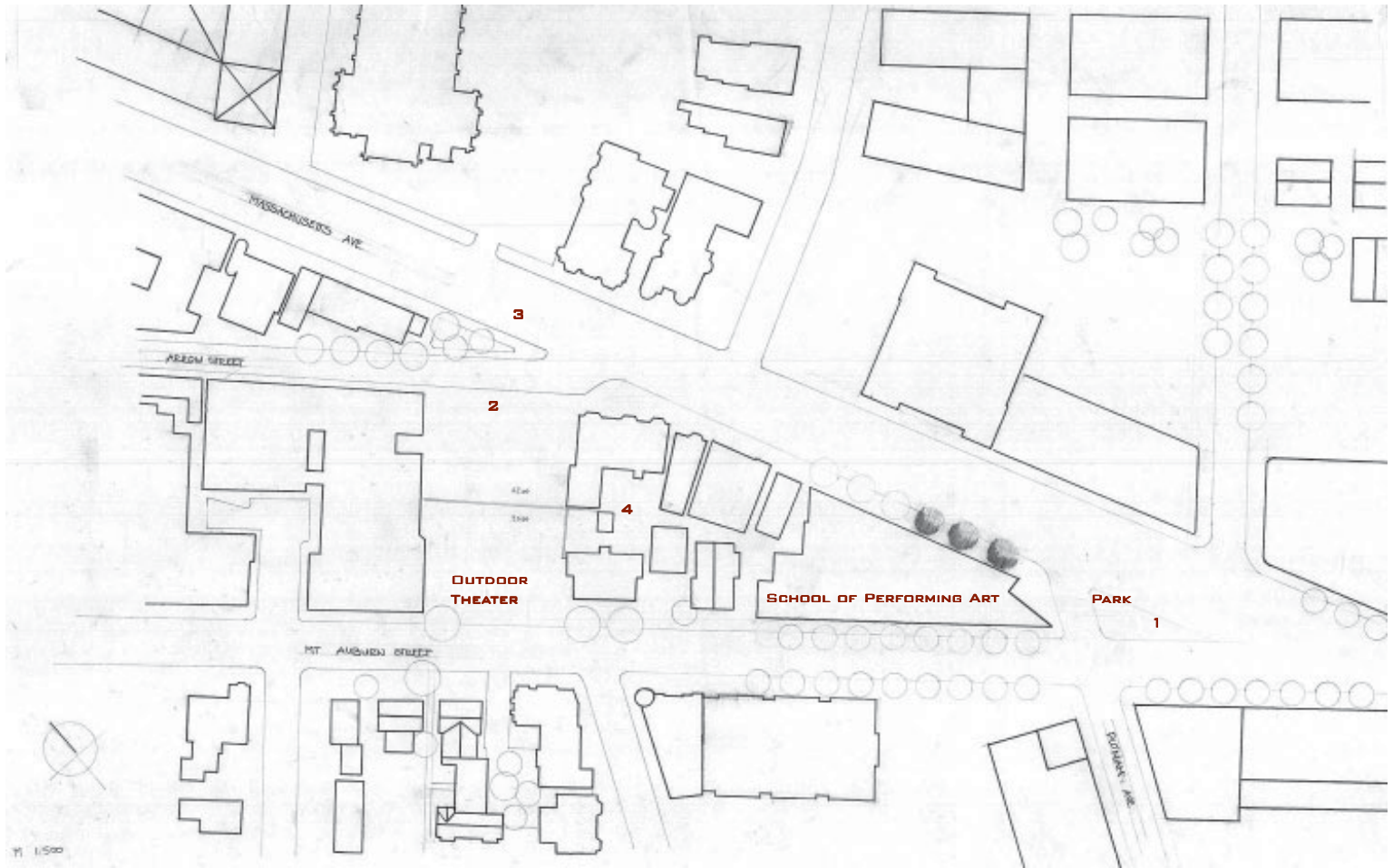




M O M E N T U M



MOMENTUM



ENERGY DEVELOPS SPACES

OUT OF **ONE POINT**, WHICH IS THE **INTERSECTION** OF MT AUBURN STREET AND MASSACHUSETTS AVENUE.
A **LINE** COULD DEVELOP INTO A **CURVED WALL** PROVIDING SPACES FOR RELAXATION.

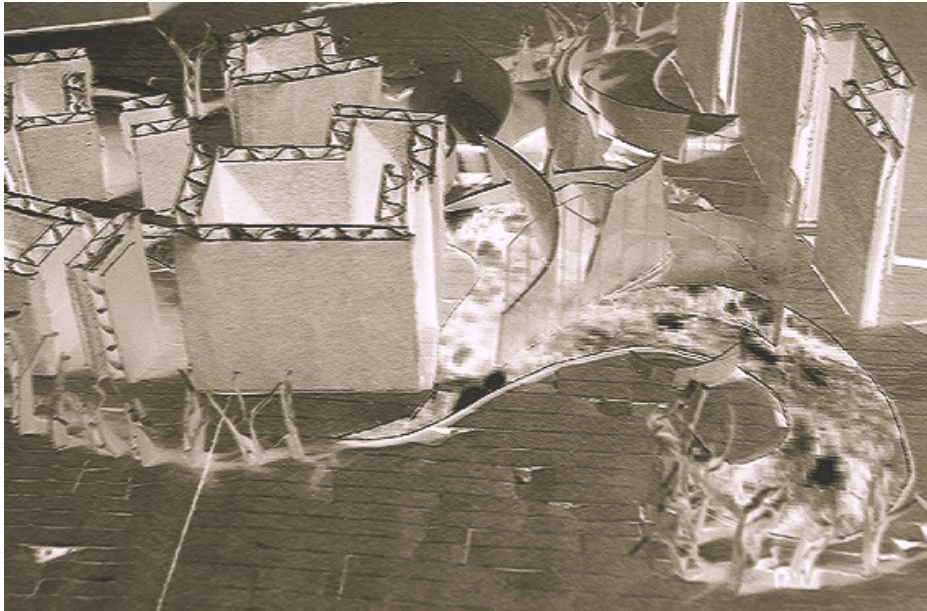


A OUTDOOR PERFORMANCE GARDEN

ON **DIVERSE LEVELS** WITH **FREE STANDING GUIDING WALLS** TAKES UP THE SPACE AT THE BACK END OF THE AREA. THE PLACE IS **SURROUNDED** BY **OLD WOODEN RESIDENCES** AND **BRICK BUILDINGS**.

THE OLD WOODEN RESIDENCES ON THE SITE ARE USED FOR **FOREIGN STUDENT RESIDENCIES** AND ALLOW ROOM FOR **GUEST PROFESSORS**.

A **CURVED PATHWAY** BETWEEN THE EXISTING **WOODEN STRUCTURE** GUIDES THE VISITORS TO THE MAIN BUILDING AND THE OUTDOOR TERRACE OF THE **RESTAURANT** ON ITS FIRST LEVEL.



