

Category: Student Work

Project: Summe + X (Exploration & Visualisation of »Emergence«)

What was the challenge?

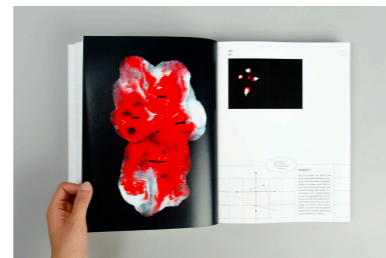
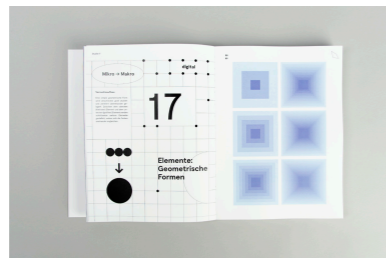
We often think in terms of single elements, individuals and singularity. The fish, the human being, the drop of water, the tree. But what happens when the individual elements combine to form systems or groups? When fishes become a swarm and raindrops become rainfall? In the union, features arise which individual elements do not possess in isolation. Complexity evolves from simplicity and order from chaos – a circumstance defined as »emergence«.

With our bachelor thesis we wanted to face the challenge of giving this complex phenomenon a visual translation. We wanted to explore the potential of union, to examine this in particular in social contexts and to translate it by design, as well as to research it in design itself. Often we only look at the whole, but even the most complex structures owe their existence to simple, sometimes banal elements or components that only unfold their potential in community, side by side. Our goal was to bring this fact to light – to observe it, document it and convey it visually.

What was the solution?

Our work is divided into two areas: »Searching X« explores emergence in design itself: With many small experiments, analog and digital, we investigated the aspect of connection. In each experiment, we studied at which point or in which form new properties/features evolved when individual elements were combined, overlapped or somehow connected – or, conversely, when the whole was dissolved into its individual parts.

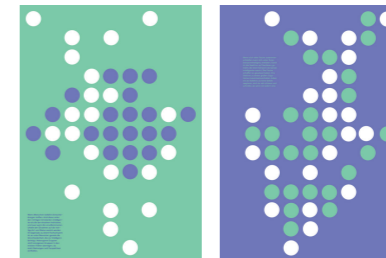
All the results were recorded in a book which is graphically oriented to the merging of molecules, counting in total about 400 pages.



In the accompanying exhibition »Visualising X« one station each takes up an aspect of human association.



A prime example of emergence in the social sphere is for example swarm intelligence, which manifests itself differently in the animal kingdom than among us humans – a double-sided poster is devoted to the differences and similarities.

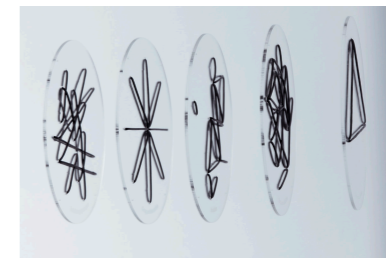


What was the effect?

Each of the stations of the exhibition, including the book, provides only a partial aspect of emergence, but in sum – as a whole – a multi-layered picture emerges. We by no means claim to portray a complete picture, but rather aim to arise awareness and offer new perspectives, especially on familiar and seemingly trivial things. In a time in which many negative examples of human interactions are present, we find it important to also give space to the positive examples, the chances and potentials.

Our work aims to provide answers, but also to pose questions. Can the potential of connecting elements be better exploited? Can it be used more consciously in the design process? And can we humans solve problems better when we focus more on the chances of cooperation and association?

Another station illustrates that we as individuals are part of the whole – part of a relationship, a group, a society. The complex interconnections visually add up to a chaotic web, but can be recognized laterally as ultimately many individual layers.



The strong contrast between positive effects of human association (e.g. cooperation, teamwork) and negative effects (e.g. group pressure, mass panic) is depicted by means of a poster curved in both directions – the two poles inseparably connected.



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