

The Untapped Potential of Video in Architectural Design

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Research Plan

Problem statement

Video is a medium that enables the communication of qualities such as time, movement, sequence, sound, and more. These are qualities that are important in architectural design, but are not intrinsic to traditional methods of architectural representation such as drawings and physical models. Because of this limitation, I want to explore the possibilities of using video in architectural design, as supplement to standard methods of researching, designing and representing architecture.

Project fascination & background

Traditional methods of architectural representation, such as drawings like plans, sections, façades, as well as physical models, are static and in some ways limited in what they can communicate. The way we as humans perceive the world around us, and specifically built architecture, is dynamic and always changing; as we move through a building we perceive spaces from different perspectives and we hear how the materials of a space reflect our footsteps, our voice and other sounds, as we spend time there we notice how light changes as the day passes or weather changes.

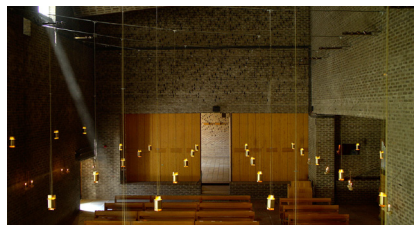
Our interaction with these spaces, or with other people in such places, connect us to buildings, leaving an impression on us. It is these elements of architectural design that I feel I have not been able to fully explore in projects I've completed throughout my architecture studies, as they are difficult to make tangible with traditional methods of representation. Because of this, I want to explore applying video, which is a more dynamic medium of communication, as a tool in the architectural design process. Doing so will require experimenting with video in a practical and applied way, testing out different techniques and seeing where the strengths and weaknesses of video in relation to architecture lie.

Relevant examples & inspiration

The examples below have in part inspired me to pursue this fascination, showing me a broad range of possibilities in the relationship between film and architecture. This variety of different techniques and styles of film-making have led me to want to experiment with using video at different stages of the architectural design process, to see what is possible and useful at varying phases, ranging from initial exploration, to sketching/prototyping, to the detail level and then final representation. This interest is formulated in my secondary research question.



From: www.bekalemoine.com/homo_urbanus.php



From: arkdes.se/en/utstalling/the-silence-amie-siegel-2022/



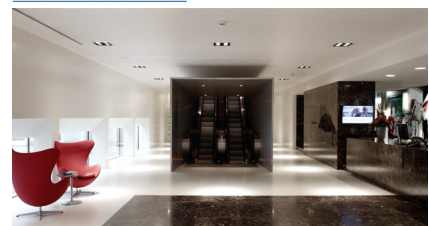
From: <http://kth.diva-portal.org/smash/record.jsf?pid=diva2%3A1070591&dswid=1656>



From: afasiaarchzine.com/2017/09/sauter-von-moos-7/



From: www.mos.nyc/project/hole-no-thing



From: minutes.kaanarchitecten.com/films/forensic

Research questions

Primary question: In which ways can the medium of video be used as a tool throughout the architectural design process?

Secondary question: How does the use of video at different stages of the design process affect design outcomes?

Hypothesis

When used precisely and creatively, video can be an enormously powerful addition to the design process, capable of communicating design research and design ideas beyond what traditional methods of architectural representation can communicate.

This hypothesis encapsulates the premise of my project and my ambitions for my research. Because of the experimental and pioneering nature of the project, it's somewhat difficult to predict what the outcome will be and what it may lead to in terms of a design project. The research is focused on the method and process of designing, rather than being specifically for a design. Quantifying the values of 'precisely', 'creatively', and 'powerful' in this hypothesis will be one of the challenges of the research process.

Method

My research for this project can be broadly divided into two categories that will run in parallel: experimentation and design research. Experimentation, which I've already started, involves a process of thinking of and trying out techniques of using video in the design process. I want to do so by working with a number of my peers, all students at the faculty of architecture, that are currently working on their own design projects and are at different stages of their process. By working "for" these peers, I want to attempt to apply video techniques to what they are currently working on, in parallel to their own process, allowing a comparison of results after some amount of time (perhaps a week or two). Doing so will allow me to focus on the video techniques while having to spend less time on creating the objects/products filmed (e.g. site/sketch models, sketches/drawings).

The design research portion involves exploration towards a design project that resembles the typical steps of designing; program studies, site/location research, stakeholder studies, etc.. Here too, I want to apply video-based techniques, allowing me to test the techniques that I've experimented with previously and evaluate their effectiveness.

Experimentation - broader research into application of video in the design process.

Experimenting with new techniques to apply video at different phases of the design process, using different techniques and styles of film-making and storytelling.

Design research - video-based research for my own design project.

Applying and testing out the techniques to do research for my own design project and to see what outcomes they lead to (what works and what is more/less useful).

Expected results

The result of my research will be a collection of videos that both function independently and are part of a bigger whole, containing different techniques and narratives in relation to architectural research and design. Each of these videos would likely focus on a specific step in the design process, and utilise a corresponding video technique (or multiple) or style of film-making. There's also the possibility at a later stage to edit the separate videos together into a larger film as 'research paper', creating continuity and a narrative in both my research process and documenting techniques that span a general design process.

Research so far

Since starting this project at the beginning of September, I've made two videos; a proof of concept video and a mini-documentary about a research excursion to Austria. These are pictured below, with explanations about their purpose and their 'results'.



Proof of concept video: Weekend

A video exploring the importance of narrative in representing architectural design, as well as montaging techniques using a filmed location and a physical model. By using generic audio samples of daily domestic moments, a narrative is created that accompanies visuals of a home. The sound-scape created by these audio fragments communicate a story about how the home is used and what happens there on an arbitrary weekend day, giving viewers just enough information to inspire their imagination to complete the rest.

