

# UNFOLDING SPATIAL MECHANISMS

Karianne Halse

The main aim of the workshop-series 'Acquired Techniques', this time conducted through six evenings in December at the Aarhus School of Architecture - is to unfold the spatial mechanisms of the tools and techniques related to the architectural working process and methods. Focusing upon architectural production as a conglomerate of various analogue and digital methods with an emphasis on how the tools themselves become operational for spatial and thematic investigations and invention.

Each evening has a focus upon a specific technique, and the previous step is the point of departure for the next.

phases/evenings:

## 1. MACHINE FORENSICS AS SPATIAL POTENTIALS; COLLAGE AS AN OPERATIONAL TOOL

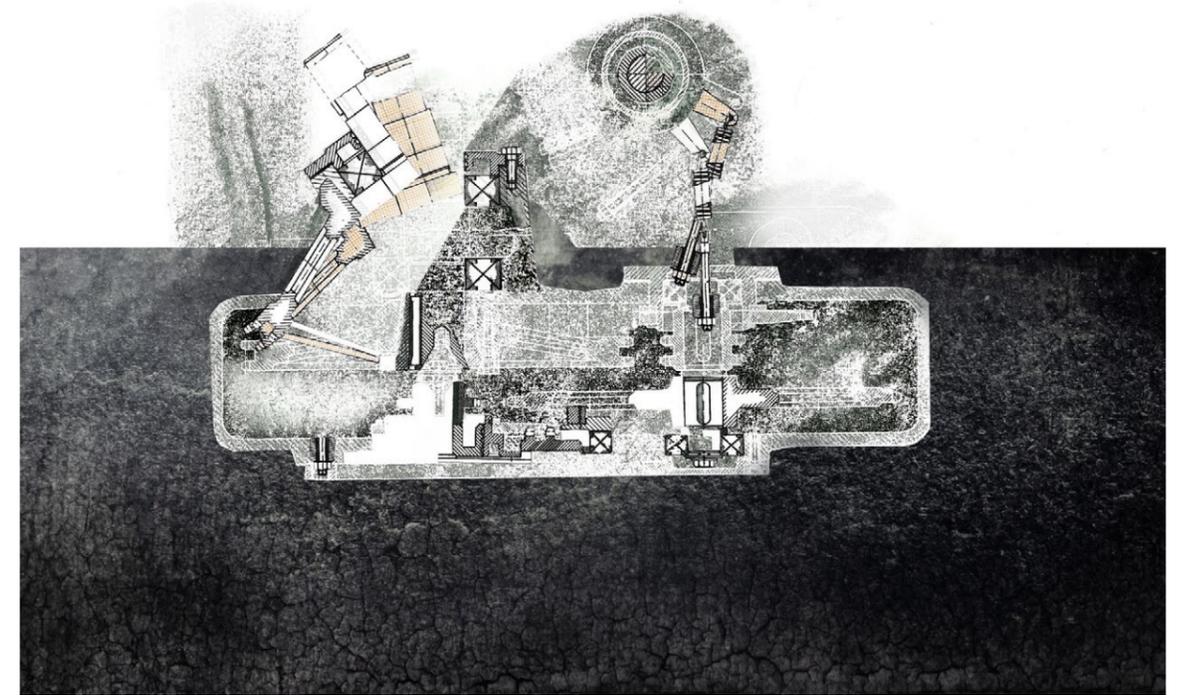
Collage as a medium possess an inherent ambiguity, and served as a way of opening up, exploring and reflecting upon the matter - constructing a subjective reality:

Each participant was assigned a *technical drawing of a machine* - spanning in scale from utensil to larger structures - functioning as the starting point of this phase.

