Tilburg University

Hochschule der Medien

Approaching Asian Popular Culture Beyond Japan from a Metadata Analytics Perspective

Views Opened up by the TINTIN and JVMG Projects

Funded by

DFG Deutsche Forschungsgemeinschaft

German Research Foundation

European Research Council

Established by the European Commission

TINTIN Project

JVMG Japanese Visual Media Graph

Zoltan Kacsuk and Neil Cohn

Mechademia Conference 2026

Traversing Trans-Asian Imaginaries: Anime, Manga, and Media Cultures

National University of Singapore

29-30 May 2026

Outline

1. **Metadata analytics** and the need for available research corpora
2. Introducing the **TINTIN** and **JVMG** projects
3. Example 1: Exploring **manga from Southeast Asia** with the TINTIN corpus
4. Example 2: A look at **East Asian media** with the JVMG knowledge graph

Metadata analytics and the need for available research corpora

Data-driven methodologies in digital and computational humanities

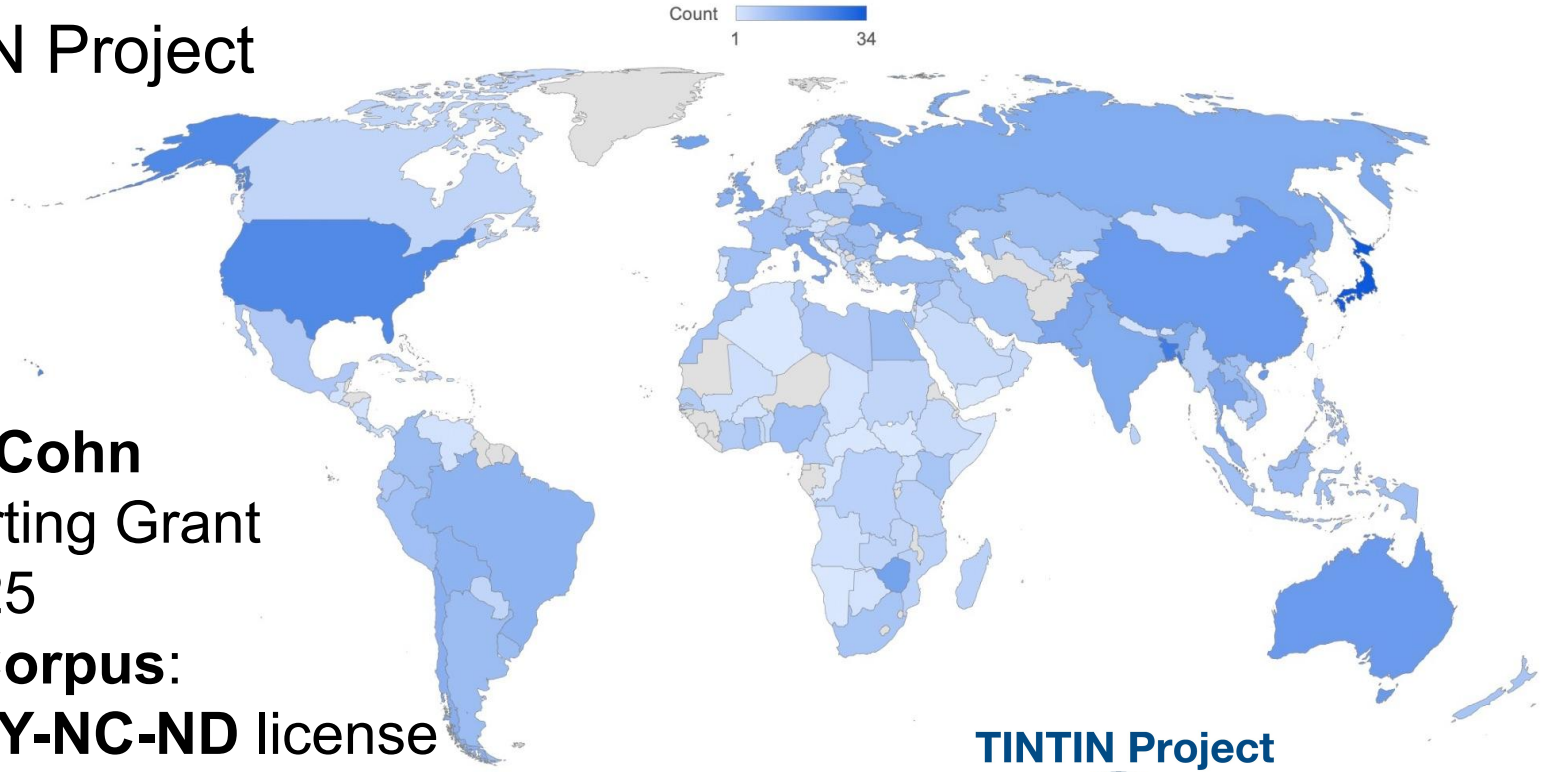
- Quantitative **textual analysis** – distant reading, culturomics
- **Web native** approaches – ‘digital methods’, webometrics
- **Algorithmic** data **extraction** – cultural analytics
- **Metadata** analytics

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**
- **Metadata** describing various aspects of works/characters/creators/etc.

