

Conducting research with the Japanese Visual Media Graph

Applying the Census Approach to Japanese Visual
Media

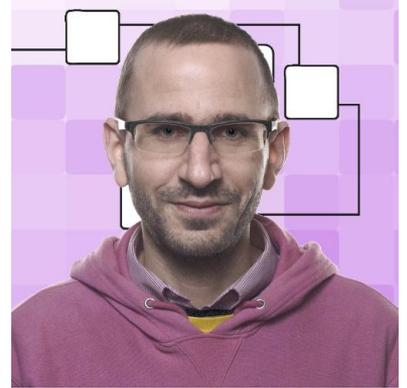
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Zoltan Kacsuk
Kyoto Seika University
25 November 2022

About me

- Doctor of Arts in Manga Studies, **Kyoto Seika University**, 2016
- Work on:
 - Subcultures, fan cultures, geek and otaku culture
 - Comics and manga studies
 - Data science and **digital humanities**
- Current position:
 - **Post-doctoral researcher** on the JVMG project



Outline of the presentation

1. **Example research applications** with the JVMG knowledge graph
2. Introduction: A **census of fictional characters**
3. Results: **Who populates Anime?** Examining the Anime Characters Database
4. Considering the **Japanese critical discourse**

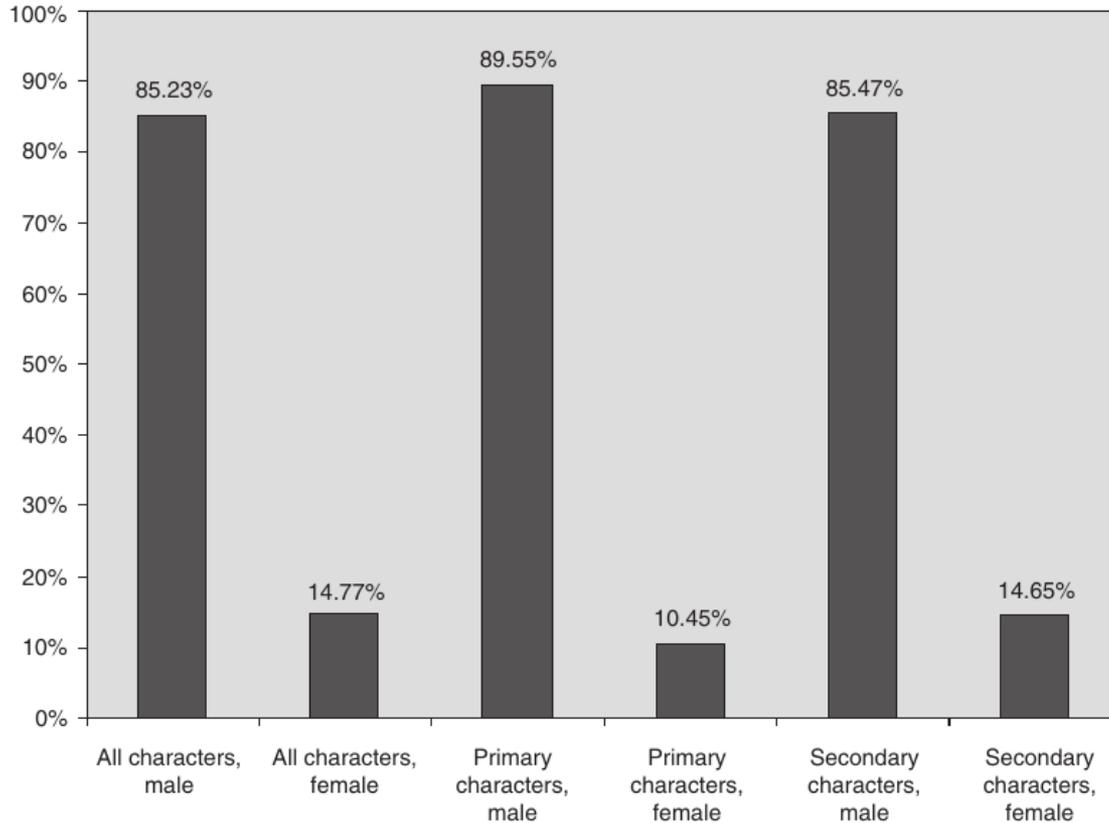
Example research applications with the JVMG knowledge graph

1. Investigating Japanese **Visual Novel Characters**
2. Testing one of the points from Hiroki Azuma's "**Otaku: Japan's Database Animals**"
3. **Exploring recurring patterns in character creation** in visual novel games
4. **Examining the concept of media mix** by looking at networks of co-appearing characters
5. **Census of characters** in Japanese visual media

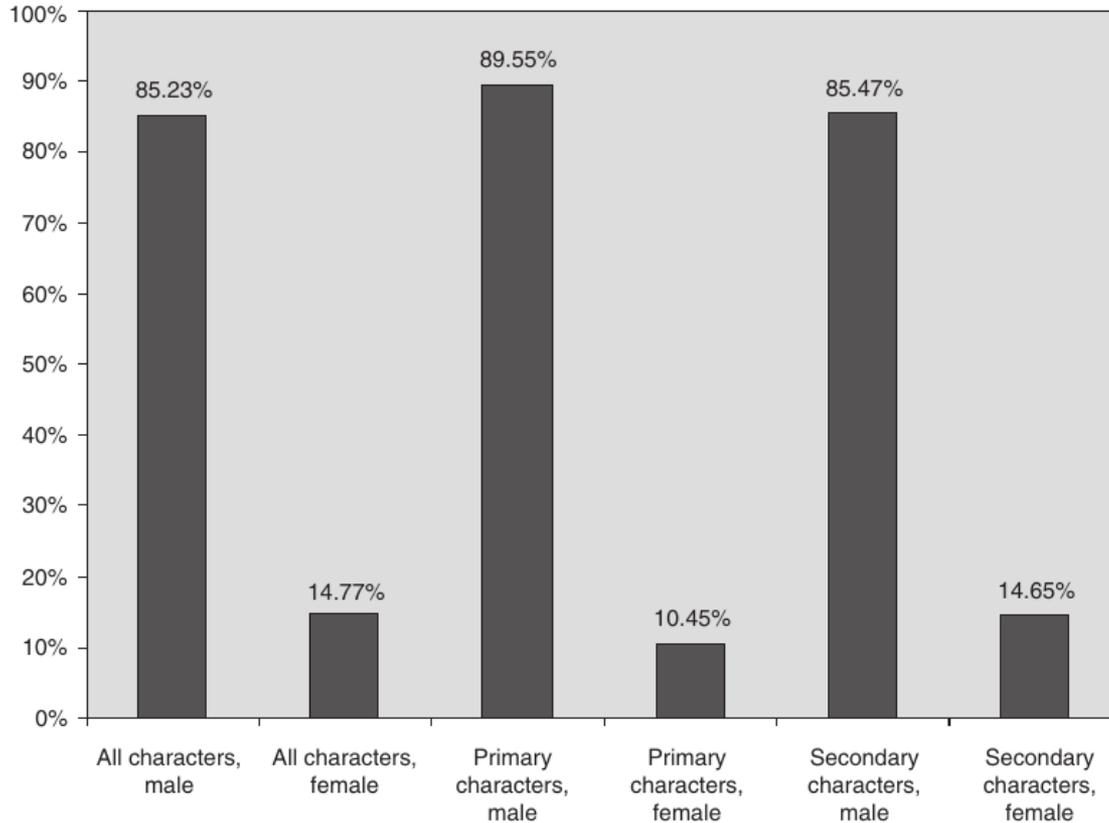
Introduction: A census of fictional characters

Background: The Virtual Census of Videogame Characters (Williams et al. 2009)

- “Measuring the imbalances that exist on the screen can tell us what imbalances exist in social identity formation, social power and policy formation in daily life.” (Williams et al. 2009, 819)
- “The results show a systematic over-representation of males, white and adults and a systematic under-representation of females, Hispanics, Native Americans, children and the elderly” (Ibid., 815)



Source: Williams et al. 2009, 825.



