HOW TO DEVELOP ARCHITECTURAL CONCEPTS

FIRST IN
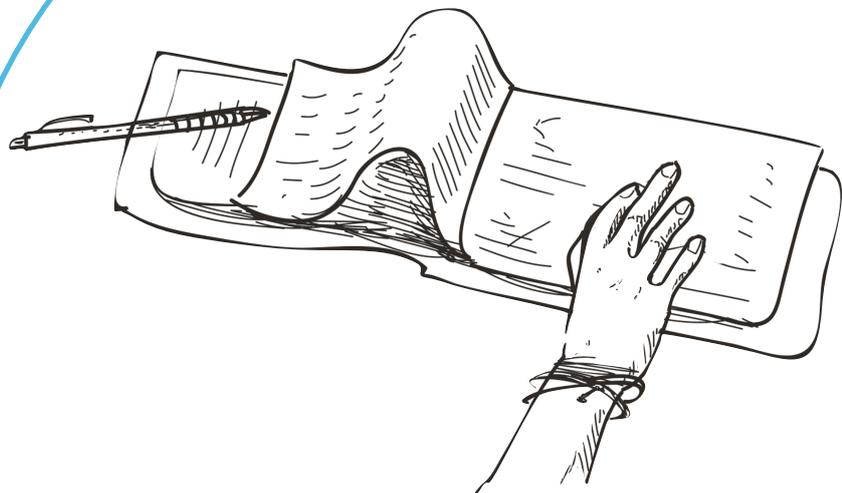ARCHITECTURE

HOW TO DEVELOP ARCHITECTURAL CONCEPTS

From FIRST IN ARCHITECTURE

One of the most popular questions I get asked by students is 'how do you develop an architectural concept?'.

The design process can be daunting to new students, who often find it difficult to find a direction in their design. They are constantly asked, 'what is your concept?' by their tutors, and respond by staring blankly back at them.

In this article we will take a close look at the architectural concept and how it fits in with the design process.

What is a concept?

Concept: Definition
an abstract idea
a plan or intention
an idea or invention to help sell or publicise a commodity
idea, notion, theory, conviction, opinion

A concept is an idea, a theory or notion, but in architecture we could also describe a concept as 'an approach' to the design.

When we think of an architectural concept, we think of an abstract idea, one that is unchanging throughout the design process. This is not necessarily the case, a concept can be linked to many factors, and can evolve as the design grows.

Architectural concepts are the designers way of responding to the design situation presented to them. They are a means of translating the non-physical design problem into the physical building product. Every project will have critical issues, central themes or problem essences, and the general issues of designing a building can be approached in a number of ways.

Approaches to the design

There are several areas the designer may focus on at the early stages of design that will begin to inform the concept and direction. These areas may be drawn upon throughout the project, weaved into one another, as the project develops. The approaches can be categorised as:
- Functional
- Material
- Contextual
- Conceptual
- Formal
- Collaborative
- Philosophical

The aforementioned themes can be combined and shifted to expand and explore the different approaches to the development of design and concept.

Functional

Should we approach the design with function at the forefront of our minds? Does the project have more necessity for the functional elements rather than the aesthetic appearance of the building? There are certainly some types of buildings that we would make function high up on our priority list. For example, a factory will have quite particular functional requirements, or if designing a hospital we would want to ensure that the building can be used effectively above anything else.

Just because we focus on the functional approach to the design, it does not mean that we cannot demonstrate creativity and flair. Every project will present opportunities to problem solve, be innovative, but it may just be that in some cases the function of the building is our key focus.

Material

We may approach our design looking at the materials of the structure as part of our early concept. By focusing on a specific material, we will be naturally led towards particular forms of construction, thus creating a type of appearance organically.

Perhaps we select a material approach based on our site context, which suggests a historical use of a particular material, which we want to use in a more innovative way. By selecting local materials, it will give the local visitors a sense of comfort and familiarity, whilst also giving a nod to the natural surroundings and environmental benefits of sourcing locally.