Introducing the TINTIN and JVMG projects

The TINTIN Project

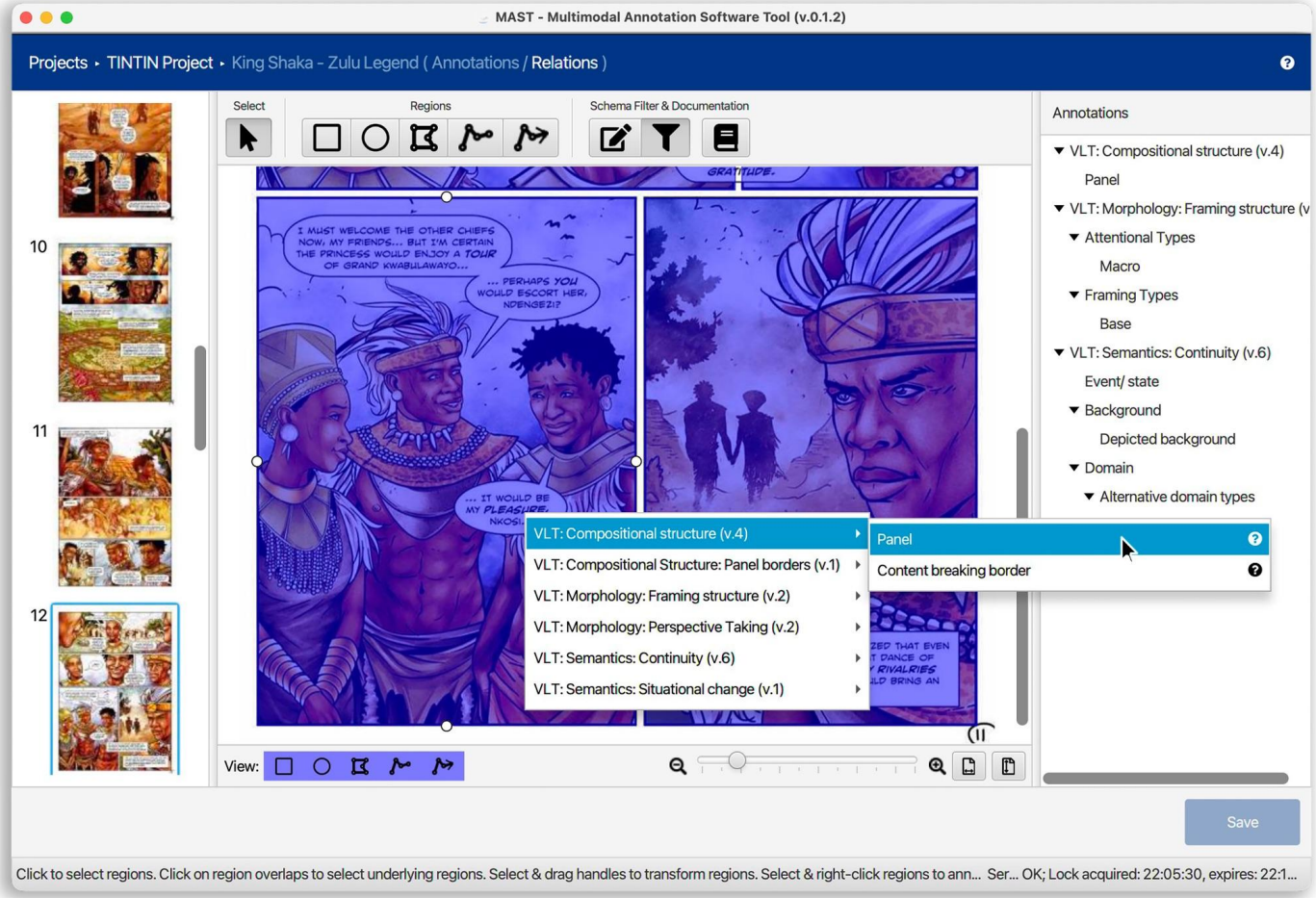


- P.I.: **Neil Cohn**
- ERC Starting Grant
- 2020-2025
- **TINTIN Corpus**:
  - **CC BY-NC-ND** license
  - **1030 manually annotated comics**
  - **Global coverage** (144 countries and territories)
- https://www.visuallanguagelab.com/tintin

TINTIN Project

The Multimodal Annotation Software Tool (MAST)

TINTIN Project



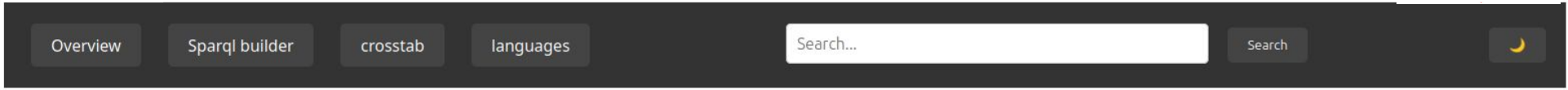
- Developed within the TINTIN Project
- **Bruno Cardoso**
- Very rich annotation capabilities
- Will be made available in a **Docker Container**

Introducing the Japanese Visual Media Graph (JVMG) project

- Project idea and lead: **Magnus Pfeffer** and **Martin Roth**
- Databases by enthusiast communities are often the **most up-to-date online resource for checking information**

- Project aim: Make these databases available for **large-scale quantitative research, in collaboration with the communities**
- **CC BY-NC-SA 4.0** license
  - Funding: German Research Foundation (DFG), 6 years duration

