### Mixed Movements - performance-based drawing

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#### Body and the making of architecture - summary of aims:

Mixed Movements is a research project engaged in performance-based architectural drawing. The project works with dynamic drawing, relating architectonic implementation to body and movements. My intention with the actual work is to present the drawing material as interactive 'space-time tablets'.

Architectonic implementation is a question of relations between the human body and a body of architecture. These relations are activated by our different approaches to drawing materials. A drawing

may explore architectonic problems at other levels than those related to building. This exploration is a special challenge and competence implicit in the type of architectonic research we call artistic development work. The project *Mixed Movements* generates drawing material not primarily as representation or communication but as performance-based media, making the body being-in-the-media felt and appear as operational forces.

# Mixed Movements as interactive 'space-time tablets' - summary of method and implementation:

'Space-time tablet' is a concept you may think of as a kind of computer game or installation, presenting a series of projected interactive drawings and related architectonic 'questions'. The tablets present different tectonic motives related to different forces of movement. The 'player' meets a drawing tablet as an articulated pulsating architectonic statement and, from here on, will be able to 'walk into' the drawing, transforming and deforming its material.

Acting with a dynamic drawing, the player uses her own body movement. The body movements are

simultaneously transmitted into different parameters of the drawing material and also gives rise to discuss scales and levels of implementation. The concept of scale is understood here as a matter of different levels of meaning and presentation, as well as possible courses of acting rather than a matter of size or drawing conventions.

Frames from different drawing-fields of a space-time tablet are presented as figure 1-3.

#### Transformation, deformation and singularity - summary of theory and method:

In questioning conception of architecture, the notion of transformation and deformation seems especially suitable as two different categories of composing.

Transformation is the domain of diagram or 'thinking with architecture'. A diagram is an arrangement of material and flow-through forces, which may transform the material. Diagrams transform a material from one form to another. The moves of the transformation produce new places or singularities in a transformation series. The diagram operates by making something appear and what emerges is the *Figure* switching between force and form and between transformation and deformation.

Deformation subordinates movement to force and also abstraction to *Figure*. Deformation disturbs or twists the Figure, directly related to the different sense organs of the body. Sensation, Figure, is already an 'accumulated' sensation related to rhythm – a rhythm running through a drawing as it runs through a piece of music. Figure-rhythm relations are the vectors of sensation – they are what make a sensation pass from one level to another. In the coupling of sensation, rhythm is already liberated; it confronts and unites the diverse levels of different sensations: it is now resonance.

#### Keywords

mixed movements, space-time tablets, interactive drawing, transforming and deforming, diagram as 'thinking with architecture', resonance model, the body being-in-the-media,

#### Body and the making of architecture - aims: How to challenge architecture by the capacity of the body to affect and be affected by movement?

Mixed Movements is a research project engaged in performance-based architectural drawing. The work inscribes itself in a tradition that conceives the history of body and architecture as interwoven. Sanford Kwinter characterizes such shifting relations. He points from the ideal body of the renaissance, regulated by geometric figures we know from Vitruvius, to the present understanding, where this ideal body gives way to plastic movements of a surfer. Kwinter describes the surfer not just as a 'first mover' but as a body effort that, in the middle of currents and waves, finds emerging features, singularities and unfoldings she can interact with and melt into through fluent techniques.

The drawing being challenged by this contemporary body is the starting point for my project. Architectonic becoming is a question of relations between the human body and a body of architecture with the relations being activated by our different approaches to drawing materials. A drawing may explore architectonic problems at other levels than those directly related to building. This kind of exploration is a special challenge and competence implicit in architectonic research as artistic development work. *Mixed Movements* generates drawing not primarily as representation or communication but as a performance-based media, making the body being-inthe-media felt and appear as operational forces.

Mixed Movements starts in the middle of the current and considers the ordinary walking body as an event of tempo, rhythm and affect. Body movements are video recorded, and the rhythm of both steps and mode of moving are reconstructed into a series of notations and into figures and rhythms of the drawing.

In that way, the work is initiated by a focused sensing of the architect with the sensed being transferred into the drawing. The drawing relates to hidden forces; it points out and incorporates the forces and makes them stand out as modes of operation as well as expressions.

Art is able to anchor perceptions and feelings in a material. Thus, art is able to articulate perception and feelings as independent blocks of sensations. To sense is to meet and exchange: the sensing is connected to the sensed and is thereby changed – i.e., 'sensual becoming' is to become other, to come into being through an encounter with forces inscribed into surroundings, events and materials.