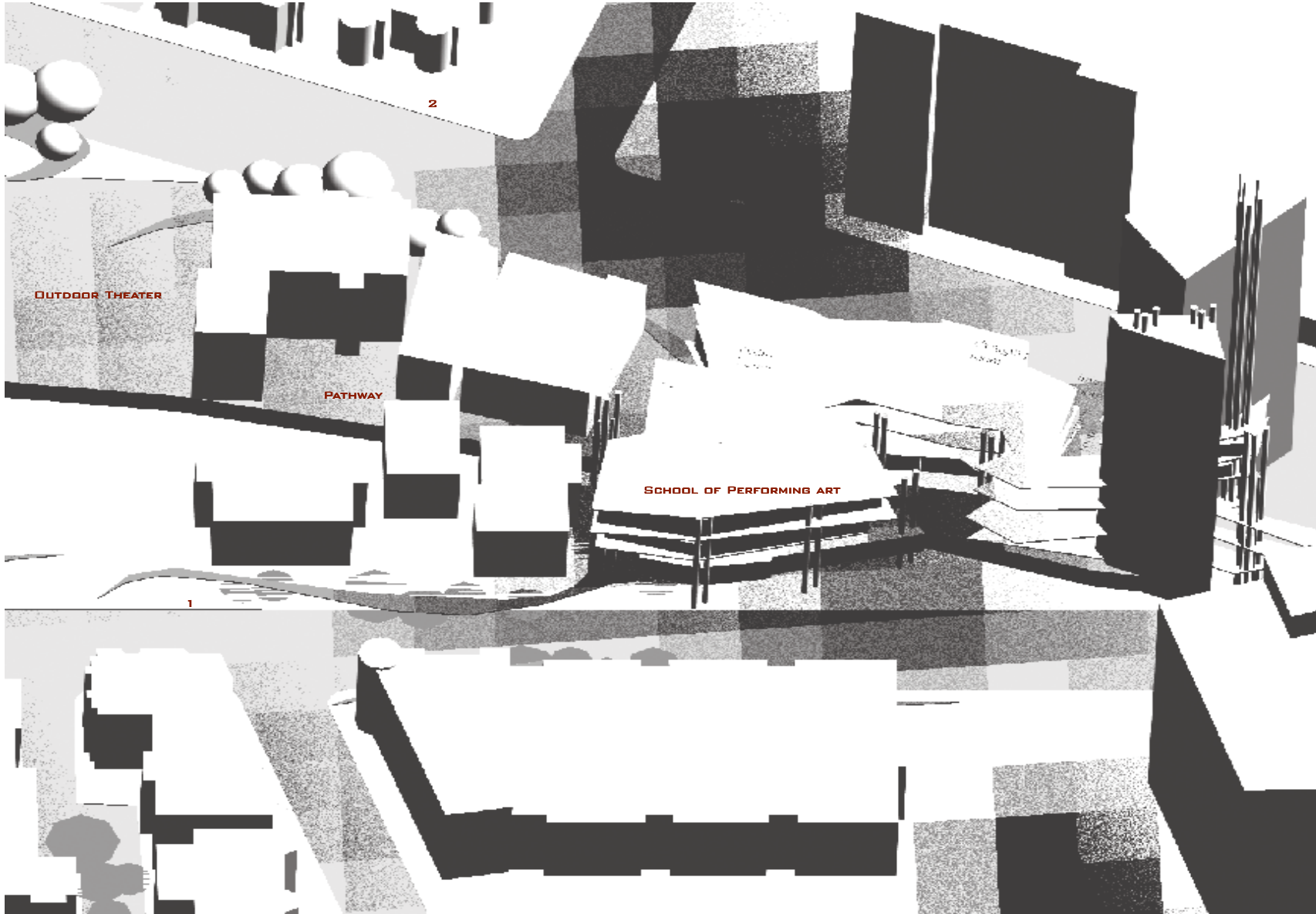


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MOMENTUM



PERFORMING ART AND ARCHITECTURE

THE CHOSEN **PROGRAM** FOR THE SITE EXISTS OUT OF A **SCHOOL OF DANCE** IN COMBINATION WITH A **RESTAURANT** AND A **BOOK SHOP** ON THE LOWER FLOORS, AS WELL AS A **STUDIO THEATER** UNDER THE ROOF. THE PROGRAM FOR THE DANCE SCHOOL INCLUDES ROOMS FOR **DANCE SEMINARS**, TUTOR AND ADMINISTRATION **OFFICES** AS WELL AS A **LIBRARY** AND A **LECTURE HALL**.

PERFORMING

THEATER AND DANCE USE THE GESTURE OF THE BODY TO EXPRESS CERTAIN CONDITIONS. THROUGH DANCE A CAREFULLY **DEFINED SEQUENCE** OF CONTROLLED MOVEMENT **TRANSFORMS** MOTION INTO A WORK OF ART. AS WELL AS A **PIECE OF ART** IS **TRANSLATED** INTO **MOTION** THROUGH A CAREFULLY DESIGNED GESTURE AND MOVEMENT LANGUAGE.

EXPRESSION

EVERY **FIGURE** CAPTURED IN A MOMENT **TRANSLATES** A SPECIFIC **CONDITION** AND IS THEREFORE ABLE TO **COMMUNICATE**. THE MOTION OR TRANSMISSION IS STILL PERCEIVABLE. CAPTURED MOTION IN **ARCHITECTURE** CAN AS WELL **COMMUNICATE** A SPECIFIC STORY.

ARCHITECTURE

THE PROPOSED BUILDING IS SEEN AS A COMMUNICATOR BETWEEN ITS USAGE AND ITS USER AND AS A REFLECTION OF ITS SURROUNDING AS A PART OF A SPECIFIC PLACE.



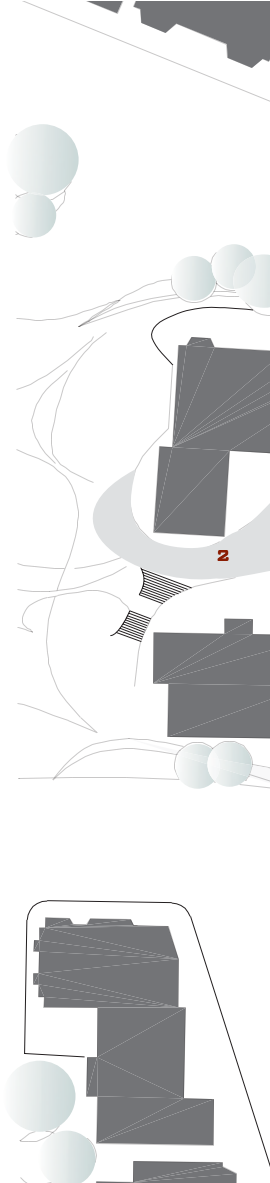
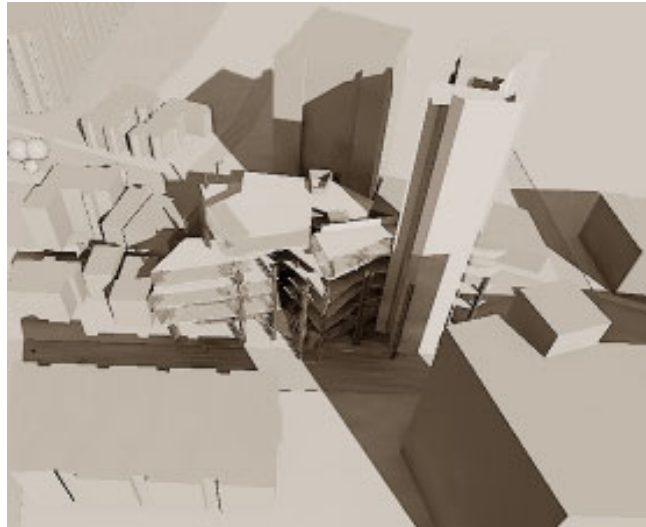
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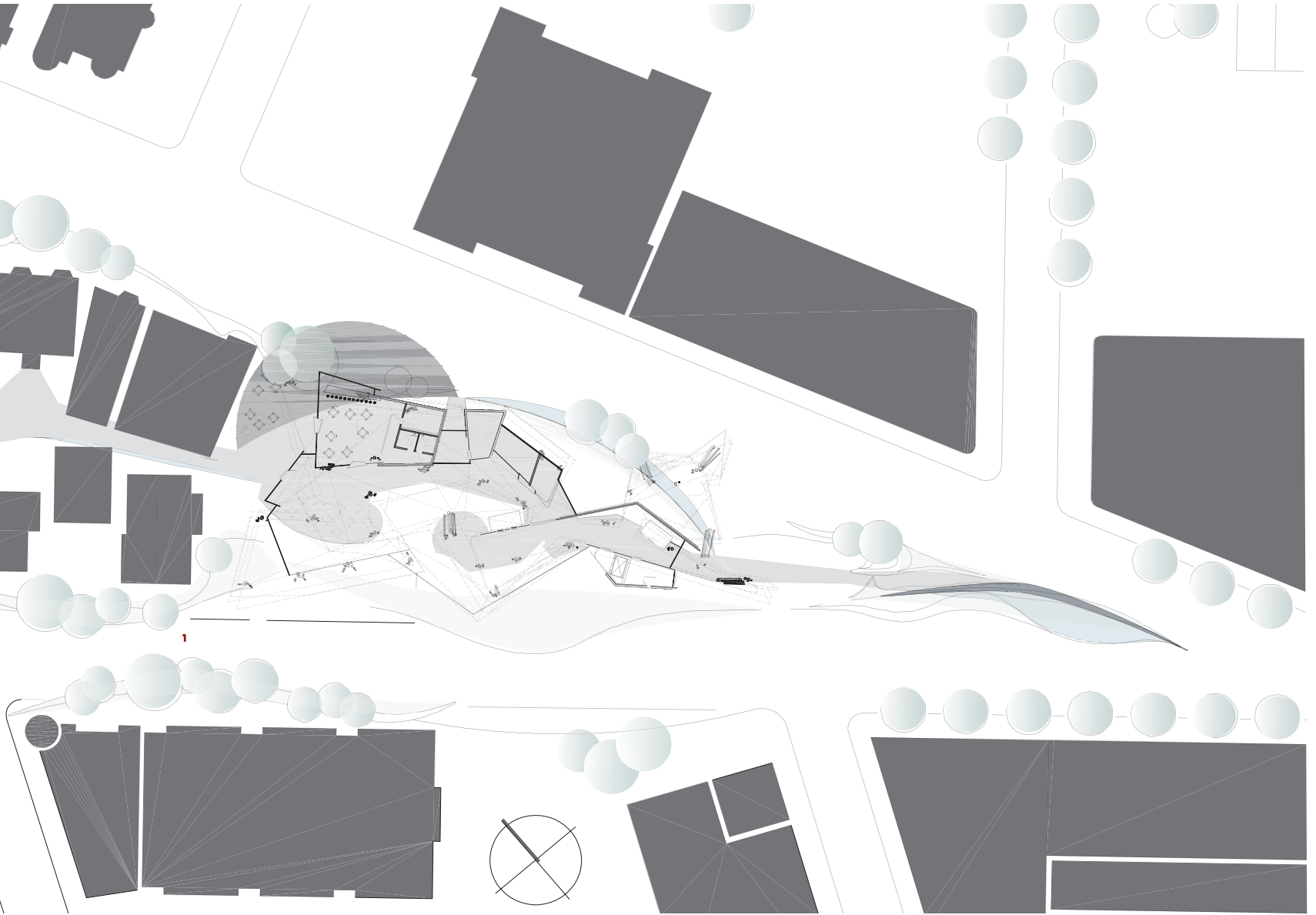