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A recent update of the study (Harrison et al. 2020) suggests some change:

“similarly to the 2009 study, most characters proportionally are White, male, and adult.” (Harrison et al. 2020, 2)

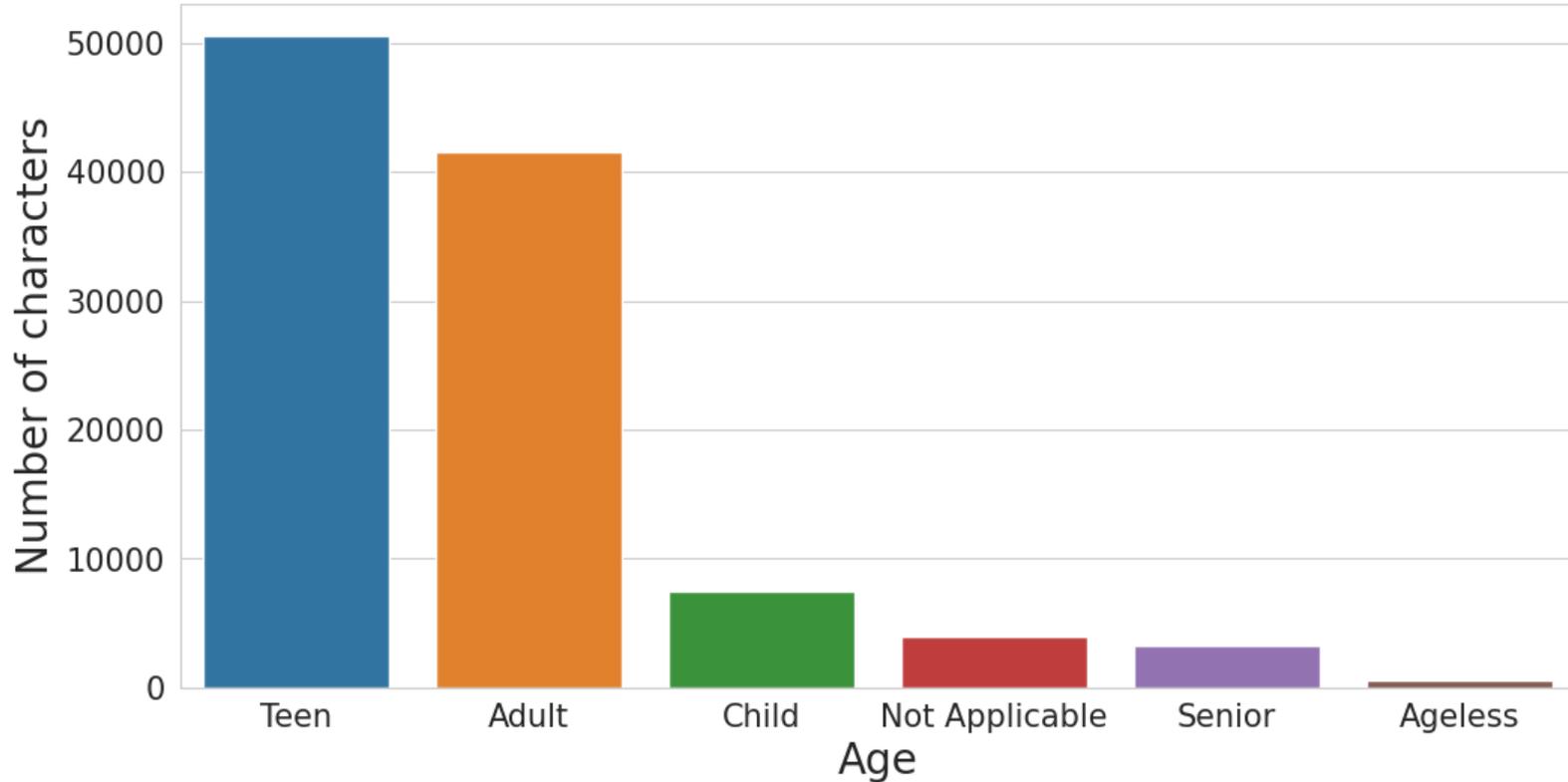
“the overall proportion of female characters has nearly doubled from 13% in 2005 to 22% in 2017. [...] this increase was primarily due to non-playable secondary roles” (ibid.)

Aim: A census of fictional characters in Japanese visual media and **anime** in particular

- Who **populates** Japanese visual media (Jvm) / anime?
- What does the fictional population of Jvm / anime **represent**?

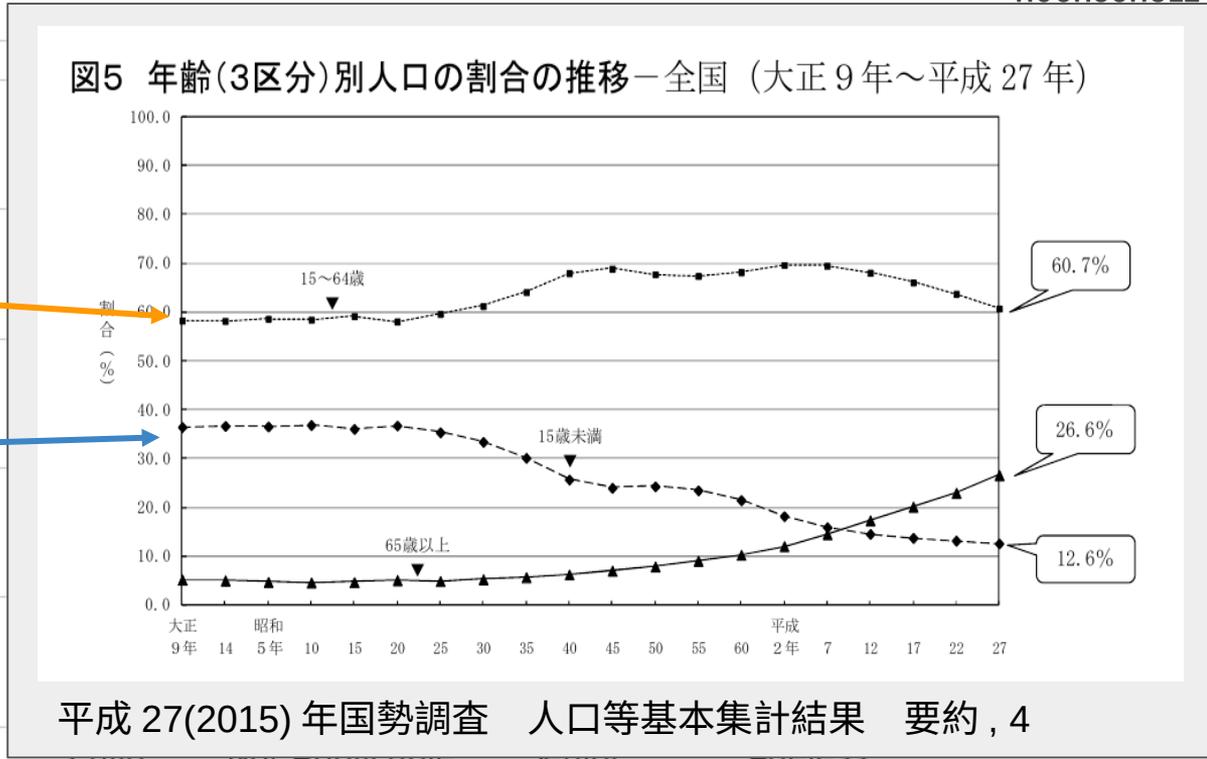
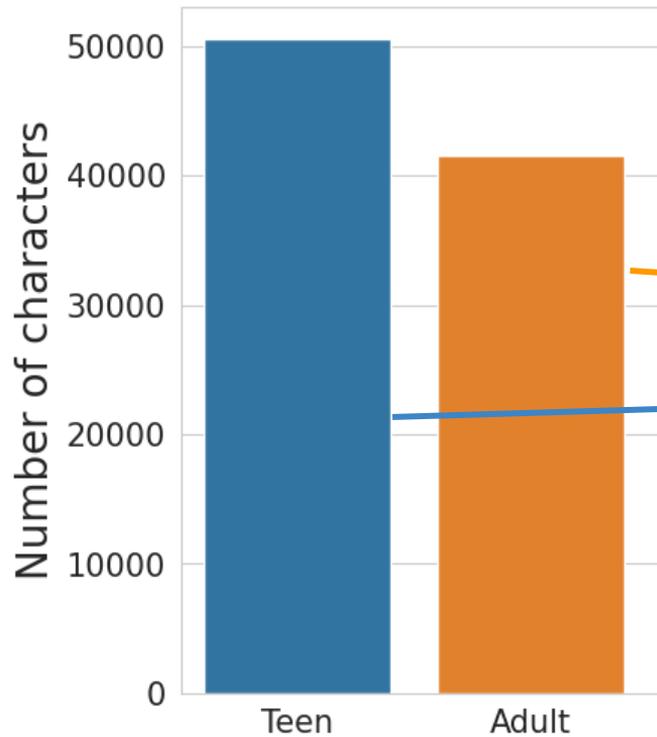
Results: Who populates Anime? Examining the Anime Characters Database

Distribution of all* ACDB characters by age



* Excluding characters with no publication year.