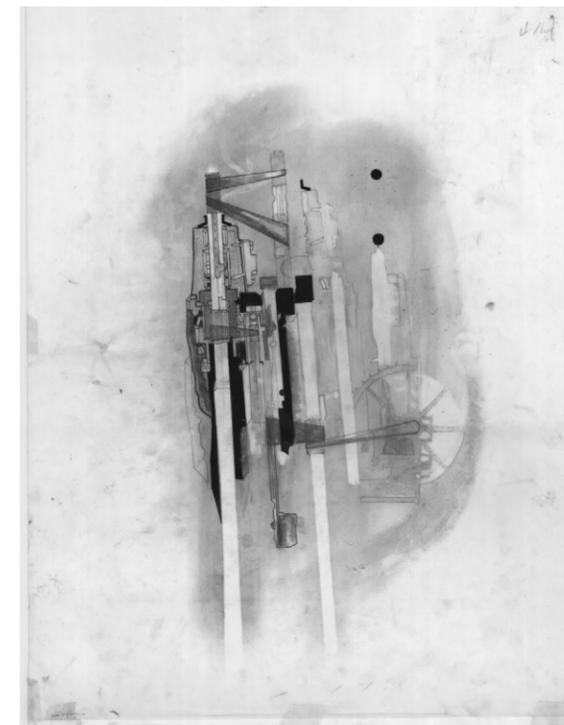
The collage was a tool to investigate the machine and served as a breeding ground for spatial potential; understanding and interpreting the given drawing as a *set of spatial relations and moving elements*, rather than its original, 'banal' function as a machine. Through a mix of analogue and digital techniques, the collages nourished *spatial significances* through addition of layers as materials, light conditions etc., defining depths and dimensions.

## 2. RE-TRACING SPACE; EXPLORING THROUGH DRAWING

To draw is an operation - a tool for working, sketching and thinking - used to unfold and investigate a subject: The participants were constructing a section or plan, focusing on the spatial relations and moving elements



Philip Jensen, 5. semester: 'Underground Reality' (1. Machine Forensics as Spatial Potentials; Collage as an Operational Tool)



Alexander Siig Kristensen, 3. semester (2. Re-tracing Space; Exploring through Drawing)

suggested by the collage. The subject of investigation was *change* - a change over time or a change through a reposition within mechanical system(s).

Through the drawing a differentiation was established between a *stereotomic (heavy, solid) part*, which should be highlighted to function as the heart of the drawing, and a set of *versatile systems (mechanical, lighter additions)*. A part of this assignment was to experiment with how to initiate and communicate this hierarchy in the drawing.

## 3. EMERGING STEREOTOMIC SPACES; INVESTIGATING THROUGH CASTING (MODEL I)

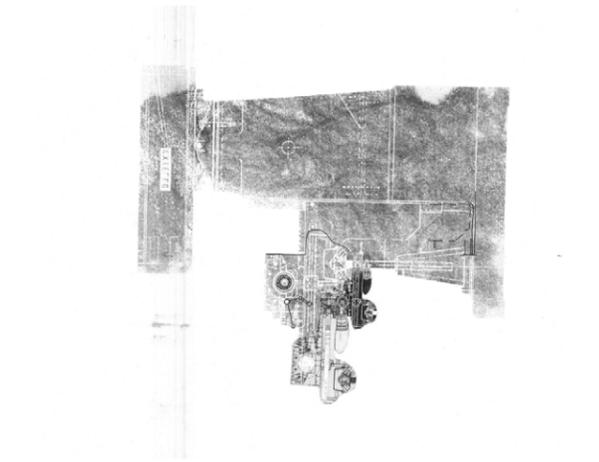
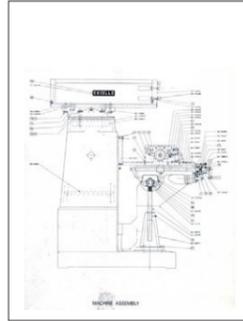
The model is a crucial tool for understanding, inhabiting, and evaluating space. A cast is a record of the surfaces that have formed it. It is a physical manifestation of a past action - a *memory* of that action - OR it can be understood as a physical manifestation of a future action - an *invitation or instruction*:

