

Constructing Clouds :

Colour as an alternative representational medium for architecture

The line dominates the history of architecture and architectural representation. Typically, its primacy comes from a belief that the line faithfully indexes the tectonic realities of construction. However, this pre-presentation of the object involves an intellectual trick that ignores the drawing's artificiality. Furthermore, this thinking also tacitly limits what one can represent. As Hubert Damisch (2002) notes, "...the cloud cannot be depicted by means of geometry...(given geometry) only reproduces objects as the clearly delineated, outlined shapes that are apprehended by an observer positioned at a particular spot."*

The line's preeminence makes sense, given Architecture has struggled to use colour as part of a generative technique. The capacity of digital imaging technologies to quantify colour has altered this circumstance. In effect, the RGB colour schema quantifies the qualitative — transforming space, form and time phenomena into reconfigurable data.

Unlike animated diagrams or algorithms, digital imaging technologies support design techniques that privilege, rather than simulate, real-world data. Accordingly, this exhibition offers a set of preliminary, speculative methods where colour is more than a surface treatment. Colour becomes the representational medium.

The exhibition draws on information operating across various architectural and urban scales to show how the quantification of colour can map architecture's ephemeral and sometimes nascent atmospheric qualities. The work also shows how the digital pipeline can diagram this information to open alternative spatial and material conditions. Crucially, the methods illustrated in this exhibition approach colour without drawing

*Damisch, H., 2002. *A theory of cloud: toward a history of painting*. Stanford University Press, USA, p 127.

Crucially, the methods illustrated in this exhibition approach colour without drawing on the mysticism underpinning Itten's colour theory or the spiritual purity that drove Van Doesburg's Elementarism. Instead, the work aims to extend the digital toolbox strategically by accepting that architecture remains, first and foremost, a formal endeavour. With this objective in mind, the work presented uses digital imaging technologies tactically to:

1. Map and reconfigure colour data to extend or contest the line's primacy.
2. Mediate rather than simulate real-world data.
3. Privilege sampling over abstraction.
4. Position the political as an aftereffect of the temporal reconfiguring of space, form and material.
5. Approach the inter-relationship between the urban and the domestic without privileging one over the other.

The exhibition samples a range of techniques for mapping colour data. It begins with a set of comparative atmosphere 'city' maps. The following drawings trace different conditions of movement mapped over time. These temporal mappings of diverse urban contexts are followed by a series of maps that operate at the scale of the architectural interior. Using Mies's Farnsworth House, Eisenman's House VI and UN Studio's first Mobius House, these diagrammatic images suggest how colour might generate form by reconfiguring and transforming spatial information.

Acknowledgements

We want to acknowledge the following people and organisations :
- *Our colleagues from the Faculty of Design Architecture and Building, the University of Technology Sydney, for their support and critique over the last decade.*
- *ARTECH international for providing a venue to present and develop this work.*
- *Matthew Austin for his technical contribution to the house case studies.*