

CITY THEATRE NEW SCENE

- an exploration of space through time -

ANN DAHLBERG

Chalmers School of Architecture
Department of Architecture and Civil Engineering

Examiner : Morten Lund
Tutor : Jonas Carlsson, Jonas Lundberg



2020

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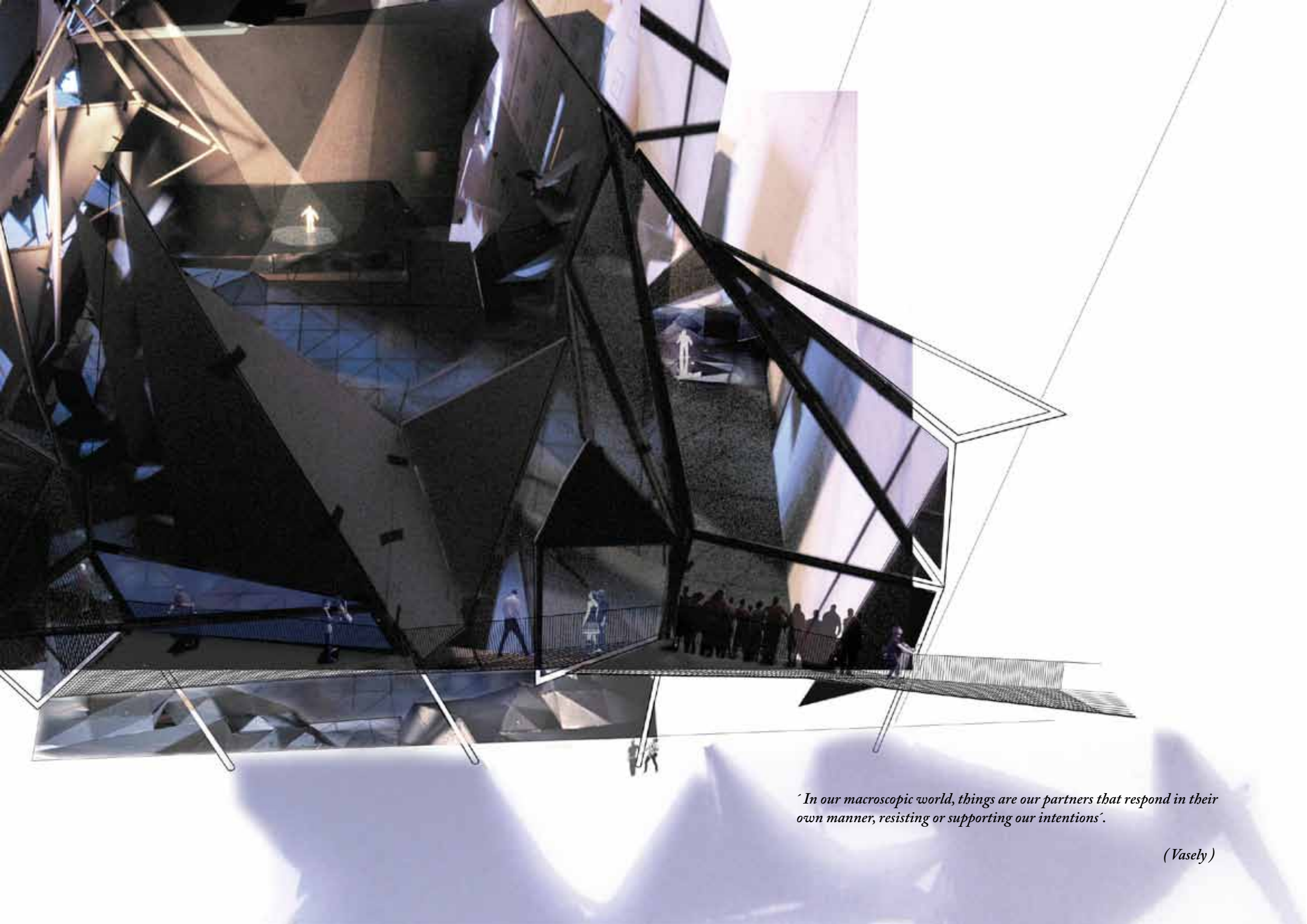
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Architecture and Urban Design MPARC



'In our macroscopic world, things are our partners that respond in their own manner, resisting or supporting our intentions'.

(Vasely)

WHAT?

This thesis proposes a dynamic outdoor scene for performance and dance behind Gothenburg City Theatre, today a parking lot.

The proposal is based on a dynamical exploration of space-creation.

It explores space - through time.

The thesis comprises two parts: the exploration and the proposal.

The exploration looks at space, time, movement, permanence and ephemeral transition. It's about building through physical creation and by structuring movements. It's about parts in relation to structure. Movement structures then give dynamical patterns, or variations, creating a relational whole.

By exploring how dance is creating spaces, I have been searching for a way in which architecture can present space in a more vital, engaging way.

Spaces in change - an architecture that does not entrench itself.

Why DANCE?

What is it in dance that fascinates in relation to architecture, and can it be used to explore new spatial configurations? In architecture, embodied - but static - movement is often considered to animate space.

I hold it's still a very static experience.

Dance, in opposite, is creating space through movement, in time. These spaces are experienced while in transition.

I wanted to learn from this kinetic sensitivity. From the experiences and spaces created by performative practices - dance - where doing is more important than seeing. The dancers articulate and create space not above, or in front, but from within a structure - the Body. The dancer redefines space. This space holds all the possibilities we don't see in everyday movement patterns.

Dance is a direct way of experiencing, comprehending and shaping space.

Dance is space experienced through movement.

It's a realisation of spacecreative impulses, by individuals.

Dance articulates space and arranges it. Dance resists stability and is intrinsically kinetic : where there is no movement, there is no dance, or space.

It cannot be separated from those practising it, but can be experienced by an audience through their own bodies, their muscular activity.



Dance is a physical, kinetic experience with compositional elements that are changing over time. Dance is experienced while taking place - through time. This is its ephemeral property.

Dance, and its spaces, has to be reconstructed if experienced again.

Change in this movementspace is about reconfiguring space and time into kinetic shapes. These spaces will be about geometrical change over time - a performative space through movement.

Structure as event.

This architectural space produces an environment in transition.

By learning from dance I wanted to extract and present new spatial possibilities with qualities found in the work of dancers, their shaping of space.



City space - animated as open Cultural 'marketplace'.

HOW is dance creating space and how could this be relevant to ARCHITECTURE ?

Dance draws upon a creative idea of movement. Its elements are space, time and dynamics which are used and modulated to a composition. Work is done with an immediately responsive model - the body.

The body is a physical instrument through which dance and space is created and experienced.

This thesis suggests that architecture likewise can be seen as an instrument - just like the interplay between dancer and choreographer - to the purposes of the user.

Architecture created with instruments that respond.

A physical body has an ephemeral physicality in that it holds so many variations of form. Dance is the construction of a set of movements, or qualities of movement, a set of spatial and time parameters.

Generally in choreography, there is a superior form, a set of spatial relations as well as flows of energy created by bodies. Choreography is the arrangement of movement, phrases, sequences of phrases, and entirety.

There is a timescore that choreographs the performance of events.

These are given life by the dancers. How that's done is its quality. There's a huge step between movement and dance.

By shutting out the visionary, moving by eyes shut, you find the pure movement quality.

This thesis suggests that architecture can be given life the same way and assigned a set of ephemeral qualities.

TIME and SPACE

In dance, space IS time (space and time in one). If not, dance would be photo - a freeze frame - rather than sequence.

The particular movement is primitive, like a photo. They are put together in phrases and sequences, as in film.

Time is then used as a compositional element.

This thesis suggests that this could be done in architecture too, in order to achieve a more relevant and vitally engaging architecture

In dance, you experience every single moment in time, as it comes a long, as you experience space. Space is thereby given a quality of life, strength, attraction.

And these events are not necessarily sequential, as of a static, sequential floorplan. They can be spatially reiterated, repeated and looped.

MOVEMENT and SPACE

Dance is space experienced through movement. Space IS movement in dance. When the dancer is still, there is no space.

Gothenburg City Theatre today - with closed volumes and facades to its surroundings.

The dancer creates space and defines its properties and qualities.

But space is both created - and experienced - through movement. Movement is experienced from within, through internal quality sensations - through time.

The perception of movement decides how we experience space, and thereby how we use it.

This is a direct way of forming space - an active generation of form based on material information (not a passive reception of form).

In dance, movement is exposed from inside to outside and space is experienced through virtual, muscular movements. The movement includes space, expands space, is active or passive, occupies or get occupied.

Does space exist before the movement? Does movement create space? Both are true, in the same moment. In dance, the dancer redefines space. Space holds all possibilities.

Space can be passive, til activated by movement.

When a movement puts together two points in space, the interstitial space is charged.



In dance, the dancer redefines space. It holds all the possibilities we don't see in everyday movement patterns.

GRAVITATIONAL FIELD

Space created through movement is about space as gravitational field. The force of gravitation is the core. If the center of gravity is moved outside the center of mass, there's movement. The relationship between the force of gravity and the gravitational field decides and informs the form.

Through movement, space is experienced as relational change.

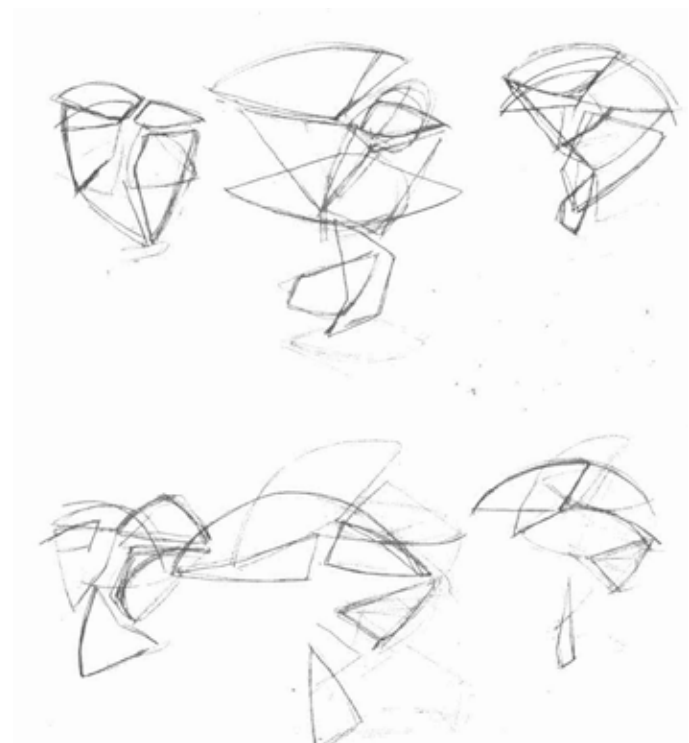
RELATIONAL SPACE

Movement in space is about relations in space that are in fluid change. The relational change concerns body shape (form), floor pattern and movement patterns through volume. Spatial geometry exposed through dance is about direction (spatial), dimension (in space) and plan.

Through movement, points in space are put in relation by bodies. Spacegrids can be created through spatial relationships between many dancers.

The shifting relationships makes space nomadic, dynamic, temporal and with locality.

Relations change in flow. Distance, volume, acceleration, velocity, direction, vectors. .



Mapping of creation of space in a workshop with dancers.

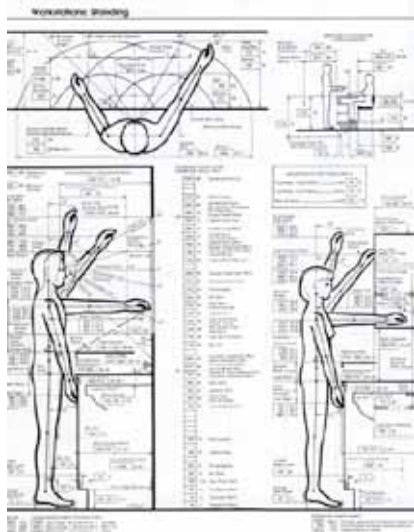
As stated, our perception of movement decides how we experience space. This, in turn, decides how we use it. Architecture can try to control how we experience space through time, by sequencing spaces and movement.

A sculpture we mostly have to walk around to experience. Architecture we move through, as well. Repetition of content in space gives sameness. It makes it impossible to change content by moving in that space (i.e. spaces of cathedrals and colonnes). Sculpture changes performance as an answer to our own movement - it interacts with our experience.

Dance is creating space from within and defines its spatial properties and score by itself. Space is here experienced from within itself through movements, and it's an intimate relational change. Points in space are put in relation through time. It's not necessarily sequential. It can be done by several points put in relation at same time, by several actors.

Spatial design in dance becomes one of movement, line and form, of intimate space and time. The experience of space is depending upon your own position. If you're moving / keep still / if the 'landscape' is moving (i.e. travelling through a landscape can be experienced as film, a sequence of shaky camerashots due to your own position).

Dance is both space experienced through movement (from within) and as dynamical spacegrids (from above, as choreography.)



It's a huge step between movement and dance.

FRAGMENT TO WHOLE

Dance is thus about the performer's creation of space in relation to her experience of it. And it's also about the spacegrid of dance, which consists of many dancers spatial relationships. Movement is an effect of changed relationships. It can also be changed proportion of size of parts in relation to wholeness. There is an ongoing physical dialogue in dance, forming movement material.

QUALITIES of SPACE CREATED BY DANCE.

Speed of movement becomes a qualitative perception of rhythm in changing conditions, as a score. Continuity in time will be continuity in space, and opposite. A changing, floating form is one which without merging totally with another, still changes and thereby change identity. What remains despite change is the static. What changes into, is the ephemeral. Dance is creating a spatial identity of what will change, and what is constant, dynamic and static. Its about floating changes through time, floating form. Ephemeral space. Spacetime.

Movement quality - in dance- and its dynamic is determined by Force, Time and Energy-release. So is the quality of space created by dance.

The experience of such space holds spatial, physical sensations. Of moving, supporting, counterbalancing, falling, weighing. . The sensations are part of the aesthetic/kinetic experience. Input are, for instance, balance, pressure, gravitation, levity etc.

HOW the physical changes of form are done in time are their qualitative change. These qualities are what differentiate dance from i e sport, or mechanics.

Dance is a physical, kinetic experience through body that is non-replaceable by technology. It concerns human physicality. Body. So does space created by dance.



AIM and METHOD

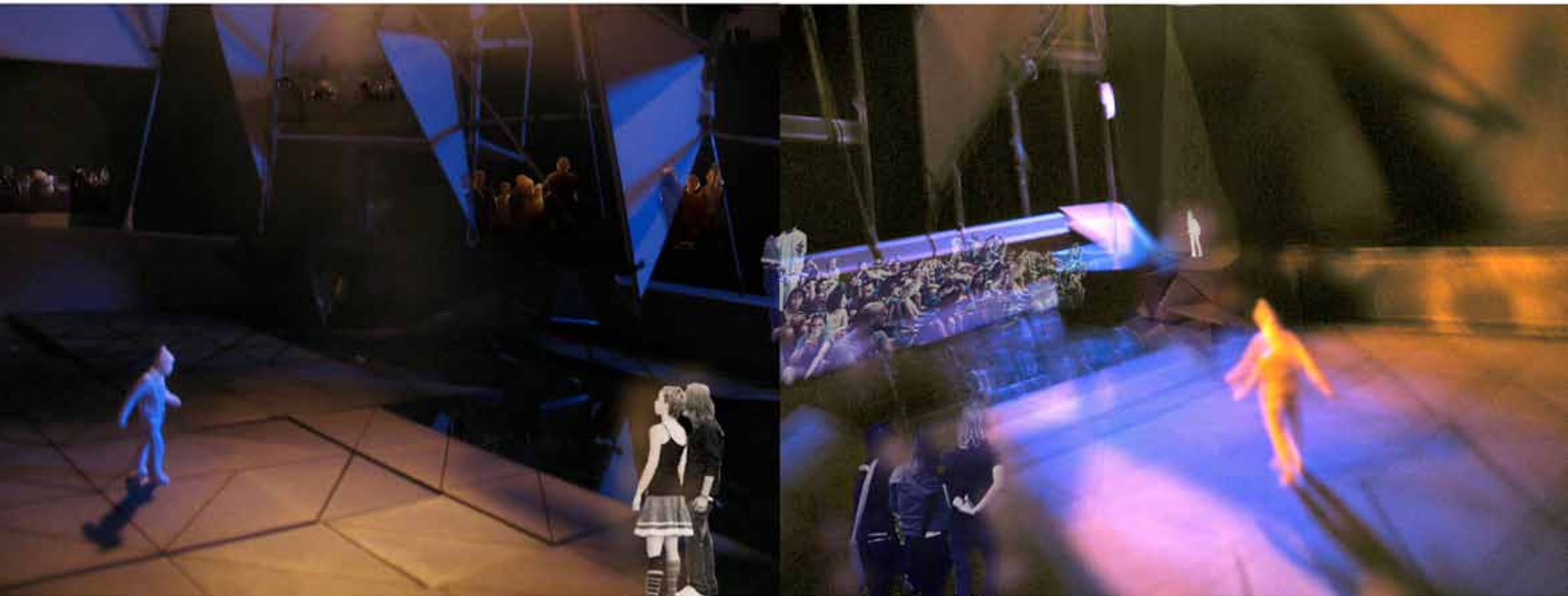
In order to achieve movement qualities out of an architectural structure and its space, I wanted to establish a dynamic system. Not desiring static architecture and its representation, the method chosen was experimenting with movement in time during the process of creating an architectural proposal.

The ephemeral property of dance, and its space, is that it is experienced while it's going on - through time. It has an inherent kinetic property that resists stability. Since time is used as a compositional element in dance, I choose to use film as a tool for analysis and design of the spaces of this thesis. By using film I could elaborate and draw spaces that change. Filming was therefore used to assist the work of finding architectural answers.

Workshops with dancers, and a choreographer, were the material.

The workshops contained live performance and mapping of movements in time. Both momentarily by observation, physical reiteration and drawing and afterwards, through reiteration, drawing and modelling in real and digitally, from filmstrips. The captures were then used to inform workshops with new spatial ideas.