Architectonic becoming exchanges the body of the drawing with the body of man. Space-time motives of the drawings break through as differences or possible

worlds, meeting the sensible human body. From the beginning, the way of tying forces and motives in material and media is oriented towards indefinite life thus challenging everyday repetitions. From the start, aesthetics and ethics are closely related endeavours, incorporated in the transforming and deforming of drawing.

Deleuze talks about the role of art as being able to appeal to the world we live in here and now. Defaracteristics of everyday life are repetition and return of the same. Art, therefore, must incorporate these repetitions in order to expose their limits and thereby extract what is different and virtual. The task of a work of art is to open passages from the actual to the virtual thus interrupting repetition and converting copies into simulations and a play of forces. Art extracts 'a little time in a pure state' from the everyday repetitions and thereby opens the capacity of the body to be affected by change.

Converting copies to simulations is an already well-known bodily capacity. Deleuze talks about the everyday body and the ceremonial body, the ordinary movement and the aberrant movement. He argues that these poles rather generate a passage than a difference from the one to the other: the non-perceptible passage from attitude or position to gesture or kinaesthetic twist. To twist body images is art's mode of operation. The 'images' of the body are different to all other images - I know them from without through perception but also from within by feelings. These feelings of body/world forces are the material of art. Art's challenge is to catch and present these forces, not to reproduce or to find shapes - 'not to render the visible, but to render visible'.

Mixed Movements opens a composition plane, questioning the passage from ordinary to aberrant movement, from normal to grotesque body:

How to catch the current of everyday life and twist it into dissimilar rhythms, challenging ordinary sensormotor experience?

How to exploit transgressing power, to measure rhythmic intensity, and to effect and activate the body as part of the drawing process? That is, how to incorporate intuitively created rhythmical changes into the slow work of assembling and breaking up motives, scales, materials and techniques?

And how to unfold these poly-rhythmic and polyphonic drawings so that the compounded other-body of the material may resonate with the acting of the human body?

# Mixed Movements as interactive 'space-time tablets' – method and implementation:

#### How to kinaesthetically interact with different scales and levels of implementation?

'Space-time tablets' is a format you may think of as a kind of computer game. The interactive space-time tablets present projections of tectonic material activated by operational forces; they do not mime possibly built spaces. Nevertheless, the idea with the tablets is to provoke 'the whole body' and thereby exploit kinaesthetic know-how.

The space-time tablets present different tectonic motives related to different movement forces. As a 'player', you 'walk into' a tablet and meet a rather advanced drawing material: a pulsating architectonic statement that consists of parallel levels of articulation. From here on, you can interact with the material using different kinds of moves. Acting in/with a dynamic drawing, you use your own body movement related to features in the drawing material. For example working with Wii- or Microsoft interactive consoles, your handling of the material gives rise to sensual interactions as well as to 'discussions' of scale and level of implementation. The concept of scale I address is a matter of different levels of meaning and presentation, and also of possible courses of acting, rather than matters of size and drawing conventions.

The project will present four space-time tablets, each opening up with a specific relation between tectonic motives and movement forces. And each organized as a series of different drawing-fields or modes of operation.

The project is work-in-progress and the figures selected are from a storyboard. Only one of the tectonic motives is active in figure 1-3 below, dealing with a kind of woven fabric- or composite of surfaces- or membranes and lines- or rib/frames, related to a forward-backward rhythm.

The first drawing-field is set up as an animated map or context. The map presents a tectonic and morphologic topology you may scale ambiguously, creating variable condensations and sites for possible new inserts. The player may move parameters of the map components forward and backward, affecting rhythm and form of the individual characters, and thereby change their interrelations.

The diagram force of the drawing-field is this back and forth displacement of the components transforming local situations. The accompanying moves by the player softly deform the situations, twisted also by fine suture-or cutting lines and lines of associative-words. Figure 1 is a frame selected from this first drawing-field.

The second drawing-field uses frames from the animated map as a context for new space-time experiments. The player may choose a single frame from the 3Dmap that hereby is changed into a 2Dmaterial. This 2Dmap-frame now acts as a template for 'intrusion' of new components constructed as local inserts or fragments. The fragments show up as surfaces negotiating with the map-territory – like fronts or entries suggesting 'something not yet defined'.