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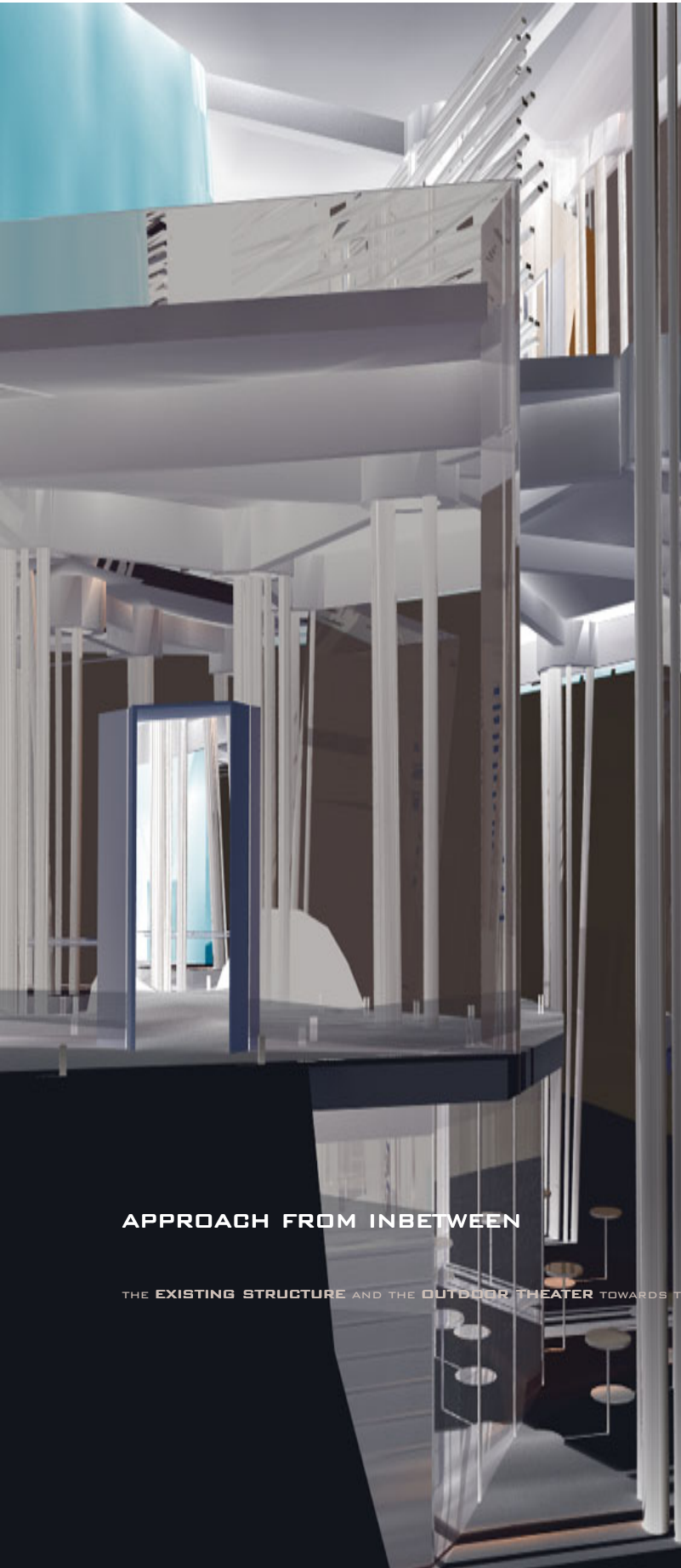


MOMENTUM





APPROACH FROM INBETWEEN



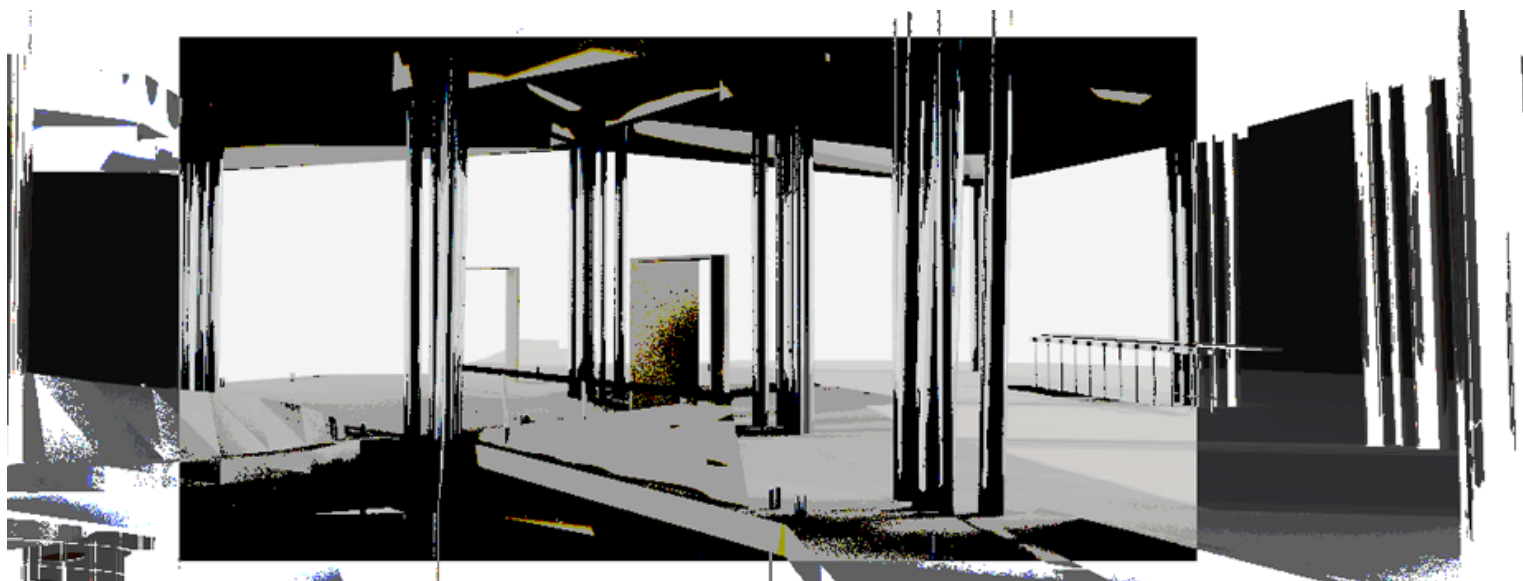
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APPROACH FROM INBETWEEN

THE EXISTING STRUCTURE AND THE OUTDOOR THEATER TOWARDS THE RESTAURANT ON THE ENTRANCE LEVEL OF THE SCHOOL OF PERFORMING ARTS.