This step involved conducting a cast, materializing the

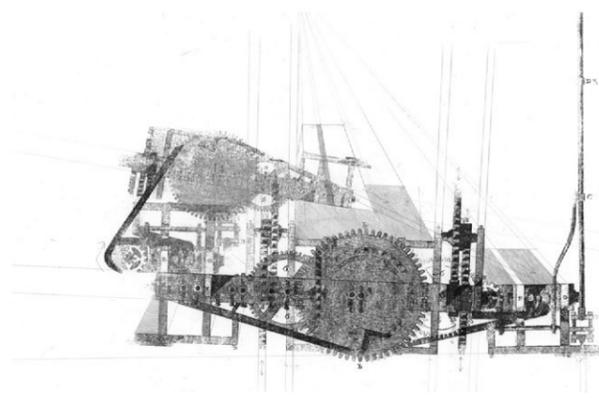
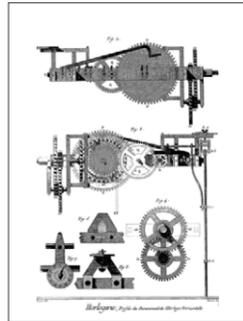
**INPUT:  
MACHINE-DRAWING**

**I. MACHINE FORENSICS AS SPATIAL POTENTIALS;  
COLLAGE AS AN OPERATIONAL TOOL**

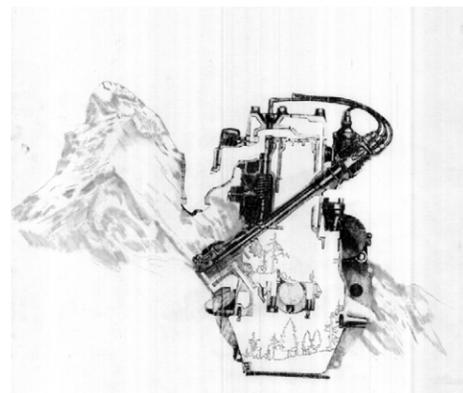
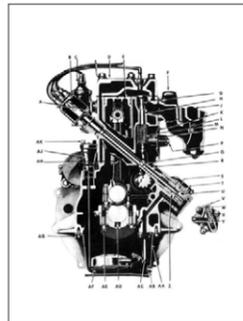
**Kristoffer Codam  
5. semester**



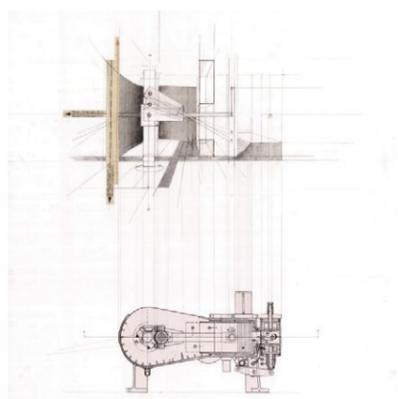
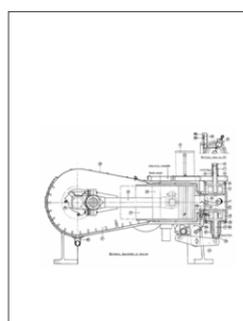
**Lotte Helle-Valle  
Diploma student**