Link: https://youtu.be/2YWjIIYx_Y4



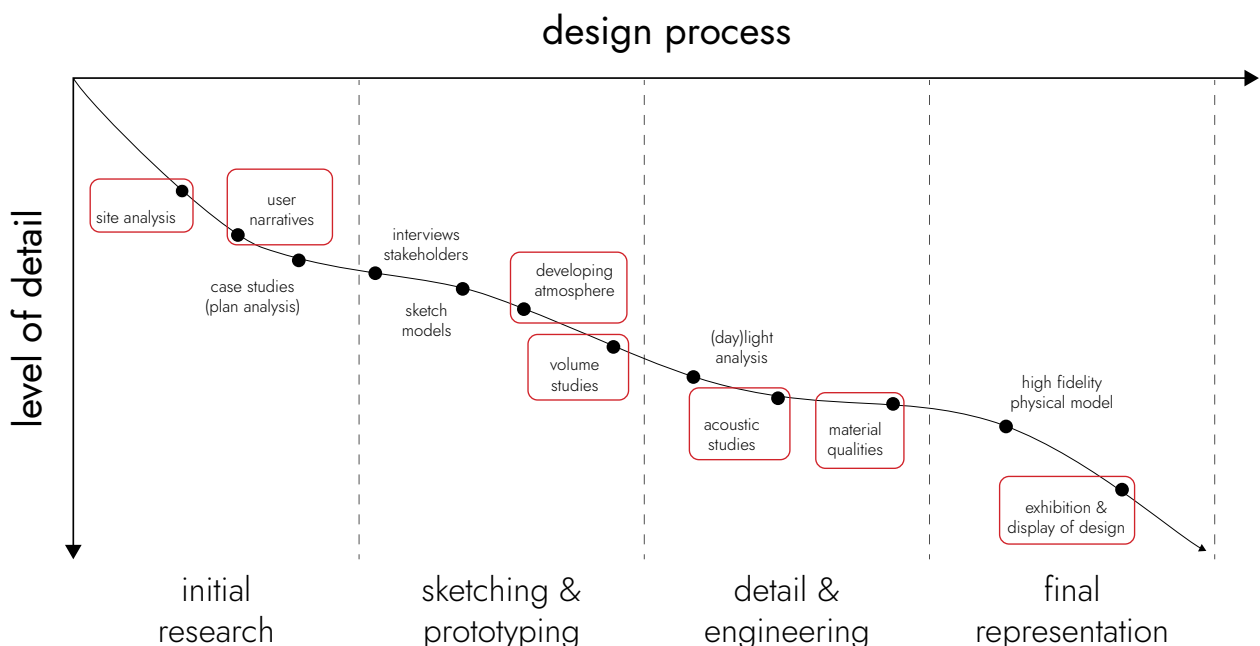
Research mini-docu: excursion to Austria

A short documentary about an excursion with Valentin, one of my peers, where we spent five days walking through the biggest ski area of Austria. The video explores ways to capture and communicate the atmosphere of an area and the impacts of human activity and mass tourism on a previously natural landscape. In this case, the use of video attempts to hold on to the impressions and feelings we experienced as we walked through the landscape, such that these feelings may be brought back when the video is watched later.

Not available yet.

Application of video

The scheme below highlights a variety of steps within the design process that may be interesting to involve video in. Highlighted in red are the moments where I currently see the most potential for experimenting with video techniques, also judged by where video may have a strong/unique aspect to add compared to standard or traditional methods of researching and designing. On the next page are a number of ideas that are slightly more elaborated, to illustrate more explicitly some of the ideas I want to try out in the experimentation process.



Specific video ideas

Site analysis

A concise video that captures the key characteristics and atmosphere of a project site, communicating notable qualities and interesting features.

Future scenario visual

A video that visualises one or a variety of future scenarios for a site or greater context, to explore possibilities and important themes.

Program case study

A video study of an existing building with a similar program to the one I choose to create a 'profile' of it, to find out which qualities are essential.

Interviews with stakeholders

Get to know stakeholders related to a location by conducting interviews with them to find their values, wishes and needs.

Material studies

Test the various characteristics of different materials by examining their tactile, acoustic and visual qualities in high detail on video.

Model volume study

Use a site model or virtual background to visualise different volume/form possibilities, testing strengths and weaknesses of each.

Towards a design

Given that this project has a strong focus on method and process, the direction for the design portion of the project is still mostly undefined. The basis for this will hopefully become more clear from the design research that I will conduct over the coming months. However, there are a few qualities that I assume will be useful or important in the context of my project, or would simply be interesting to pursue in combination with video-based methods. These are explained below.

Public / meeting place

A public building that is visited by a large number of people and might have a mix of different functions would be interesting to pursue, as this would mean more people are there to see/experience it.

Experiential / routing

A building that has a strong emphasis on experience, perhaps via a specific spatial succession or routing could be interesting, as this fits the nature of video quite well.

Use of specific future scenario

A specific future scenario might allow for a strong conceptual anchoring of the project, directing the design project towards a specific focus and perhaps reducing complexity of the current urban context in some ways, which would allow me to focus on method and representation rather than solving complex issues.

Renovation of an existing building

Working with an existing building could be beneficial in combination with using video, as it would give something to film and something to react to.

Proximity to Rotterdam

As I live in Rotterdam and have gotten to know it quite well over the past years and through several design projects, doing the project in Rotterdam would be useful, especially because it would make it easily accessible to go and film there.