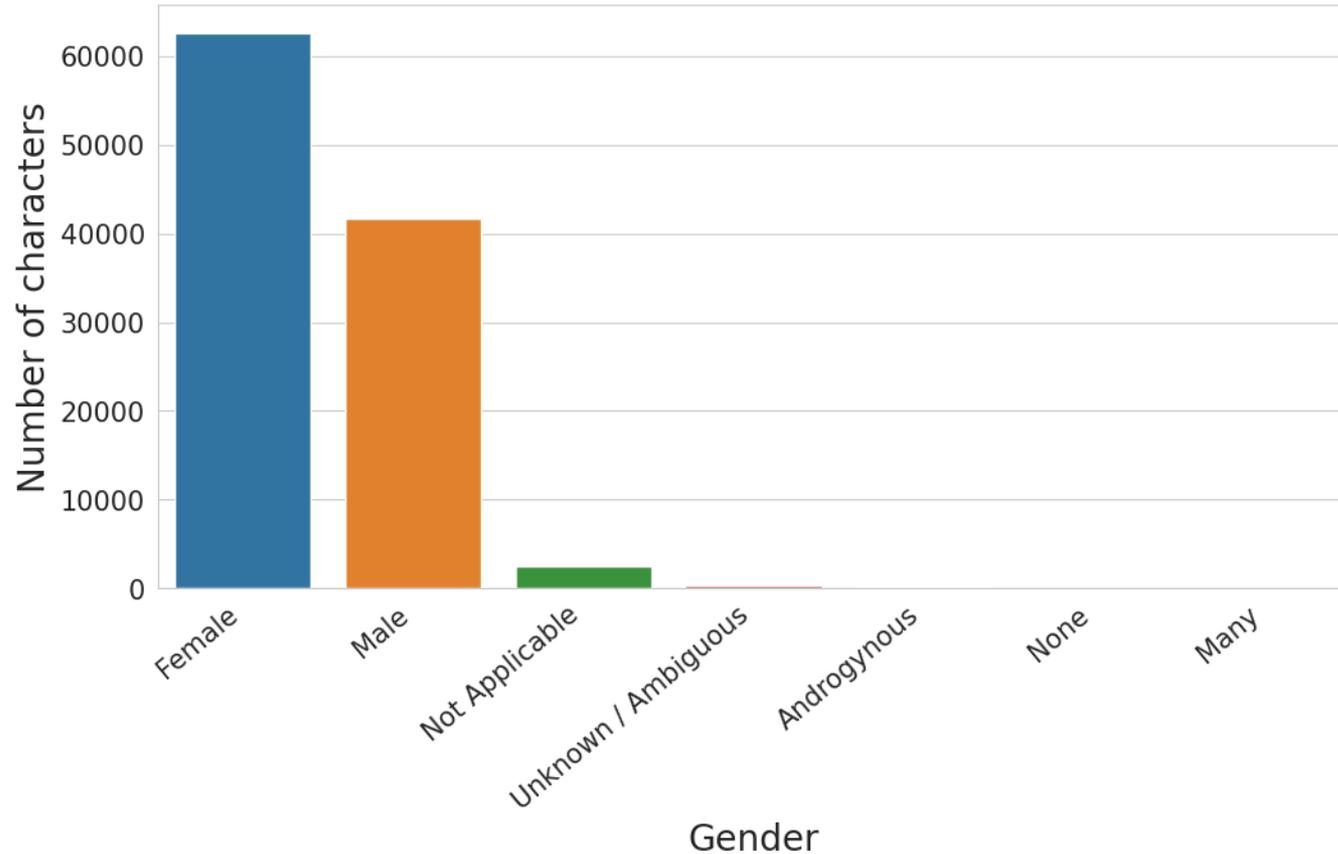
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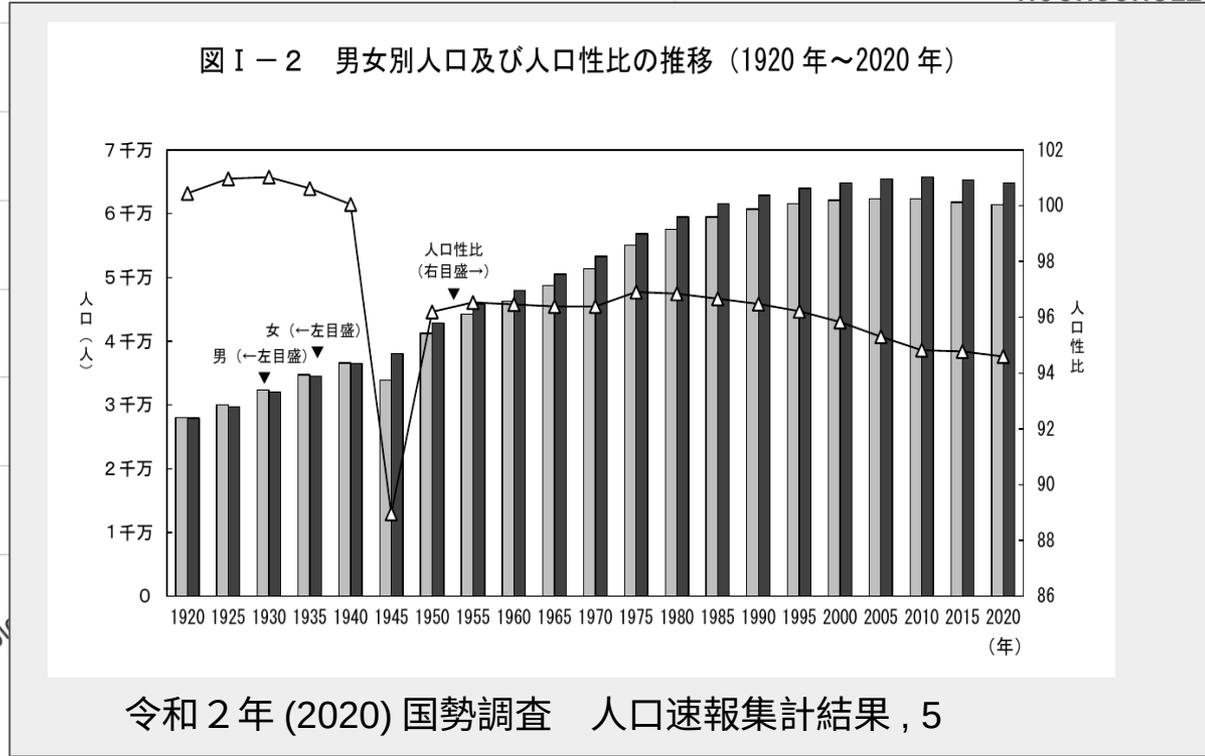
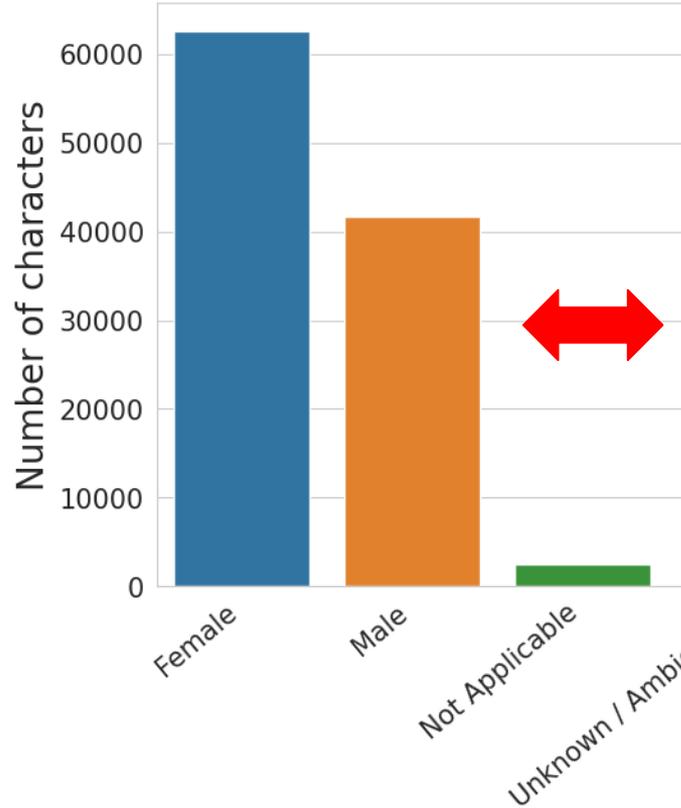
Age

