

# Enthusiast models of the Japanese visual media domain

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# Outline

- Japanese Visual Media Graph (JVGMG) project
- Enthusiast communities and their data models
- Observations

# Introducing the JVMG project

- Databases by fan/enthusiast communities have collected huge amounts of data on Japanese visual media



- **Japanese Visual Media Graph (JVMG)** project proposal
- Project aim: Make these databases available for large-scale quantitative research, in collaboration with the communities
- 3 year grant funded by the “e-Research Technologies” program of the German Research Foundation

# Source databases

## Fan/enthusiast community databases:

- **AnimeClick:** Wide interest in Japanese visual media and culture
- **The Visual Novel Database (VNDB):** Focused on visual novel games only
- **Anime Characters Database (ACDB):** Focus on one aspect of the domain

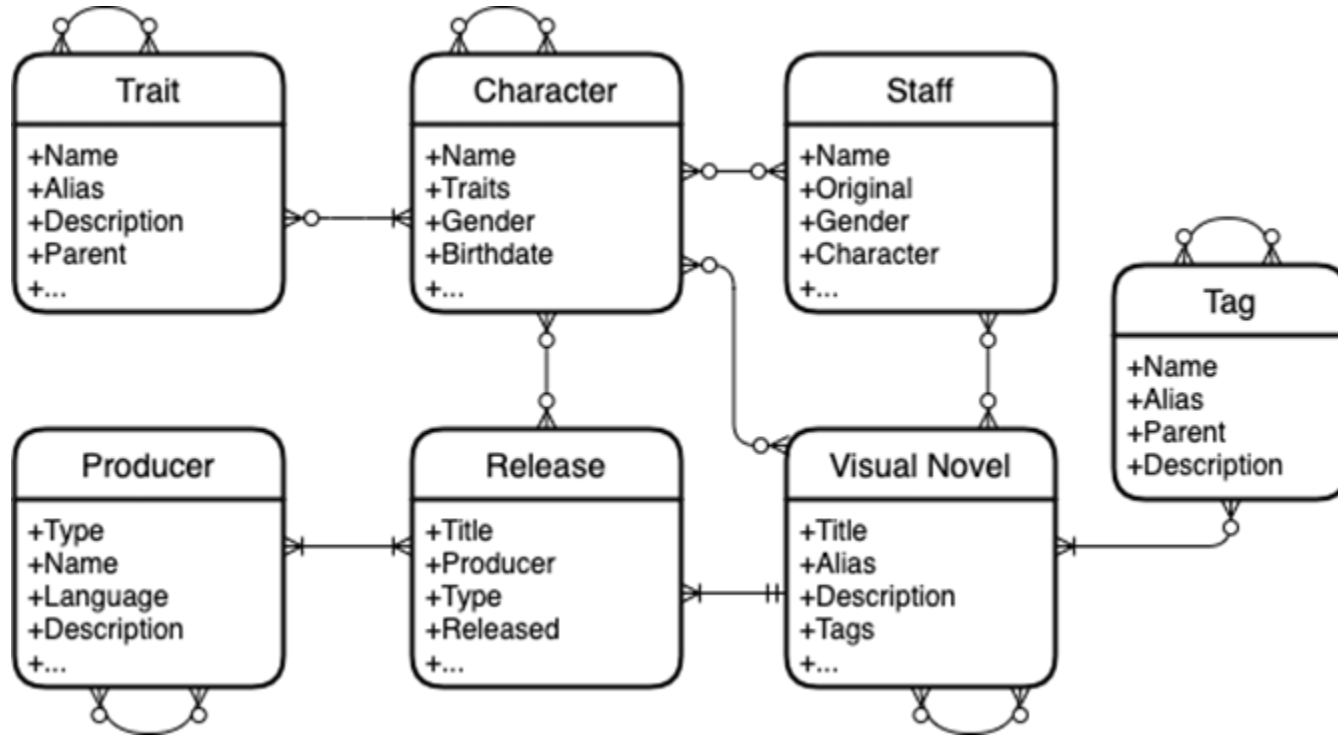
## Other databases:

- **Wikidata:** Not focused on Japanese visual media
- **Media-Arts Database:** Collects information on manga, animation, games and media art from institutions, creators and publishers in Japan

