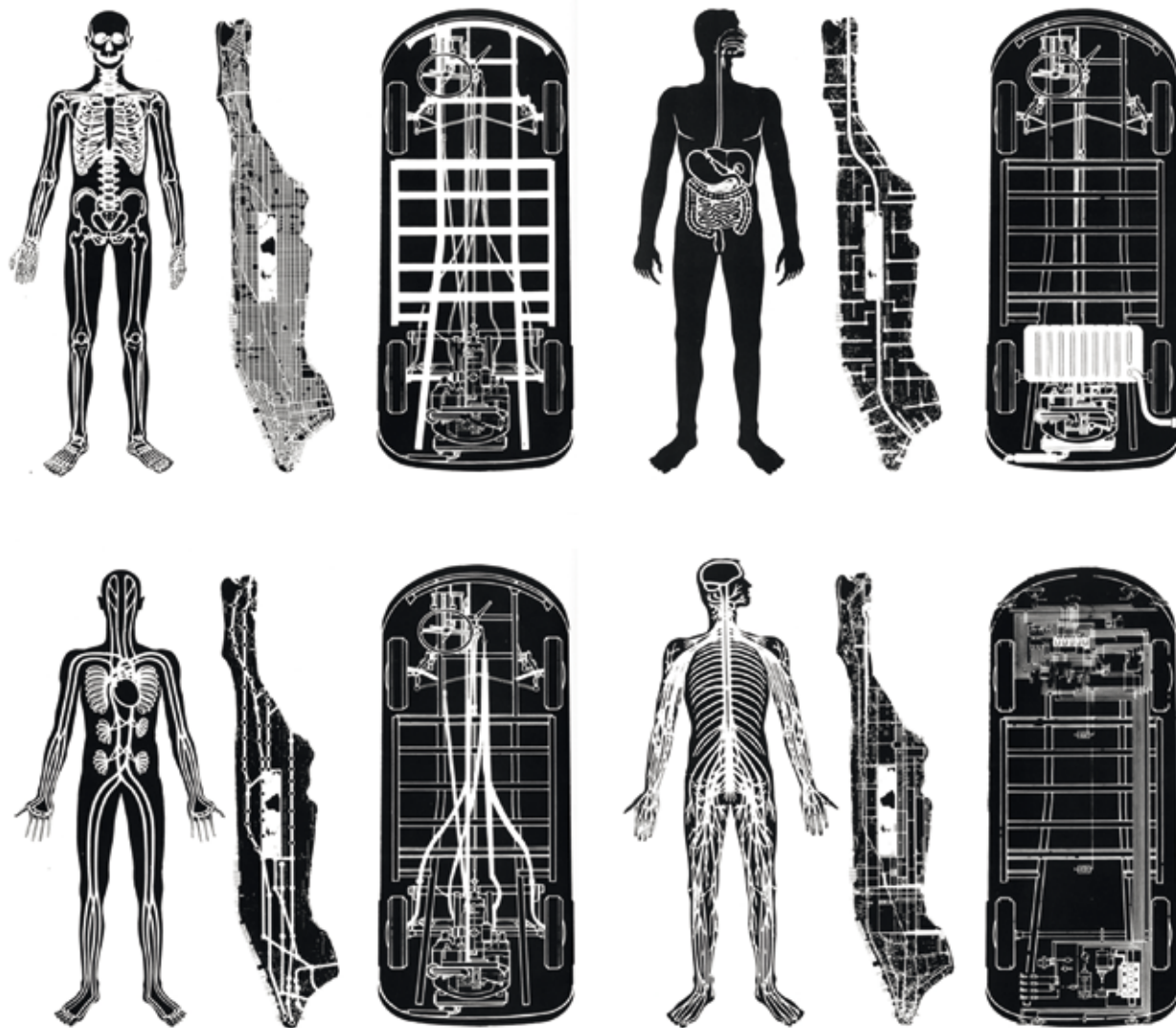


ANALOGIES & METAPHORS



First published in 1982, German architect Oswald Mathias Ungers' *City Metaphors* juxtaposes more than 100 various city maps throughout history with images of flora and fauna and other images from science and nature. Ungers assigns each a title--a single descriptive word printed in both English and German. In Ungers' vision, the divisions of Venice are transformed into a handshake and the 1809 plan of St Gallen becomes a womb. Ungers writes in his foreword: "Without a comprehensive vision reality will appear as a mass of unrelated phenomenon and meaningless facts, in other words, totally chaotic. In such a world it would be like living in a vacuum; everything would be of equal importance; nothing could attract our attention; and there would be no possibility to utilize the mind." A classic of creative cartography and visual thinking, *City Metaphors* is also an experiment in conscious vision-building.

When can the method be used?

Analogies and Metaphors are especially helpful during idea generation. Seeing an existing problem through the lens of another domain supports the creation and exploration of novel solutions. Analogies are typically used for conceptualisation, starting from a clear problem definition, and Metaphors for early problem framing and analyses.

When using an Analogy, inspirational sources can be closely or distantly-related to the current problem. For example, a close Analogy for a new office air conditioning system might be air conditioning systems in cars, hotels or airplanes. A distant Analogy might be a self-cooling termite mound. Metaphors, on the other hand, are mainly helpful for communicating particular messages to users. They typically do not help in solving practical problems, but represent the meaning a product evokes. For example, you can attribute a personality – like adventurous, feminine or trustworthy – to a solution concept and evoke particular emotions. When using metaphors, the source of inspiration should be from distantly related domains.

How to use the method?

Start by searching for inspirational material. If you want to come up with more creative and innovative thoughts, search in distant domains. When finding material, ask yourself why you associate that particular inspirational source with your design. Then you can decide whether to implement the Analogy or Metaphor by asking yourself how you will employ it in the new design solution. When using Analogies, be careful not to simply copy the physical attributes of a given source to your problem. You need to identify relevant relationships in the remote domain and turn them into

You can use Analogies and Metaphors to find inspiration for new solutions derived from a mapping process between inspirational sources and a target domain, which is the problem to be solved.

potential solutions through abstraction and transformation. The better you abstract from the relationships you observe, the more inspiration you are likely to get.

Possible procedure

STEP 1 – FRAMING:

Analogy: Frame the design problem to be solved.

Metaphor: Frame the qualities of the experience you want to provide to users through the new design solution.

STEP 2 – SEARCHING:

Analogy: Search for situations where that problem has been successfully solved.

Metaphor: Search for a distinct concrete entity that already has the quality you intend to convey.

STEP 3 – APPLYING:

Analogy: Retrieve the relationships from the existing components and processes in the inspirational domain. Abstract from what you see and capture the essence of that relationship. Transform and transfer the abstracted relationships to fit your new problem situation.

Metaphor: Retrieve the physical properties of the inspirational domain. Abstract the essence of these properties. Transform them to match the inherent constraints of the product or service at hand.

Limitations of the method

- When trying to establish analogies you might take a lot of time to identify an appropriate source domain, with no guarantee of arriving at a useful search. You might get stuck when the inspirational material you are trying to use does not help you to find a solution. Therefore, it is important to have a good knowledge about the source domain you are exploring so that you can recognize such situations early on.

Tips and concerns

- **Analogies:** It is important to play with both close and distant domains. When you choose only close domains you risk finding only obvious and unoriginal solutions. Your success depends partly on how you abstract and transform inspiration into innovative solutions.
- **Metaphors:** It is fruitful to look for qualities that you want to emphasise in your concept and find Metaphors that encapsulate these qualities. When applying a metaphor, try to establish subtle yet identifiable references to the original entity. However, avoid making very obvious connections otherwise you could end up with a 'kitsch' product.

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