

# Analogies

## What

An analogy is a comparison between two things—for instance, a comparison of a heart to a pump. We communicate in analogies all the time, as they allow us to express our ideas and explain complex matters in an understandable and motivational way.

## Why

Executives, artists, writers and all kinds of other creative professionals rely on analogies as a powerful tool to build empathy for their users and generate new ideas around a problem. For example, hospital emergency rooms have been inspired by F1 pit stop crews, and Henry Ford's assembly line was inspired by observations he made about the systems within slaughterhouses and grain warehouses. Who knew?!

## When

You can use analogies for several purposes: to build empathy with users, to synthesize and define information and to generate new ideas around a problem. We use analogies to gain a fresh way of looking at an environment, and we use them in instances where direct observation is hard to achieve. The cause-and-effect dynamics between many events are similar; only scale and complexity present themselves as obstacles. So, the trick is to come up with an analogy that's appropriate for the context.

## Solve Ill-structured Problems

You can also use analogies to solve ill-structured problems in innovative ways. Professor Emeritus Gabriela Goldschmidt, in the Faculty of Architecture and Town Planning at the Technion-Israel Institute of Technology, has conducted some cognition studies with a specific focus on the use of analogy to solve design-related problems. Her results



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indicate that due to the lack of structure of design-related problems, analogies prove extremely valuable as they facilitate the kind of cognitive processes which we designers need to solve ill-structured, wicked problems.

## Build Empathy with Analogies

Analogies help us empathize with our users and find inspiration to solve our design problem by comparing it to the problems and solutions found in an unrelated field. In this way, analogies provide a fantastic opportunity to capture the attention and imagination of our users through an ingenious and wonderfully simple way to build empathy with them.

When you use analogies, you should try to identify the aspects of a situation which are the most important or interesting. The steps below will run you through how best to use analogies to build empathy:

- 01:** Identify the aspects of a situation that are most important, interesting or problematic. For instance, if your project hopes to improve a supermarket experience, some of the key aspects might be these:
  - How different goods are contained and separated in shopping carts
  - How shoppers make a decision when presented with so many varieties of each product
  - How long waiting lines can be sped up and processed as effectively as possible
- 02:** Find other experiences that contain some of these aspects—doing so will help you gain a better understanding of users, and also spark new ideas to improve their experiences. Long waiting lines, for example, are also present in airports, hospital A&E departments and even in Apple Stores after the launch of a new product.
- 03:** Create an inspiration space for analogies. Pin photos and anecdotes of the analogous experiences you have found. This helps your team spark inspiration and create insights.

## Generate Ideas with Analogies

The ideation technique which involves the use of analogies goes by many names. Essentially, they all boil down to the same concept: explore unrelated concepts for an



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insight, and apply this insight to the context of your own problem—i.e., the insights on how principles or characteristics exist within one context may help to reshape these principles and solutions within a different context.

When you purposely stoke ideation teams to dig for analogies, it encourages them to think about the attributes of the problem they work on in a different way. It will help the team seek inspiration as they problem solve—they will be more likely to reconfigure the design problem and come up with unconventional solutions.

Some designers say: all design is re-design. By that, they mean you can borrow ideas from elsewhere, build upon and remix them to generate new formats, combinations and, ultimately, innovative solutions. That is exactly what you do when you use analogies to generate new ideas.

## How to Use Analogies – Best Practices and Examples

You can apply these best practices in any situation—should you want to build empathy, define a problem, solve ill-structured problems or generate ideas.

**01:** Extract attributes of your problem scenario and see if you can make connections with scenarios, systems, spaces or objects where these attributes already exist. For instance, if your project hopes to improve a supermarket experience, some of the key aspects might be these:

- How different goods are contained and separated in shopping carts
- How shoppers make a decision when presented with so many varieties of each product
- How long waiting lines can be sped up and processed as effectively as possible

Once you've identified the key aspects, you can find other experiences that contain them—doing so will help you gain a better understanding of users, and also spark new ideas to improve their experiences.

**02:** Look towards nature. Look for similar objects, systems, scenarios and creatures and observe their behaviors. They will all have some insight to offer in terms of innovative use of resources, space and time. Biomimicry applies learning from natural systems to problem solving, and essentially copies or borrows from



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nature to build new technology. Think of how a flower opens with the first rays of sunshine—or how the honeycomb pattern is one of the strongest for use in structures, for instance.

- 03:** Look towards an industry completely unrelated to yours. You could benefit the most when you create analogies and learn from completely different industries—as Henry Ford did when he found inspiration from slaughterhouses and grain warehouses.
- 04:** Look for specific people you could interview about these analogous scenarios, systems, objects or spaces. Alternatively, think about how you might do a quick observation.
- 05:** Use brainstorming or brainwriting methods to help the team come up with analogies.
- 06:** Create an analogous inspiration board. Create a board of quotes, photos and key insights from your analogous space, scenario, system or object. This will help your team share inspirational ideas and help keep the analogous insights in mind for later in the design thinking process.



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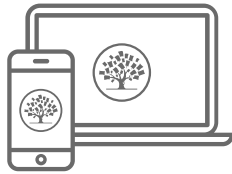
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