And last, testing on model-as-test-site sessions were conducted when the time-based qualities of the proposed, reconfigurable structures were elaborated. These sessions were filmed to inform new tests. The usual film event is carried through linearly: event to recording to editing to projection. Here, I used event to recording to editing to event to recording to editing to projecting to drawing to modelling to performing to recording to projection to event. Time is here used as a compositional element in the process - as in dance. Arrangement in time becomes spacemaking structure, in time.

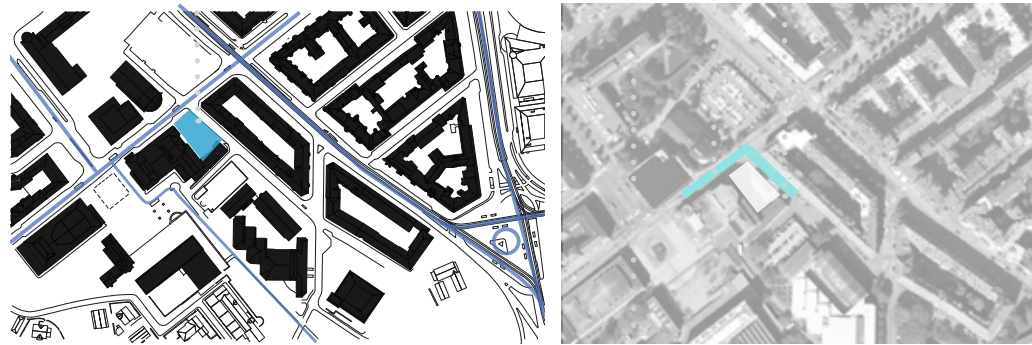


City Theatre New Scene - animated by users.



City Theatre New Scene - a dynamic, relational system.

Site and City



SITE 1: 4000

In 1934, Gothenburg City Theatre opened up at Götaplatsen, Gothenburg. The theatre was highly modern at that time and drawn by architect Carl Bergsten, together with scenery engineer and director Knut Ström. It had one of the most technically advanced scene machineries built by experts from the city's shipbuilding industry. This machinery is still in work, though complemented by more modern technologies. In 2013, the City Theatre had an occupancy rate of 86 %, a quite homogenous audience profile.

Today, the board of Gothenburg City Theatre calls for a possibility to offer more diverse performances, to try out new scenic and artistic ideas and attract larger audiences. The mission of the theatre is to explore and interpret the contemporary and produce performances of high artistic quality as well as attract a younger audience.

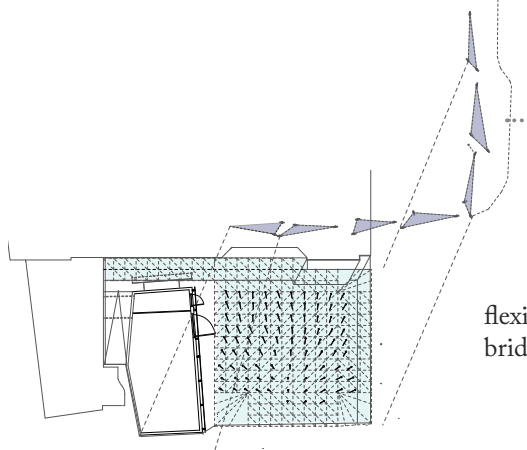
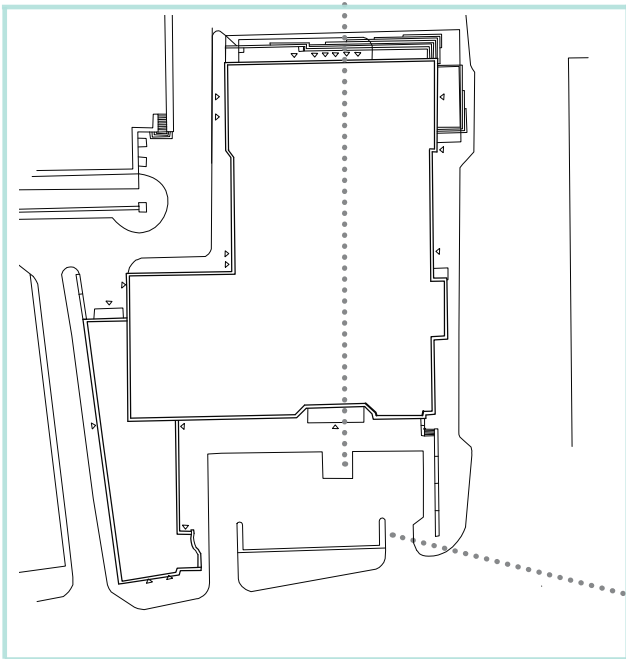
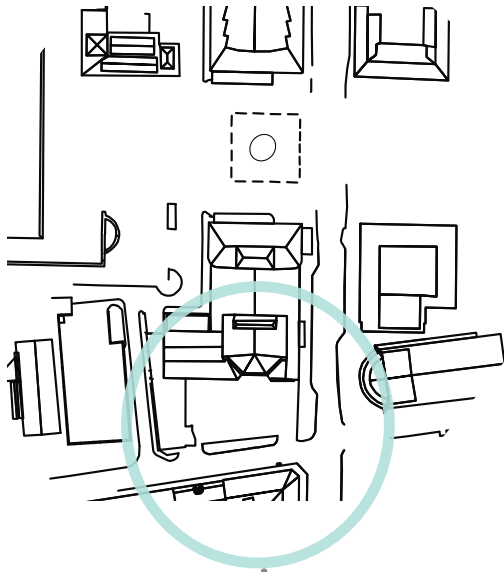
They've asked for a complementing 'black box', just like most modern European theatres have today.

A digitalized and interactive society demands scenic spaces with more flexibility, where new technologies with moving images, light and sound design can be used and where the placement of audiences can change according to need. Same demands are put by a new generation of audiences. Similarly, performance art of today demands totally different technologies and flexibility as well as new possibilities to communicate with the audiences.

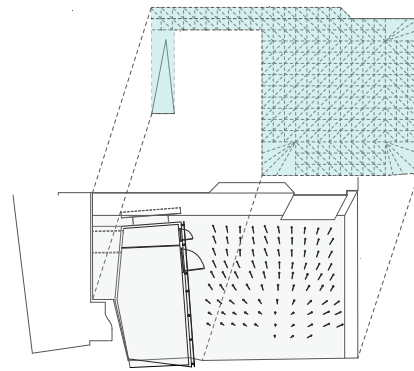
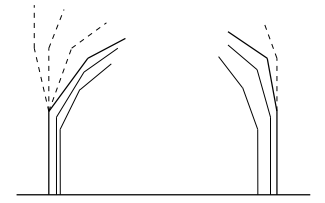
This thesis proposes a new, highly flexible and technically advanced scenery, enabling a great range of creative ideas at the backside of the City Theatre, today a parking lot and performer entrance. This new scene talks to the senses, proposes a dynamic, flexible scenery to meet the shifting needs of a new spacecreative theatre. The City Theatre New Scene offers new ways for the theatre to open up to city dwellers, adding more value to the City by making theatre activity more transparent while attracting a more varied audience.

By those means, the theatre will also become a more accurate and interactive interpreter of today's society.

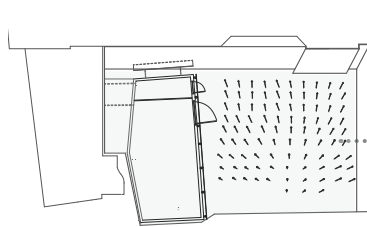
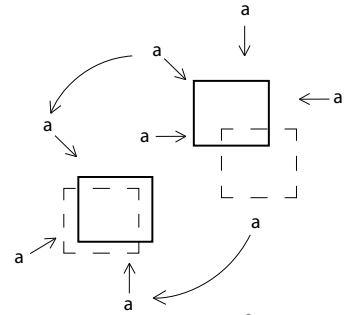
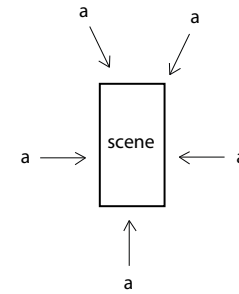
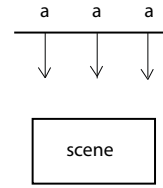
Gothenburg City Theatre New Scene



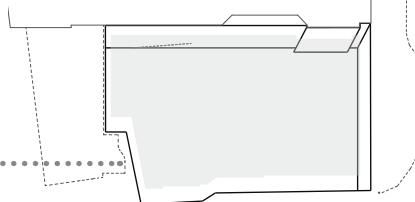
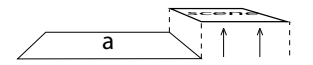
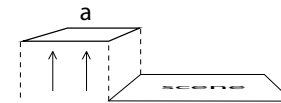
flexible soundreflectors / light fixtures / audience bridges



configurative field of 2 m² floor pans

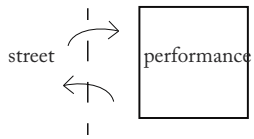


hydraulics



excavation





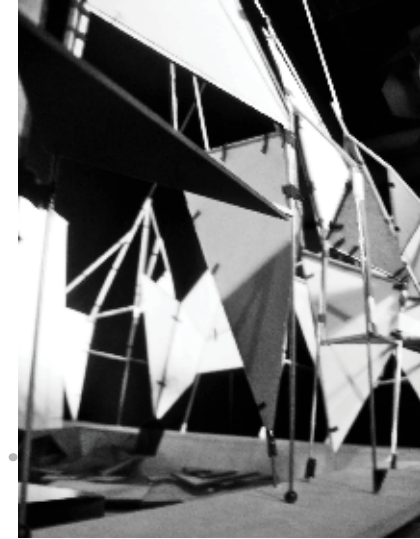
transparence / seclusion

situation entrance

Achieving transparence to the city by 'open entrances' due structures that touch ground easily, with their legs, while negotiating front- and backside. Transparence to performances is also increased by a simple ticket box placed at the sidewalk. Meanwhile allowing seclusion for sound and light and atmosphere, with shielding structures. Out of performance hours, an open city space. When performing, performance of City. With ticket, a better view.

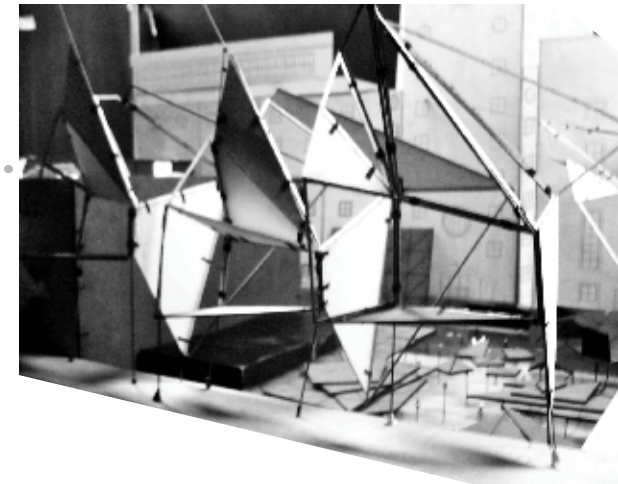
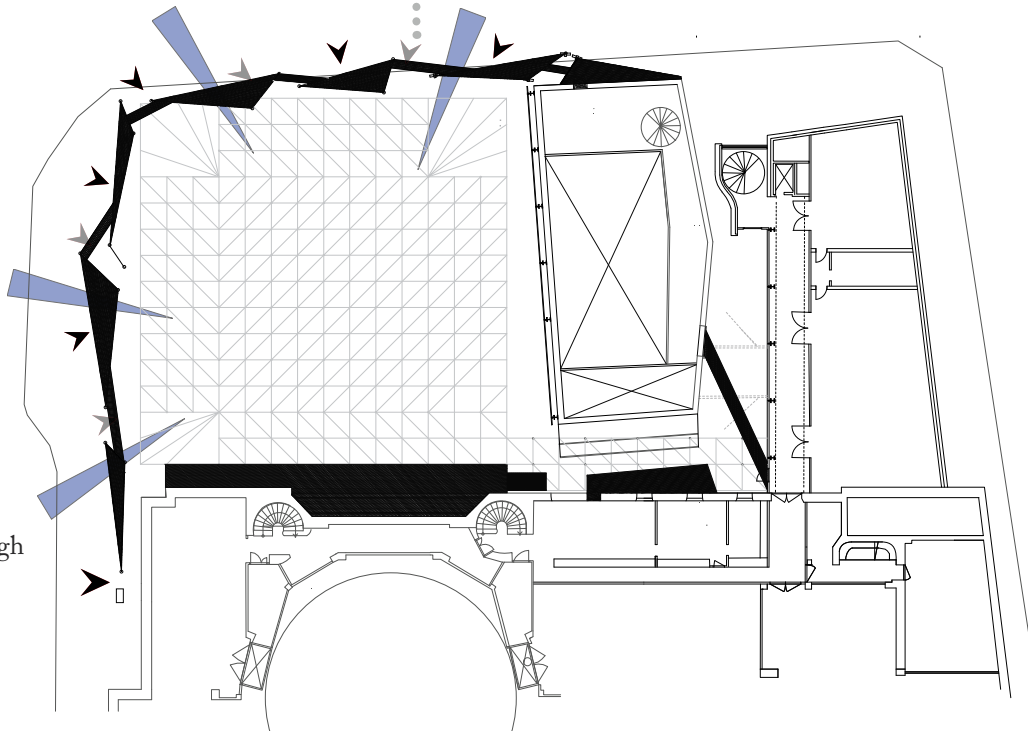


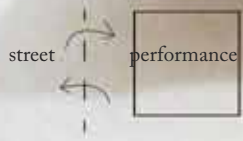
entrances through



entrances through

entrances through





situation entrance

facades / transparence

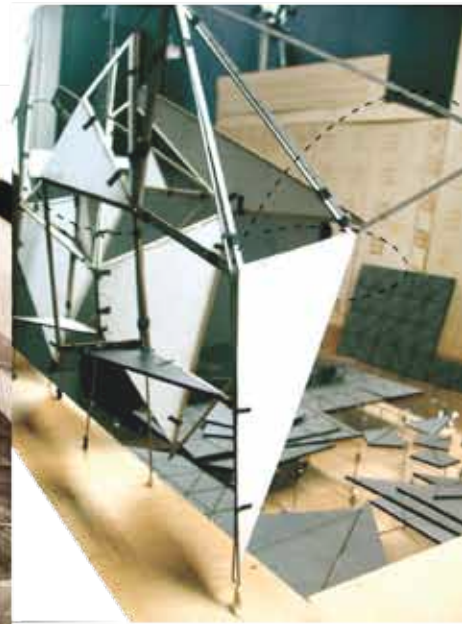
Activating space by negotiating backside and frontside, inside and outside and by modelling movement phrases that enclose / open up, contract / release, expand/ shield.



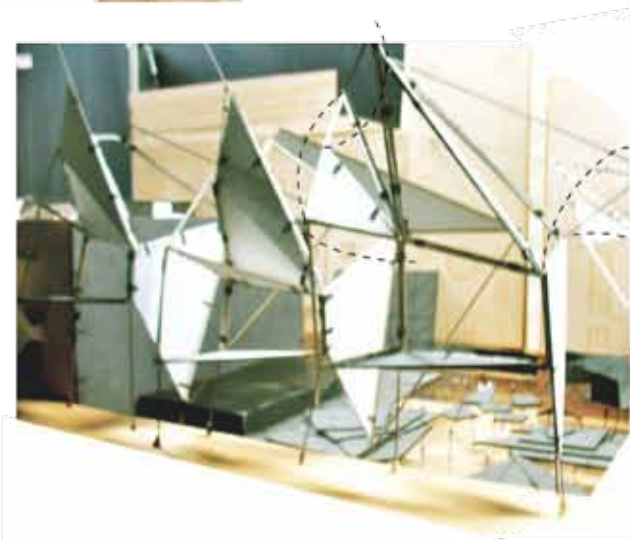
performance

Movement phrases activating spaces according to score. Responding to soundscapes by expanding and shielding while adaptable for varying light settings.

Allowing audiences a greater engagement and experience by moving around scene over bridges between structures.



open facades



situation entrance



Model experiments from elaborated movements of dance: transparence, negotiations of back and front, of enclosure and opening up, contracting and releasing to expand or shield.



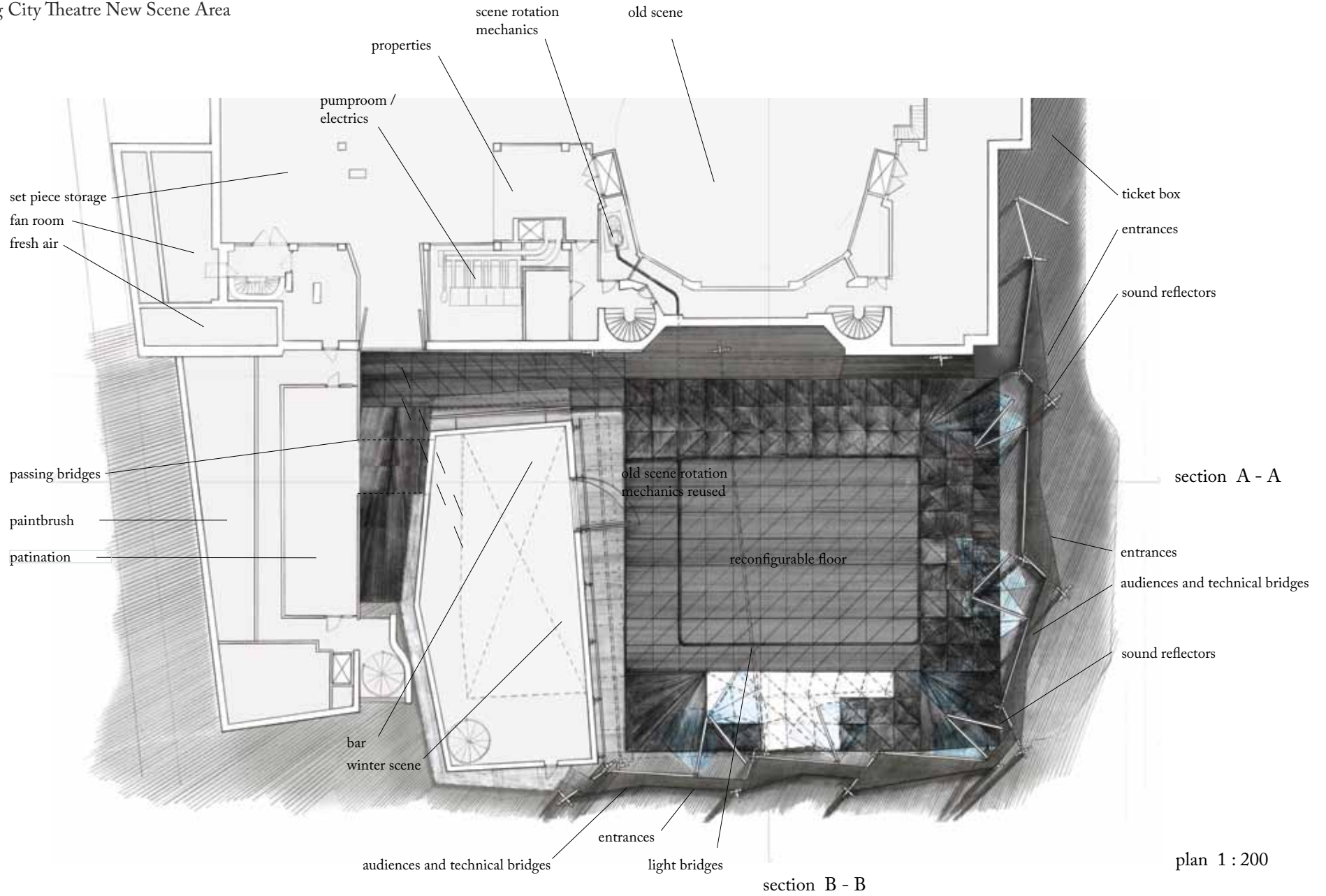
Just as dance is creating space from within and space also is experienced from within itself - through movements - this architecture is overall experienced through body. It is about the intimate room - the relationship to your own body, which is forming and reforming space through movement.