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Distribution of all ACDB characters by gender

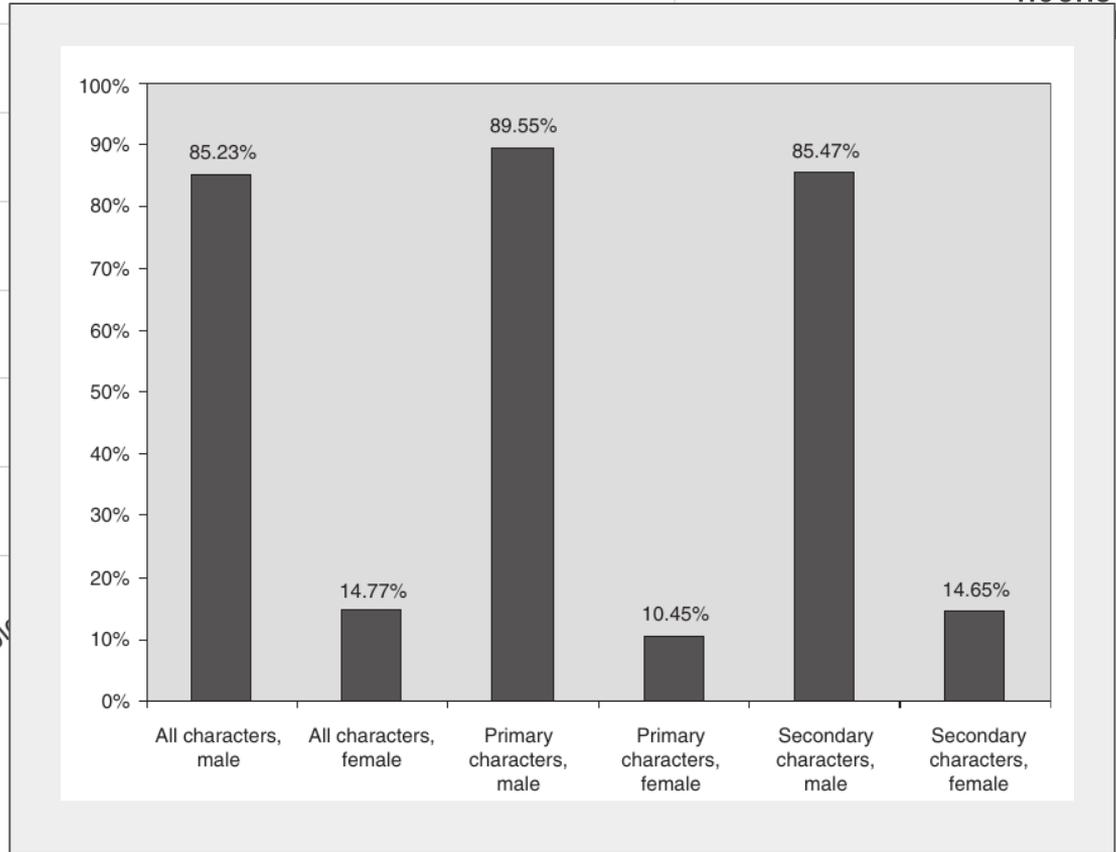
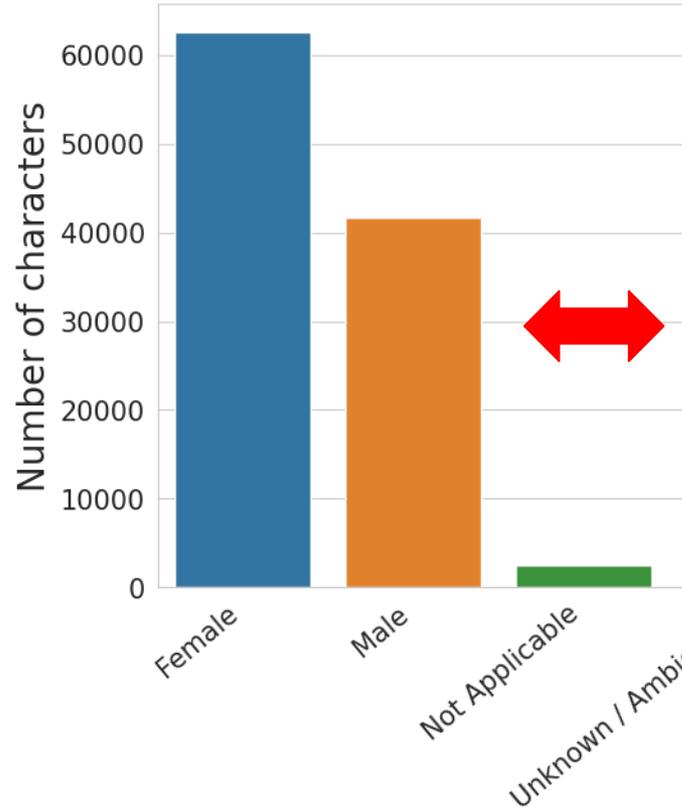