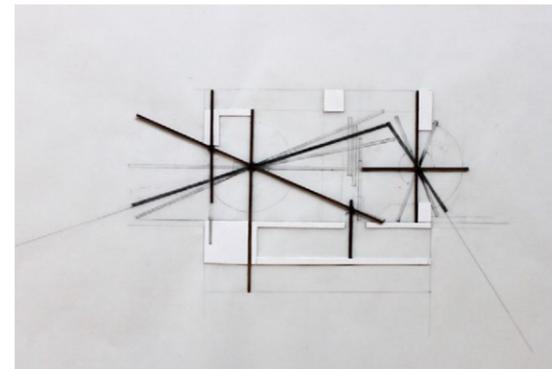
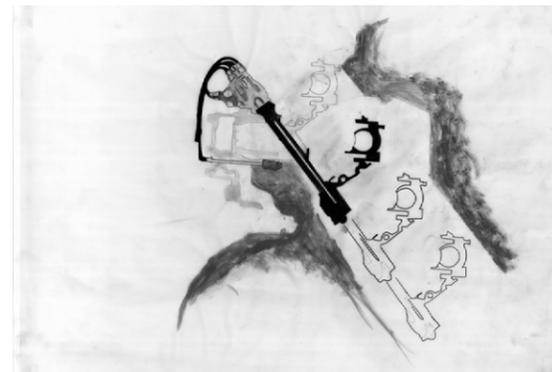
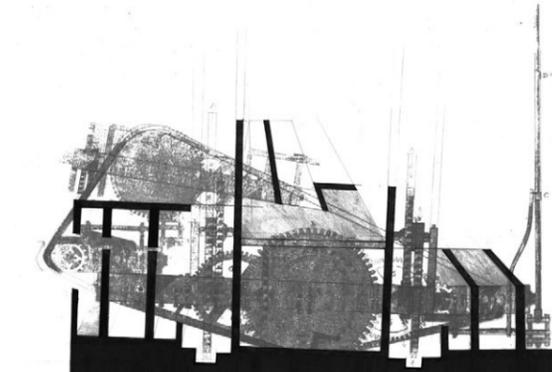
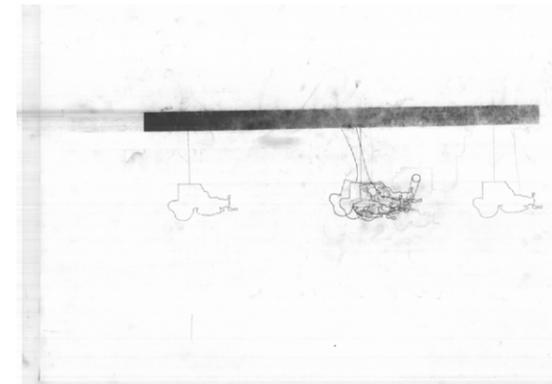
**Sigurd Rubin  
3. semester**



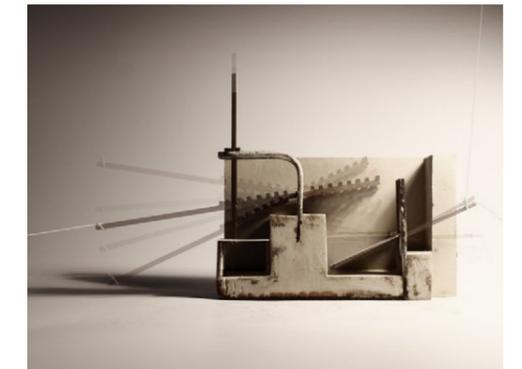
**Gunborg Martina Blom  
7. semester**



**2. RE-TRACING SPACE;  
EXPLORING THROUGH DRAWING**



**5. CHRONOTOPIC CONDITIONS; PHOTO  
DOCUMENTATION AND CAMERA AS TOOL**





rigid, solid stereotomic component suggested from the findings from the previous session - acting as an anchor for future operations.

#### 4. VERSATILE SYSTEMS; MODEL AS THREE-DIMENSIONAL DRAWING (MODEL II)

The construction of a model could be understood as drawing in three dimensions, where existing ideas can materialize themselves and new (unseen) potentials emerge, through the constant dialogue between making and reflecting:

The cast provided the anchor point from which a *versatile system* was implemented. Additionally, the drawing from the 2nd session operated as a foundation for making selections and decisions, translating its principles into physical components of the system. The models had to have at least *two possible states of transformation or positions*, altering the spatial conditions of the model (physical or non-physical).

#### 5. CHRONOTOPIC CONDITIONS; PHOTO DOCUMENTATION AND CAMERA AS TOOL

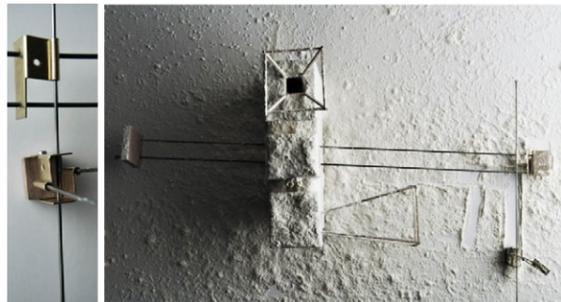
The camera is an optical device for looking with, like a microscope or a set of binoculars, through which you *observe and investigate the subject*, unveiling inherent correlations and spatial potentials. The camera becomes an analytical apparatus, *a prothesis for insight*:

This session focused upon capturing images of the model - not merely understood as a *representation* of it, but rather an investigation into the embodied spatial, material and atmospheric potentials.