The experience of this space is highly depending upon your own position. If you're moving / keep still / if the 'landscape' is moving.

By being transparent - no facades - and by performing in movement, the situation of this scene area is meeting City /city dwellers as an invitation to interact / pass through/ move around. The 'backside' is as much frontside to someone else or depending on your movement around the structure.

The area also encloses while opening up, contracts and releases, reconfigures and perform in relation to the City.

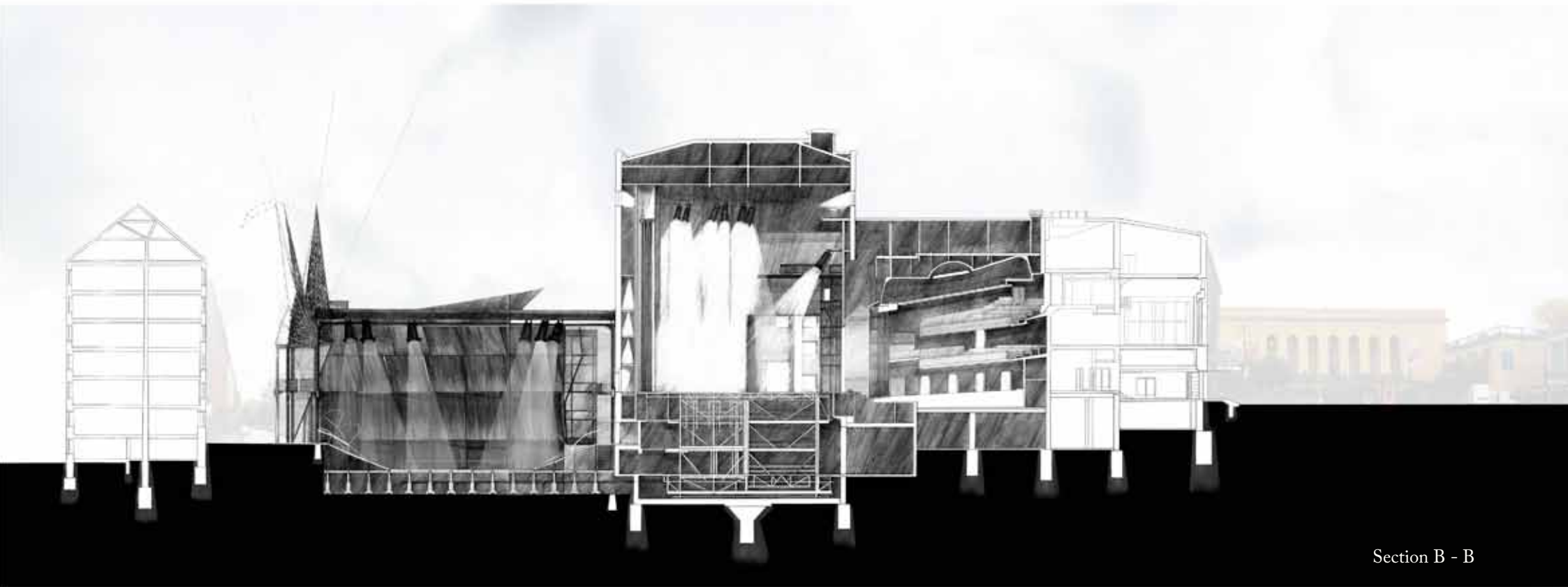
Gothenburg City Theatre New Scene Area



plan 1 : 200



Section A - A



Section B - B

WORKSHOP EXPLORATION



DANCE - A WORKSHOP ABOUT SPACE - FROM WITHIN

In a workshop with four dancers and a choreographer I explore how the dancer defines and articulates space/spaces from inside to outside.

The elements of dance are : space / time / dynamics. The elements are used and modulated to a composition.

The dancers articulation creates space from within a structure - the Body. The relationship between body and created space is what interested me.

What is this relation? A human moves in air and is depending on gravitation. By moving she create spaces. Gravitation and bodymuscles are her medium and movement is conducted by force, energy release and time.

How are these spaces that will not exist without the time dimension? In dance, the dancer creates space through time. Space is time.

In the workshop I work with time elements: changes of tempo, duration, moment, regularity in beat, accents, displacements of accent.

I wanted to explore dynamics and space, the amount of force in order for something to happen, over time.

I was looking at changing qualities. Movement could be sudden, slow, sustained, forceful, weak, collapsed. I looked at changes in weight, lightness and heavyness, sustained to forceful etc. I was also looking at spatial transistions - how it looked between phrases and sections in a composition. With the choreographer I elaborated a few movement sequences and looked at how they were made and how the changes were - all captured by film.

SPACE - Spatial elements:

level: movements up and down along a vertical axis. (low: movements or non-movement with contact of hands or feet to floor. Running, turning, sliding combined with form, direction and pathway, high: bodyshape vertically elongated or body leaving floor, vertical balance when ascending, jumping up or over.)

#spatial geometry: direction (position and bodymovement or parts of body in relation to space, audience and other dancers - forward, backwards, right, left, down, up, diagonally, sideways) dimension (size of form or movements: hight, depth, width - wide, high, narrow, small, rounded, long, short, tubular, conical, spherical), plan (the fusion of dimensions - the body's three plans: sagital/along the body front to back - righ and left side, symmetry or assymetry frontal/ divididing the body in front and back tranversal /dividing in upper and lower part)

#form: the coherent arrangement of the body or group of bodies : symmetric and assymmetric.

Symmetric shapes - the body equal at both sides around its center to express balance, strength, power, stability

Asymmetric: where bodyparts are unequal, expressing fluidity, movement, unsteadiness, continuity

#floor patterns: the way a dancer takes moving through the room and indicators of where she's been. Straight in all directions, circular, undulant, zigzag, in a spiral.

#design in volume: looking at bodyshapes, pathways on both floor and in air.

#intimate space: the area around the own body (kinesphere). It expands or contracts when the shape is changing.

#active space: when the space itself is animated, when it has a meaning or symbolic propositions created by bodyshape, its direction and focus. Related to the intention of the coreography and the interpretations of the dancers.

#performance space: strong and week performance areas, depending on the direction, shape and focus. Dancers move inside and through space, unfolding, defining and exploring it.



TIME

The dancer is moving with or up against time. Movement stretches during a limited time-span.

#tempo: speed of the beat - quick, medium, slow giving a feeling of hurried, nervous, build up in excitement, strength or climax, of medium of stability or fluidness and slow of fear, comfort, pain or tiredness.

#duration: the time it takes to complete a movement or a dance. Sustained, suspended movements or balance or extension, or finished within one beat, like jumping. Connected to purpose of dance. Using variation and contrast.

#momentum: increase and decrease of speed building intensity or climax, while decrease gives contrast in relation to climax, diluting, depression or calming down.

#regular or irregular: The beat can be regular giving a sense of stability or strength, or irregular giving a feeling of unpredictability.

#accent: the emphasis

#metre: when an accent recurs at regular intervals. The grouping of beats around an accent gives regularity in timing - a predictable structure. Movement can be used to either support or contrast predictability.

#natural rhythm is produced by a body's own function like breathing, walking, heart-beats, jogging and is distinct and personal and will affect performance.

#stillness can be active, a kind of attendance in progress, a hesitation, a break in flow. Can be used to create suspense, contrasting movement and creating the unexpected in the next move.

PARTS and WHOLE

In composition, movement is generated from a stimuli. A motive is developed that represents the concept created from that stimuli.

The arrangement of movements is focused on the development of phrases (distinct movement units using a motive as driving force). Phrases and sequences are put together to make a complete work, a whole.

The phrases are put together by transitions to create sequences and sequences to a whole thereby achieving the structure.

The particular movement is personal and original for each and everyone.

DYNAMICS and MOVEMENT QUALITY

Dance is the release of energy and weight or force. Energy release is the amount of force used for the movement to happen. If the release of energy is slow, the movement is sustained. If there's a quick energy release the movements become sudden and strong. The varying speed in release will make the work varied. A contrast between a sustained and sudden energy-release changes movement quality.

Weight gives the movement a feeling of ease or heaviness.

Force is the intensity in energy release.

How the force is used creates the particular dynamics and gives it its quality.

Dynamics, or the interaction of force, energy-release and time, will give movements the quality that serves the motive.

Movement aesthetics describes the feeling of a work and articulates it.

Qualities can be: nervous, tense, smooth, flowing, dull, sticky, prickly, heavy, saddening, gay as tested.



Formfinding / mapping movement

observation

form is sought through observation

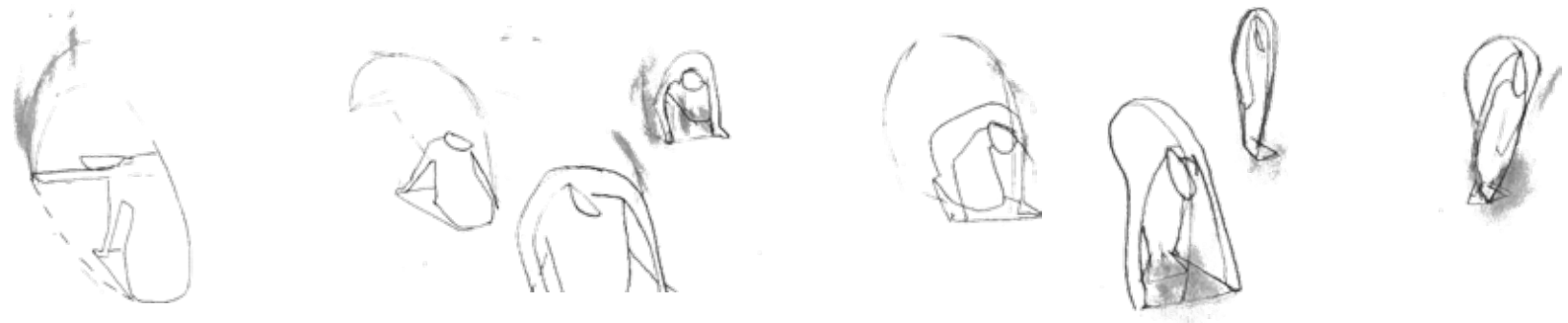
flowing form is not static - it changes over time and is transcending

the tools used to better observe and withhold moving forms are drawing, film and later drawing from film



drawing

movement is analyzed in parts - each movement phrase (bodyform at one moment and its transition to another) connects to the next one

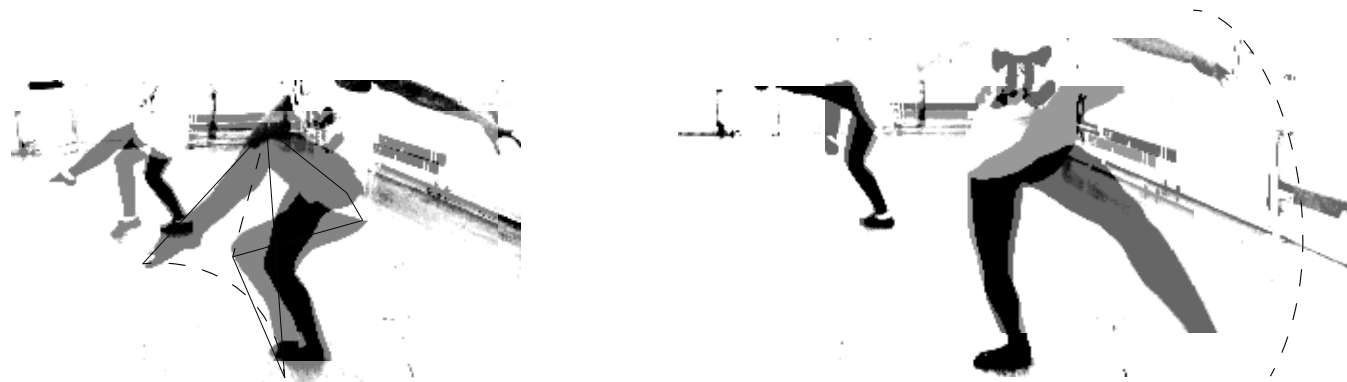


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 dance is creating a spatial identity of what will change, and what is constant, dynamic and static. Its about floating changes through time, floating form

movement is an effect of changed relationships

it can be changed proportion of parts, in relation to wholeness



tracing movement or 3d dynamics



selection and film

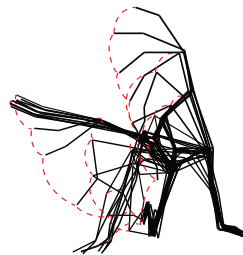
particular movement sequences that were found through observation are chosen and filmed from several angles

sequences chosen for the project are:

- # contract-release
- # enclose - open up and
- # twist and turn



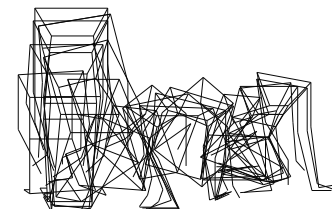
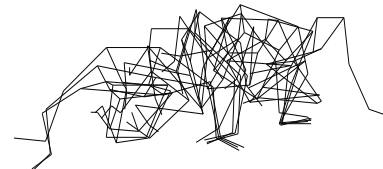
phrase



sequence



sequence



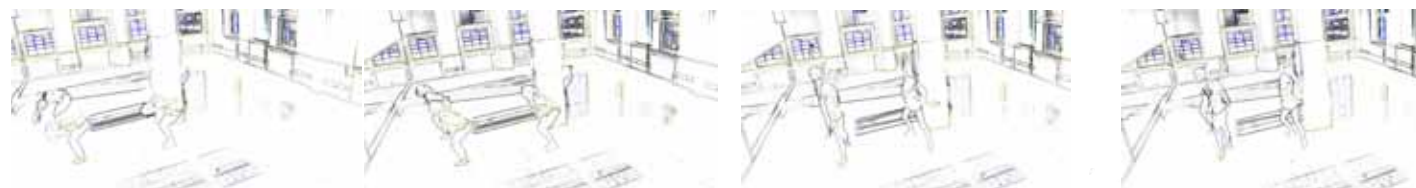
The points in space that make body form in each of the transcending movement phrases are connected: feet, knees, hips, chest, shoulders, elbows and hands : CONNECTORS.

drawing from film

in order to capture the transcending forms more accurately, movement is analyzed through drawing from film

drawing is made finding geometry - in single phrases and sequences - connecting points and lines through time

drawing explores direction - dimension - plan (gravitation)

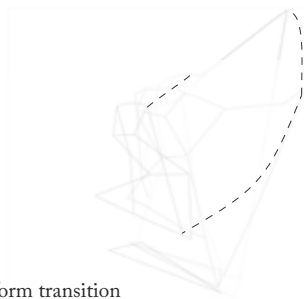


drawing from film - connecting surfaces

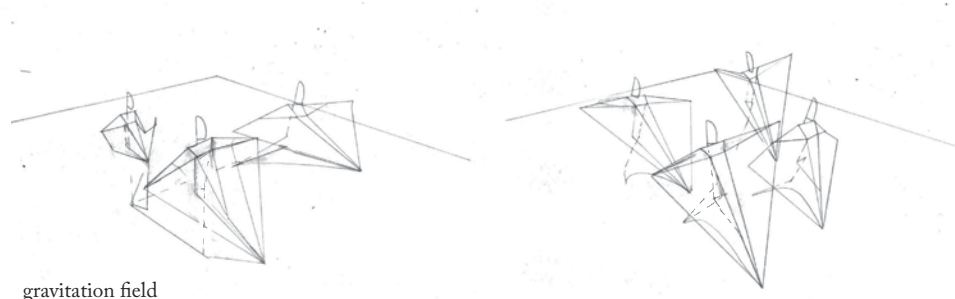
points in space that make body form (connectors) can be perceived as surfaces when connected. From these more or less strong surfaces, moving 3d forms are read - transcending from one to the other, over time



form transition



gravitation field



these surfaces and forms can be strong or weak, more or less articulated, giving variation in expression

