

embodiment design. Therefore, it is useful to be familiar with the establishment of function structures, design catalogues, and to have the knowledge about physical effects and their application. If these techniques are well trained, it will allow the generation of ideas easily and their modification in various directions. Especially in the case of origin design it is good practice to start with techniques on a quite abstract plane. This increases the probability of having several variants from which the best can be selected afterwards. Furthermore, the confidence and competence of students are strengthened by the use of a systematic approach. It helps to foster the motivation and subsequently the creativity which is obviously ceaselessly in flux when inspired continuously. Students experience the nearly automatic production of ideas and are often astonished about the type and number of generated ideas, and variation is surely a source of innovation. For that reason, the conduction of further comprehensible engineering design examples is desirable for training future design engineers and for pointing out the benefits of systematic approaches.

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