JVMG knowledge graph frontend: https://mediagraph.link/overview



Overview

Anime Characters Database Graph

Character A character found in ACDB.	131029
Publisher Within ACDB, Publisher refers to a title or series to which a character belongs, and not an entity that is engaged in a publishing role.	12381
Tag A class for descriptive details	331

AnimeClick Graph

Character Character of a manga or anime	57579
Author Author of an anime or manga	59502
Staff A person or group involved in the creation or publication of a creative work.	187017
Episode Single episode of an anime	212396

Visual Novel Database Graph

Anime Indicates the anime of a visual novel	1831
Visual novel A specific visual novel.	45612
Character A visual novel character.	126578
Staff An individual staff member that has contributed to the	33267

Media Arts Database Graph

Agent	69119
Animation TV program	172160
Animation video package	65919
Game package	49684
Manga book	380226

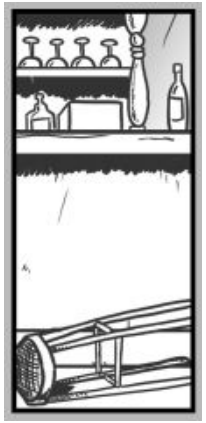
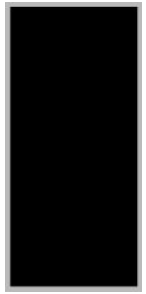
GPS Graph

Physical game package	6564

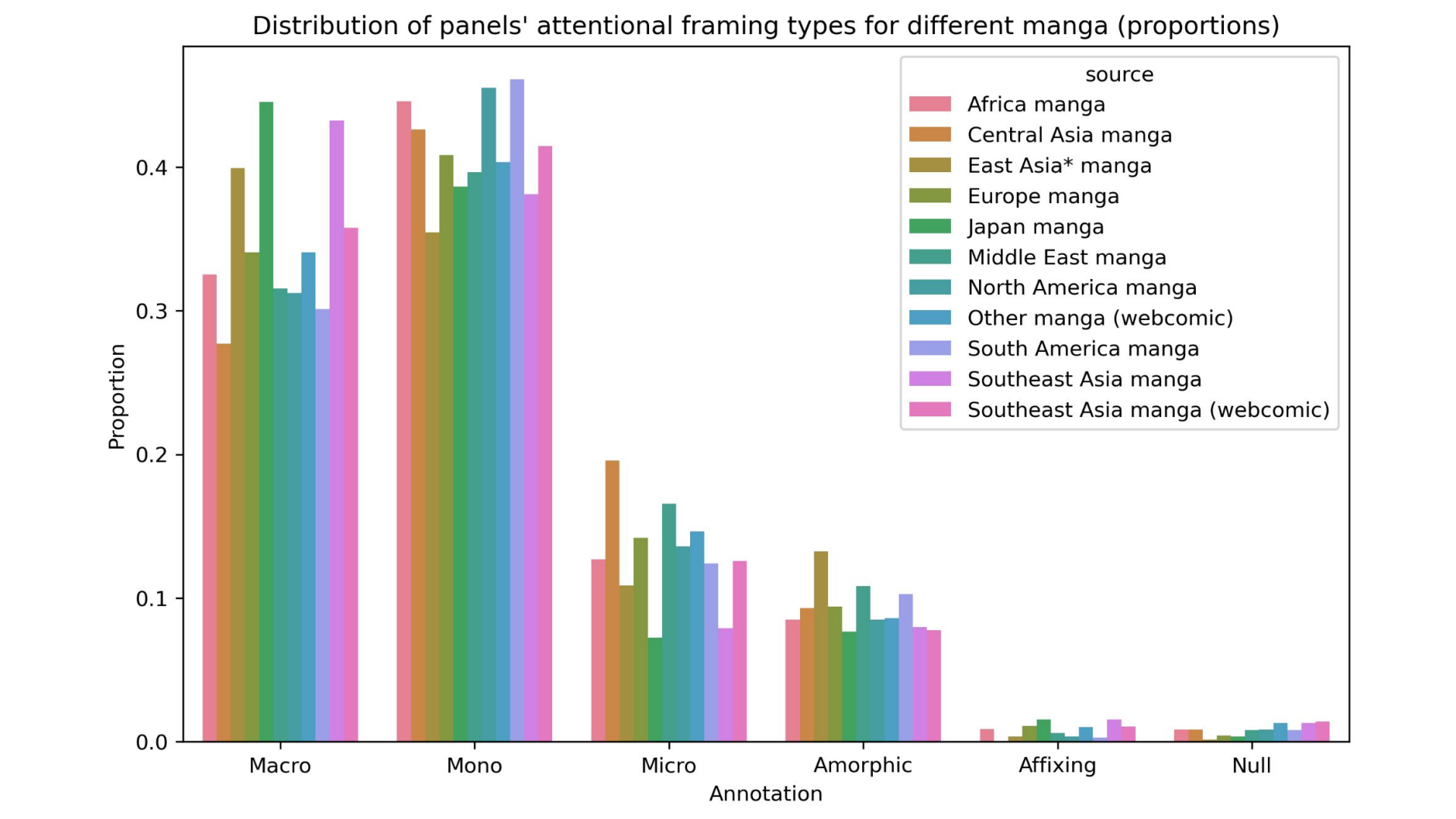
Example 1: Exploring manga from Southeast Asia with the TINTIN corpus

