The thesis submitted by Goki Miyakita is entitled “Design of Narrative Book Collection Combining Computational and Visualization Approach Exploring Japanese Culture Through Keio University’s Pre-Modern Japanese Book Collection,” presents a new dimension in interacting with rare Japanese books on the Internet through designing an online interactive interface, the Narrative Book Collection. The Narrative Book Collection is implemented as a supplementary material to an online learning course launched on a Future Learn MOOCs platform.

The thesis is written as a design thesis consisting of five chapters. Chapter 1 begins with an introduction about history of books and functions as cultural artifacts. The chapter also discusses how books are transformed in the digital age with a focus on the impact of emergent technologies in rare book collections.

Chapter 2 reviews relevant fields such as digital scholarship in museums and libraries, researches in Digital Humanities, Information Visualization, Information Aesthetics, and narrative of book collections including Distant and Closed Reading.

Chapter 3 proposes Narrative Book Collection, a new reading experience through designing an interactive interface of rare Japanese books. It aims at enhancing understanding of rare Japanese books through establishing affective, easy and useful interface. The chapter explains the design details based on three design goals: (1) stimulate exploration and facilitate the understanding of the course through browser-based interactions, (2) enable wider range of interpretation of bibliographical information, and (3) provide both distant and close reading experiences to enable multiple pathways.

Chapter 4 discusses the Proof of Concept of Narrative Book Collection by analyzing the 4th course run of FutureLearn which took place in autumn 2017. The thesis examines usability and effectiveness of Narrative Book Collection through both quantitative and qualitative approaches.

Chapter 5 concludes the thesis.

The contributions of the thesis are the following:

1. The design of Narrative Book Collection as an interactive interface associated with Time (timeline), Genre, Typology (binding style), Appearance (color and size), and Content (writing style) has made the learning experience more exploratory and deepen learner’s knowledge of rare Japanese books.

2. The Narrative Book Collection was launched as a supplementary material for the online course on FutureLearn platform with 1,045 participants from 95 countries. Through the course implementation, it has proved that an interactive supplementary material to an online course enhanced learners to interact with its diverse elements of Japanese culture, from both micro to macro level.

The reviewers came to conclusion that the contributions of the thesis in relation to social impact, research output and quality meet the requirements for a PhD in Media Design.