

Metadata Analytics for Critical Research on Visual Media Culture

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Martin Roth and Zoltan Kacsuk
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Data-driven methodologies

From digital humanities to computational humanities

- Quantitative **textual analysis** - distant reading, culturomics
- **Web native** approaches - ‘digital methods’, webometrics
- **Algorithmic data extraction** - cultural analytics
- **Metadata analytics**

Metadata analytics

- Roots in **bibliometrics** and **scientometrics**
- Based on **descriptive metadata** in library and information science
- Large metadata databases built by **enthusiast communities** online*
- Understanding cultural objects and processes **at scale**

An example of metadata analytics: The Japanese Visual Media Graph Project

Introducing the JVMG project

- Databases by enthusiast communities are the **go to resource for checking information**



- **Japanese Visual Media Graph (JVMG) project**
- Project aim: Make these databases available for **large-scale quantitative research, in collaboration with the communities**
- Funded by the **German Research Foundation's** (Deutsche Forschungsgemeinschaft) e-Research Technologies program

KEY CHARACTERISTICS

The Japanese Visual Media Graph project is based upon the following tenets



COLLABORATION WITH COMMUNITIES

We work with diverse fan and enthusiast communities to make their data available to researchers. We respect their wishes and conditions for the use of the data.



SUITABILITY FOR RESEARCH

The needs of researchers drives all aspects of the development of the graph database, from the choice of data sources and the data model to specific representation details.



OPEN DEVELOPMENT

We document the process of data integration and the associated research in an open manner. You will find regular updates on the [project blog](#).

Why is this metadata?

- Descriptive metadata are the **foundations** for each database
- One of the aims is to **catalogue** works/creators/characters/etc. and make them **discoverable/comparable**
- **Expansion of descriptive metadata** along the interests of the communities (cf. Azuma 2009 [2001], Mayernik 2021)

Research with metadata analytics allows us to:

- **Create a typology** of visual novel game characters
- **Test claims** from previous otaku culture research
- Explore recurring patterns in **character creation**
- Look at **networks of co-appearing characters**
- Create a **census of characters** in Japanese visual media (cf. Williams et al. 2009)

But is this critical research?

Three potential answers:

- 1a)** Metadata analytics as critical perspectives on **accepted tenets** of the field
- 1b)** Metadata analytics as critical perspectives on **media “realities”**
- 2)** **The JVMG project as a whole** as a potentially critical undertaking

“Small Data” vs “Big Data”: The JVMG project as a critical undertaking

Vicki Mayer - *Small Data Theorizing*:

- “small data theorizing in designing digital archives [...]:
 - 1. A logic of **multiplying ontologies** to order and classify data;
 - 2. A logic of mindful **consent** to collect, store, and use data;
 - 3. A logic of social use-value towards an **alternative data economy**.” (2020: 9, our emphases)
- Conceived as both a critique of and in opposition to “big data”

From metadata analytics for critical research towards a critical look at metadata analytics

Dimensions of critique vis-à-vis (big) data

- **Metadata/ontology:**
 - Never transparent/natural
 - Always ideologically framed
 - What gets excluded?
- **Power relations:**
 - Ownership/access
 - Who benefits?
 - Potential for abuse/misuse
- **Epistemology:**
 - Quantification & correlation vs. theory & context
 - Critique of digital positivism

Thank you for your attention!

Get in touch at: rothm@hdm-stuttgart.de
or kacsuk@hdm-stuttgart.de

Visit our project website:
<https://jvmg.iuk.hdm-stuttgart.de/>