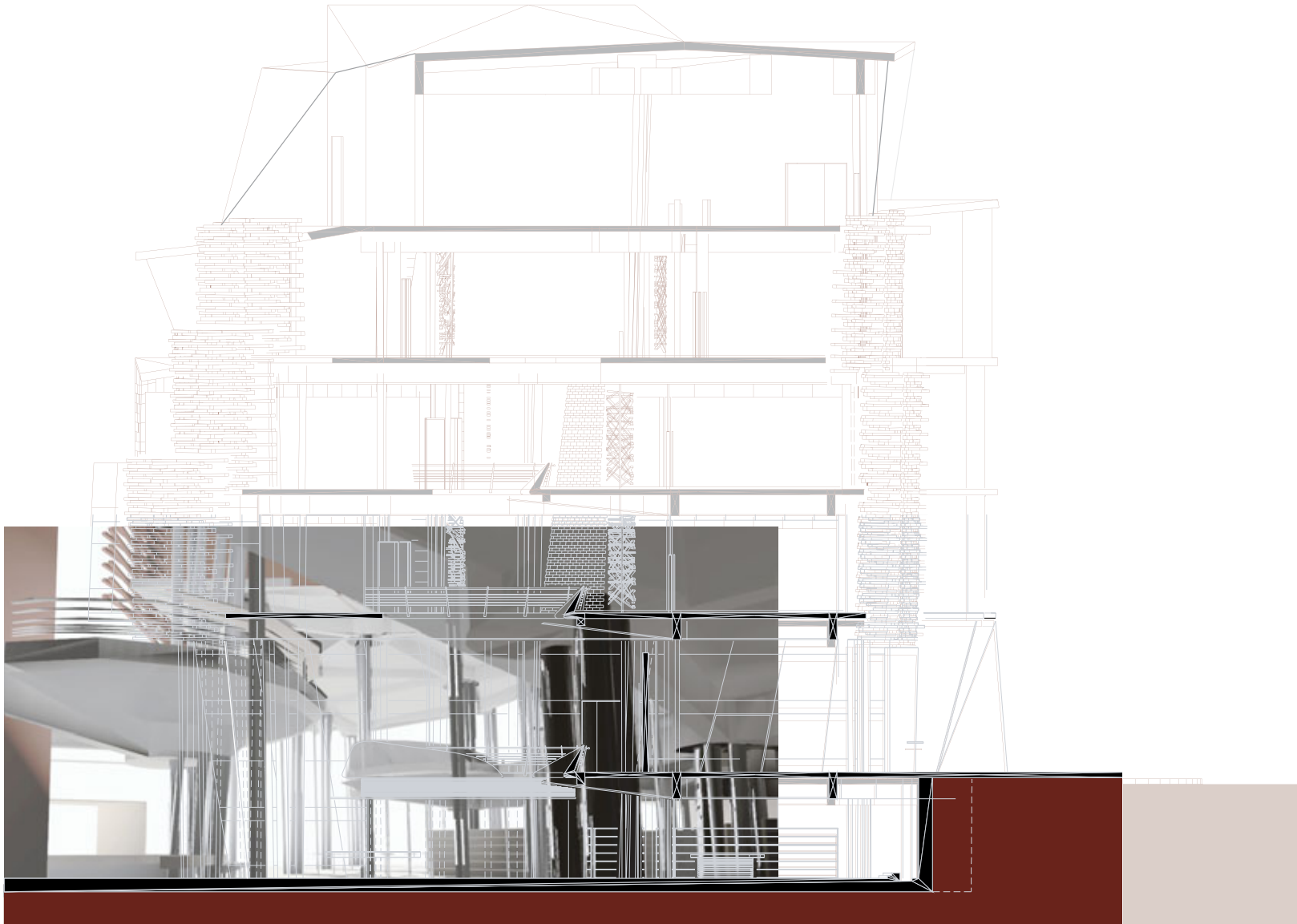


RENDERING LOOKING BACKWARDS TO THE INBETWEEN PATHWAY



APPROACH FROM INBETWEEN

MOMENTUM



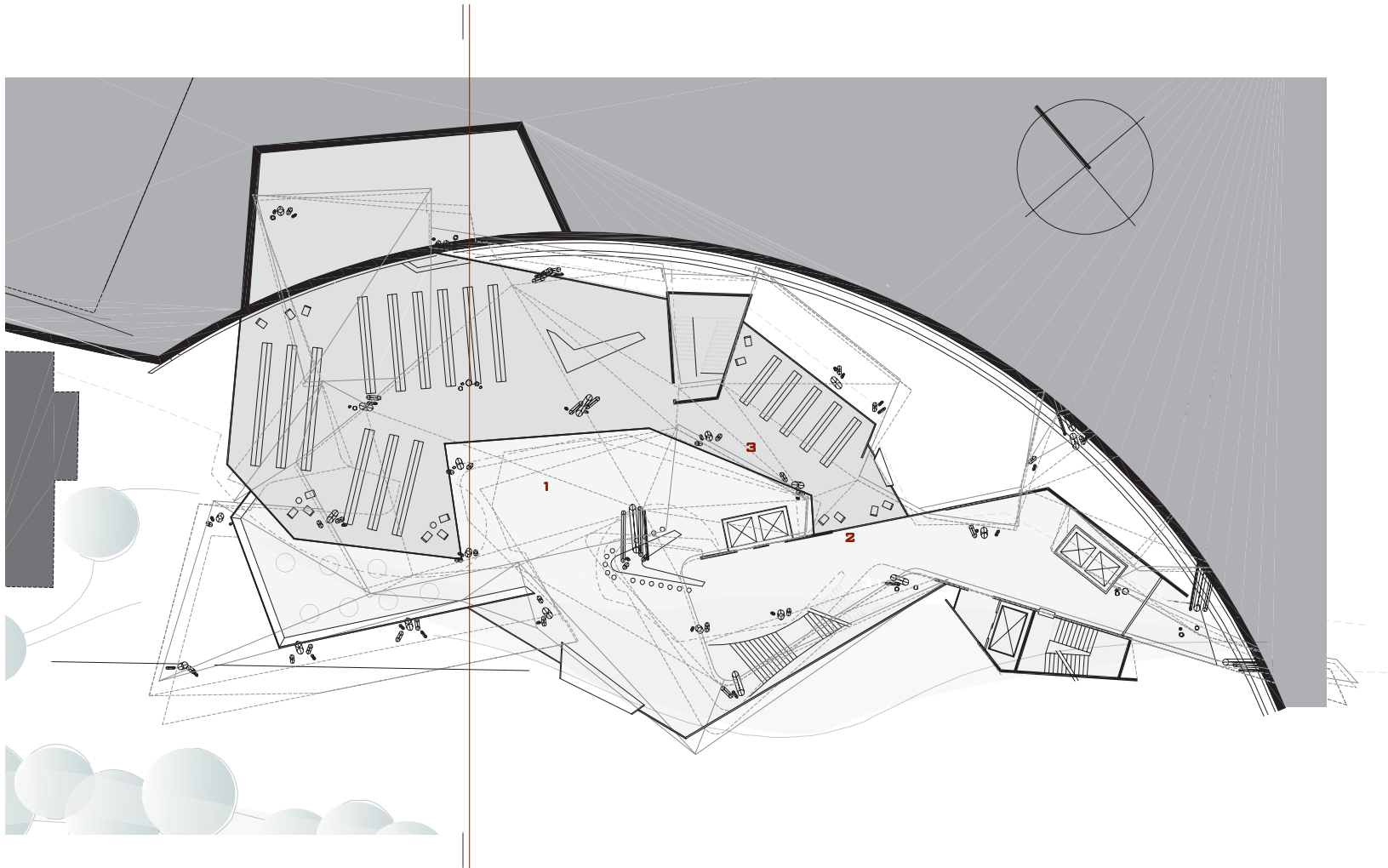
THE ATRIUM

WHICH ACCOMMODATES MOST OF THE **CIRCULATION SPACES** IN THE BUILDING, **DIMINISHES** IN WIDTH AS ONE MOVES VERTICALLY, WITH A CORRESPONDING **REDUCTION** IN THE **SPEED OF MOVEMENT**.



THE ATRIUM

MOMENTUM



LOWER LEVEL: LEVEL BOOK SHOP AND COFFE SHOP

CURVES AND ANGLES

STAND FOR THE INTERPRETATION OF DIVERSE **FREQUENCIES OF MOTION** AND PROVIDE GUIDELINES FOR FUNCTIONAL RELATED **SPACES** WITHIN THE BUILDING.

THE CURVE

OR CIRCLE IS USED TO ARTICULATE **SPACES OF RELAXATION** TO GATHER TOGETHER AND WATCH THE **FLUCTUATION** THROUGHOUT THE BUILDING. THESE PLACES ARE ORIENTED TOWARDS THE ATRIUM , TO WATCH AND TO BE WATCHED BY THE FLUCTUATING BODIES.

ANGLES

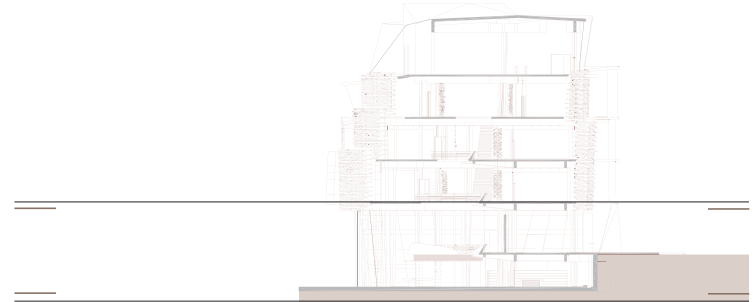
ARE EXPRESSION OF A **HIGH FLUCTUATION** AND INCREASE OR DECREASE DEPENDING ON THE MOVEMENT TAKING PLACE AROUND THEM, IN ORDER TO SUPPORT THE FLOW OF THE PLACE.

COLUMNS

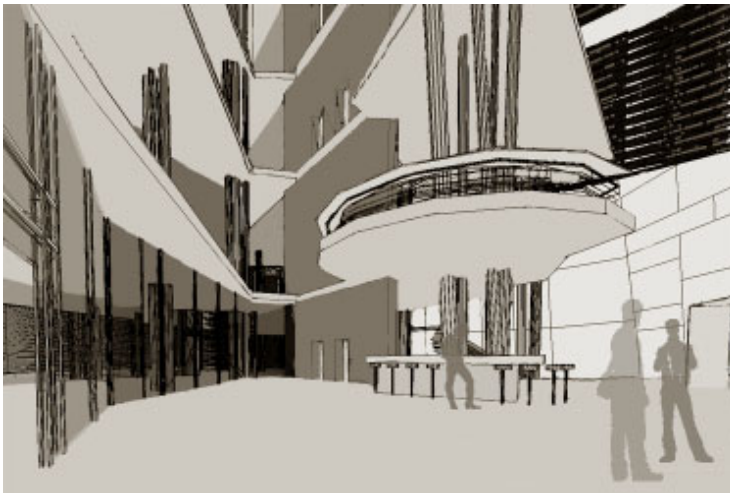
ARE **BUNDLED** TO UNDERLINE THE FLUX OF THE SPACE. ALTHOUGH NOT READILY APPARENT DOES THEIR LOCATION DEVELOPED OUT OF A STRICT 5 FEET BY 8 FEET GRID, AND PROVIDES **OPEN FLOATING SPACES**. THE **GRID IS ADJUSTED** TOWARDS THE FUNCTION, TO SUPPORT THE OPENNESS AND THE CONSTRUCTIONAL NECESSITY.