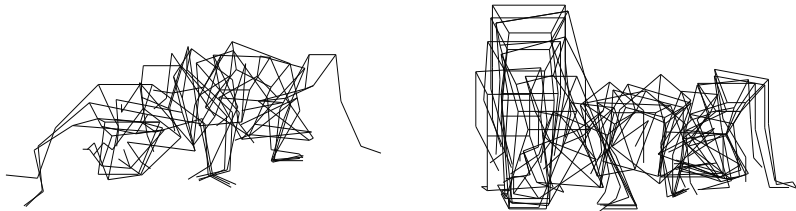
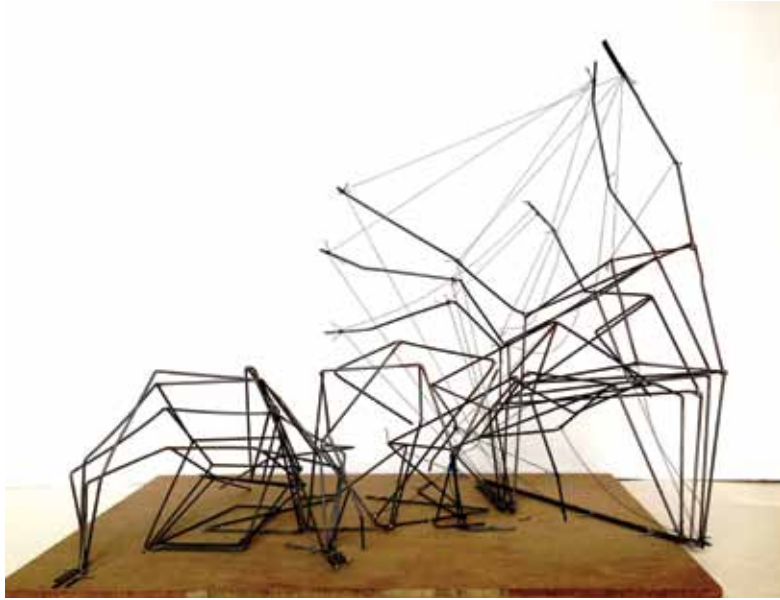
from 2d to 3d -
modelling space from drawing

accurate scale dimensions are given the parts of the human body, which are connected in particular selected movement sequences, modelling movement and space in 3d.

gravitation area (on floor) and its displacement over time (movement) was established

this was done by physical tests (try outs) where mass and center of gravity and its field changed due movement

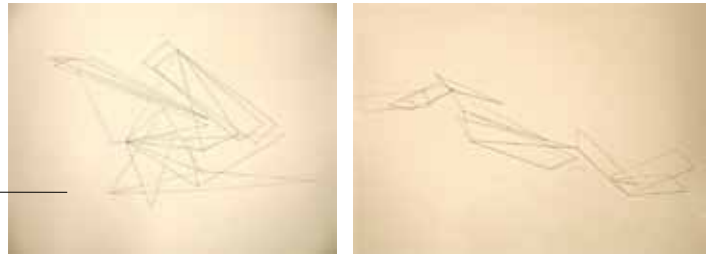
from this information, direction of bodyparts, in relation to whole, could be set in an x,y,z environment (gravitation field and its space above)



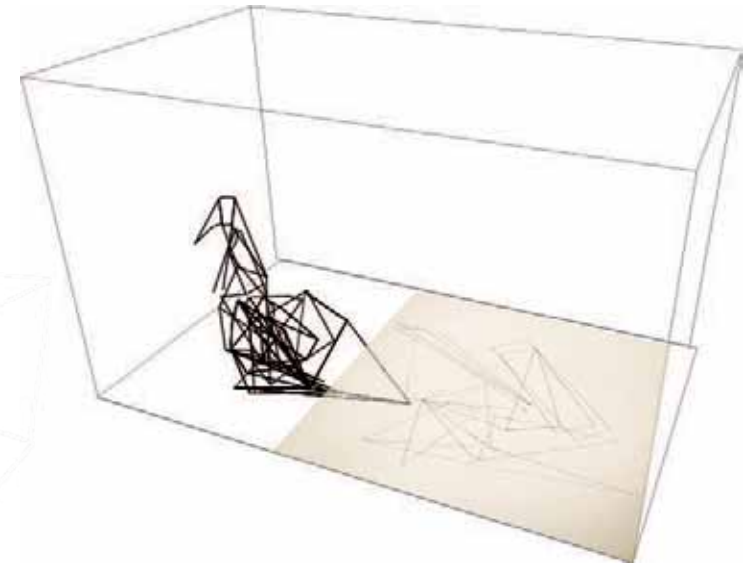
modelling from film - making 2d to 3d

movements are analyzed in relation to a digital 3d box of directions

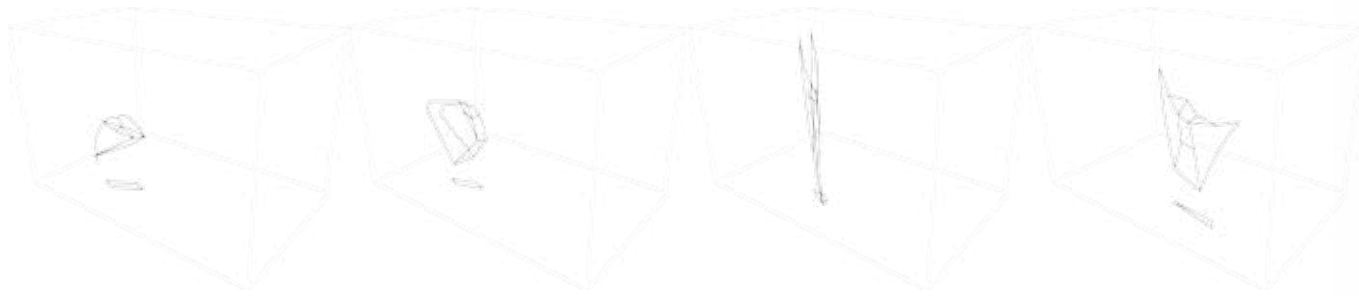
2d drawings of moving bodies from film sequences are transformed into 3d digital moving models by asserting the center of gravity, and the feet patterns of bodies moving in direction x,y and z



2d floor-patterns of movement sequences



center of gravity and floor-patterns of a moving body in relation to the x, y, z box.



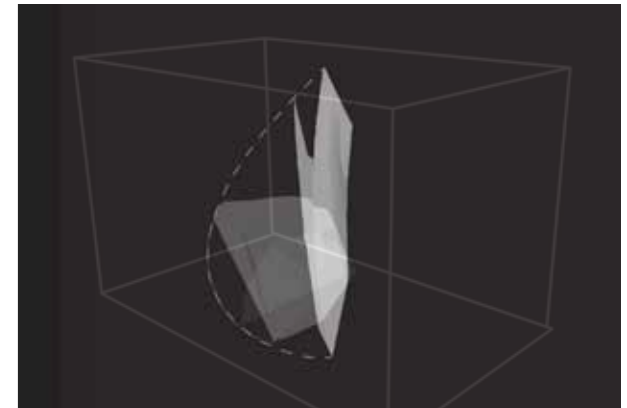
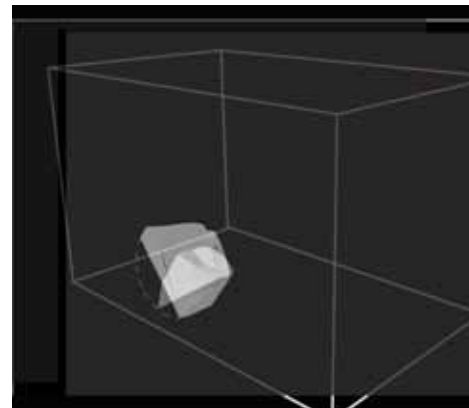
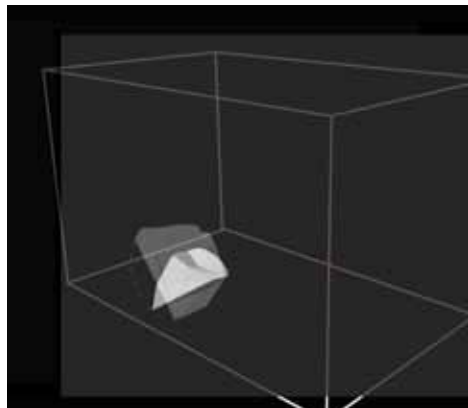
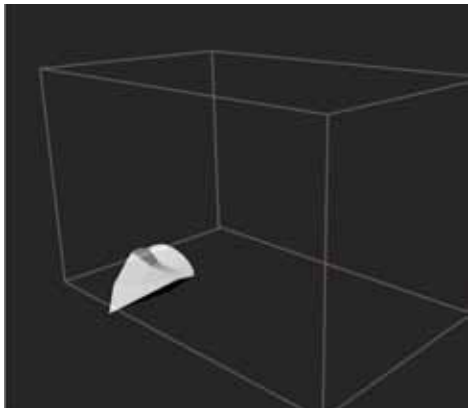
the digital moving models are created by relating them directionwise in the box according to the drawings, starting by the gravitation field, the direction of limbs and surfaces asserted by test-outs

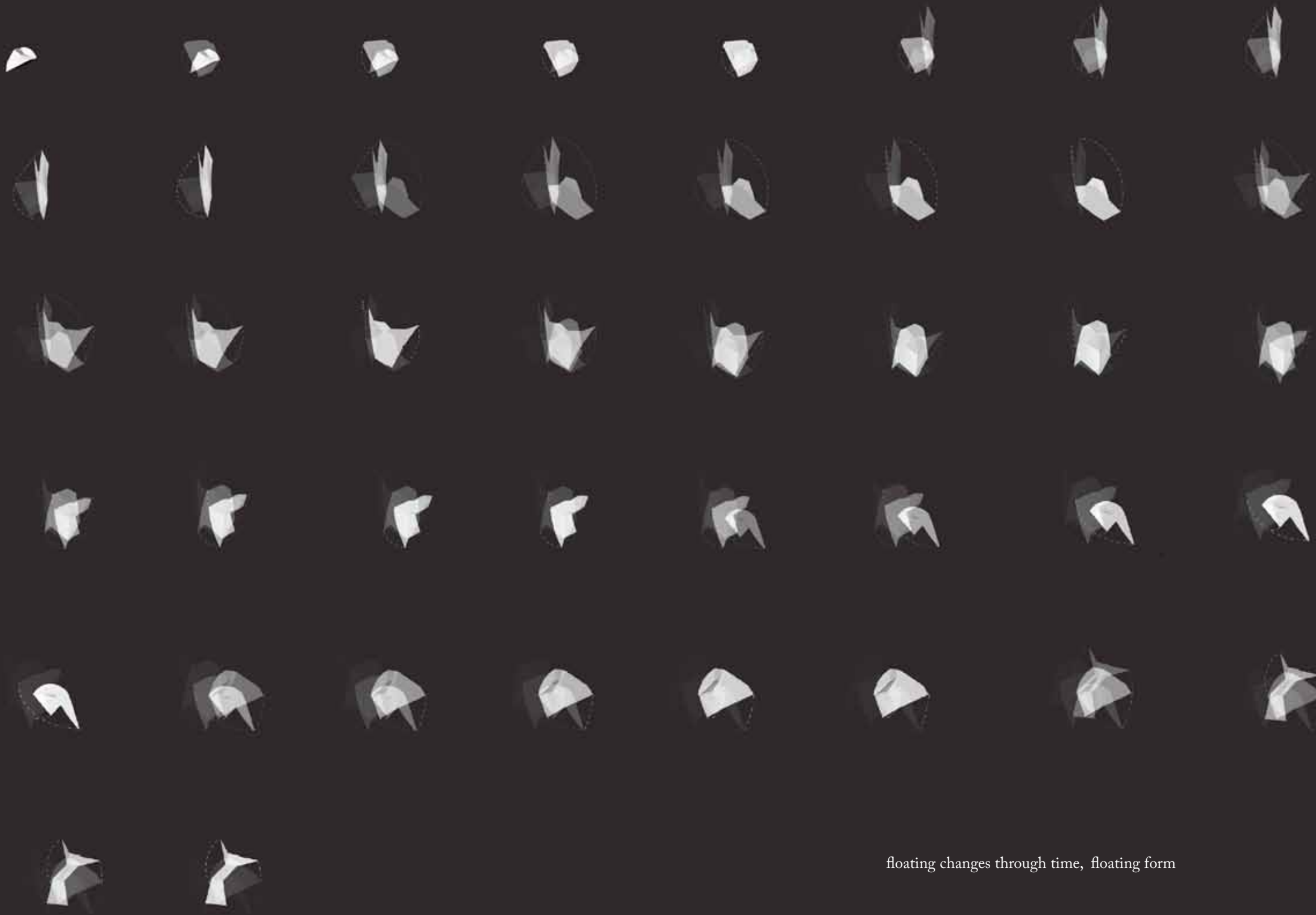
film can be seen at:
<https://youtu.be/rm4OeWmOiV8>

the force of gravitation is the core - if the center of gravity is moved outside the center of mass, there's movement.

the relationship between the force of gravity and the gravitational field decides and informs the form.

through movement, space is experienced as relational change.





floating changes through time, floating form

modelling parts to whole

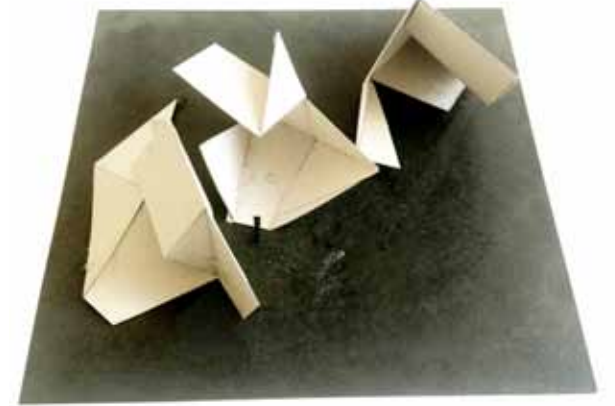
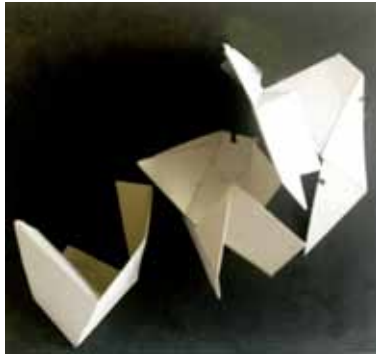
selected movement phrases are analyzed and modelled from parts to whole
each part a relative dimension to whole
junctions for achieving movement found



points, lines and surfaces

selected movement sequences : # twist and turn
enclose - open up
contract - release

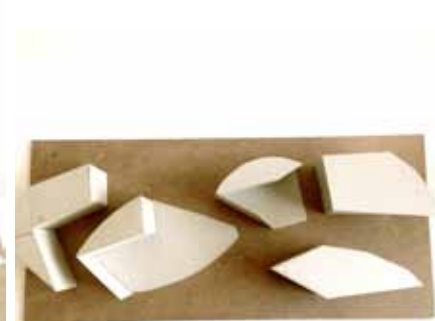
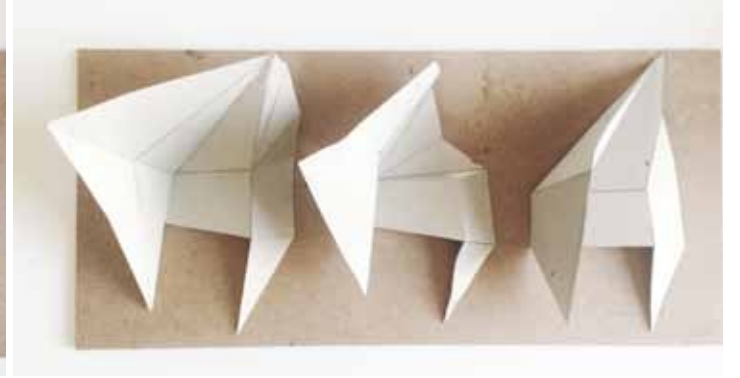
twist and turn

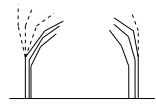


enclose - open up



contract - release





unfolding

rising

opening up

expanding

opening up

expanding

rising

releasing



folding

enclosing

including

enclosing

including

contracting

collapsing

enclose - open up

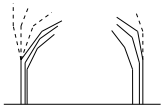
contract - release

include - expand

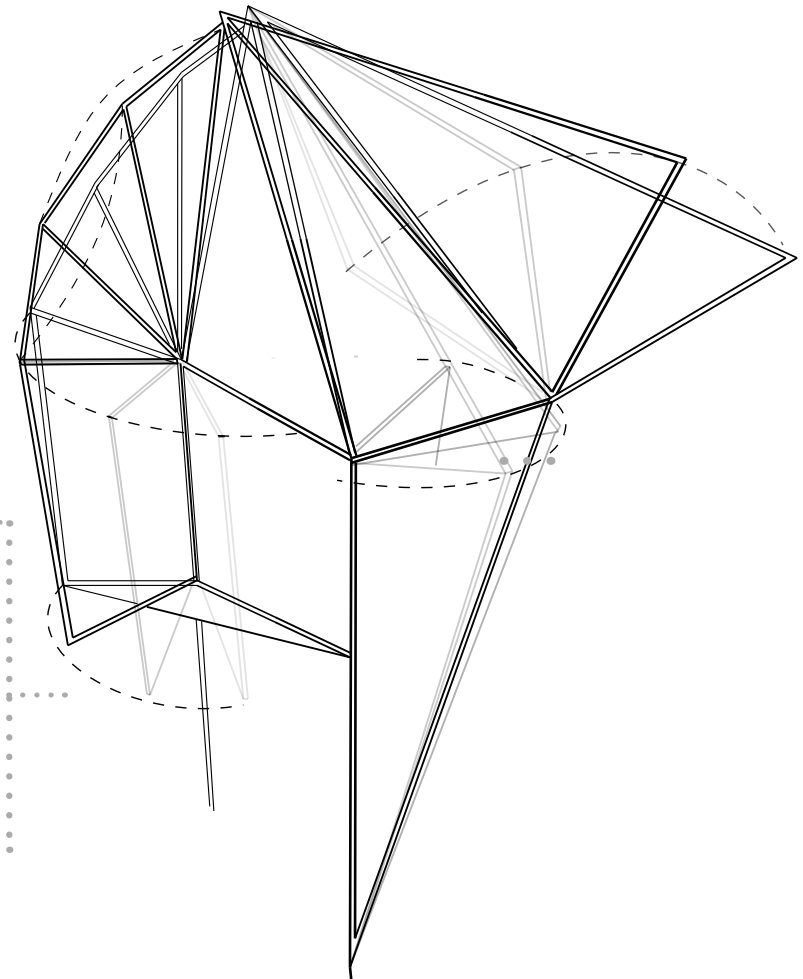
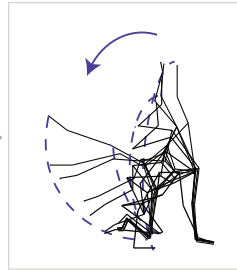
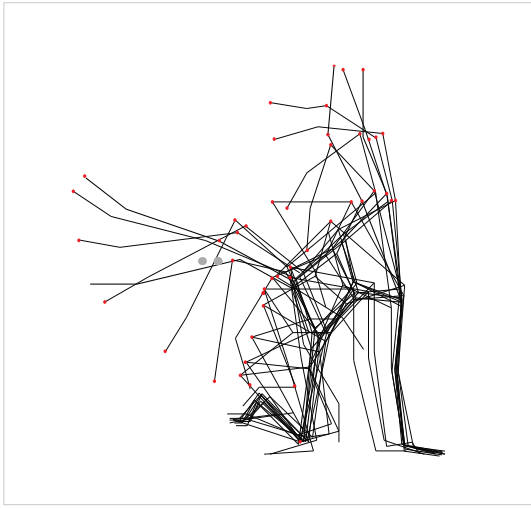
collapse - rise