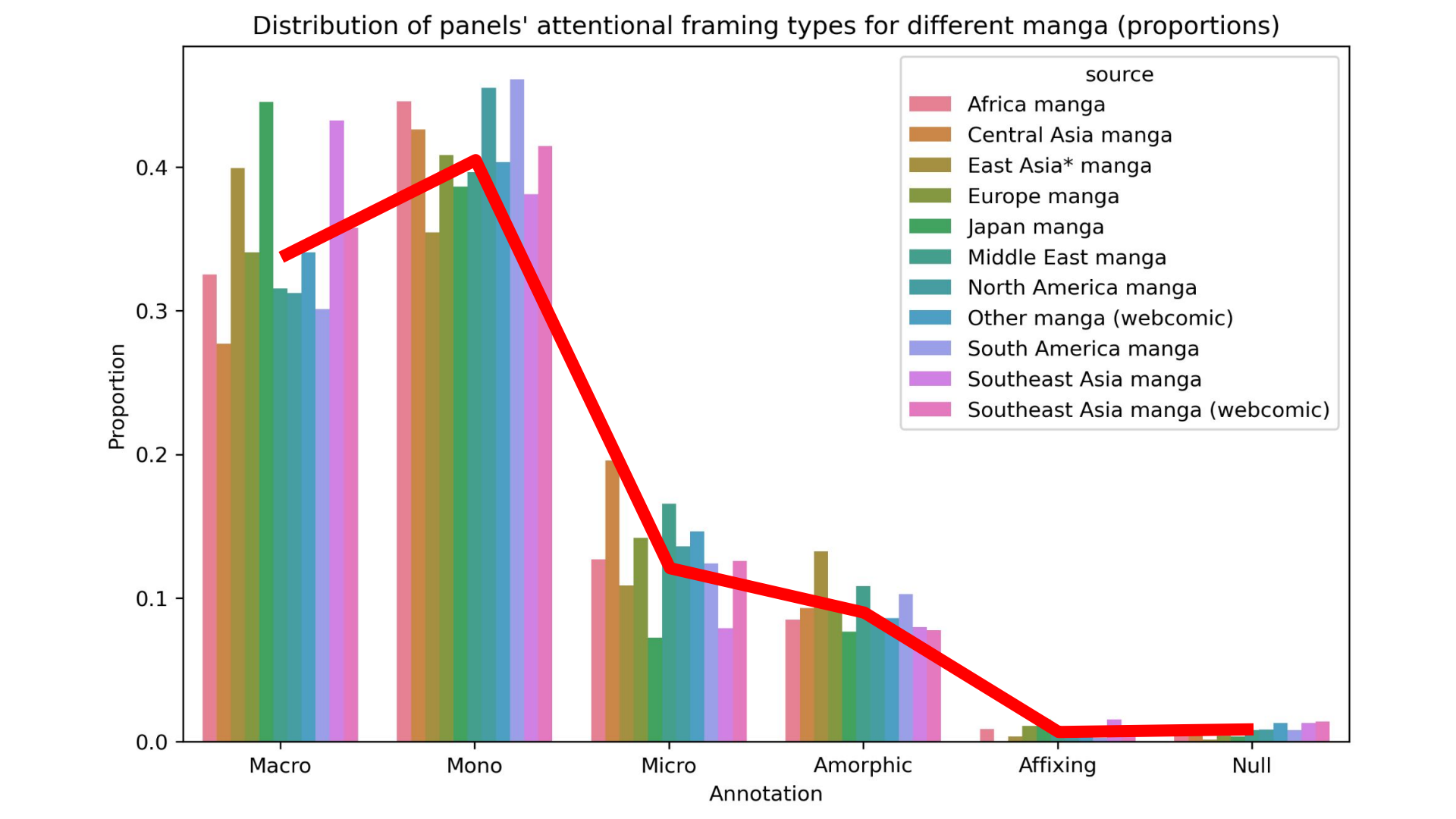
	Manga		Other style		Total
Global Region	*Print formats*	*Webcomic*	Print formats	Webcomic	
Africa	33	2	124	21	180
Central Asia	9	0	2	8	19
Japan	**34**	0	0	0	34
East Asia*	17	1	16	0	34
Europe	29	7	243	37	316
Middle East	31	1	14	10	56
North America	10	1	41	3	55
South America	37	1	64	19	121
Southeast Asia	**33**	**24**	33	8	98
Total	239	38	638	115	1030

Attentional framing types

Macro	Mono	Micro	Amorphic	Affixing	Null
					
multiple active entities	one active entity	part of an active entity	no active entity	morphological affix only	no information

Images from: Cohn et al. 2024. *TINTIN Project Documentation*.
Available at: www.visuallanguagelab.com/tintin