THE COLUMN BUNDLES ARE **ARRANGED IN RINGS** MADE OUT OF **REINFORCED CONCRETE**. IN-BETWEEN THE RINGS THE **CEILING IS OPEN**. LIGHT FIXTURES **LIGHTEN UP** THESE SPACES ONE FLOOR UP AND ONE FLOOR BELOW.

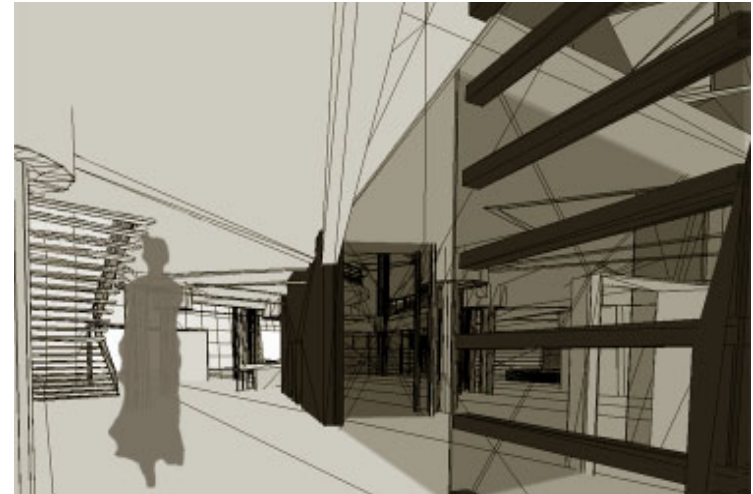
THE **CIRCLE OF THE COLUMNS** IS USED TO PROVIDE **PLACES TO REST**. COLUMNS IN **DIFFERENT DIAMETER** DEPENDING ON THEIR HEIGHT AND LOAD BEARING MEASUREMENT FORM OUT THESE SPACES. THE **COLUMNS** EXTEND **VERTICALLY** ONLY AS NEEDED **STRUCTURALLY** AND END AS STOOLS ON THE LEVEL ABOVE.

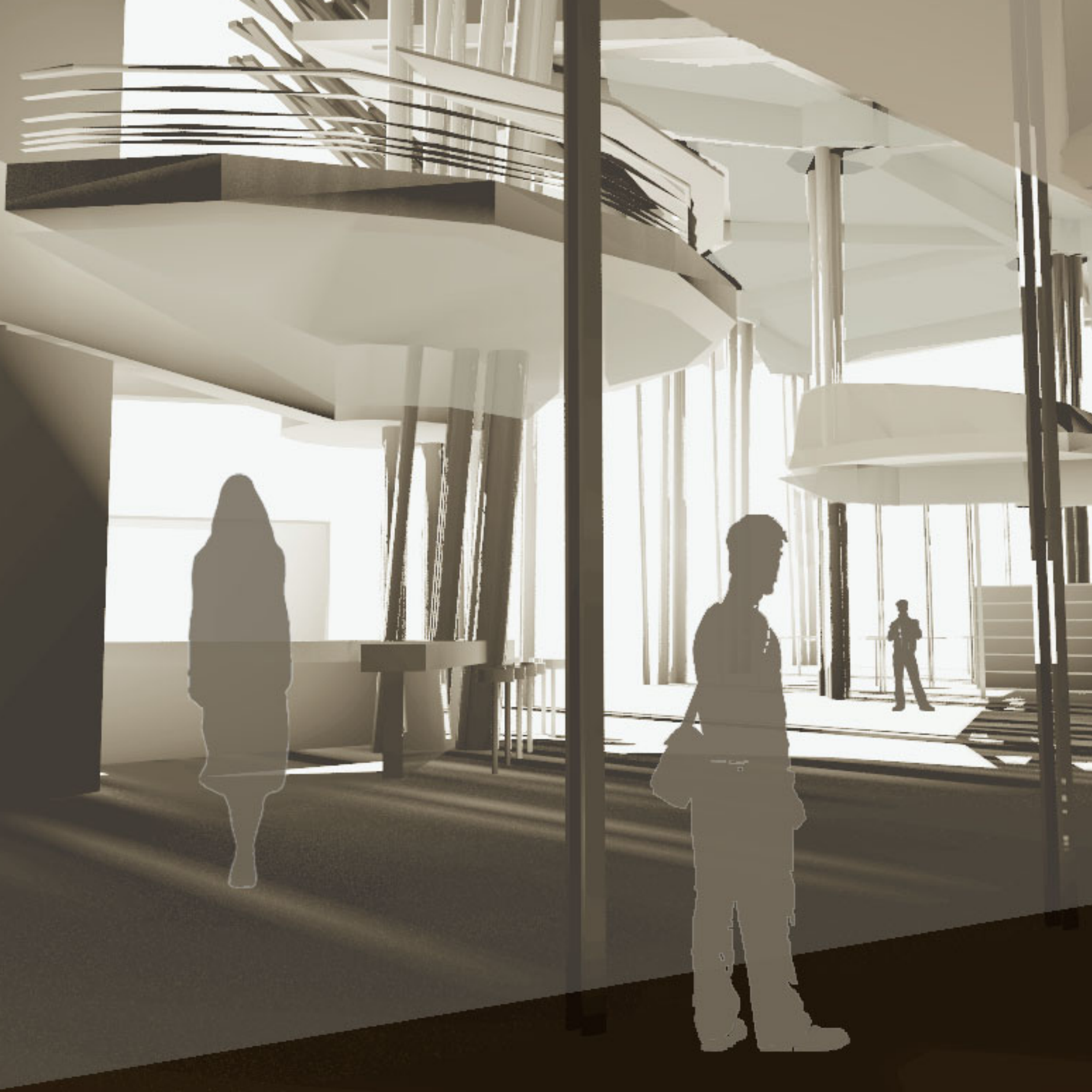


1



2









MOMENTUM

2 ENTRANCE SITUATION THROUGH HIGH RISE TOWER WALLS

3 STREET VIEW ENTRANCE MT AUBURN STREET



3 ENTRANCE FROM MT AUBURN STREET THROUGH THE OPEN CLEAR GLASS FACADE



THREE EQUAL ENTRANCES

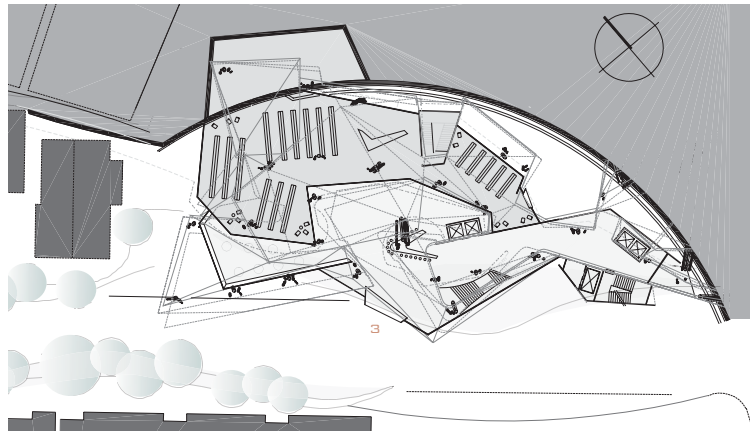
3 EQUAL APPROACHES

ARE REACHING THE SAME SPACE: **THE ATRIUM.**

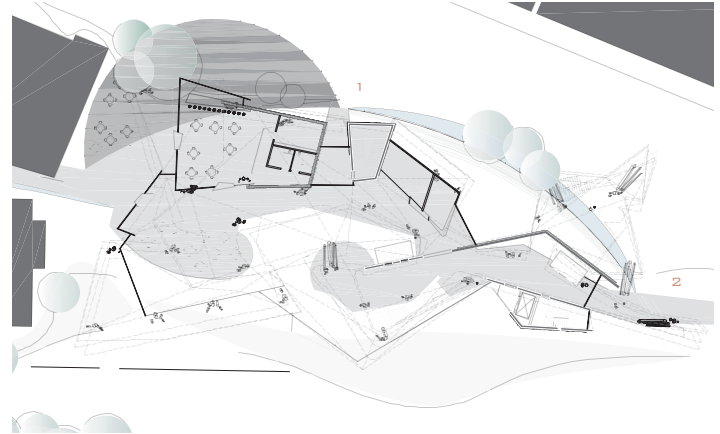
GESTURES ARE A WAY OF **COMMUNICATION** THROUGH BODY LANGUAGE, WHICH IS UNDERSTOOD **INDEPENDENT** OF THE HELP OF THE **VOICE** ITSELF. THE ENTRANCES ARE SEEN AS COMMUNICATOR OF A **VARIETY** OF **PERCEPTIONS** OF THE SAME SPACE FOLLOWING A PASSAGE.

THE **ATRIUM** OF THE DANCE SCHOOL IS REACHED FROM MASSACHUSETTS AVENUE THROUGH A **ONE LEVEL NARROW ENTRANCE**, BEHIND WHICH THE OPEN HALL IS WIDENED UP. THE SAME SPACE IS REACHED BY PASSING THROUGH THE **HIGH NARROW TOWER WALLS** FROM THE INTERSECTION OF MASSACHUSETTS AND MT AUBURN STREET. ON MT AUBURN STREET THE ATRIUM IS ALREADY **VISIBLE** BEFORE CROSSING THE BORDERLINE INTO THE BUILDING THROUGH THE **GLASS FACADE**.