fold - unfold

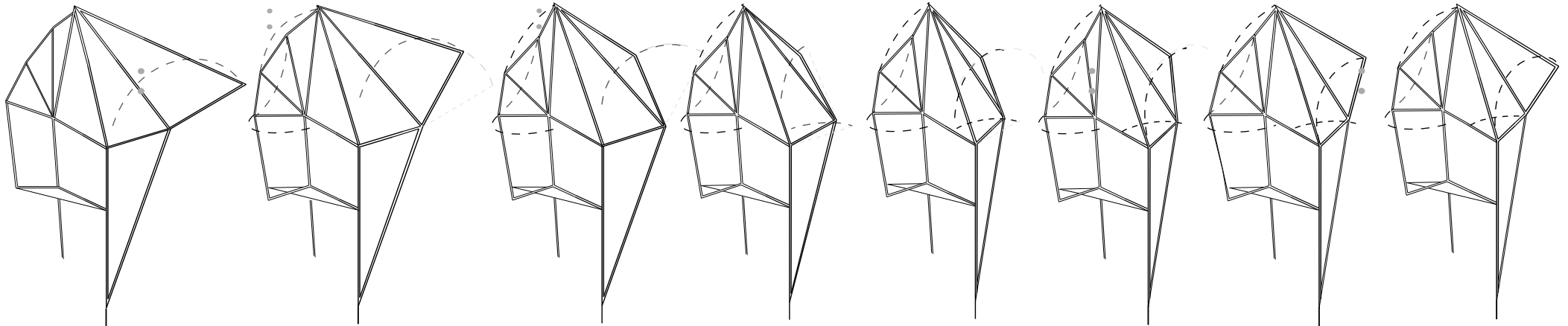


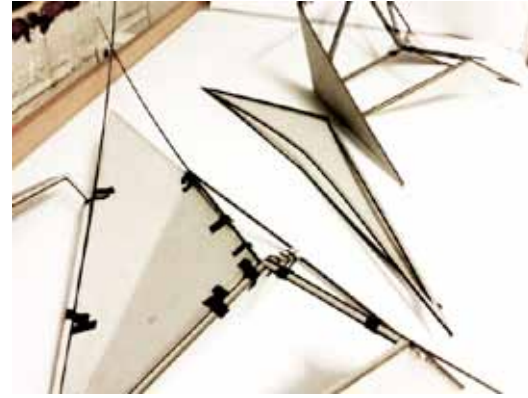


Soundreflectors - movement sequences translated to architectural structure



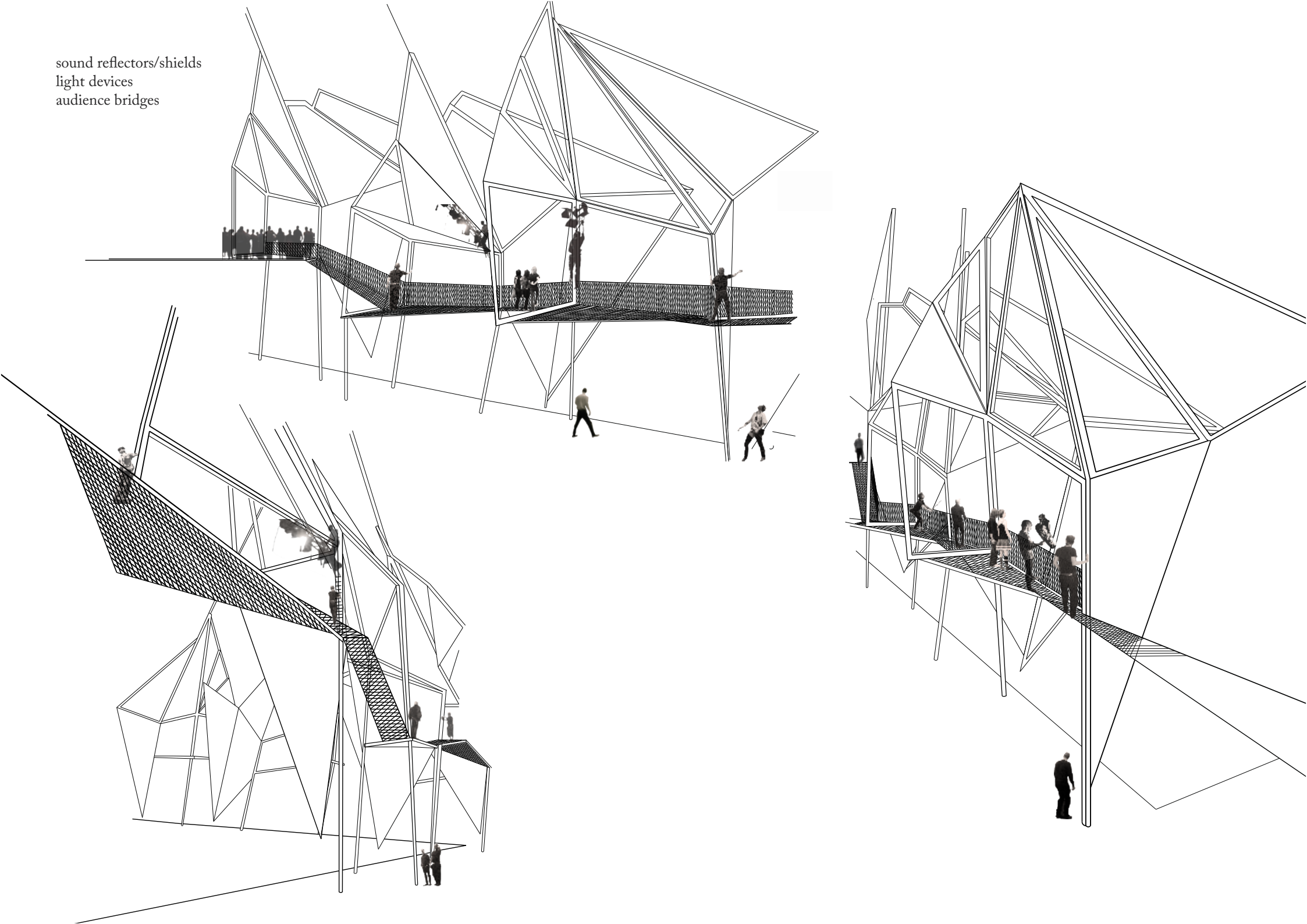
Soundreflectors - architectural structure with agency.

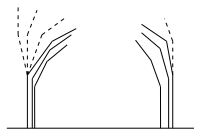




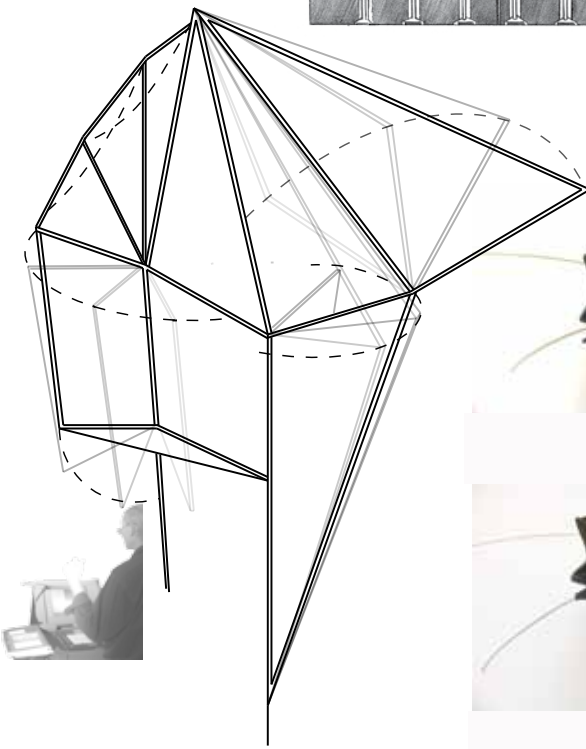
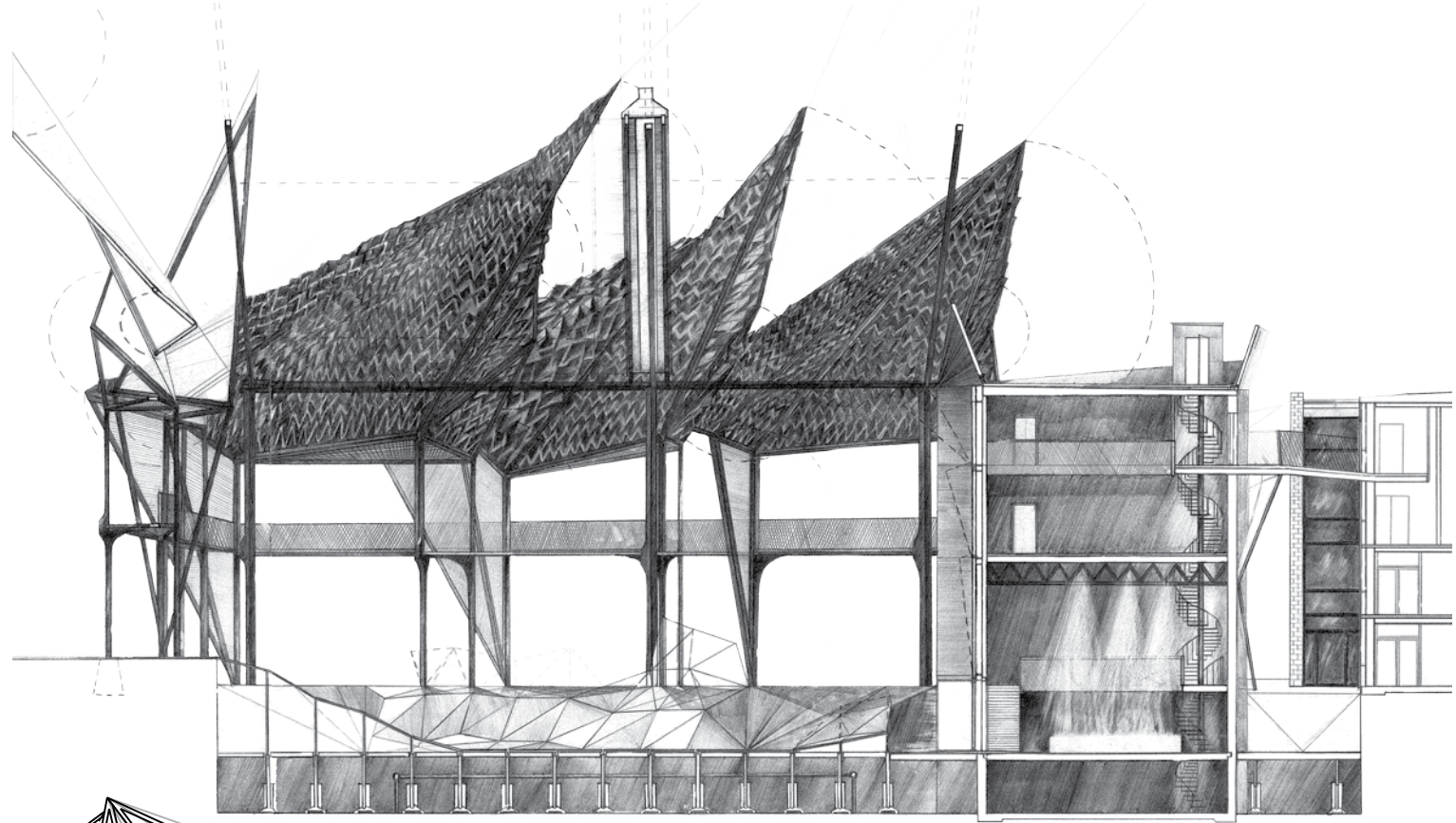
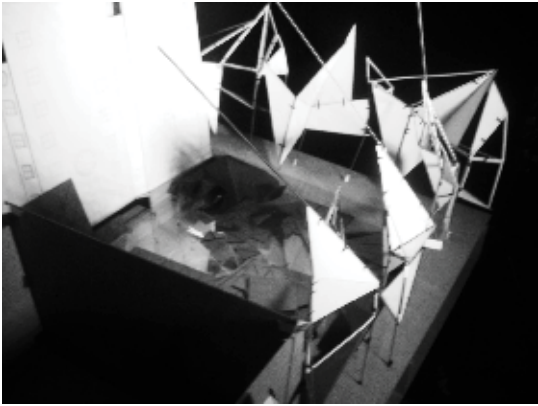
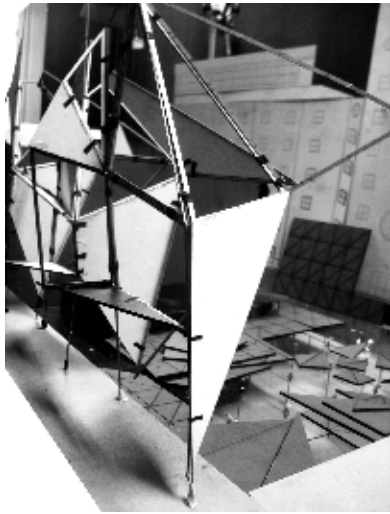
surfaces are joined together with flexible joints, just as the human body, in order to create moving variable structures

sound reflectors/shields
light devices
audience bridges



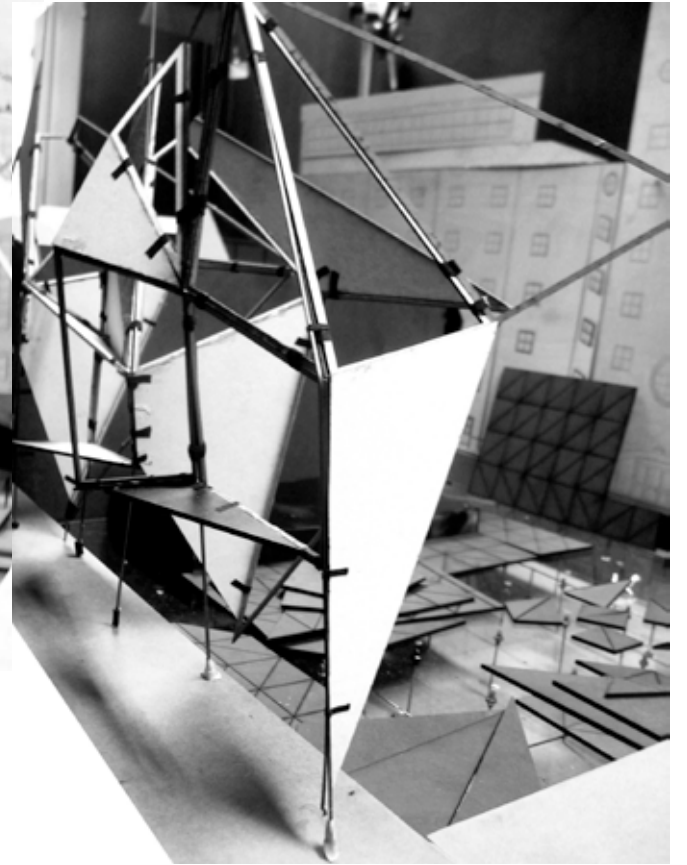
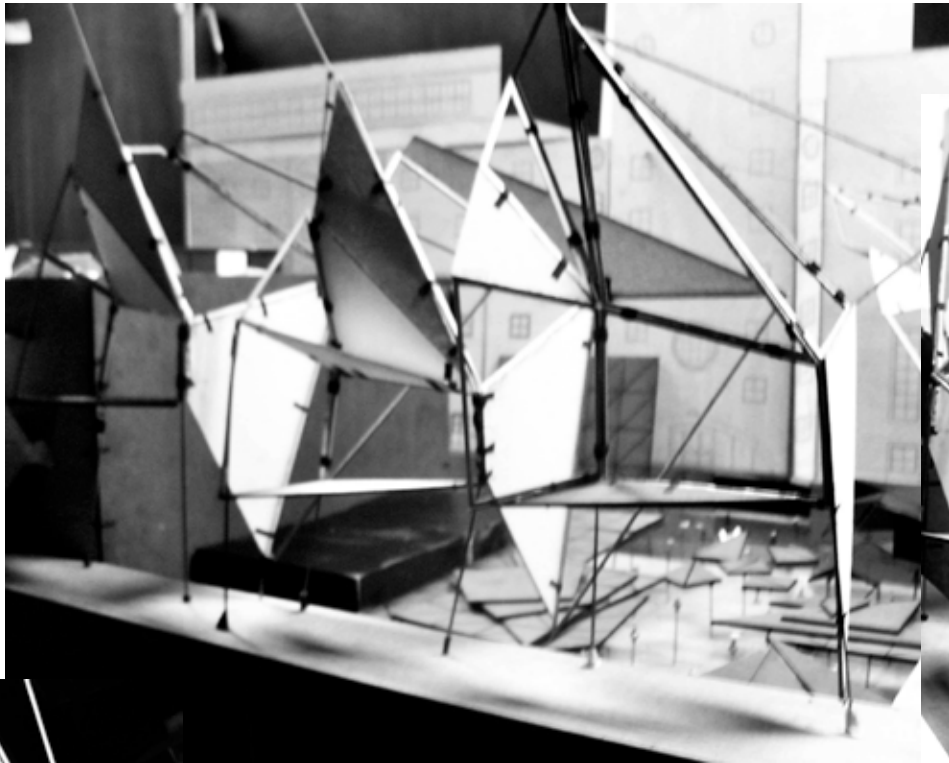


soundreflectors material

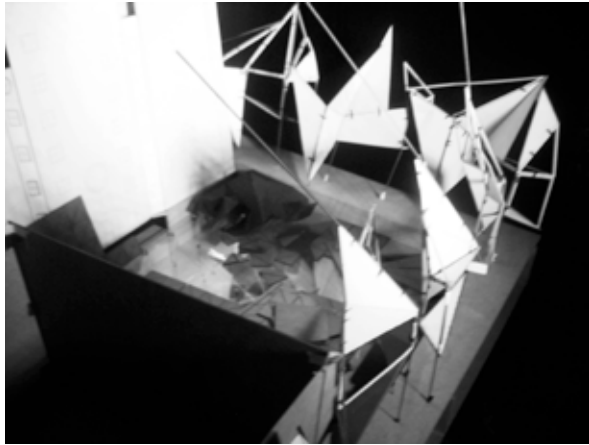


material
the auditory reflectors are dressed in weatherproof textile absorbing or reflecting sound depending on director's particular wish for each performance
these textiles are treated to receive steadiness, and then folded in an origami pattern, thereby optimising performance and variation
the reflectors respond to information given by sound program





film as design tool - exploring time as compositional element



T I M E - movement qualities

In the aim of achieving a time-based spatial architectural proposition with moving parts and reconfigurative entities, the thesis explores through 3d modelling, through model as test-site and through film what qualities this architecture will have.