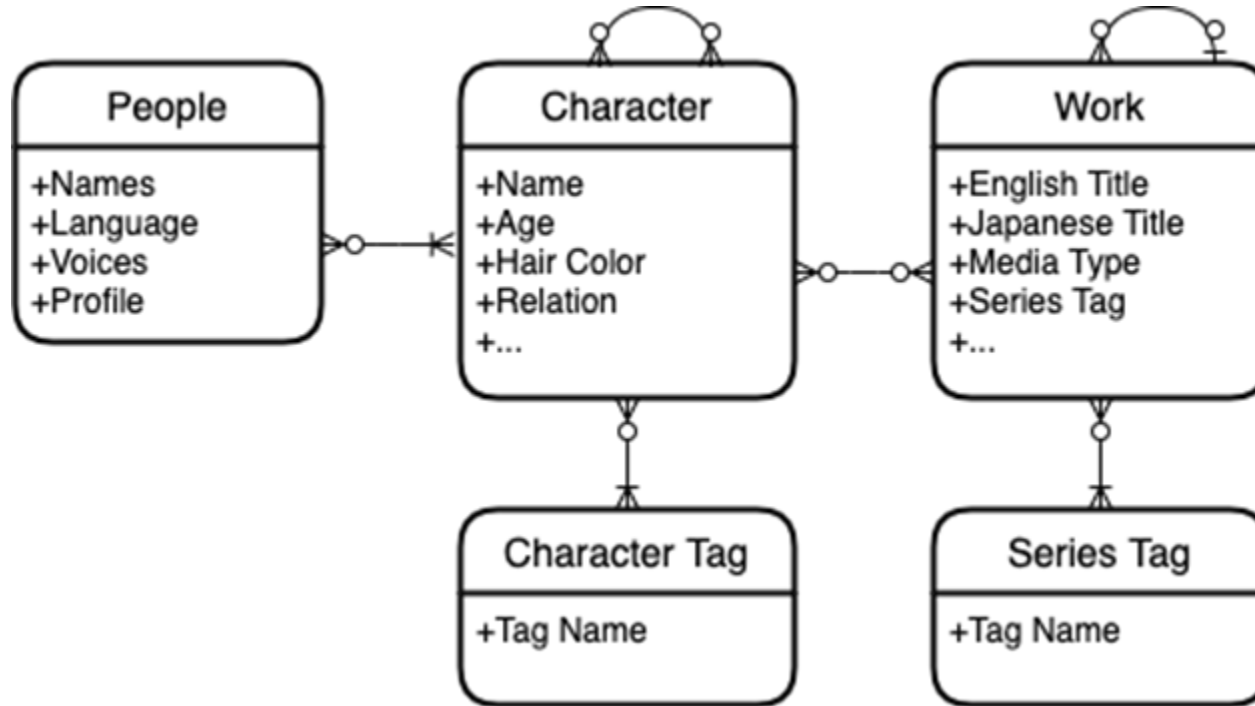
# Entities instead of string literals

- More possibilities for retrieval
  - Find all works by a creator
  - Find all characters that share a set of traits
  - Find all media that share a set of tags
- Allows for complex relationships
  - Role of person in media work creation
  - Role of character in media