FLOOR PLAN LOWER LEVEL: LEVEL BOOKSHOP AND COFFEE SHOP



FLOORPLAN ENTRANCE LEVEL: LEVEL RESTAURANT

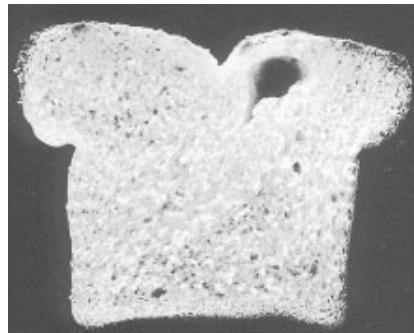


1 ENTRANCE FROM MASSACHUSETTS AVENUE INTO ATRIUM HALL

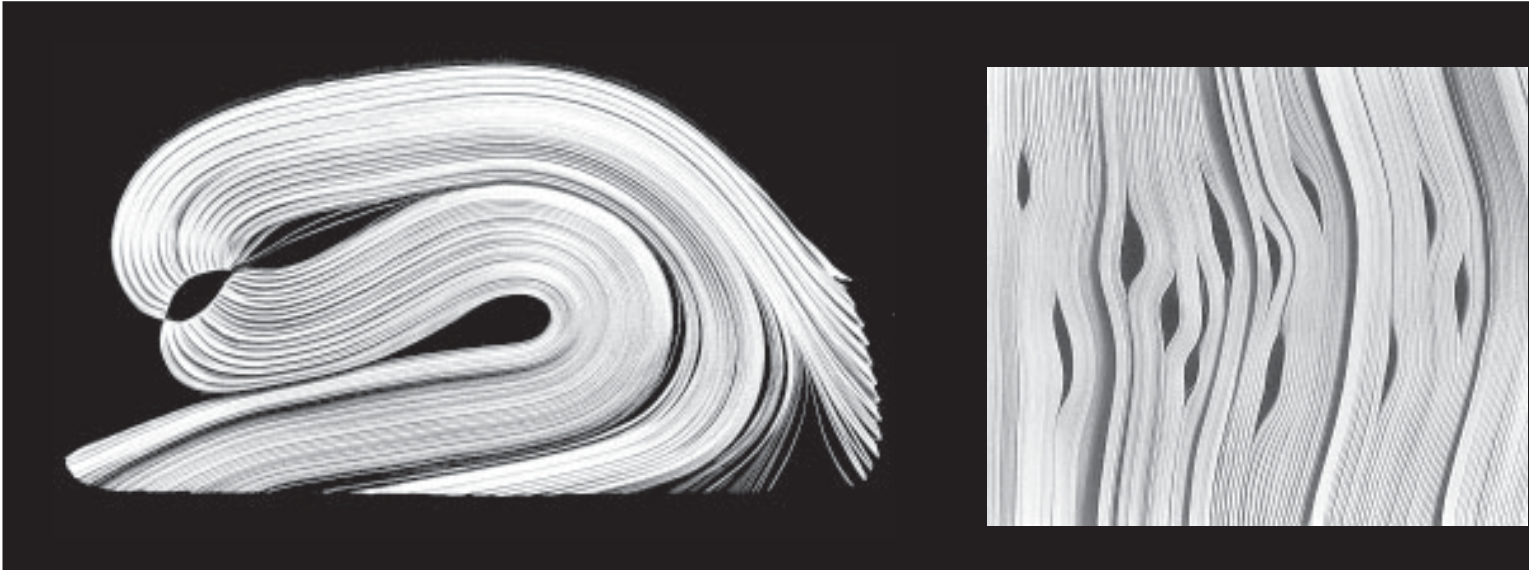


3 EQUAL ENTRANCES

M O M E N T U M



MOMENTUM



TEXTURE AND MATERIAL

ARE USED AS **GESTURES** TO **COMMUNICATE FLUCTUATION**, CHANGE AND **OVERLAPPING** OF **FREQUENCIES**.

THE ROUGHNESS OF THE SURFACE OF **NATURAL STONE** IS AN EXPRESSION OF **EXTERNAL INFLUENCES**. THROUGH TIME AND FORCES OF NATURE THE SURFACE OF NATURAL STONE WAS SLOWLY FORMULATED AND IS CONTINUOUSLY SLOWLY CHANGING WITH PASSING TIME.



MOMENTUM

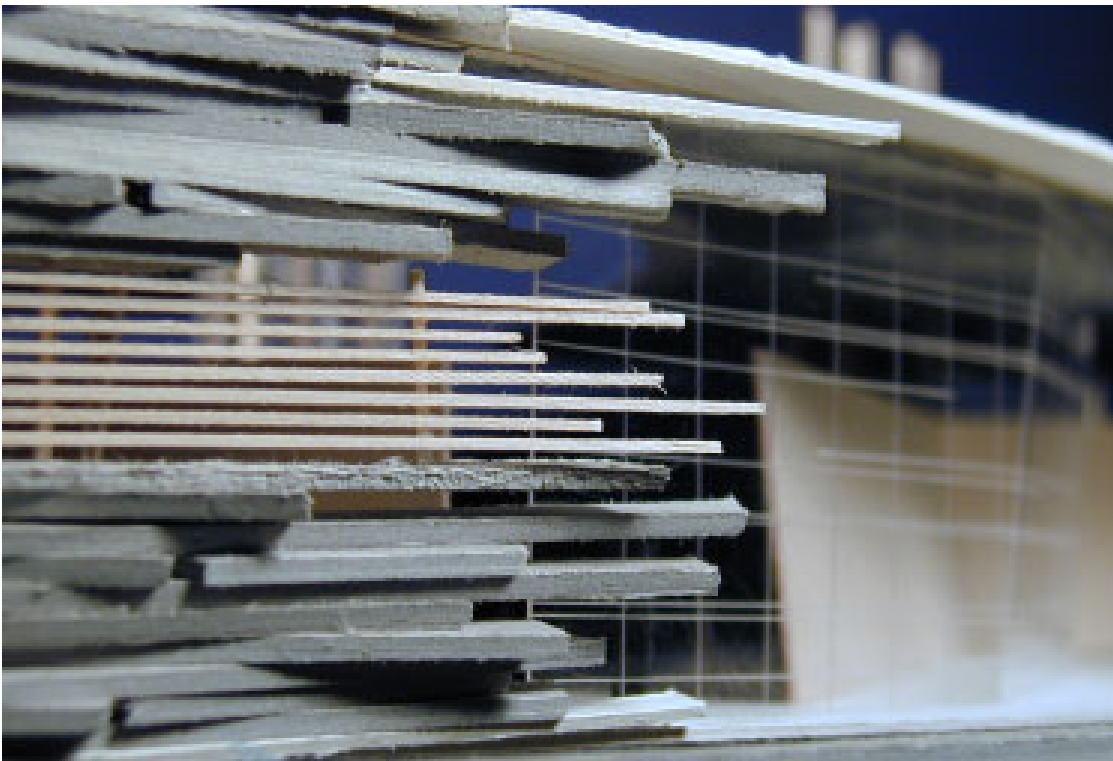
TEXTURE AND MATERIAL

THE **ROUGHNESS** OF **NATURAL STONES** IS USED IN THE BUILDING AS **MOTION** IS **DECREASING** OR LIKEWISE CHANGING INTO **SMOOTH**. A STREAM IS BEING **TRANSFORMED** INTO A SMOOTH SURFACE SO ALSO, THIS EFFECT IS SUPPORTED AS WELL IN THE CHOICE OF THE **COLORS BEIGE** ARE REFLECTING THE **GRADUATION** OF DIFFERENT **FREQUENCY**. **SMOOTH** SHINY MATERIALS ARE USED IN AREAS OF **HIGH FLUCTUATION**. THE **HORIZONTALLY** PLACED NATURAL STONE FACADE ALLOWS **FREQUENCY** OF THE MATERIAL. EACH ROW OF STONE IS **INTERLOCKING FLUCTUATIONS**. IN CONTRAST TO **VERTICAL ELEMENTS**, WHICH ARE **PASSING BODY** AND THEREFORE ALLOW TO EXPERIENCE ITS **VELOCITY**.



A **GESTURE** TO COMMUNICATE **FLUCTUATION**. THE ELEMENTS ARE **ROUGH** WHERE THE MATERIALS TO EXPRESS **HIGH FREQUENCIES**. AS THE **SURFACE** OF NATURAL STONE IN IS THE MATERIAL **CHANGING** ITS **TEXTURE** IN THE BUILDING. FOR THE NATURAL STONE FACADE. **WARM COLORS** FROM DARK **REDDISH BROWN** TO WITHIN A **MOTION**.