The qualities were found using film recordings of moving 3d models. The models and sitemodel were staged, enacted, searching answers on how the phrases would be put together, on how the physical changes of form are done in time.

Movement - as changing fluid relations - concern change of shape (form) and movement patterns through volume.

By moving, or being moved, points in space are put in relation by the structures. Spacegrids are created through these spatial relationships between many components of structure. Changes of these spatial geometries are about direction (spatial), dimension (in space) and plan.

Changing relations are about distance, volume, acceleration, velocity, direction, vectors.

Speed of these movements becomes a qualitative perception of rhythm in changing conditions, a score.



Transition and reconfiguration can be sudden, sustained, slow, strong, weak, nervous, forceful, careful, smooth, suggestive, demonstrative, flowing, tense, dull, heavy, light, gay, saddening, collapsing.

Varying speed in energyrelease for the structures to move will make the work varied. A contrast between a sustained and sudden energyrelease changes movement quality. Movement aesthetics articulates the feeling of a work. The particular dynamics - qualities - are created by how the force (intensity in energyrelease) is used.

The users - directors through soundprogramming, stageworkers and audiences will tune this scene to the particular end of each performance and duration in time.

The instruments - the auditory reflectors and the reconfigurable scene floor - are responsive and interacts, can suggest.

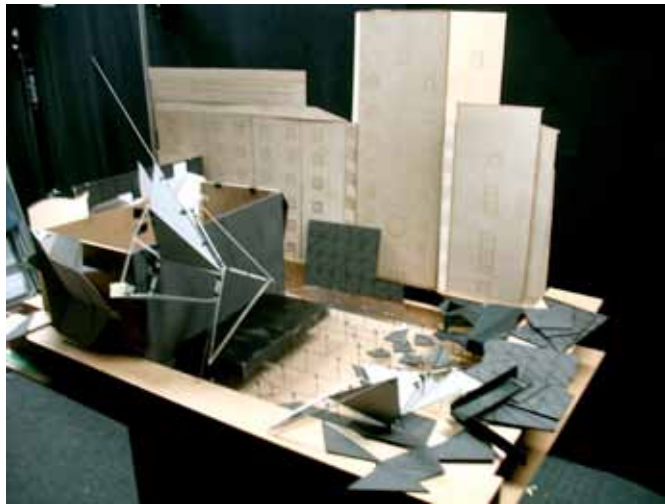
As in dance, every single moment in time is experienced as it comes a long (though events are not necessarily sequential as in a static sequential floorplan, but can be spatially reiterated, repeated and looped).

This is also how you'll experience this space which gives it a quality of life, strength and attraction.

The shifting relationships makes place nomadic, dynamic, temporal and animated. Alive.

To that end, these architectural structures are used as instruments.

model as testsite



Testsite: film recordings of moving 3d models at site. The models and sitemodel were staged, enacted, searching answers on how the phrases would be put together, on how the physical changes of form are done in time and what the spatial qualities are.

Film sessions of movement variations

tempo: speed - quick, medium, slow - giving a feeling of hurried, nervous, build up in excitement, strength or climax or of stability or fluidness, and for slow of fear, comfort, pain or tiredness.

durations: the time it takes to complete a movement - sustained, suspended - or finished within one beat

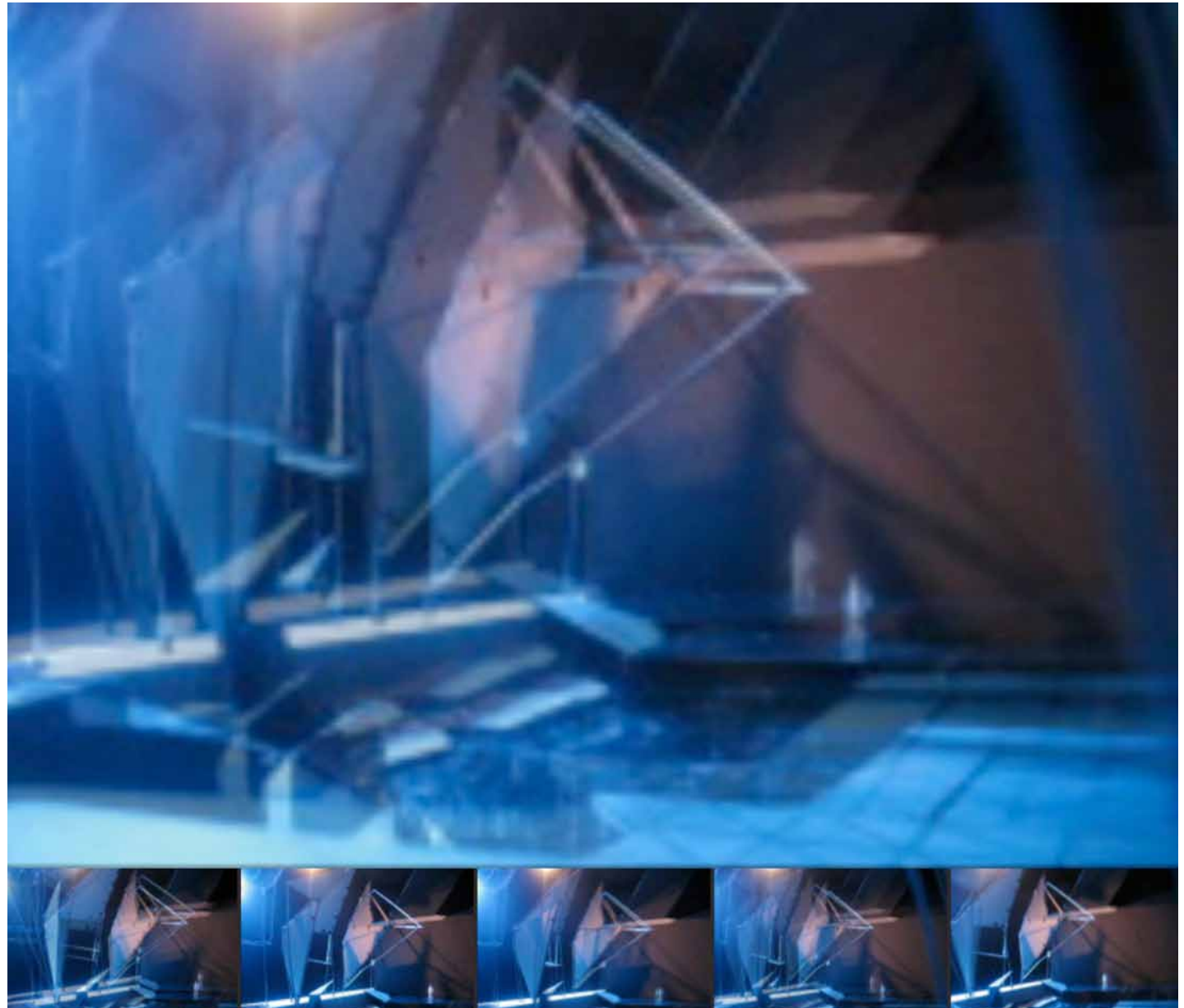
moment: increase and decrease of speed - building intensity or climax, while decrease gives contrast in relation to climax - diluting or calming down.

regular or irregular: regular - giving a sense of stability or strength, or irregular - giving a feeling of unpredictability.

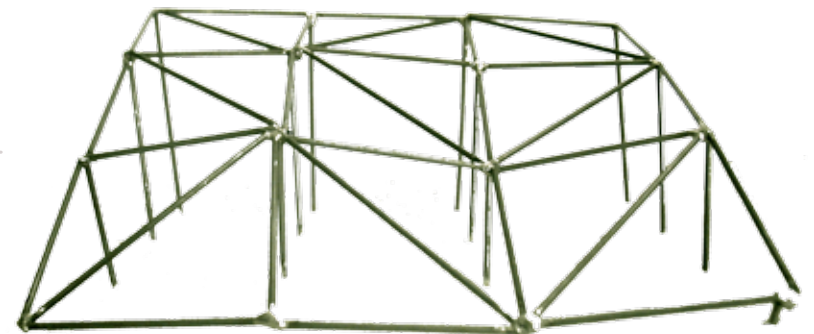
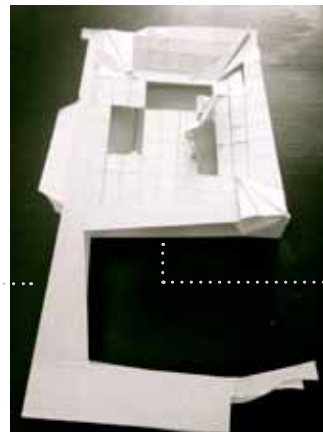
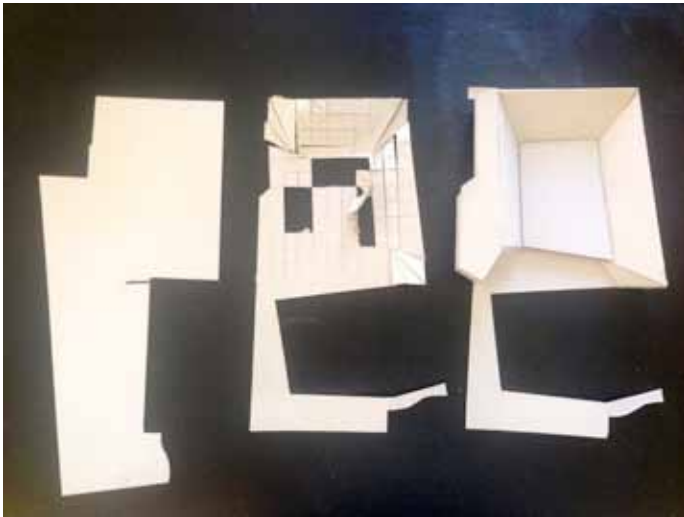
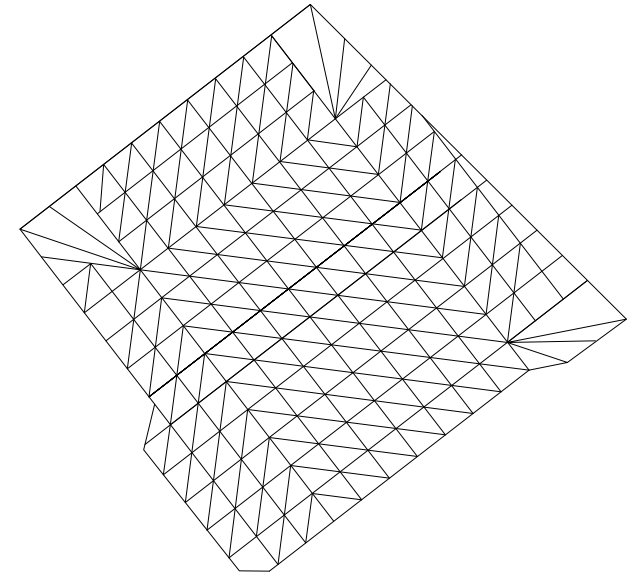
accent: emphasis

metre: when accent recurs at regular intervals - giving regularity in timing - a predictable structure. Movement can be used to either support or contrast predictability.

stillness - can be active, a kind of attendance in progress, a hesitation, a break in flow. Can be used to create suspense, contrasting movement and creating the unsuspected in the next move.

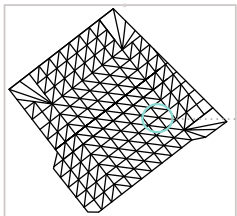
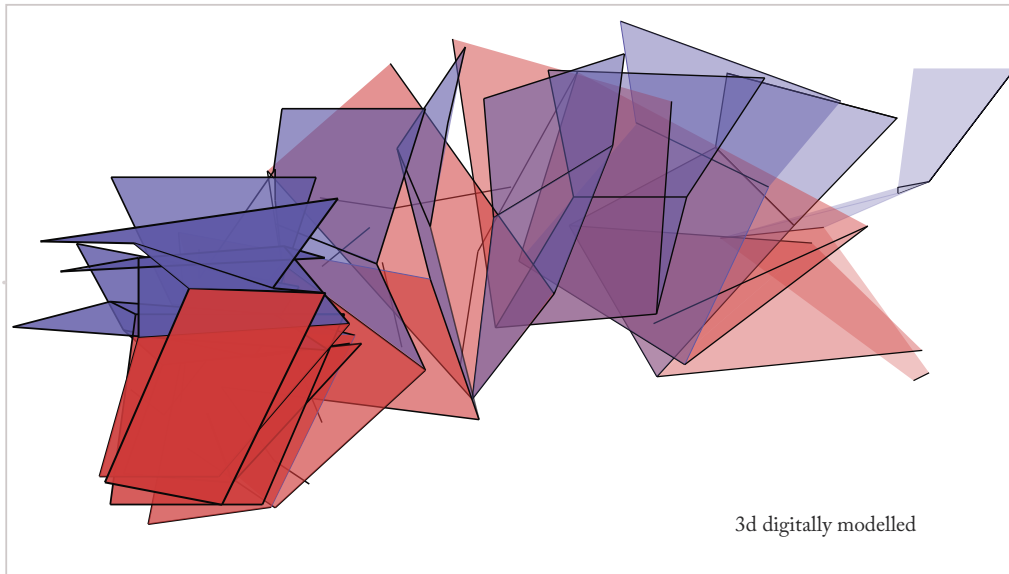
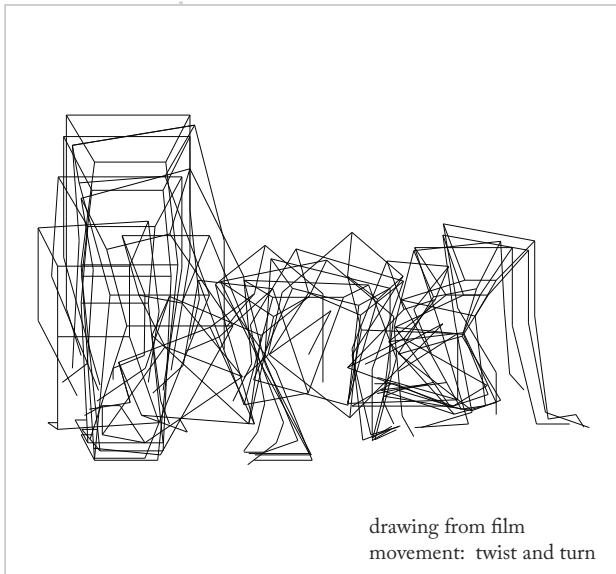
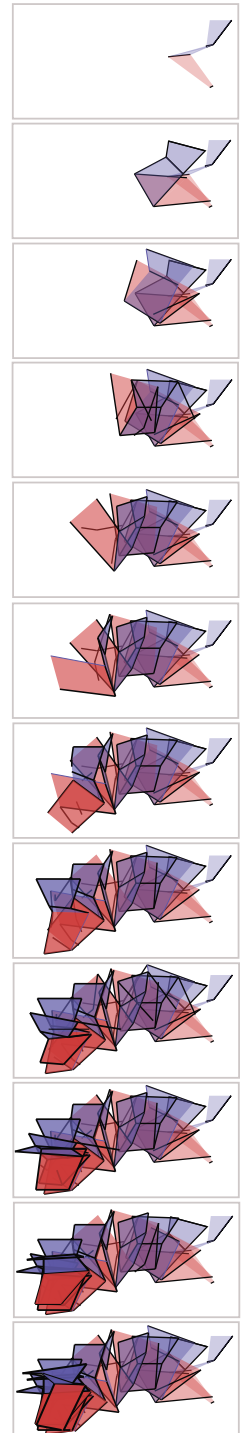
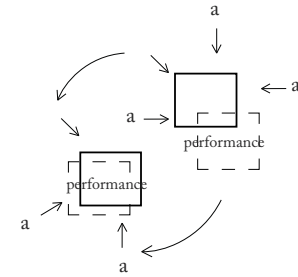
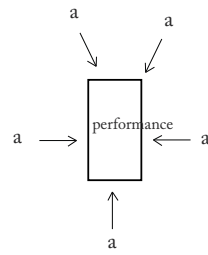
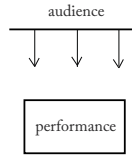
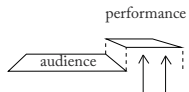
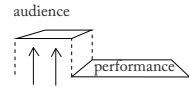


gravitational field

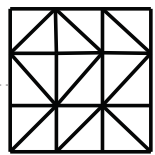


configurative area - model as testsite

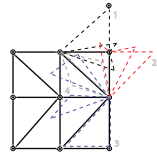
gravitational field



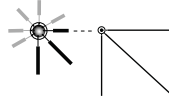
gravitational field / floor



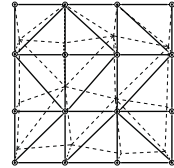
components (2 x 2 m²) joined together by elastic textile



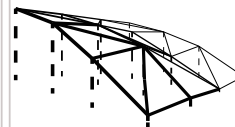
floor pans' performance: twist and turn due flexible joints