Distribution of all ACDB characters by gender

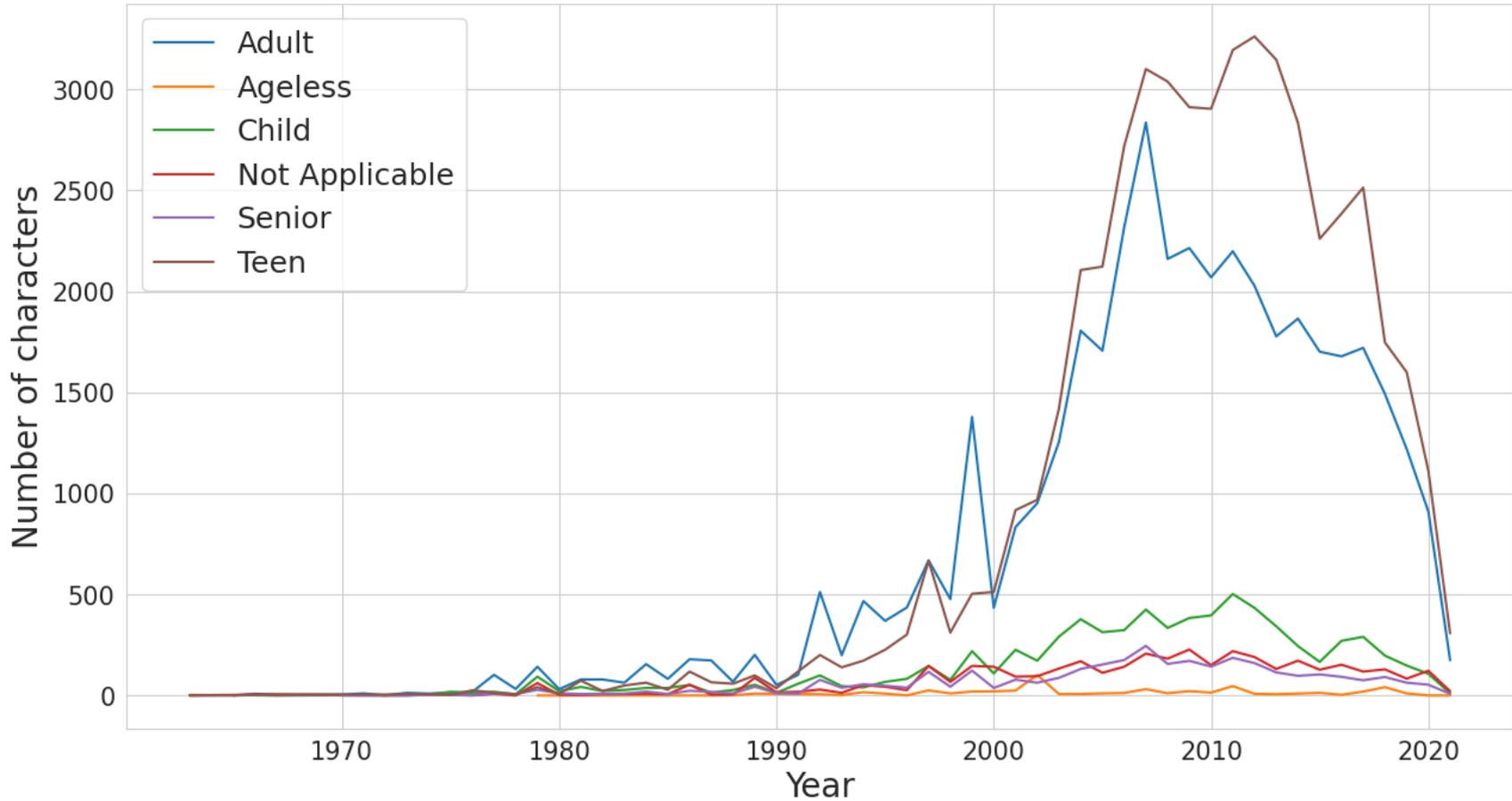


Gender

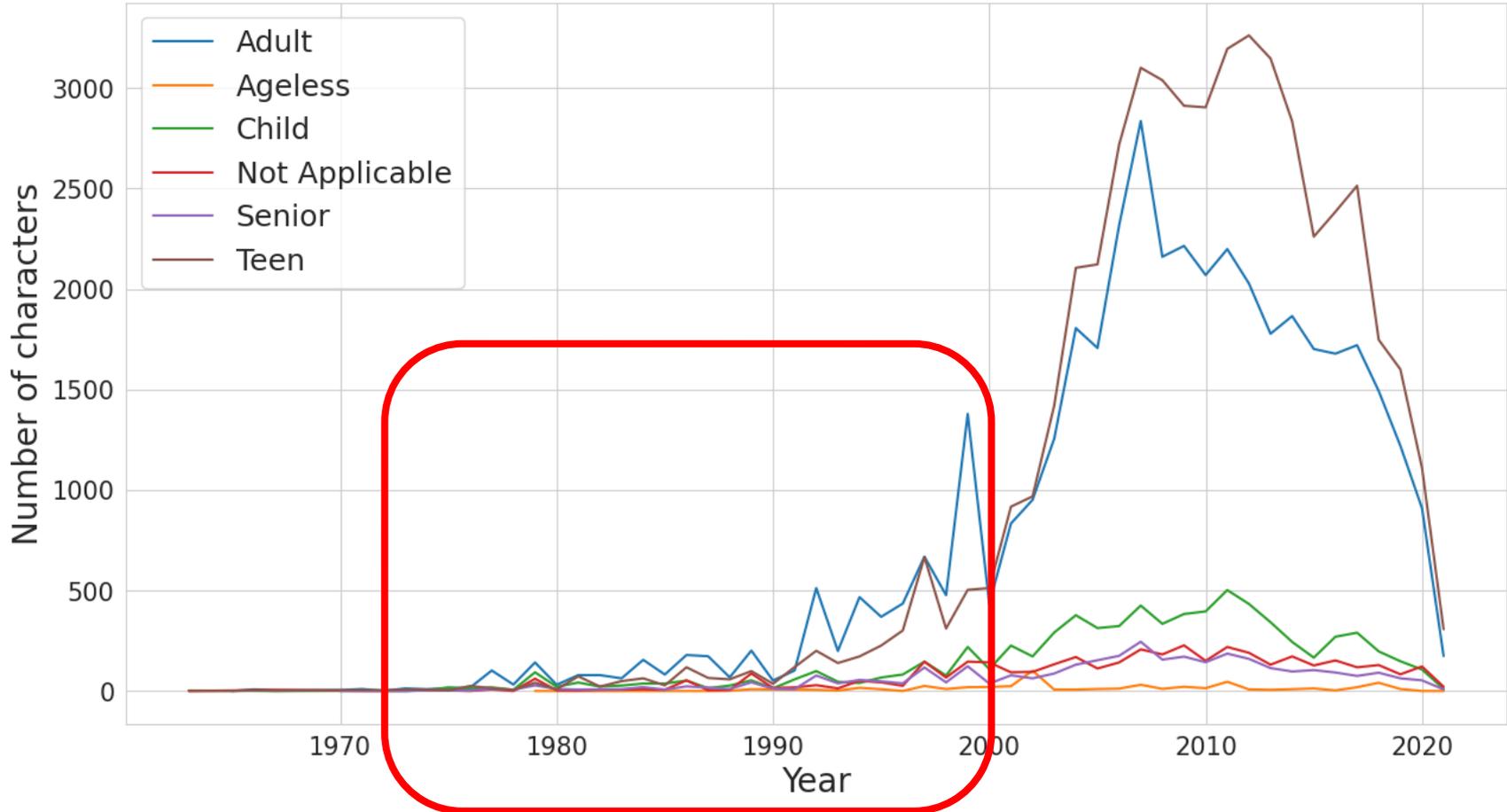