These new components activate a new diagram, which I call a passage-diagram that organizes different passage-motives as different types of pathways into the field. Figure 2 is a frame selected from this drawing-field. A third drawing-field described below will relate to the 'series-passage' situated in the right lower corner of figure 2, and composed of the same fragment seen from different angles.

The third drawing-field chooses a passage-motive, i.e., the series-passage-motive, and now functions as a drawing laboratory experimenting with space-time figures related to the motive. The field now works with provisional 3Dfragments, constructed as supple surfaces and contours you may break up, negotiating heterogeneous characters, different thresholds and times. The passage is searched creating a 'resonance model' or kind of transparency between more times and places, using multi-exposures along with selection and rejection of component parameters. This multi-views as well as techniques 'inverts' the figure, inversion being one of the operations you may use to question and disturb a composition. By that the setup of passages operates as a probing into what I call 'kinaesthetic twist', seeking to articulate the passage as a figure that resonates between different space-time positions and between transformation- and deformation forces.

The passage-diagram, then, indicates a type of pathway, but also points at hybrid, resonating techniques used to explore the drawing-field. Sensor-motor patterns related to conventional use of drawing-techniques such as section, elevation and perspective are questioned, provoking the involved space-time-figures. Also the exchange between 3D- and 2Dconstructions negotiates the drawing-field in a more open way, twisted as it is into changing orientations and 'depth' of light and texture. 2D'flight lines' cut up, demarcate, gather and outline potential new contours and profiles, questioning the whole drawing-series. The passage-diagram, thus, makes the player move her point of view - in contrast to the diagram of the first drawing-field, where the player is

supposed to move the components. Figure 3.1-3.4 is series of frames selected from this third drawing-field.

#### Transformation, deformation and singularity - theory and method: How to make heterogeneous materials and forces resonate in architectonic creation?

Questioning conception of architecture, the notion of transformation and deformation seems especially suitable, as different categories of constructing/composing.

Transformation is the domain of diagram. A diagram works through the control of force-relations; it is an arrangement of material and flow-through forces that may transform the material. Transformation forces relate to the material but are at the same time different from it: they work like a flow of energy passing through, not as an inner source. Rules-of-change of a transformation relate to material, not to substance: to function, not to shape. Dependent on motive, the diagram as a 'bodyplan' or a drawing machine may transform and actualize a material as widely different concepts: folded and curled in some sequences, it appears as lion; squeezed and dragged in other sequences, it shows up as zebra.<sup>iii</sup>

Diagrams produce and formalise: compose, limit, stratify, territorize and 'map' the relations in 'abstract machines'.iv The recurrent moves of the transformation produce difference – create possible new places or singularities in the transformation series. The diagram controls but also opens up for a resistance - control and resistance function as 'inside' and 'outside' of force relations. A diagram operates with a call for an outer point of resistance, asking what kind of 'outsides' may be confronted to make the diagram productive. Diagrams and singularities make thoughts move, challenged by related force-flows that never cease to shake the abstract machine and provoke the yet-not-thought. The diagram actualises and exposes the drawing process as 'thinking with architecture' – how can architecture be working? What kind of conflicting elements may be thrown into the implementation as new participators?

The setup of a diagram transforms the material from one form to another. The diagram operates by making something appear, and what emerges is the *Figure*. The Figure is a condition made visible by switching between force and form, between transformation and deformation. The Figure emerges at once and is also gradually constructed as a series. The Figure works by making the incorporated space-time motives and forces of the material break through as sensuous operational form.

Deformation subordinates movement to forces and also the abstract to the Figure. When deformation disturbs or wrings the Figure, it is directly related to the different sense organs of the body. Every sensation, and every Figure, is already an 'accumulated' sensation related to rhythm – a rhythm running through a drawing as it runs through a piece of music.

In his book about Francis Bacon, Deleuze refers to deformation and transformation as two very different categories. He also points out two directions of getting around figuration, i.e., either by abstract form or by the Figure. The concept of Figure here designates the sensible form related to a sensation – the Figure acts immediately upon the nerve system, which is of the flesh, whereas abstract forms are addressed to the head, and act through the intermediary of the brain, which is closer to the 'bone'.