Distribution of panels' attentional framing types for different manga (proportions)
source
Africa manga
Central Asia manga
East Asia* manga
Europe manga
Japan manga
Middle East manga
North America manga
Other manga (webcomic)
South America manga
Southeast Asia manga
Southeast Asia manga (webcomic)
Proportion
0.0
0.1
0.2
0.3
0.4
Macro
Mono
Micro
Amorphic
Affixing
Null
Annotation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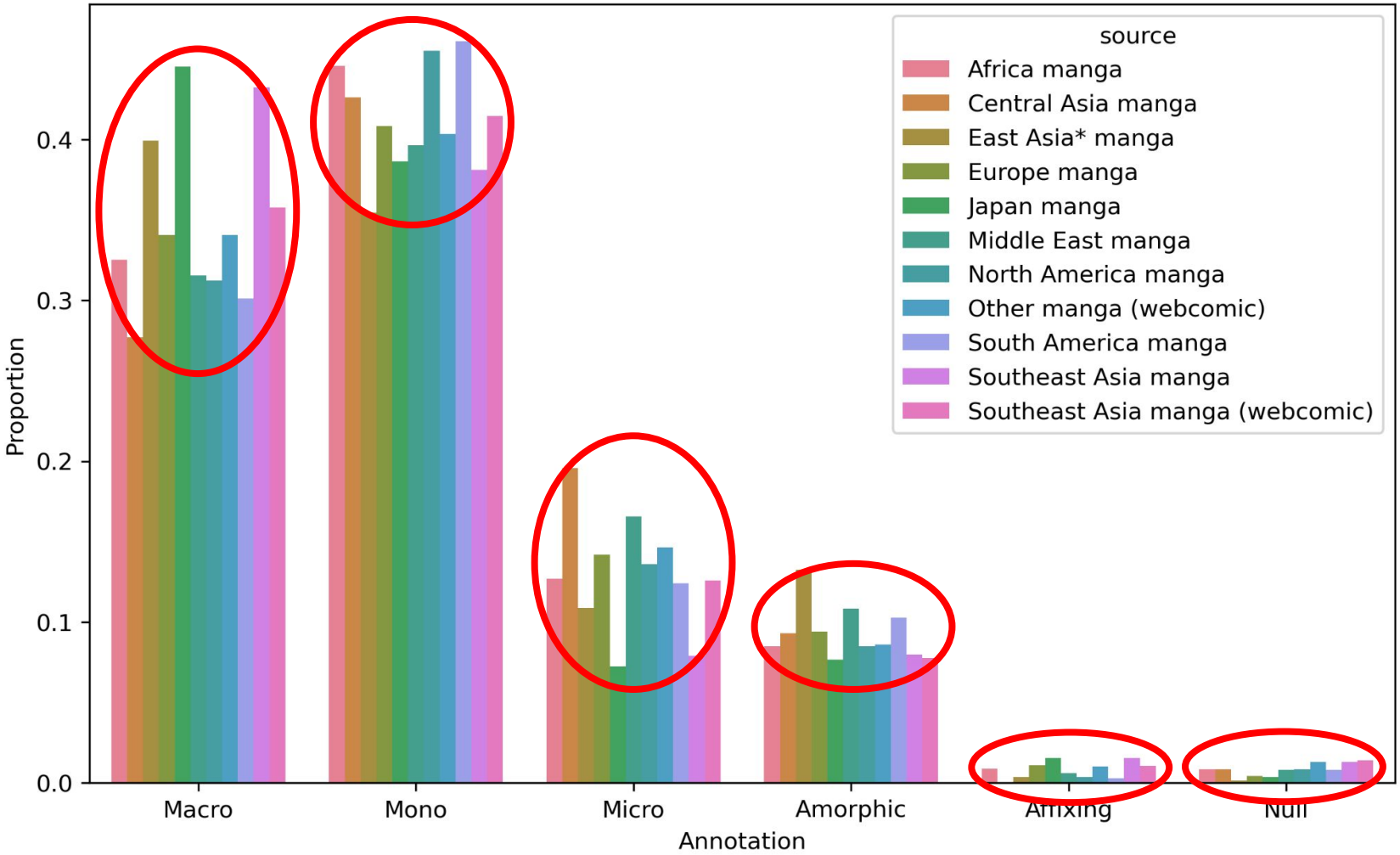
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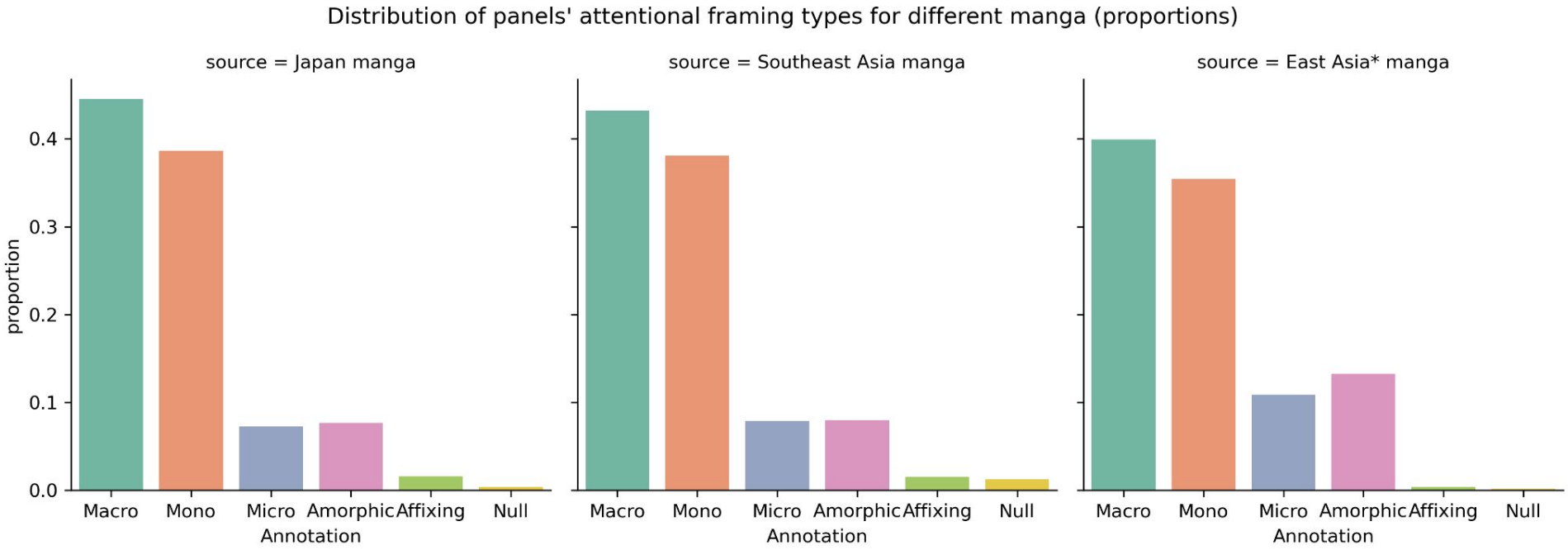
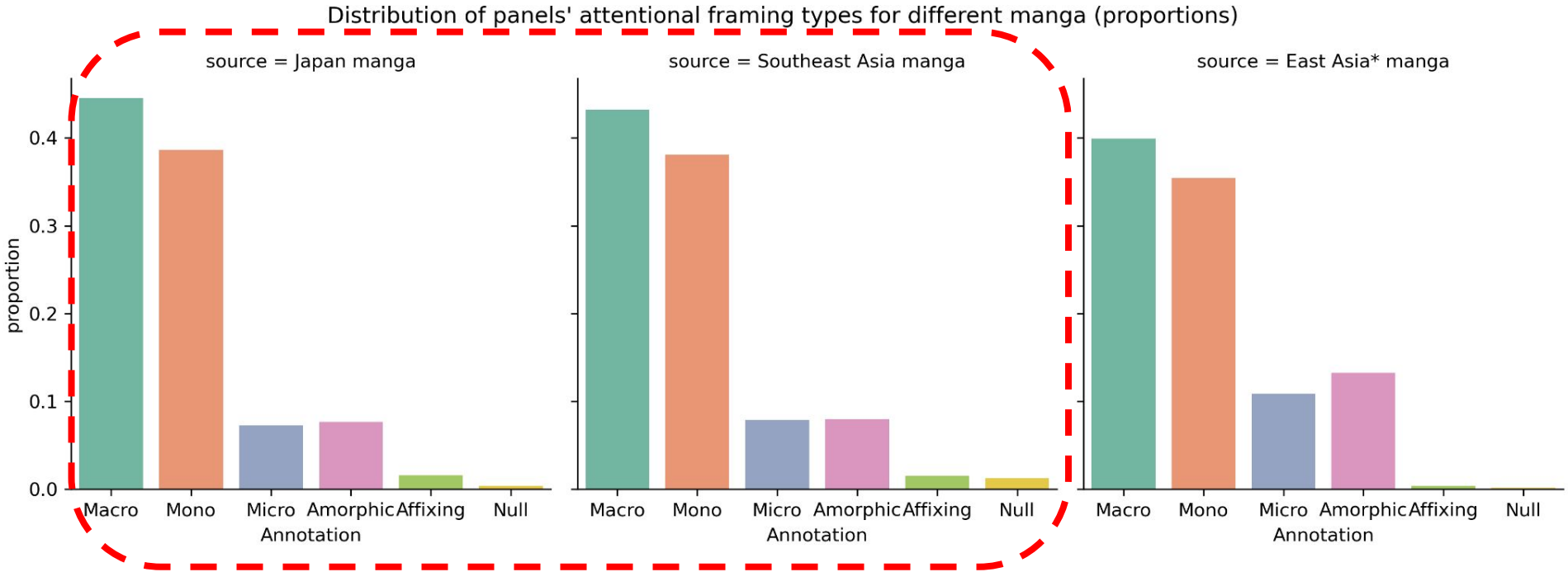
Manga from Japan, Southeast Asia and East Asia*