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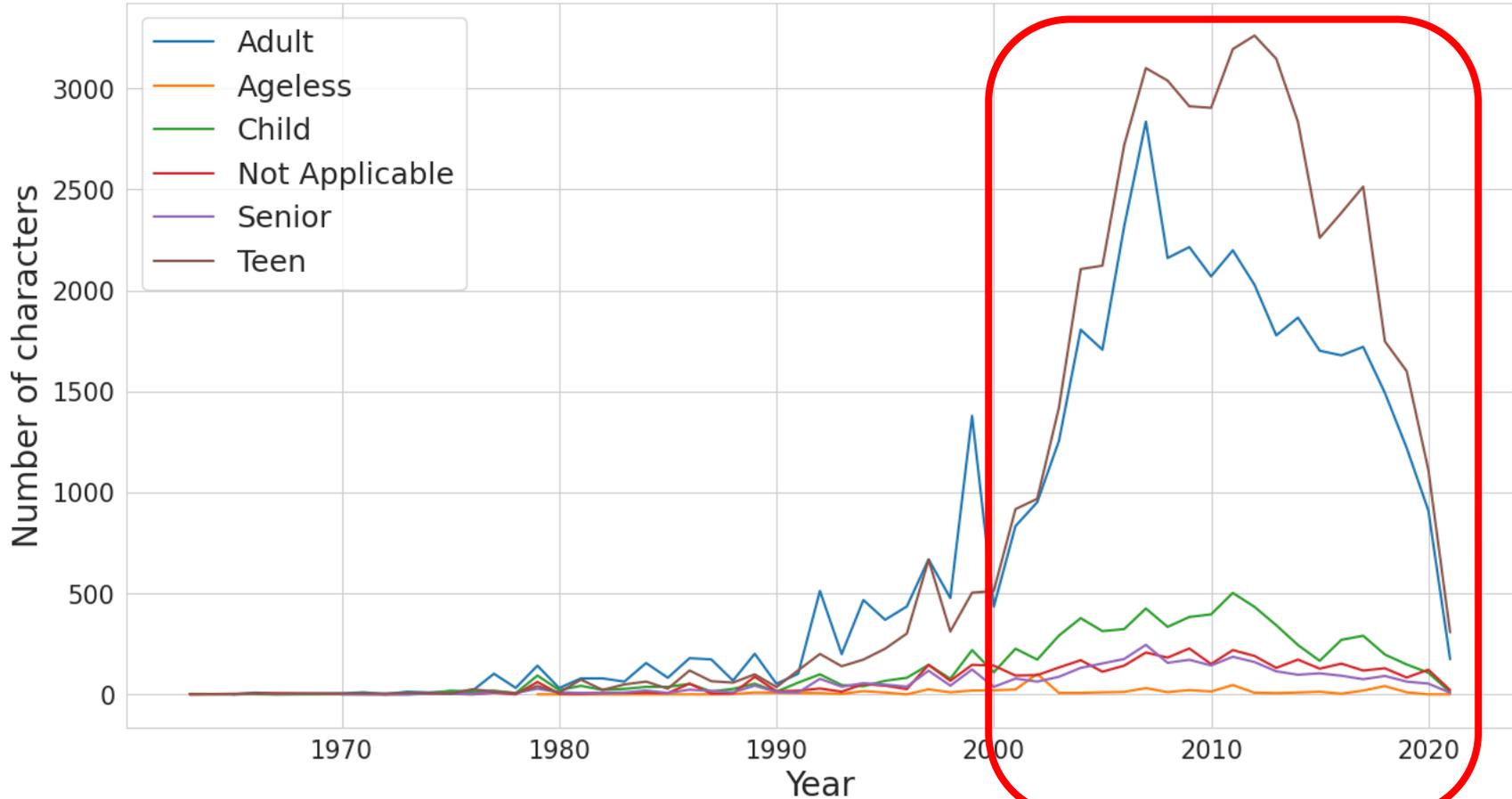
Distribution of all ACDB characters by age and year