PARALLEL MOVING BODIES TO PLACE THEMSELVES IN **RELATION** TO THE SUGGESTED DIFFERENTLY WITH THE FOLLOWING MATERIAL AS COMMUNICATION OF **DIVERSE** GESTURES TO EXPERIENCE **FIXED POINTS**, **HORIZONTAL ELEMENTS** FOLLOW THE

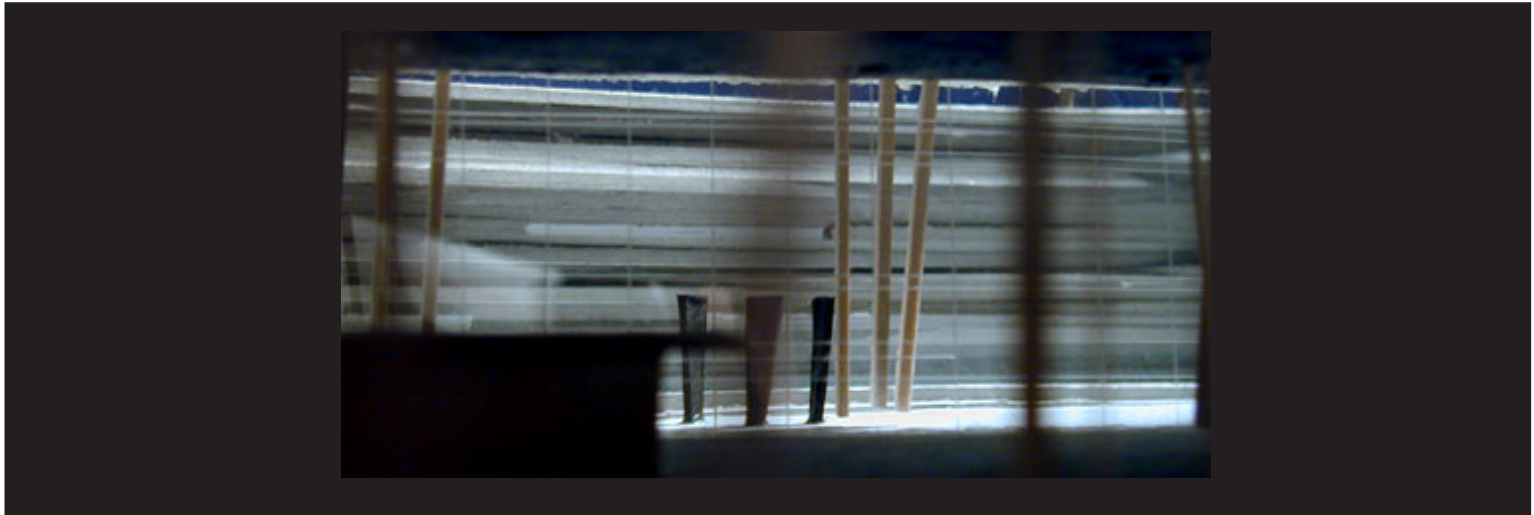


MOMENTUM

A READING GARDEN

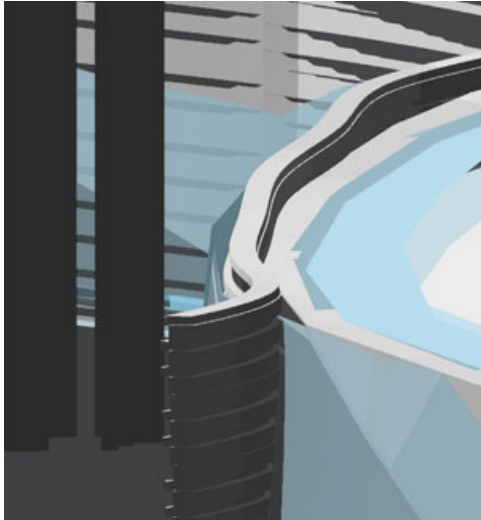
SURROUNDED BY A **CURVED STONE WALL** TO COMMUNICATE THROUGH **MATERIALITY** AND **TEXTURE** THE USAGE OF THE SPACE IT ENCLOSES. THE **IRREGULAR PLANE** OF THE STONES FORM **LIGHT PATTERNS** DEPENDING ON THE **SURFACE** DIFFERENCE BETWEEN EACH ROW OF STONE, BUT ALSO WITHIN THE **TEXTURE** OF EACH ELEMENT ITSELF. THE **SHADE PATTERN** OF THE STONEWALL IS **CHANGING** BY PASSING TIME **DURING THE DAY**. A **WATER CURTAIN** IS SUPPORTING THIS EFFECT AS WELL AS **REFLECTING LIGHT** BACK INTO THE BOOK SHOP AND **LIGHTENING UP** THE **SPACE** INSIDE. THE **ROUGHNESS** AND SOLIDNESS OF THE **MATERIAL** AS WELL AS THE FAINT **SOUND** OF THE **FALLING WATER** IS UNDERLINING THE **SLOW MOTION** AND SPACE ENVIRONMENT AS A PLACE OF **RELAXATION** AND **MEDITATION**.