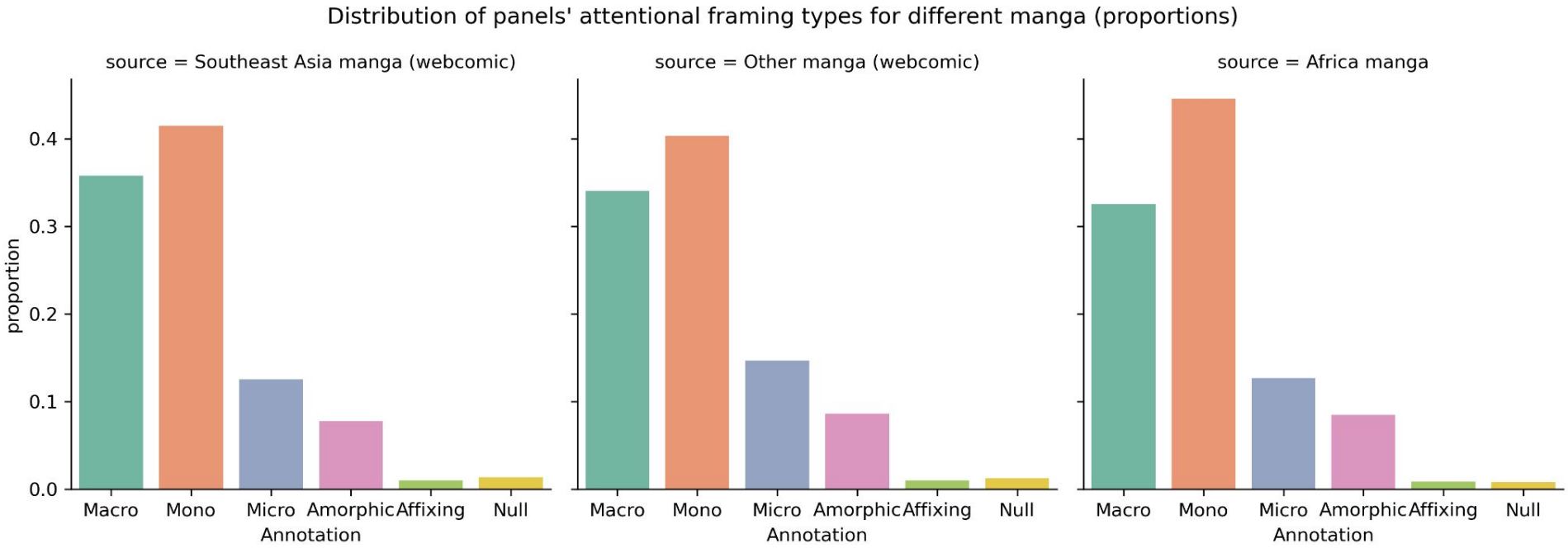
* East Asia excluding Japan

Manga from Japan, Southeast Asia and East Asia*



* East Asia excluding Japan

Webcomic manga from Southeast Asia and other countries, and (non-webcomic) manga from Africa



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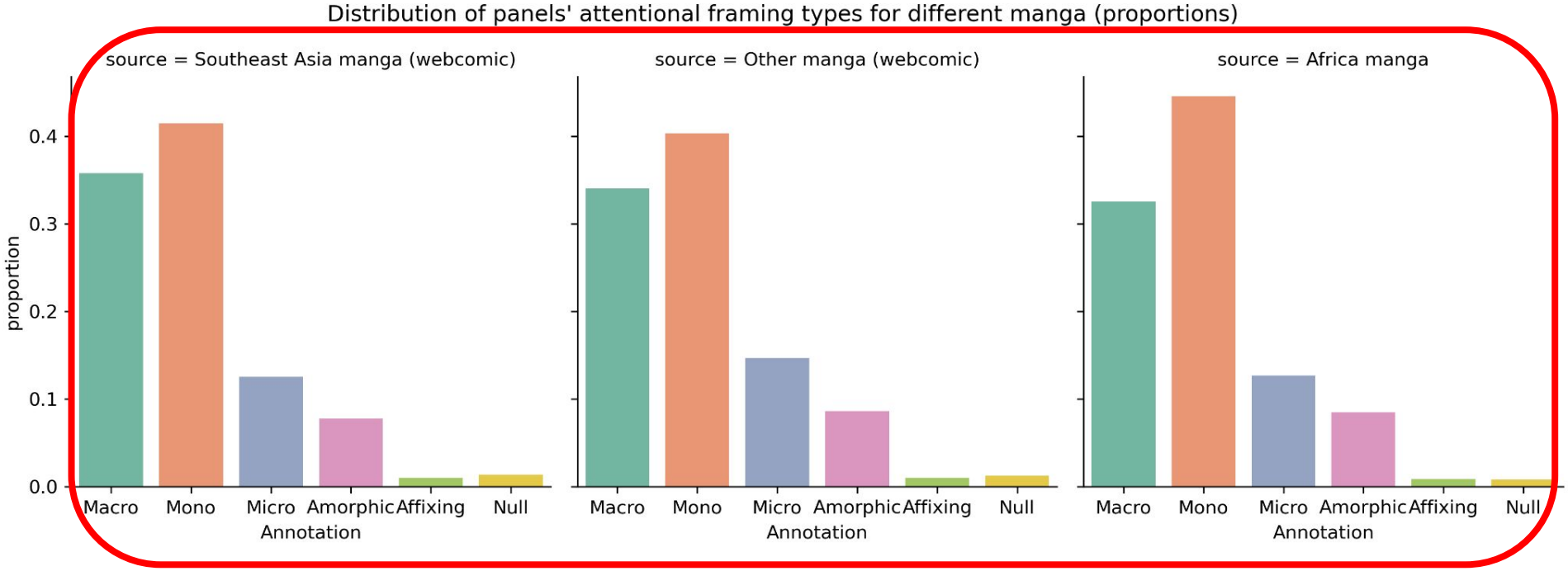
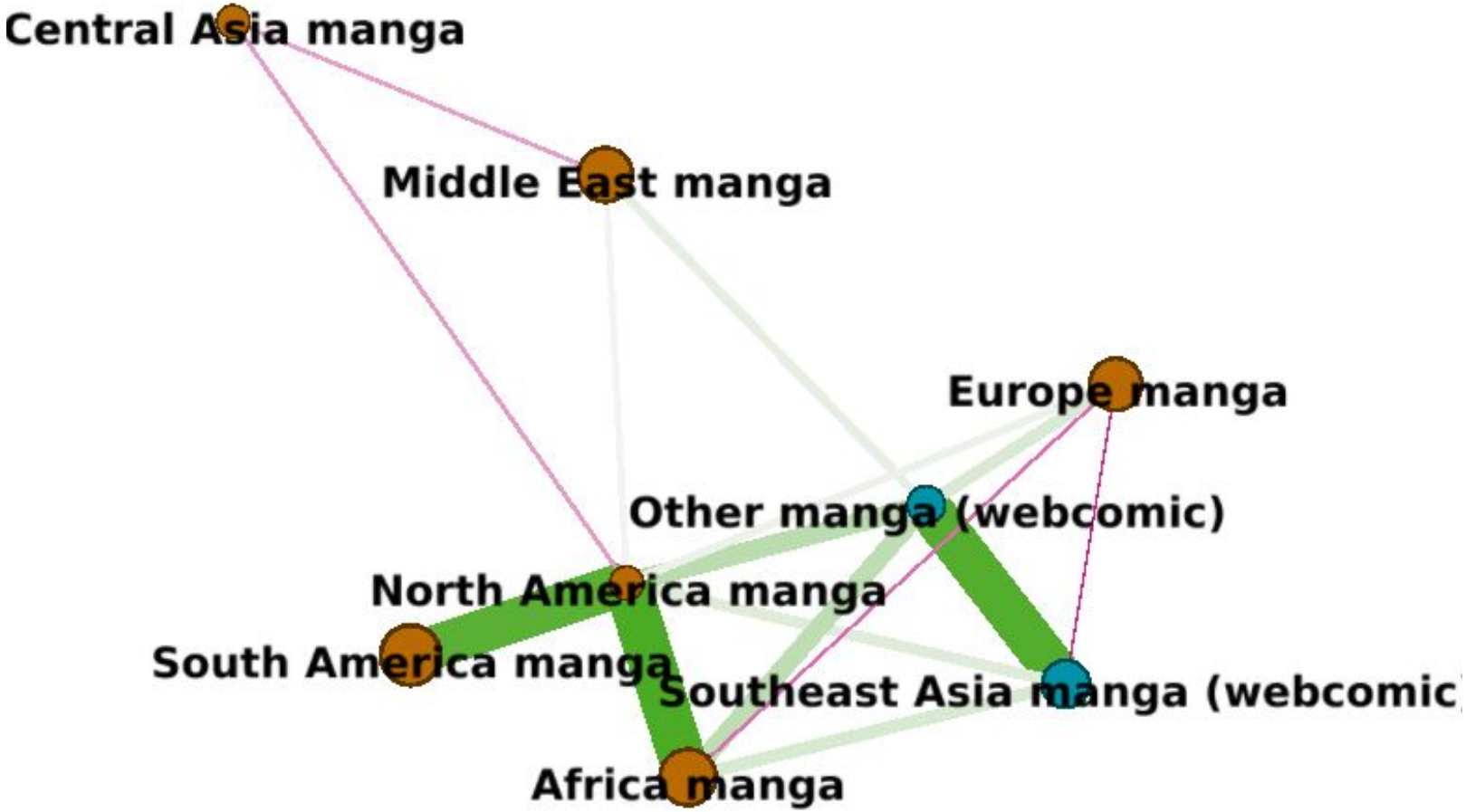