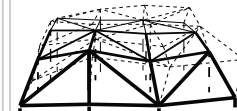
connection floor pan to joint



structure - performance the range of possibilities

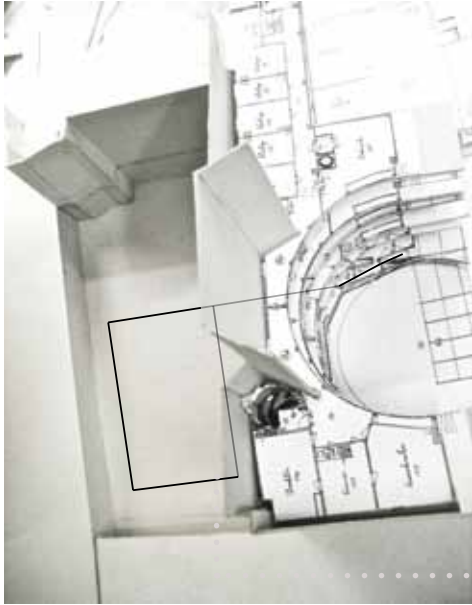
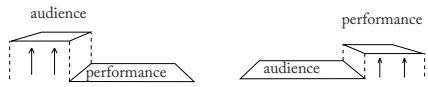


structure with hydraulics - performance

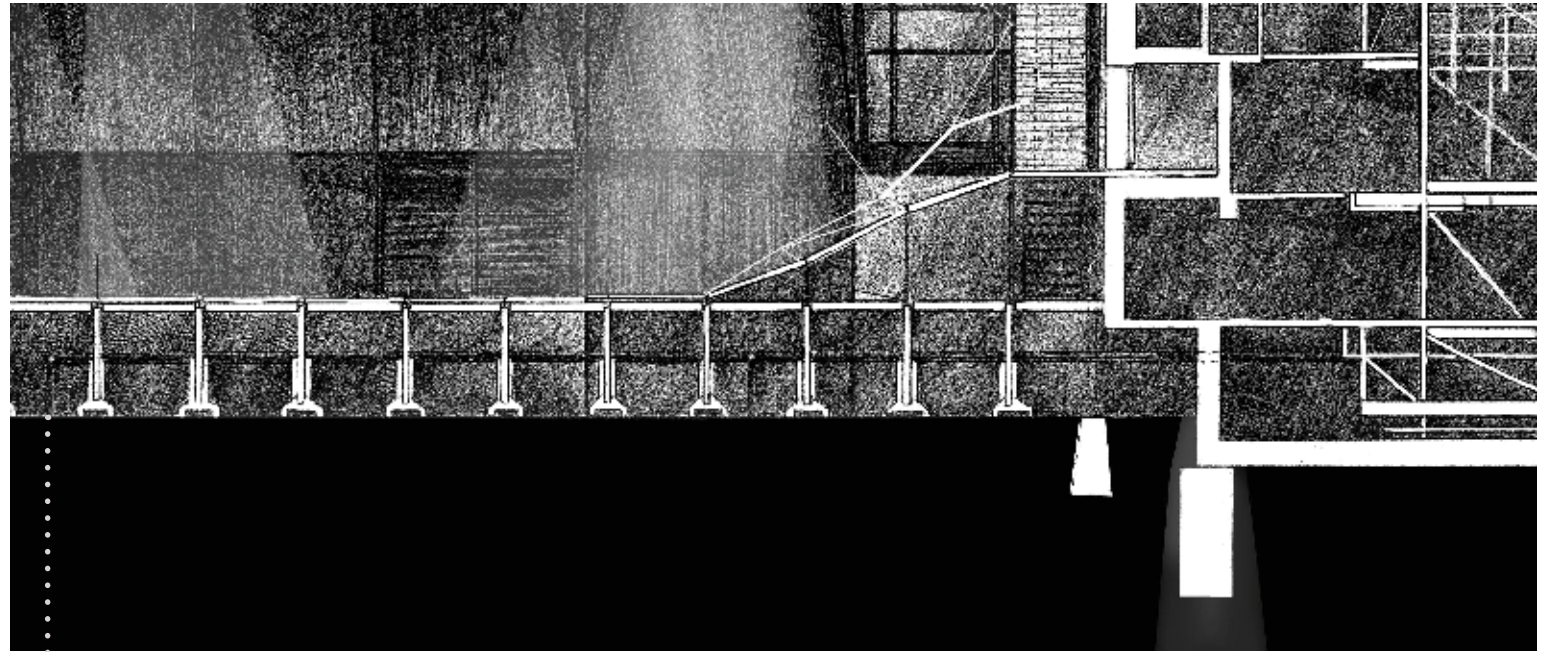
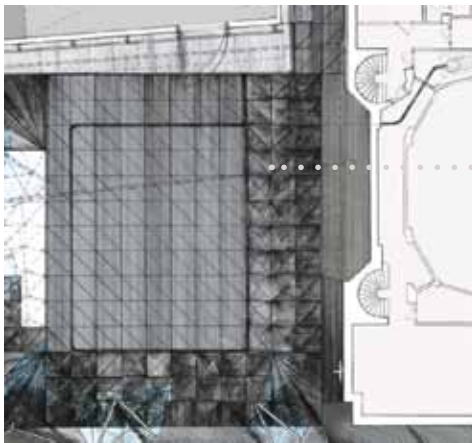


structure with hydraulics - performance

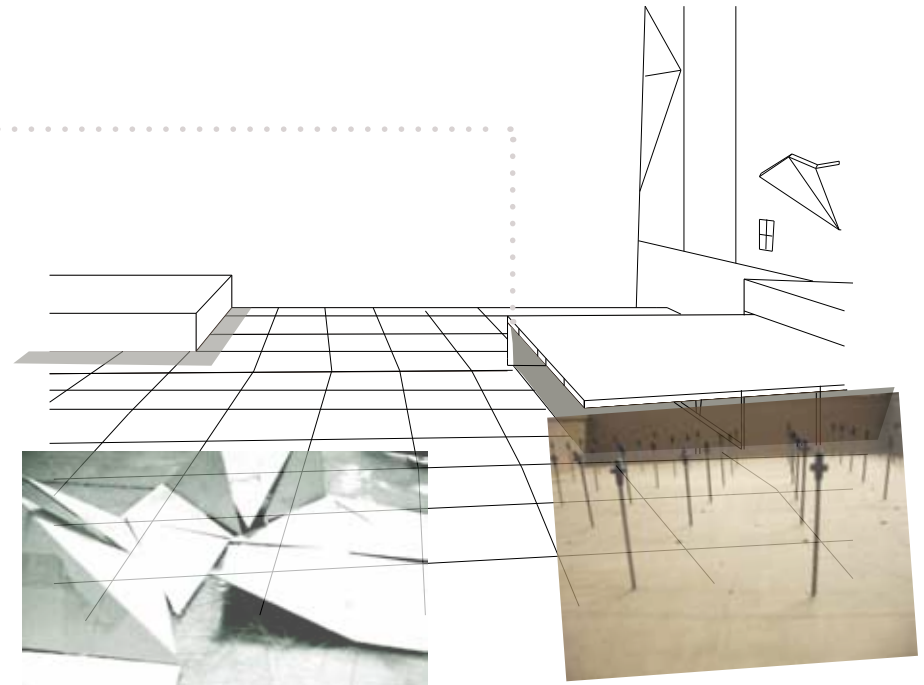
gravitational field



Existing scene rotation mechanisms used to refurbish stage areas in the field.

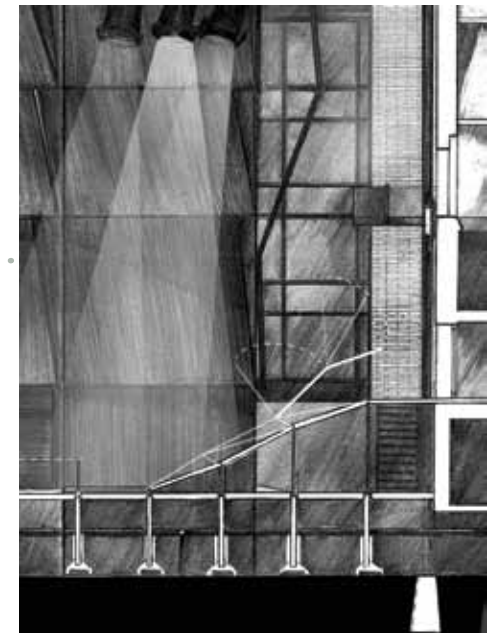
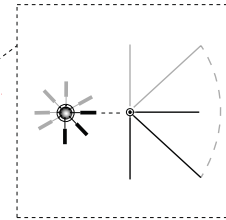
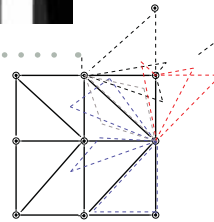
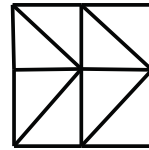
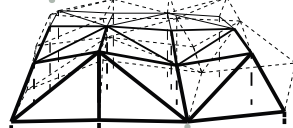
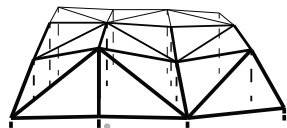
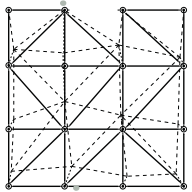
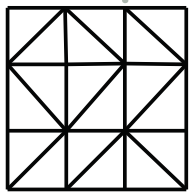
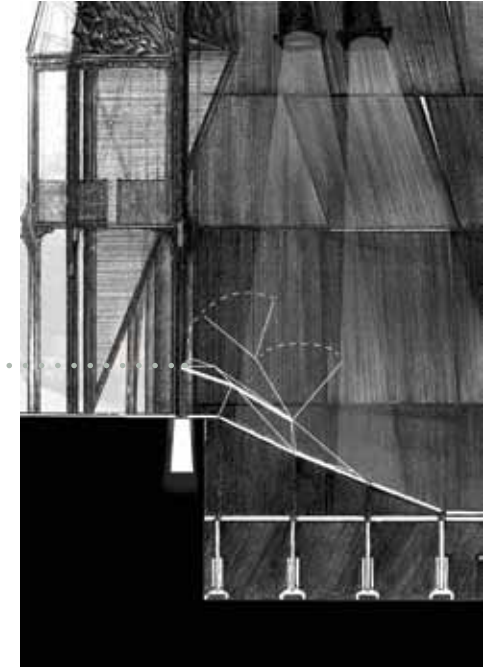


Hydraulics enabling the field to reconfigure, raise or lower, moulding space into performative landscapes.





Gravitation field / twist and turn / hydraulics



gravitational field

The area is at the same time flexible scene floor, flexible audience seating and stages.
The architecture proposes a range of possibilities, enabling space creative initiatives, as in dance.

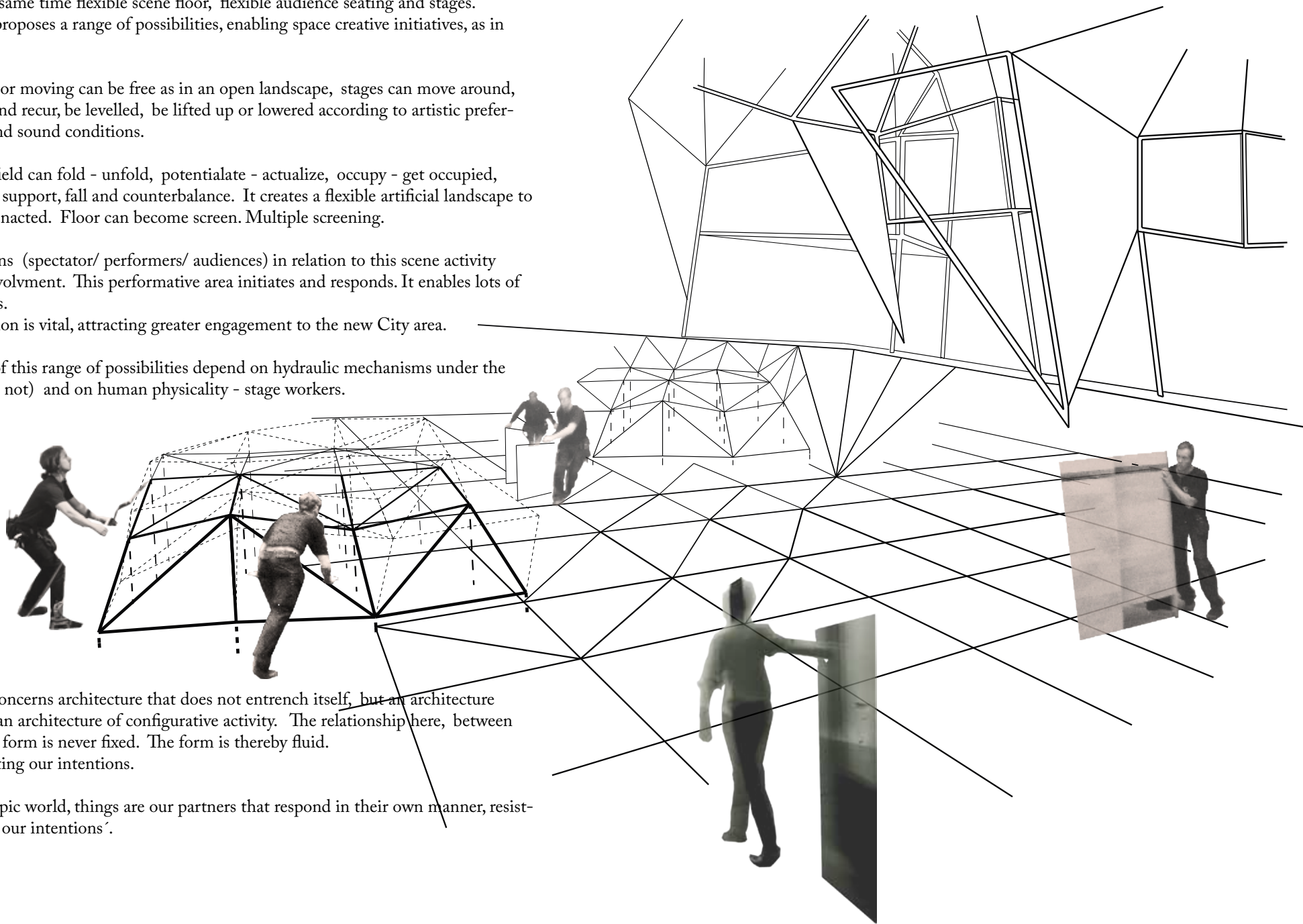
Seating, standing or moving can be free as in an open landscape, stages can move around, occur, disappear and recur, be levelled, be lifted up or lowered according to artistic preferences and sight and sound conditions.

This responding field can fold - unfold, potentialate - actualize, occupy - get occupied, twist, turn, touch, support, fall and counterbalance. It creates a flexible artificial landscape to be occupied and enacted. Floor can become screen. Multiple screening.

Changing positions (spectator/ performers/ audiences) in relation to this scene activity lead to intense involvement. This performative area initiates and responds. It enables lots of artistic possibilities.

The time-dimension is vital, attracting greater engagement to the new City area.

The functioning of this range of possibilities depend on hydraulic mechanisms under the floor (activated or not) and on human physicality - stage workers.



The proposition concerns architecture that does not entrench itself, but an architecture in transition. Its an architecture of configurative activity. The relationship here, between humans and built form is never fixed. The form is thereby fluid. Its design supporting our intentions.

' In our macroscopic world, things are our partners that respond in their own manner, resisting or supporting our intentions'.

(Vasely)

relative form

form is relative - to :

movement of points and surfaces, thus relative

form in itself

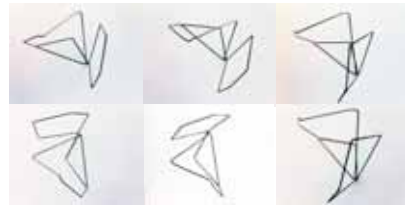
placement of the person relating to it

Activating volume

We can walk around a sculpture to experience it. Architecture we move through. Architecture often controls how we experience space through time, by sequencing spaces and movement. Repetition of content in such space gives sameness. It makes it impossible to change content by moving in that space and does not encourage movement. In opposite, sculpture changes performance as an answer to our own movement - it interacts with our experience. Initiates movement.

Dance creates space from within, while defining its spatial properties and score. Space is volume. Enacted. Space is experienced from within itself through movements, and its an intimate relational change. It gets its form from relations of parts in space.

Movement is an effect of changed relationships - a physical dialogue. Points in space are put in relation through time. Its not necessarily sequential.



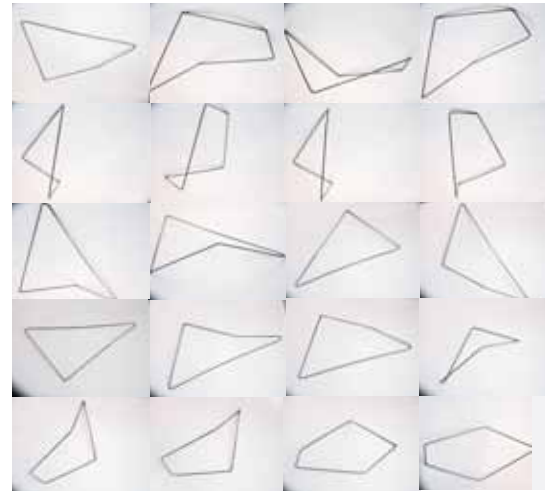
same 3d form - varying position of observer

Spatial design here becomes one of movement, line and form, of intimate space and intimate time - the kinesphere connected to your body. The experience of such space is depending upon your own position. If you're moving / keep still or if the 'landscape' is moving. Its about the creation of space in relation to the immediate experience of it.

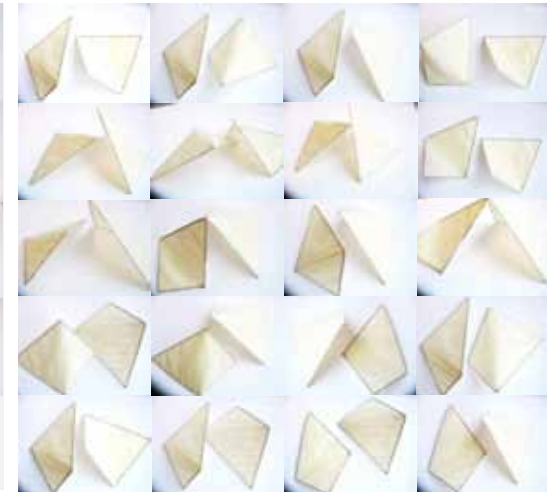
By sequencing spaces, architecture often achieves total control over not just the experience, but also movement and body. In this thesis, architecture is encouraging movement and interaction.