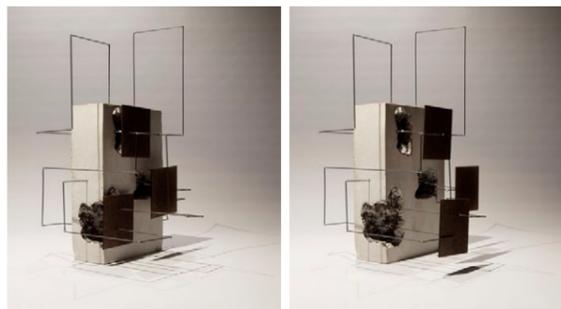
#### 6. SPATIAL MACHINE(S); PRESENTATION LAY-OUT AND EXHIBITION

The workshop ended with an exhibition, where all the produced material was organized in the workspace. The models were organized in a grid relating to each participants number, creating a network of spatial machines. Some of the models inhabited its plot by submerging into the surface - other started to relate and negotiate with their neighbors. The graphical material was pinned up on boards related to the specific model.

Esther Julie Ringer Ellingsen, 3. semester  
(3. Emerging Stereotomic Spaces; Investigating through Casting)



Eirin Bakken, 5. semester  
(4. Versatile Systems; Model as Three-dimensional Drawing)



Anna Katrine Tan Nielsen, 4. semester (5. Chronotopic Conditions; Photo Documentation and Camera as Tool)

#### INTUITIVE (RE-)READINGS

This process is dealing with an intuitive way of approaching the material, which additionally needs to be supported by an analytical, reflective praxis. It is crucial to acknowledge the drawing, collage or model as *something of value in itself* - not merely as a representation of something external. This demands a certain openness and precision towards the produced material.

The initial operations may seem random, arbitrary or unqualified. Yet, constant (re-)readings of the material while developing it will ensure that these - so-called intuitive or abstract - operations starts to inform and influence the decisions of future operations through emphasizing and investigating what has been indicated or revealed. Programs, functions, narratives etc. can be fed into this process or be its very point of departure, serving as the filter for reading and qualifying the material.

#### SEQUENCE OF OPERATIONS

This workshop does not suggest a fixed or ideal sequence of operations; the first version of the workshop (*Acquired Techniques I; A Leap into the Archive*) arranged in February 2013, had a slightly different order of the phases: starting with collage, which was interpreted into a model, then translated into a drawing. Both dispositions proved to be equal productive, demonstrating that there is no order of steps - or repetitions of orders - which is ultimate.

Clearly the media or the technique itself possess an inherent attribute affecting how some potentials will be revealed or others remain hidden if being developed through a different media. Consequently, an awareness and ability to master the different techniques is required - and thereby understand the various immanent possibilities in order to make it operational as a *set of iterations*.

The outcome of this workshop should not be understood as an exhibition of something final, but more as a step back to overview the rich and compelling collective production - a shared archive of test and victories, trials and errors of the workshop - which potentially encourages discussions, new interpretations and readings of potentials; from this, a new leap begins.



Nicolai Duedahl Hende, 3. semester  
(6. Spatial Machine(s); Presentation Lay-out and Exhibition)

*The workshop was arranged by SpArk and conducted by external and internal teachers and architects:*  
Karianne Halse (Teaching at the BA.Program, AAA)  
Espen Lunde Nielsen (Ph.D. fellow at AAA)  
James Martin (Herzog & de Meuron, Schweiz)  
Mika Friis (Architect, Copenhagen) and  
Jakob Ingemansson (Architect, Copenhagen)

*Article by Karianne Halse, Architect MAA, Teaching Assistant at Aarhus School of Architecture, based upon the written and produced material from the workshop*

mail@karianne-h.dk  
www.karianne-h.dk / www.no38.org