All distributions that are statistically similar to each other



All distributions that are statistically similar to each other

Example 2: A look at East Asian media with the JVMG knowledge graph

Chinese and South Korean works in the AnimeClick data

	China	*South Korea*	*Total Result*
Animation	**156**	**46**	**202**
Film	27	29	56
OVA	3	2	5
TV series	6	8	14
Web	119	5	124
Other	1	2	3
Comic	**120**	**448**	**568**
Manhua (of which webtoon)	116 (25)	0	116
Manhwa (of which webtoon)	0	444 (140)	444
Other	4	4	8
Total Result	**276**	**494**	**770**

Information on creators for Chinese and South Korean works in the AnimeClick data

		China	*South Korea*	*Total Result*
Animation	Company	35	9	44
	Group	1	0	1
	Person	10	30	40
	Unknown	8	1	9
Comic	Company	58	82	140
	Group	0	5	5
	Person	177	555	732
Total Result		**289**	**682**	**971**

Chinese and Korean language visual novel producers in the VNDB data

Chinese language (number of producers: 1257)			
	Developed releases	*Published releases*	*Total*
Company	404	1424	1828
Individual	376	702	1078
Group	941	2706	3647
Total	**1721**	**4832**	**6553**

Korean language (number of producers: 285)			
	Developed releases	*Published releases*	*Total*
Company	469	710	1179
Individual	72	225	297
Group	162	377	539
Total	**703**	**1312**	**2015**

Chinese and Korean language visual novel producers in the VNDB data

Chinese language (number of producers: 1257)			
	Developed releases	*Published releases*	*Total*
Company	22.1%	77.9%	100%
Individual	34.9%	65.1%	100%
Group	25.8%	74.2%	100%
Total	**26.3%**	**73.7%**	**100%**

Korean language (number of producers: 285)			
	Developed releases	*Published releases*	*Total*
Company	39.8%	60.2%	100%
Individual	24.2%	75.8%	100%
Group	30.1%	69.9%	100%
Total	**34.9%**	**65.1%**	**100%**

Thank you for your attention!

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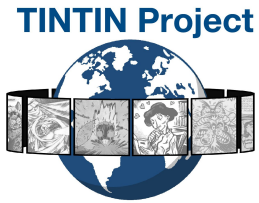
Visit the TINTIN project website:
https://www.visuallanguagelab.com/tintin

Visit the JVMG knowledge graph:
https://mediagraph.link/