Since its situated in a city space/volume of pre-existing buildings, it also deals with permanent structures adjacent to its own configurative area.

The volume and facade of the existing City theatre is opened up with bridges and balconies and penetrations for doors and technical devices to allow functional flow between the two structures.



same 3d form - varying position of observer

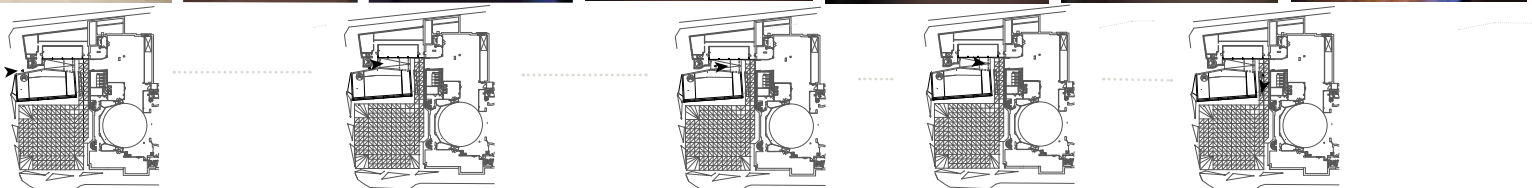


same 3d forms - variations from positioning of same objects

The inbetween spaces of old and new are charged and activated. Interstitial spaces are charged by movement.

Sequential movement here becomes a highly physical experiences with tilted floor, structures activating volume in all dimensions and space animated by the life of adjacent building volumes - light, volume, movement in between and intimate spaces.

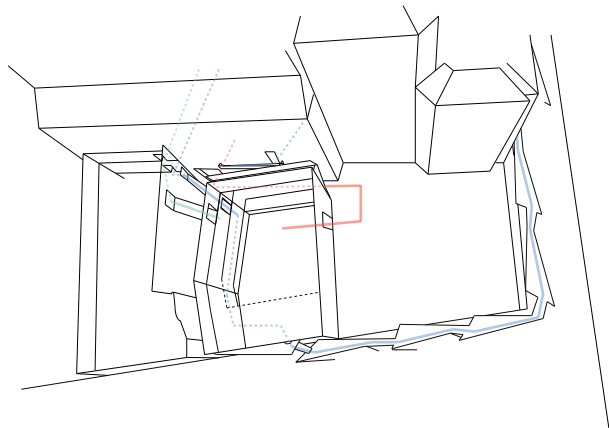
Our perception of movement decides how we experience space. This, in turn, decides how we use it. Surprises tend to encourage intervention.



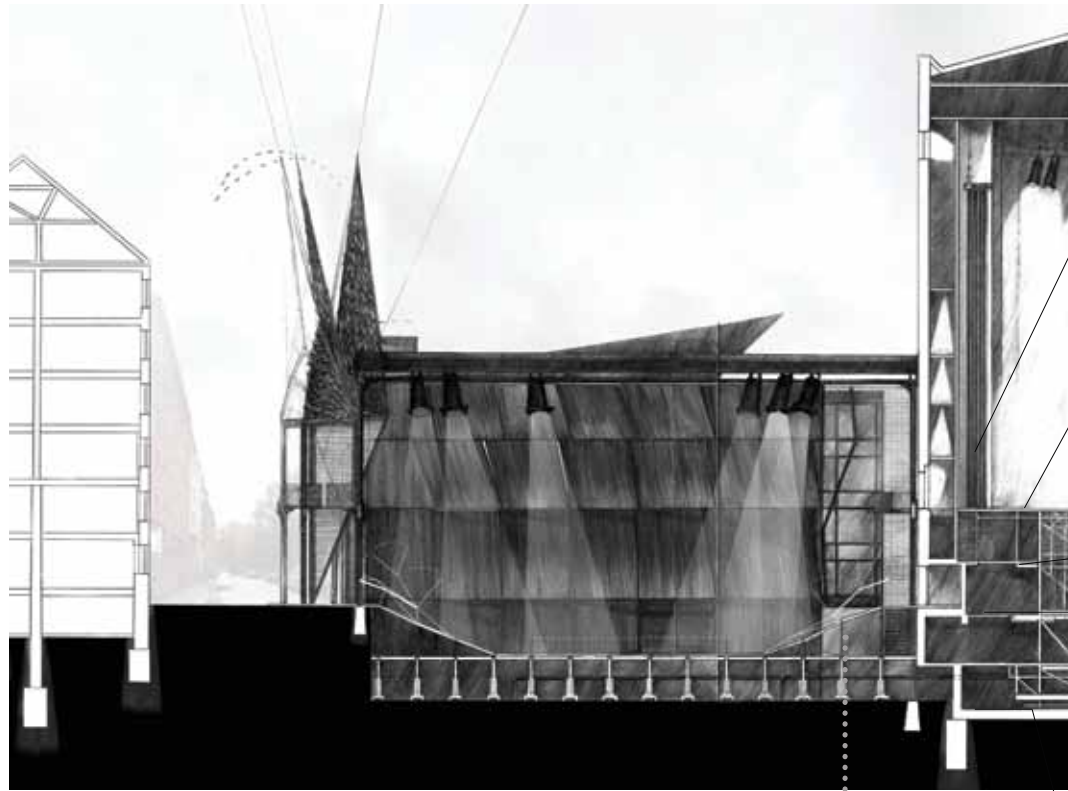
Activating 3d City volume - movement



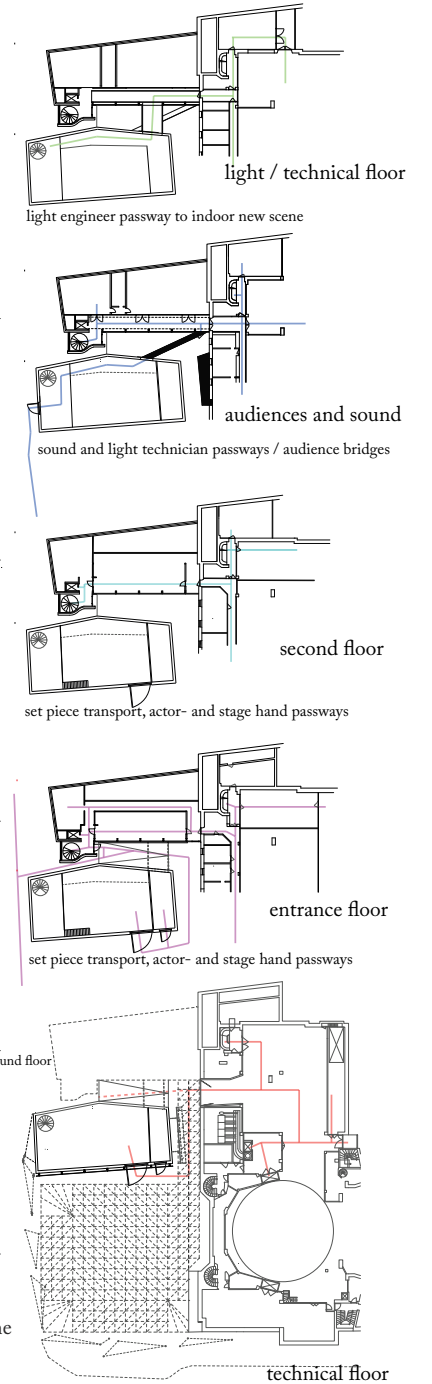
functional flow



penetrations of existing volumes



Interstitial space charged by movement



light / technical floor

light engineer passway to indoor new scene

audiences and sound

sound and light technician passways / audience bridges

second floor

set piece transport, actor- and stage hand passways

entrance floor

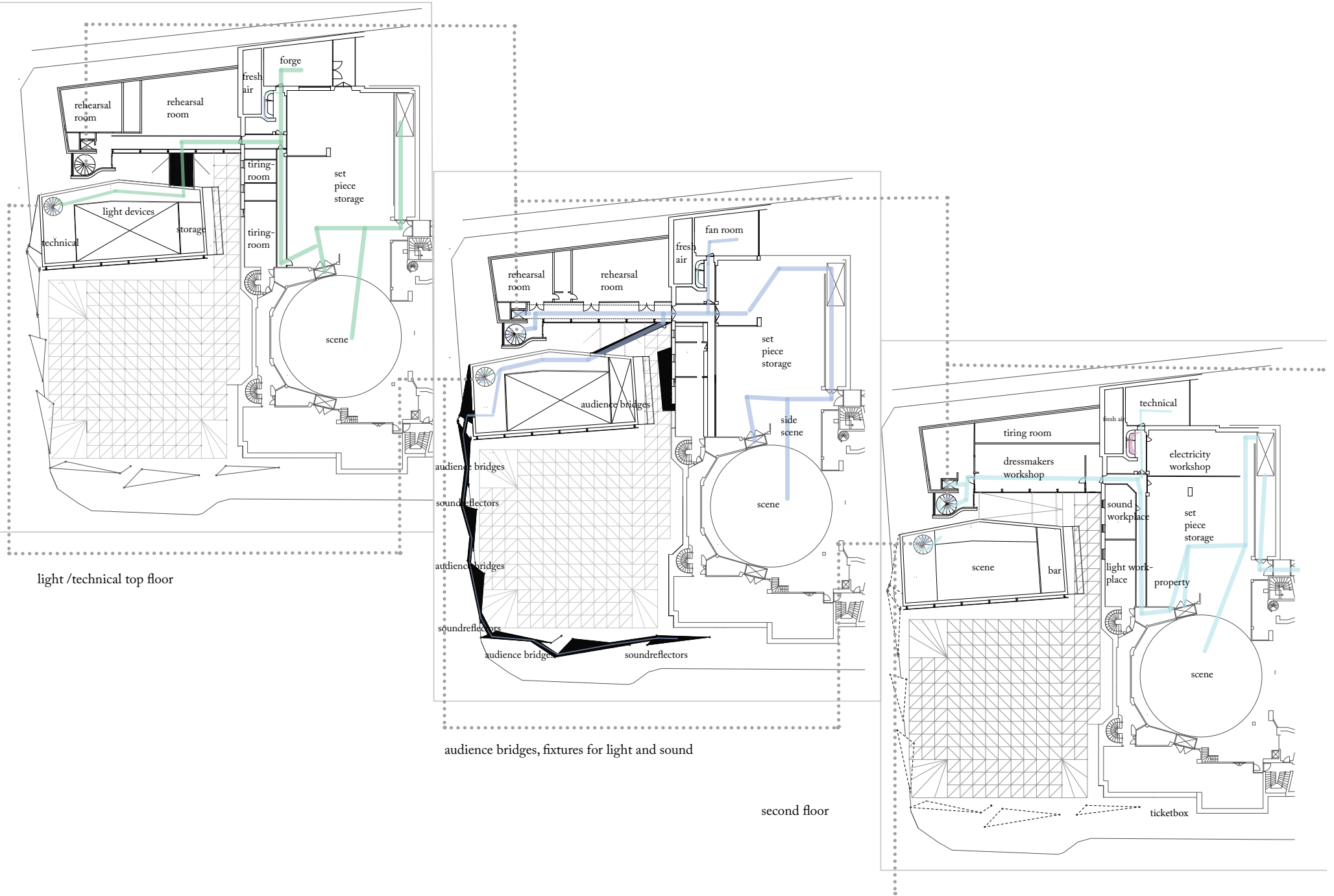
set piece transport, actor- and stage hand passways

ground floor

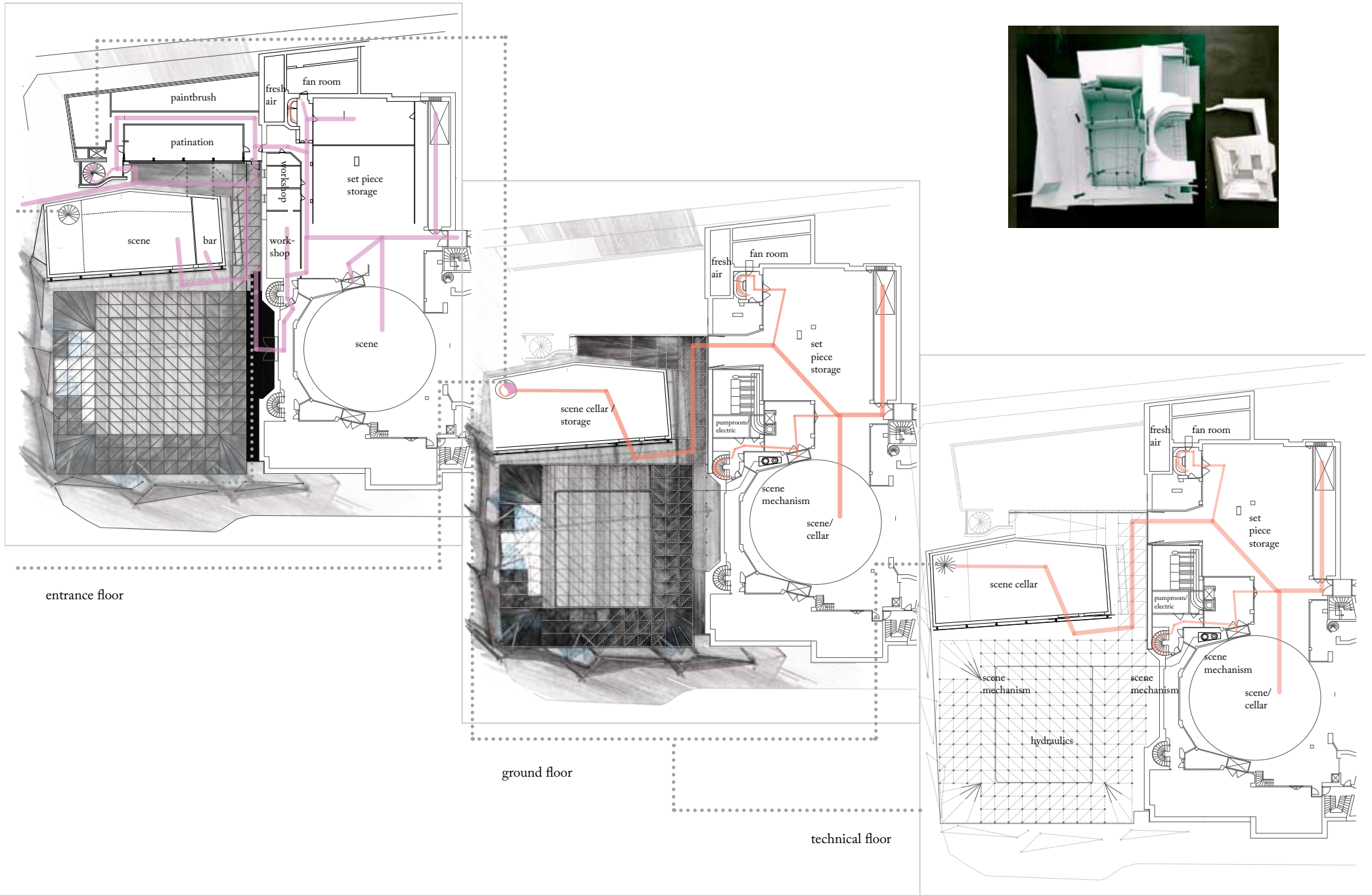
activating volume by structure

technical floor

Movement and flow through volumes



Movement and flow through volumes



CONCLUSIONS

The thesis proposes a new outdoor performance scene at the back of Göteborgs Stadsteater. It holds a set of adaptable auditory reflectors/shields and a reconfigurable scene, a reconfigurative field.

Often in architecture, time is considered stored in space, experienced in its relative unanimity. In this case, architecture as performance will be visible and noticeable at the same moment that we experience it. As in dance, the time dimension of the creation of space and the experience of it will be the same. As in film, the experience of the work is its reality. This architecture exists in one very same time-dimension: creation/visibility/experience.

It's an architecture experienced through body.

As in dance, this architecture is both created and experienced through physical kinetics, human physicality. This architecture is about the intimate room - the relationship to your body, which is forming and reforming space. It's also about the architectural body in relation to the larger space - to the 'outside' to which it encloses / opens up / reconfigures.

It gets its form from relations of parts in space. Therefore, this architecture is relational.

By sequencing spaces, architecture normally achieves total control over movement and body. But does architecture really have to be the maximum control of time through space, thereby also of its users? In this thesis, architecture proposes to just set the range, thereby enabling spacecreative initiatives, as in dance.

The relation space, dance - choreographer - dancer is here translated to space, architecture - user. Can the 'user' in architecture be the choreographer? That is: architecture as a living physical instrument tooled by its user?

The proposition concerns architecture that does not entrench itself, but an architecture in transition. The relationship between humans and built form is never fixed. The form is thereby fluid. As in Vasely's quote, 'things' or here, the built, constructed man-made supports our intentions:

'In our macroscopic world, things are our partners that respond in their own manner, resisting or supporting our intentions.'

This means architecture that recomputes. It's an architecture of configurative activity. Of practices. It's responsive, thereby also configurative.

This architecture through practices - what are the structures actually doing?

As in dance these structures perform as instruments.

The adaptive auditory shields respond to sound (and are used as audience bridges) and the scene field is acting as gravitational field, adaptable and responsive to spacecreative impulses of director, stageworkers and audiences.



What does this architecture do?

include - expand
contract - release
collapse - rise
open up - enclose
fold - unfold
potentialize - actualize
occupy - get occupied
twist, turn, touch, support, fall and counterbalance

The thesis explores through 3d modelling, through model as test-site and through film what qualities this architecture will have.

Transition and reconfiguration can be sudden, slow, strong, weak, forceful, careful, sustained, suggestive, demonstrative, collapsing and this is done through moving parts and reconfigurative entities.

Proposed changing positions (camera/ spectator/audiences) in relation to this scene activity lead to intense involvement. Choreography of space in time leads to a performative architecture that initiates and responds.

The time-dimension is vital and attracts greater engagement to the new City area.