Contextual

A contextual approach to our concept will look at the context of the site and surroundings, the historical features of the area, the people that occupy the area. After all, pretty much all architecture is for people. With this type of concept, we draw heavily once again from our site analysis, exploring the data we have collected about the site, both physical and non physical.

Every project should have an element of a contextual approach, as every design should consider its context, site and surroundings. Some designs may focus more on this than others, and some may take this as the most important factor in design.

A contextual approach to a design does not always mean it will sit harmoniously in its surroundings. The architect may choose to turn the buildings back on the context, or perhaps create a contrast between the old and the new. There are a number of approaches to the contextual concept.

Conceptual

A conceptual approach to a design is looking at the idea of conceptual architecture. This suggests that every part of the project is about the concept. The sole focus of the design is about the idea, rather than a combination of approaches and processes. Conceptual architecture is sometimes never built, but rather designed as a form of thought provocation, exploration of ideas.

Formal

A formal approach to design looks at drawing on the formal language of architecture to develop a concept. We look to architecture from the classical period to inform our approach to developing the formal rules of our design. The classical orders are one of the earliest systems of architectural language, which give formality to proportion, scale and form.

Although the design may not be classical in its style, it may be that the formal rules of proportions, scale, the golden section and so on are translated into a contemporary building.

Collaborative

Most projects can be considered to be collaborative. Whether there is a large design team working on the different aspects of the building, there is also the client, stakeholders, engineers, surveyors, contractors and many more people involved in the design. However, the end user of the building is one of the important parts of the puzzle that often is not directly involved in the design process.

Some architects are starting to take the approach that the end user is the expert in the requirements of the building, and engaging in a collaborative exercise that sees the end user contributing to the design process. This is particularly popular with projects that have a large community or social focus, where the skills and knowledge of the building users can be included in the development of the project.

This approach is rarely possible in a student project, but worth considering as an approach to design.

Philosophical

Another approach to architectural concepts is to consider your design philosophy. This is a set of values you use to inform your design. The values could be the life values of the designer, or could be a reflection of the design brief or context of the site, or indeed a combination of all three.

You could investigate some of the following statements:
- artistic vs. scientific
- rational vs. irrational
- personal vs. universal
- visual vs. non visual
- needs vs. wants
- individual vs. society

Then you can go on to look at your values in terms of design. How do these values work with the design problems you face on this particular project?

- ordered vs. random
- structured vs. unstructured
- objective vs. subjective
- one answer vs. multiple solutions
- creative vs. conservative
- specific vs. general
- man vs. nature
- complexity vs. simplicity
- design for now vs. design for the future
- patterned process vs. random process

Exercises and Ideas

Your concept should evolve alongside your in depth site analysis, and design brief generation. Development of your architectural concept should not be the very first thing you look at with

your design. Refer to your research and site information regularly and continue to draw out the problems that you need to resolve to make a successful design. What are the parameters that are being measured in order for the design to be considered successful?

The following ideas might help you develop your design concept.

Break It Down

Explore the information you have collected and break it down into areas that have meaning to you. Consider the problems, the influences, the context.
What are the limitations? What are the opportunities? Consider the different approaches above and look at which ones would have relevance and meaning to your project.

Understand the problem

Make a diagram of the problems, or requirements of the building. By understanding the needs you may be led to an approach to focus on.

Sketch

Another useful way to develop your ideas, sketch out your concepts. Whether it is tiny elements of design detail, or general form of your building. Keep referring back to your sketches, as they may inspire a development of design.

Study your precedents

Carrying out in depth research relating to your design problems will inspire you and help you discover solutions. You can study how issues have been solved in other designs, and how they might direct you with your own. It is not copying, but using previous design innovation to inform your design solutions.

Design Solution

Your concepts and solutions will begin to build as you explore the different factors required in your design and the values and ideas you can come up with. Hopefully these tips and pointers will help you to develop your concepts in design, and give you more confidence in presenting your designs.

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Architecture Site Analysis Guide

Architecture Precedent Study and Analysis

Defining the Parameters of the Architecture Design Project

Presentation board tips

How to prepare for your architecture crit

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http://www.firstinarchitecture.co.uk/how-to-develop-architectural-concepts/