A Model for Aggregating Manga Metadata Across Institutions: Improving the Granularity of Manga Bibliographic Data on the Semantic Web

Bibliographic data for manga, a style of Japanese comic, can be found in varying levels of detail granularity, typically dependent on the institution creating the data. These institutions include academic libraries, special archives or institutions with a focus on manga, corporate databases, hobbyist Web resources, and others. Often, these institutions are describing the same manga resources, but choose to describe different levels of granularity, focus on different properties, describe the data from their respective points of view, and do so in different languages. The exchange and reuse of data among these institutions would be useful in building a more complete bibliographic data landscape for the manga fans and researchers alike. Aside from some Web resources, however, this data typically exists in isolation from other sources – so called information “silos”. In an attempt to bring together these various descriptions about similar manga resources, this thesis presents a conceptual model for the aggregation of bibliographic data for manga in Linked Data formats using Semantic Web technologies. Data from Monash University's JSC Manga Library, Toppan Printing Company, US academic libraries, and Web resources, was collected and examined to identify what level of FRBR entity of manga they were describing – the conceptual Work level or the volume-focused Item level – and to what level of granularity. Then, matching manga records from different sources were found in order to identify resources available for aggregation and test the suitability of the model. The Europeana Data Model was used as the basis for the method of aggregation, while Dublin Core and the new BIBFRAME model and vocabulary were used for bibliographic description of manga at different levels. The final result is a conceptual model that enables the aggregation of bibliographic data for manga from different providers, both at the specific volume level and the conceptual “Work” level, enabling a greater level of granular detail for manga to be put on the Semantic Web.