

three-dimensional design

vo 1h, ue 4h ws 2010-11 lva-nr.: 258.045, 258.046

Task 2

Choose from Task 1 at least one example of a found form transition and try to define the (invisible) structure of the multi-component form by drawing instructive cross-sections. Employ as many sectional drawings as necessary to illustrate approximately the three-dimensional shape of your object. Transfer the cross-sectional planes, whose contours describe the shape, to a suitable flat material, cut them out, and construct a three-dimensional planar object with them.

The essential aspect of structure models is the spatial logic of the interrelationship of the cross-sectional incisions; the question of whether and how the structures of the individual pieces interplay. Particular attention should be given to the form transition and, if need be, the initial forms between or around which the form transition unfolds should be delimited and trimmed. Consider carefully whether and how you represent the multi-component nature of the form: is the part connect the forms visibly an independent form, perhaps even detachable or separable?

After first capturing of the form in a working model, distance yourself from the initial form and de-

velop totally new (component) forms by transformation – with the focus importantly remaining on the form transition. You start by changing the distance, position and diameter of the individual elements. By varying certain parameters, new conditions for the form transition will arise. The experimental modulation of the initial form and its elements can originate from certain imagined scenarios: remember that forms can be blown up, shrunk, stretched apart or squeezed together, and the in-between can hence evolve in a total different fashion respectively. Even when you employ various materials (e.g. applied coats of plastic or membranes and threads spanning between elements), diverse form transitions will result. You can also leave the delimiting initial forms, or rather those to be connected, untouched and concentrate solely on changing the form transition.

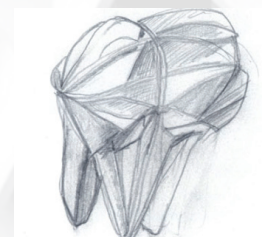


student project 3dg 2008, tobias maurer

Proof of performance:
Drawings (possibly preferably in a sketchbook, by hand or computer generated) and models recording the structural analysis and strategic approach to the transformation. Limit your depic-

tions to a compositional space of 24x24x(24+n) cm. The models are to be seen as working models. Nevertheless, due consideration should be given to consistency and aesthetics in the choice of materials and in the execution.

background: parametric parasol, sevilla 2004, jürgen maier h.



graphic analysis of a complex form



oblate ellipsoid (individual object)



skeleton of an oblate ellipsoid

Support is provided at the Institute for Three-dimensional Design and Model Making e264/2 in the main building (first staircase, fourth floor). The names of lecturers, tutorial times, the lecture and examination dates can be found on our homepage under: <http://www.ddg.tuwien.ac.at/>

Submission:
To the appropriate tutor at the institute during the week from 8.11.2010 to 12.11.2010.

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