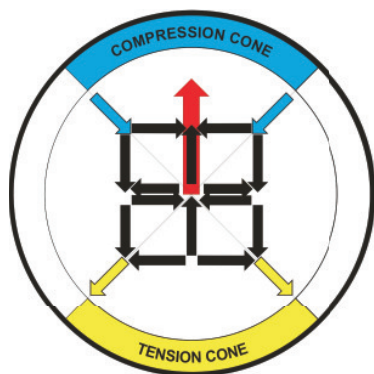


Computer-free Design Using the Method of Force Cones

C. Mattheck, K. Bethge



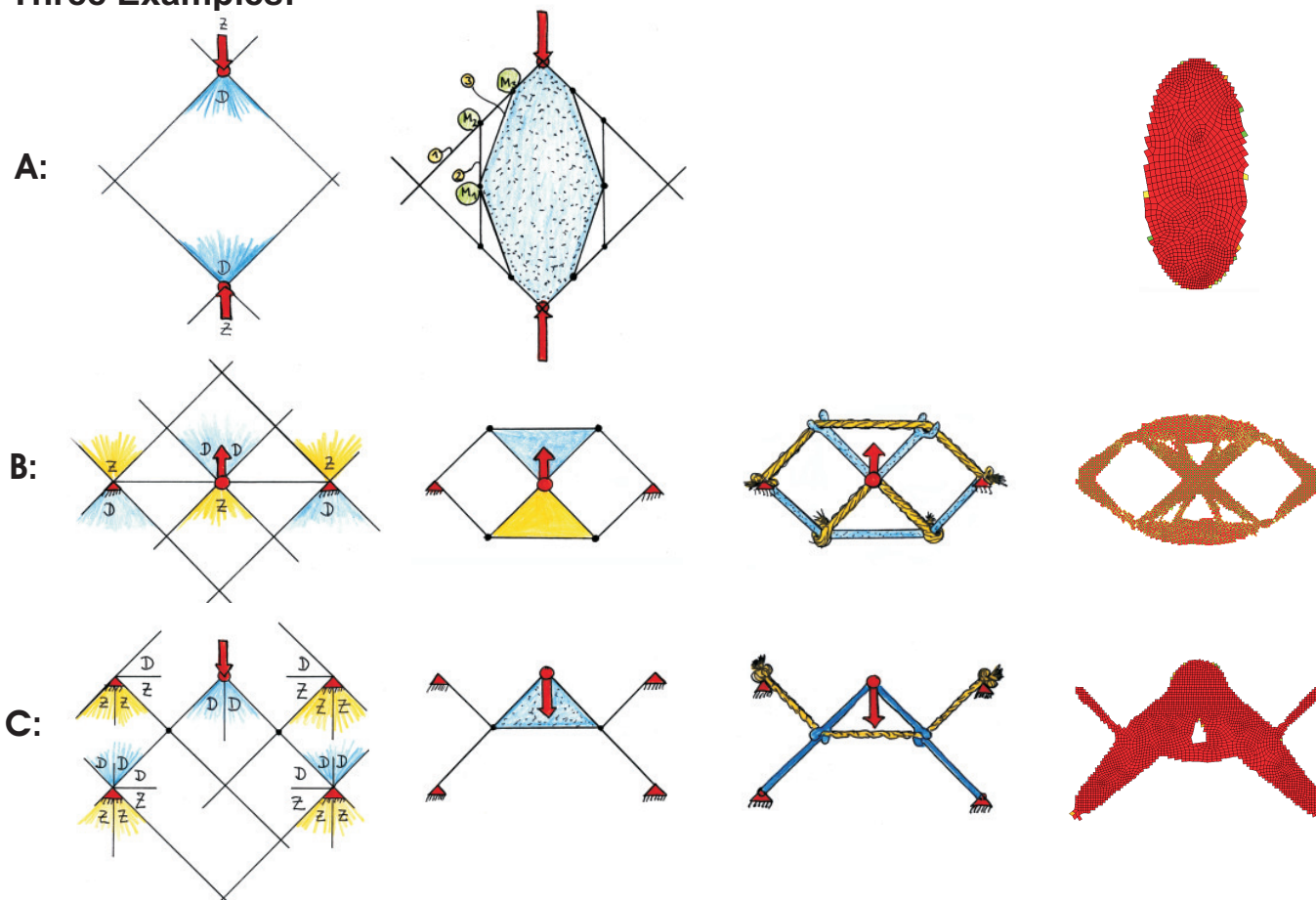
Concept:

Single loads orientate along axial 90° compression cones and 90° tension cones, respectively. Using the edges and intersection points of these cones, a lightweight design can be generated. First results were compared to results of the earlier SKO (Soft Kill Option).

Method of Force Cones

SKO

Three Examples:



Conclusion: Using this simple graphical thinking tool, optimization of topology seems to be possible. The limitations of this method are still unknown to us.

more information: www.mattheck.de

31.08.2010