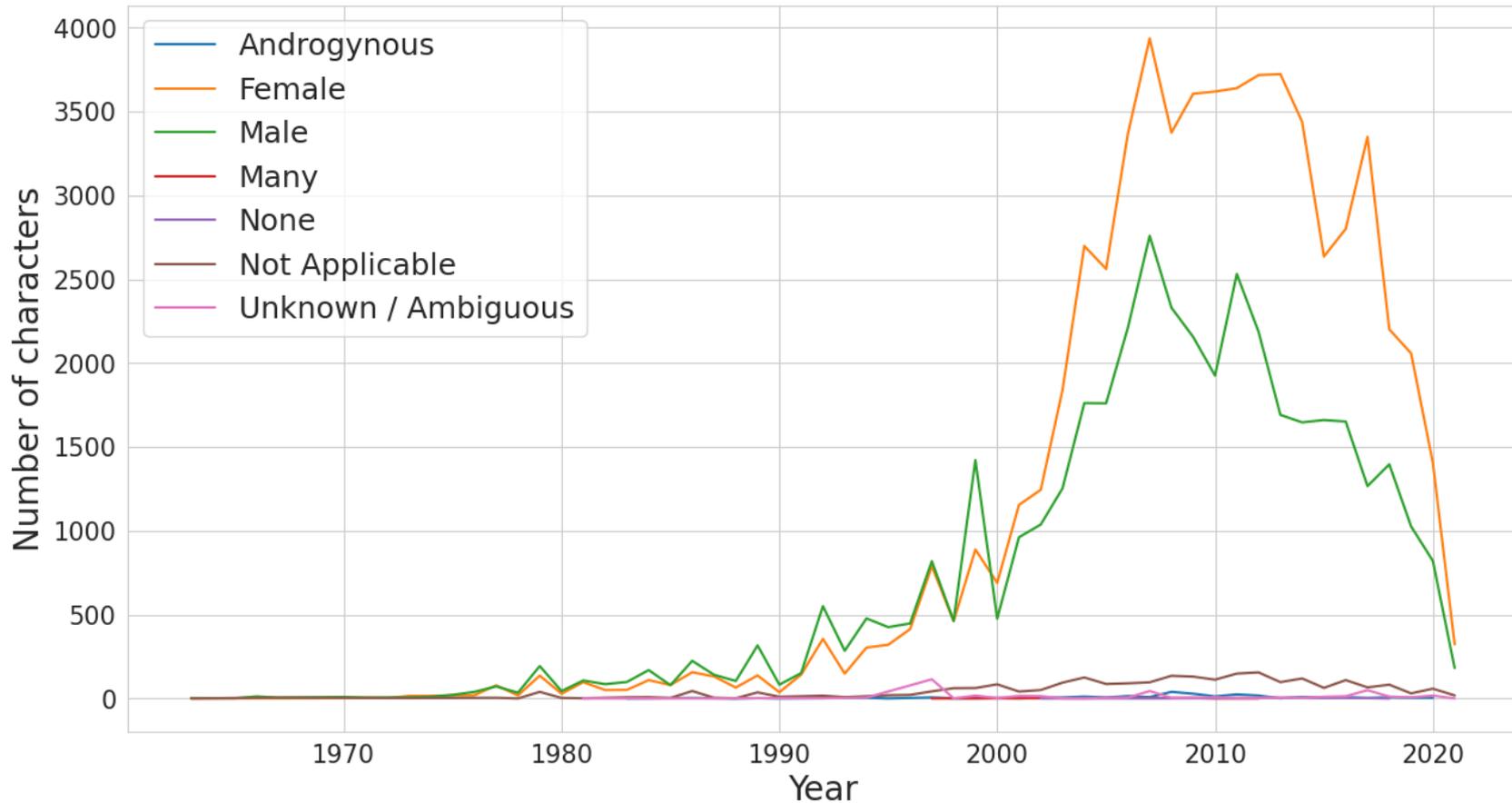
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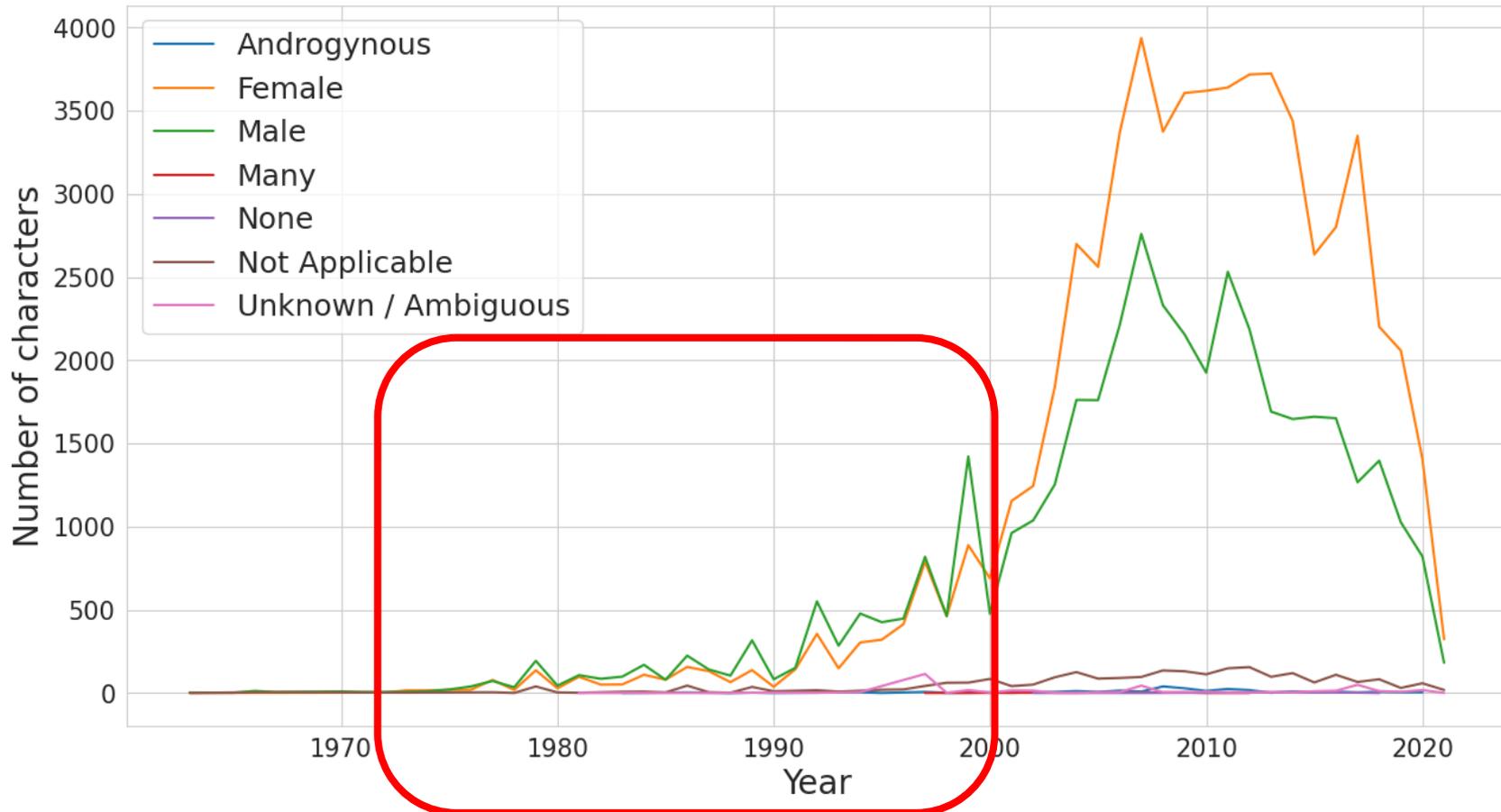
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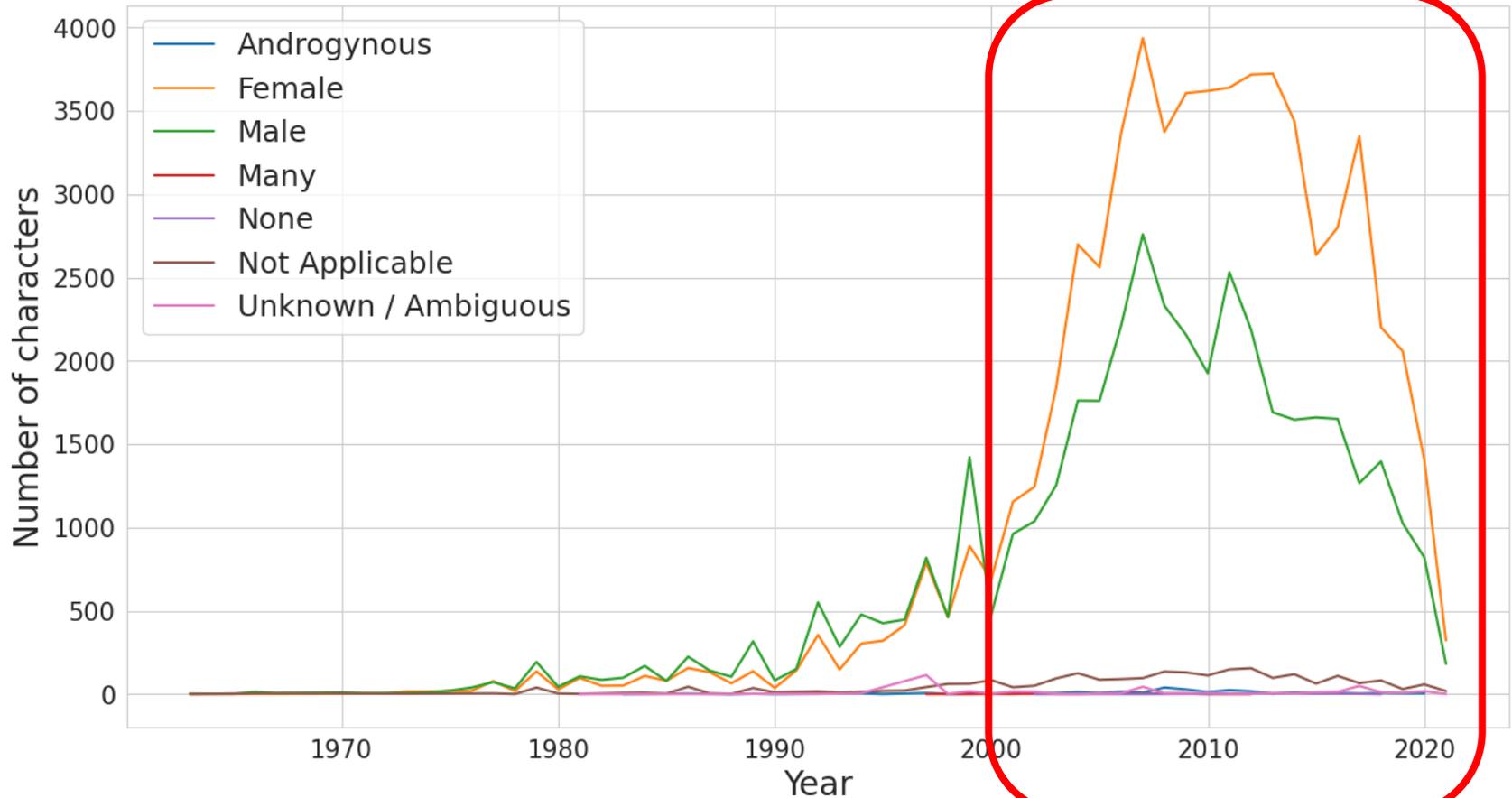
Distribution of all ACDB characters by gender and year