VIEW TOWARDS STONE WALL OF WATER GARDEN



MODEL VIEW INTO WATER GARDEN SPACE

DETAIL OF WATER GARDEN WALL

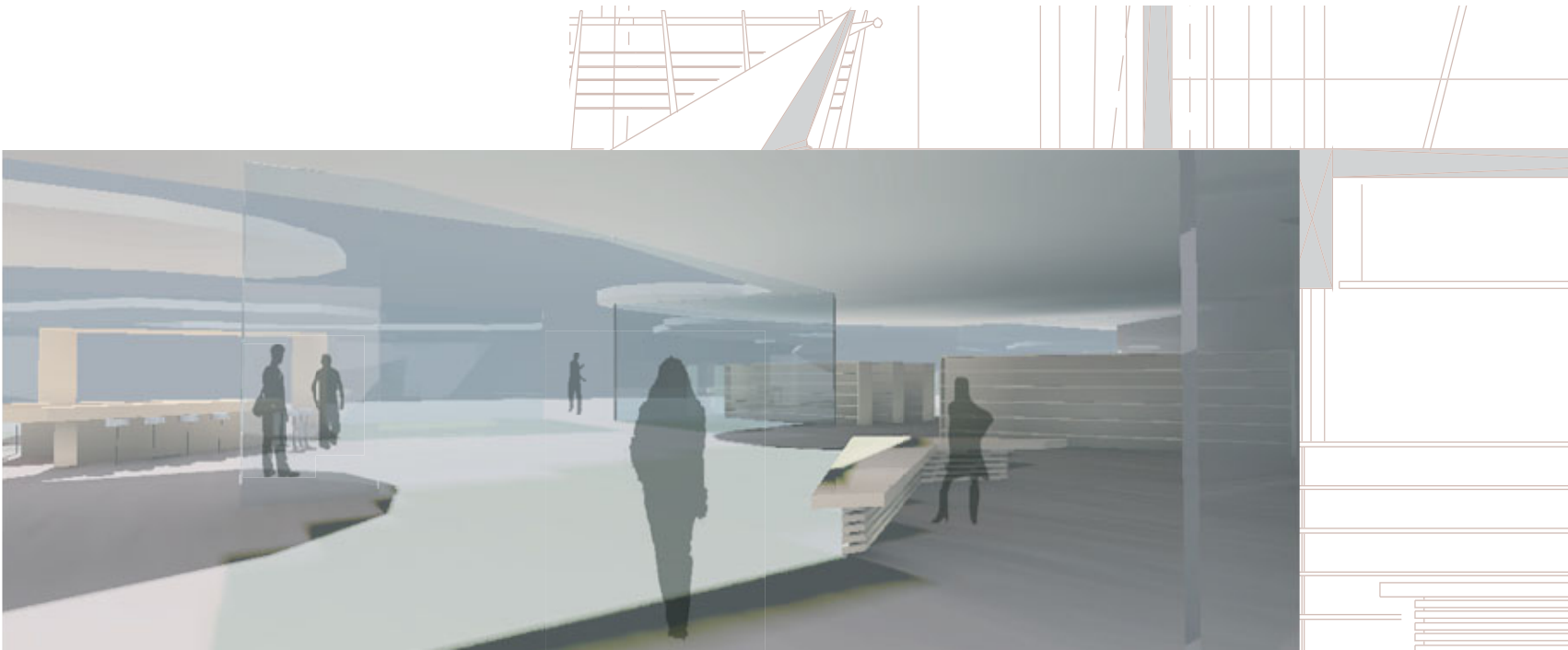


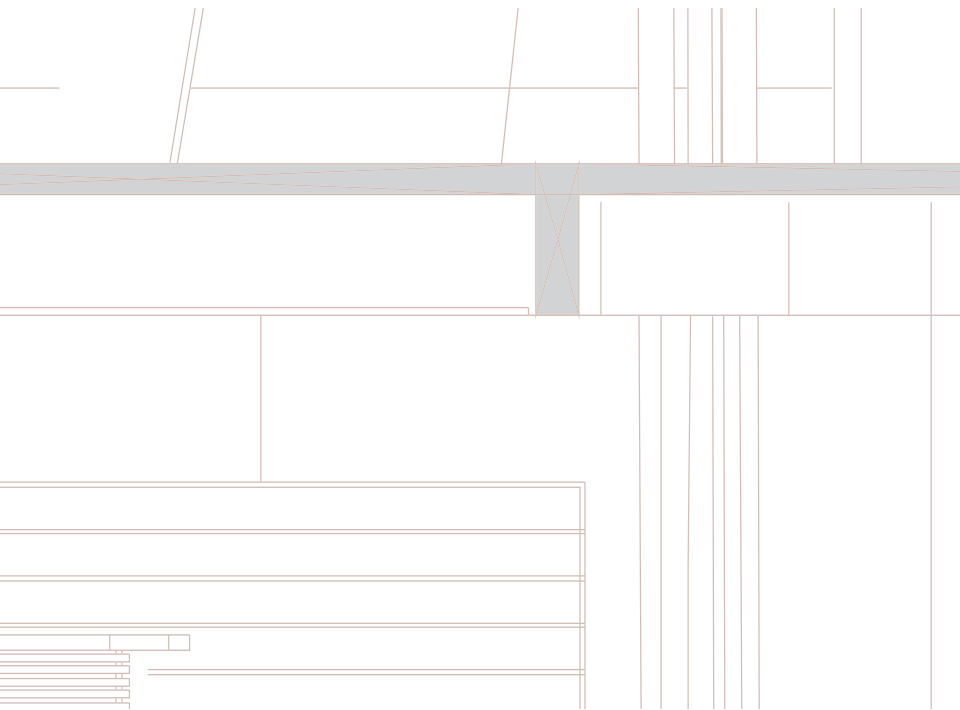
A READING GARDEN OF STONE



MOMENTUM

VIEW INTO BOOK SHOP AND WATER GARDEN ON THE LOWER LEVEL





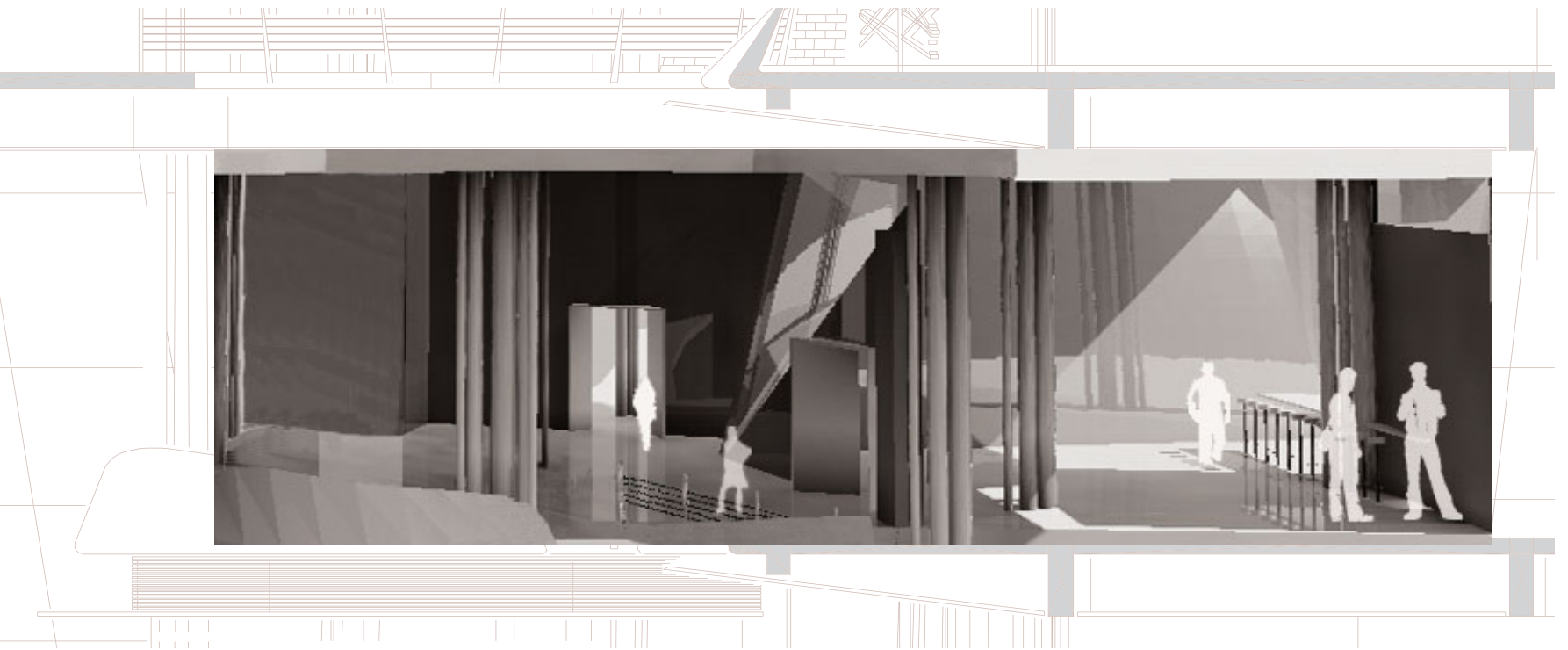
A BOOKSHOP WITH READING GARDEN



MOMENTUM



VIEW INTO THE RESTAURANT ON THE ENTRANCE LEVEL TOWARDS MASSACHUSETTS AVENUE

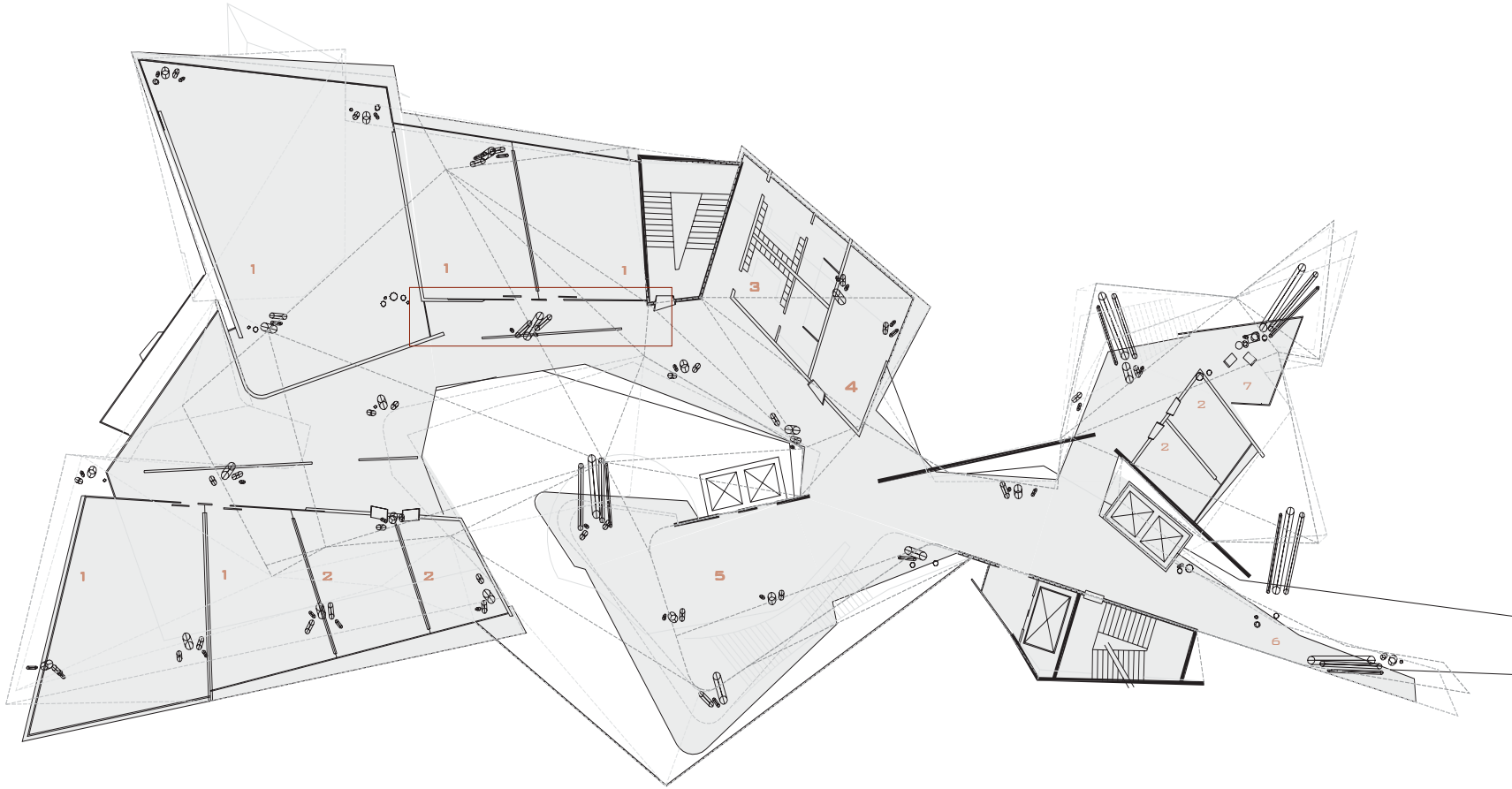


A RESTAURANT OF GLASS WALLS

M O M E N T U M



MOMENTUM



FLOOR PLAN SECOND LEVEL: FIRST LEVEL OF DANCE SEMINARS

1 DANCE SEMINAR 2 TUTOR'S OFFICE 3 CHANGING ROOMS 4 MUSCLE TONING 5 RELAXATION 6 BALCONY 7 COMMON ROOM