Speculative Metaphors:

A Design-Led Approach to the Visualisation of Library Collections

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Certificate of Original Authorship

I, Georgina Hibberd declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy in the School of Design, Faculty of Design, Architecture and Building at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

Signed by Georgina Hibberd

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Online Material

Demonstrations of the prototypes described in this thesis can be found on Vimeo:

Field

https://vimeo.com/291857405

Flock

https://vimeo.com/291858013

Neighbours (Voronoi)

https://vimeo.com/291858466

Neighbours (Delaunay)

https://vimeo.com/291858868

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Abstract

Library collections have changed significantly in the past 50 years. A collection in a research library has moved from a physical repository – of books stored in a building – to one that is made up of digital materials, accessible from anywhere. Correspondingly, libraries' approach to collection development has shifted. Where once libraries amassed as much material as possible, so as to fulfil any need of a patron, the library now focuses on providing access to digital items distributed across many sites. Access to library collection items is through digital interfaces, primarily the online catalogue.

The graphical conventions of these catalogue interfaces are modeled on previous incarnations of the catalogue and blended with conventions drawn from the Web search engine. These conventions are all borrowed, not developed specifically for access to a library collection through a graphical user interface. This can be seen in three primary ways: the presentation of individual library records, the use of the single search box and the use of lists to display catalogue search results. The last of these is my central point of concern. The list is a graphical form that organises information and does not provide context for or communicate different types of relationships between search results. It is time to seek alternative ways of presenting library catalogue search results that take account of the affordances of the graphical user interface. The central research question of this thesis then is: how might new visual approaches to library catalogue interfaces enhance the search experience?

Using a Research through Design methodology, I develop three prototypes through which I explore alternative approaches to the visual design of catalogue search results. The prototypes build on the research of scholars and practitioners seeking more generous approaches to library collection interfaces by providing a visual approach that contributes a relational understanding of library collections (Whitelaw 2012, 2015). This approach recognises that the graphical forms used to structure information are persuasive, rather than pragmatic and as such can be used to create new ways for researchers to understand the library collection.