Bacon is cited for recurrently talking about sensation as an act of passing from one 'order' to another, from one 'level' to another, from one 'area' to another – he understands these passages as acts of making sensation the master of deformation. Bacon criticises both figurative and abstract painting as passing through the brain and not acting directly upon the nerve system, failing to reach sensation, and failing to liberate the Figure because they remain on the same level. These painting modes implement transformation of form, but cannot attain deformations of bodies.

Bacon is, therefore, concerned about deformation and not transformation. Transformation of forms may be abstract or dynamical, but deformation is always bodily and 'static'. Deformation is obtained by affecting form at rest at the same time as the whole material starts to stir: cloth curls like burning paper. Everything is now related to forces: everything is force. Force constitutes deformation as an act of painting, neither working as transformation of form nor as decomposition of elements. And Bacon's deformations are rarely forced or constrained; they are not tortures despite their appearance. On the contrary, they are the most natural postures of the body when reorganized by simple force exerted upon it: the desire to sleep, to vomit, to turn over, to remain seated as long as possible.

So, paint the sensation! It is essential rhythm, although dependent on the Figure. Figure-rhythm relations appear as the vibration that flows through the body - it is a vector of sensation making it pass from one level to another. In the coupling of sensation, rhythm is already liberated; it confronts and unites the diverse level of different sensations: it is now resonance.

Figure is connected to outbreaks of the singular. The singular is characterized by coming from without; it stands out as 'other' - as an intensity that may change the view upon the material, which a diagrammatic move has set into action. I shall briefly point out some types of emerging singularities and different intensities or rhythms related to architectonic implementation and the making of the space-time tablets. Once more in a dialogue with Deleuze, the types may be summarized as follows: force, resistance or wild singularities and accompanying, expanding or contracting rhythms.

Force singularities stand out as special characters in a series, produced by a diagrammatic transformation. The singularity emerges from the transformation as special frames or sequences chosen by the search of an accompanying move. Force singularities come up as suggestive, thought-provoking differences, creating unfamiliar impulses and conceptions. Initiated by different diagrammatic series, this kind of singularity is used throughout the whole implementation.

#### Conclusion

Exchanges of space and time, as well as exchanges of object-oriented and performative unfolding, are basic features of architectonic implementation. Architecture is created through working forces - tectonic action works through animation. My project *Mixed Movements* transfers tempi and affects of the 'outer' world into figures and rhythms of the drawing-field. These incorporated space-time motives of the drawing break through as differences and possible worlds meeting the sensible human body. From the beginning, the way of tying forces and motives in material and media is oriented towards indefinite life thus challenging everyday repetitions. From the start, aesthetics and ethics are closely related endeavours, incorporated in the transformation and deformation of the architectural drawing.

Resistance singularities expand or contract a field, assembling and breaking up chosen characters. Arranged in open drawing-fields, resistance singularities may arise as new oppositions, confronting the characters of the field - textual experiments may also be part of these strategies. Parallel to this, the expanding and contracting of a drawing material are set up as resonance models. A resonance model couples different characters and techniques and modulates or deforms components and parameters of the field. The resonance model twists conventional categories of scales and representations, with the player ambiguously both 'moving her view upon' and 'being into' the drawing. In the drawing, she resonates with more localities and depths, with more tempi and levels of meaning.

Wild singularities are non-distinctive forces that stay non-integrated, open to 'other worlds' in the material, for instance, as virtual exchanges between micro- and macro-cosmos. Wild singularities are sought out as 'flight lines' that mutate: break up and assemble, seize and stretch out different domains in and outside the drawing.

Mixed Movements addresses the world of architecture as an artistic development work. The project presents the space-time-tablets as an interactive installation, as well as discusses the work-field in a context of education. Common to both agendas is the explorative drawing, engaged with multisensory capacities of the body. Creating and teaching architecture you may challenge the drawing as presentation opposing re-presentation. Investigating space-time you may generate modes of operations that sensualise colliding questions and provisional hypothesis – making the drawing performative.

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<sup>&</sup>lt;sup>v</sup>Deleuze G, Francis Bacon, The Logic of Sensation, London, Continuum, 2003



Figure 1.1



Figure 2.1

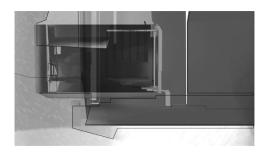




Figure 3.1, 3.2

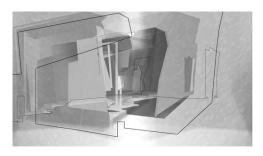




Figure 3.3, 3.4