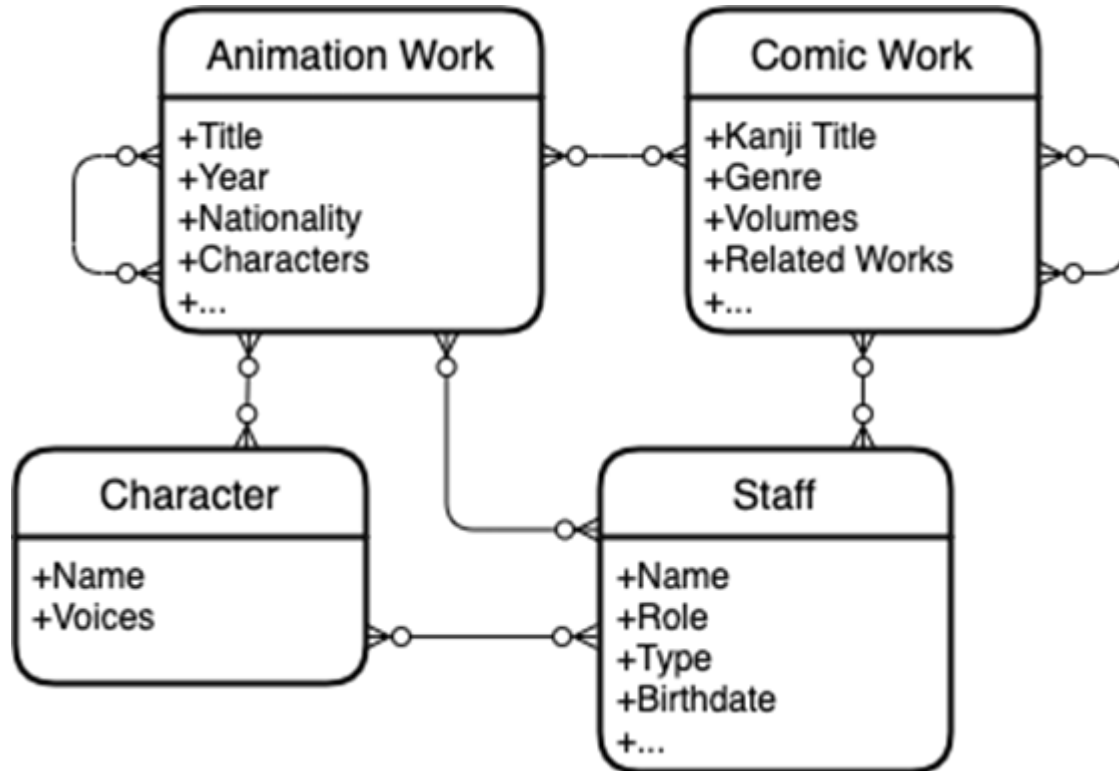
# Community: vndb.org



# Community: animecharactersdatabase.com



# Community: animeclick.it





# Entities in fan databases

- Decision of entity vs. string literal is not arbitrary
- Entities require more work
  - Database design (extra tables with fields)
  - Editorial control (avoiding duplicates and false matches)
  - Continuous development of concept hierarchies
    - New concepts
    - Usage guidelines

# Common entities

- **Core entities** universal to all sources
  - Media
  - People (artists, directors, production staff, voice actors, ...)
  - Visual characters
  
- **Additional concept hierarchies** to describe
  - Media
  - Visual characters

# Entity and concept numbers

Enthusiast community	Works and media				Company	Characters	Work properties	Character properties	Involved people
ACDB	Work					Character	Work Tag	Character Tag	People
	10.207					107.369	1.088	4.051	5.557
AnimeClick	Animation Work	Comic Work				Character			Staff
	9.491	11.762				102.143			39.604
VNDB			Visual Novel	Release	Producer	Character	Tag	Trait	Staff
			28.190	71.349	10.394	90.077	2.585	2.777	21.164

# The object-work-franchise relationship

- **Three layers:** physical object – abstract work – franchise
- **VNDB:** physical media to abstract work (bottom two layers)
- **AnimeClick and ACDB:** Clustering media into media franchises (top two layers)
- **Media-Arts DB:** bottom up from physical objects towards franchise (franchise still work in progress)
- **Wikidata:** Very fragmented (no agreement on a common ontology)

# Challenge: Representing media works

- Media works granularity is not obvious
  - TV series as single entry or multiple seasons?
  - Special episodes as part of a series, part of season or extra entry?
  - How about multi-part movies?
- Possible solutions
  - Matching similar to ontology alignment: full match, partial match
  - Merging information after decision on representation granularity
    - Aggregate data from multiple entries into one
    - Distribute data from one entry into one

# Observations

- Enthusiast groups focus on different aspects of the Japanese Visual media domain
- Their data models are detailed, well designed and share a set of core entities
- Multiple sources can be merged into a more complete representation of the domain
- Media works remain challenging due to differing representations

# Thank you for your attention!

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Visit our project website:

<https://jvmg.iuk.hdm-stuttgart.de/>

Visit the JVMG database:

<https://mediagraph.link/>