

LASSE HEJLL

MENU OF TEXTURES

- Sketching and modelling digital texture



Texture is properties of a material as we perceive it with our senses, by touch, sight, taste and to some extent hearing. Similar to how texture is used in cooking, as a tool for composition and a gage for identification and quality in raw or cooked material, texture could be used with materials for architecture. Experiencing architecture, just like eating food, is an experienced event that can be directed with texture as a narrating element.

The method developed within this thesis is a modelling tool that extends beyond modelling geometries to a detailed texture modelling scale. This thesis considers texture a variable equal, and similar, to form. Textures are made up by patterns that can be altered and describe different material properties. Applied on different geometries the combination of texture and form offers additional multisensory dimensions to a modelled form.

This thesis explores and creates textures, using digital parametric modelling tools and digital tools for texture creation. For texture building and editing, a software called Substance Designer is used. With this tool a texture is created using greyscale bitmaps

and image editing tools to set up height-, normal-, roughness- and colormaps that describe a digital texture. Each map holds different attributes of a texture and by manipulating patterns and alternate its application in different maps, this method offers detailed control over texture properties and an alternative way of modelling digital representations of architecture.

The method is tested and materialized by experiments in a restaurant design testbed. A restaurant consists of different elements or settings that fill a role in a directed experience. Site and context, in part, offers reference materials as source for extractable properties to be used to create textures holding associative powers derived from multisensory experiences. Restaurant narratives and settings inform the layout of functions and spaces as well as forms and textures. The result of the experiment is architectural implementations of directing with form and texture, at scales ranging from building in a city scale to an intimate tactile scale.

Keywords : Texture, Digital Textures, Texture Directing, Cooking

MATERIAL TURN

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