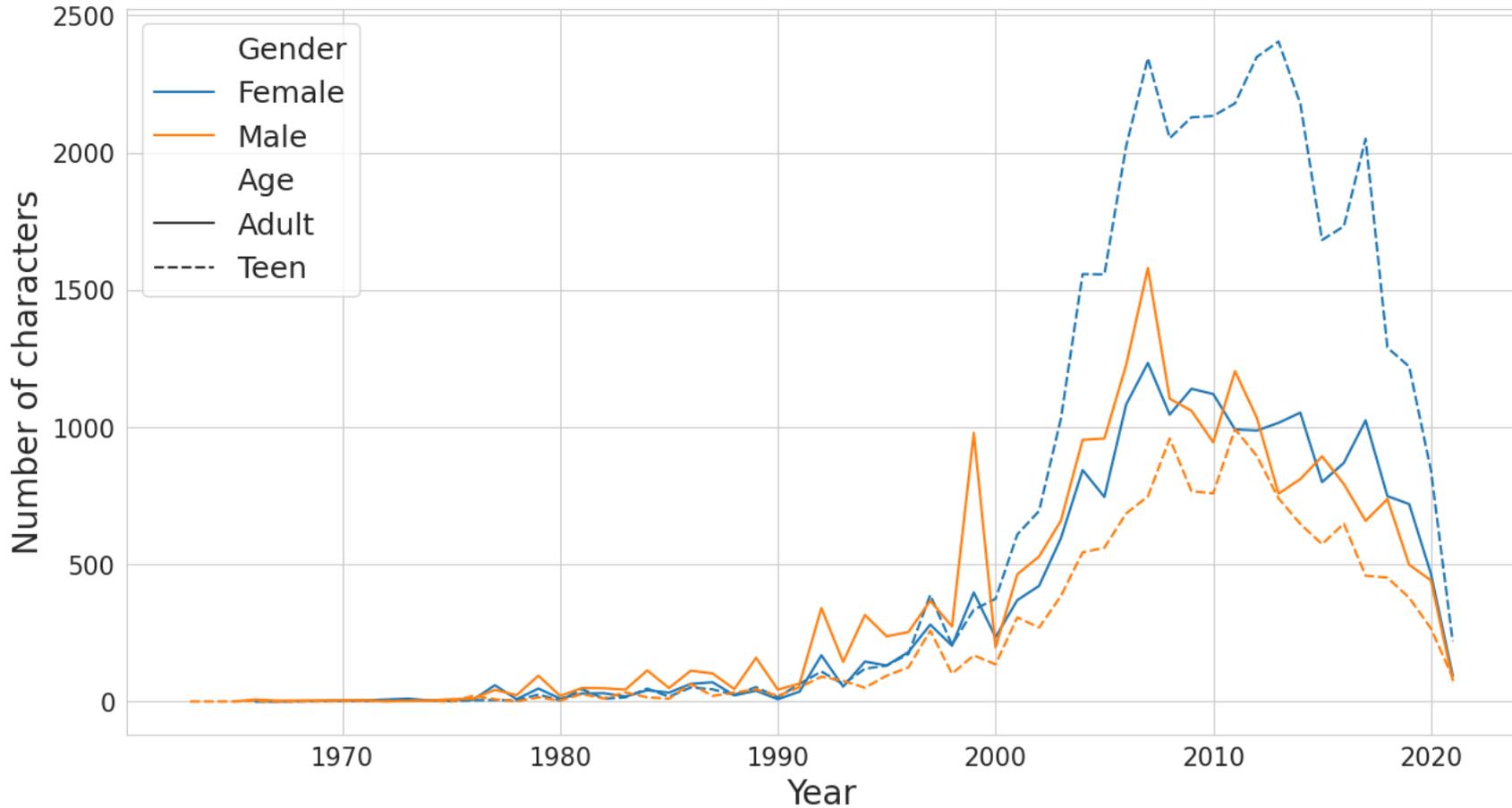
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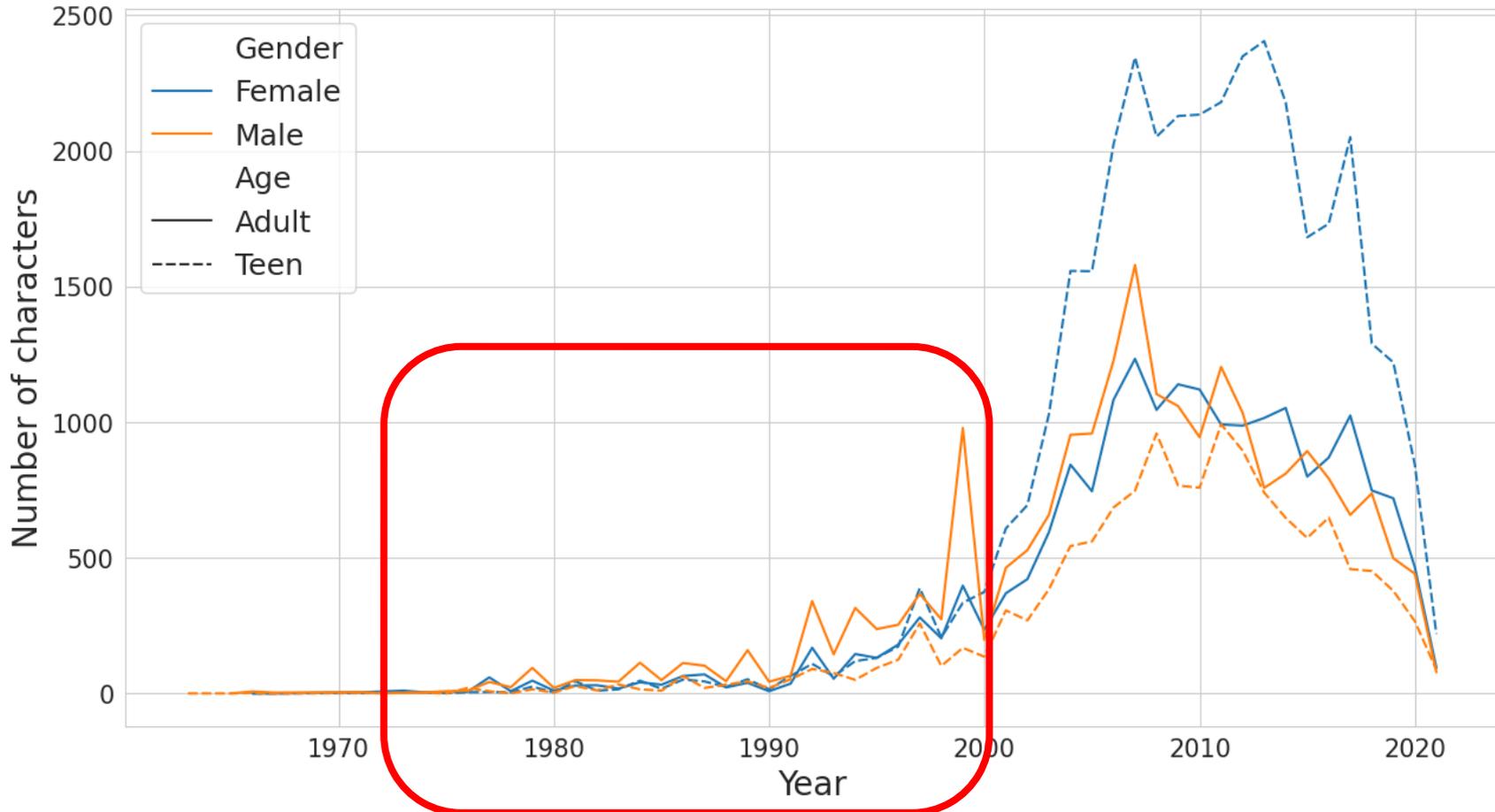
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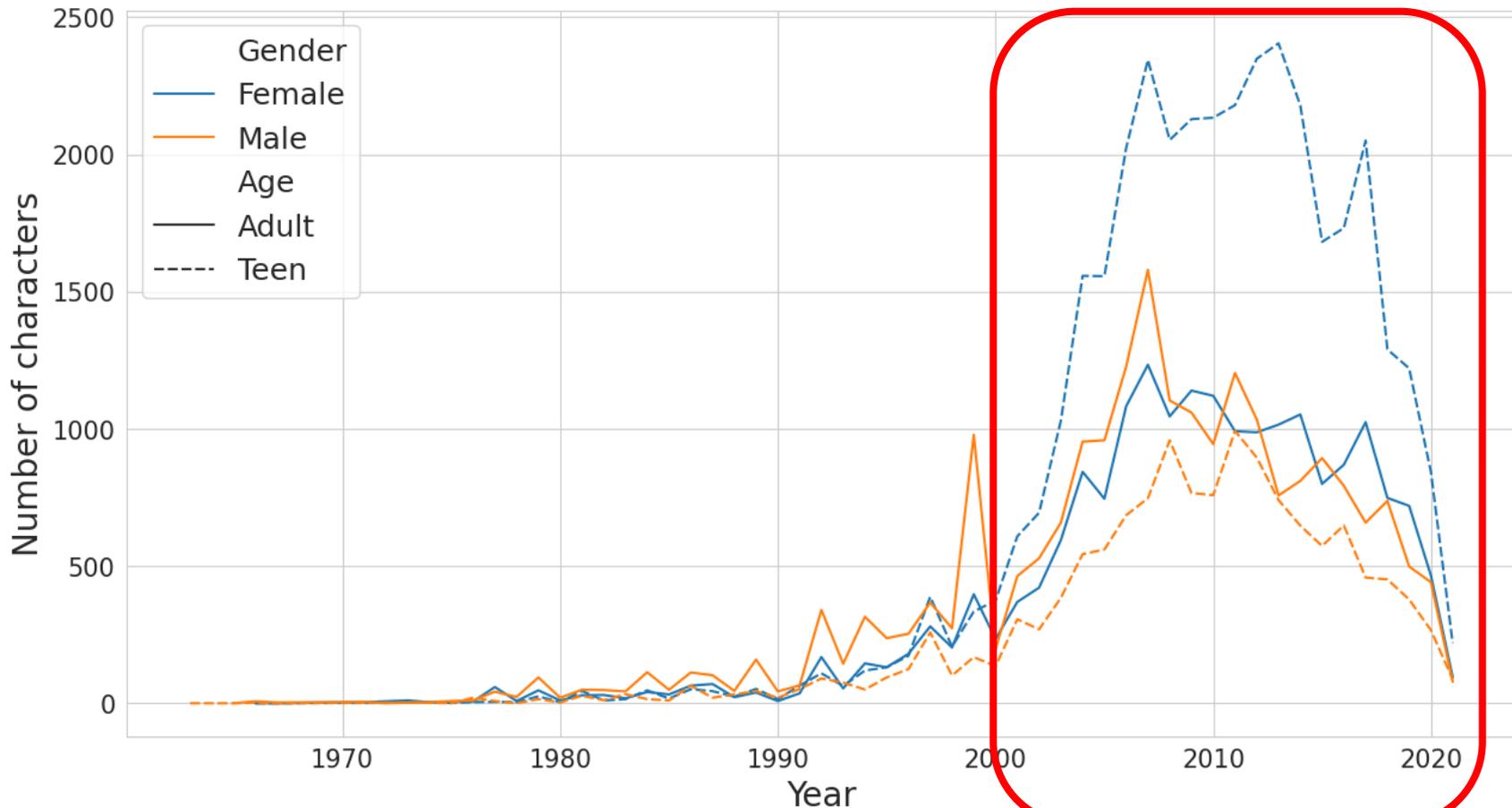
Distribution of ACDB characters by gender, age and year

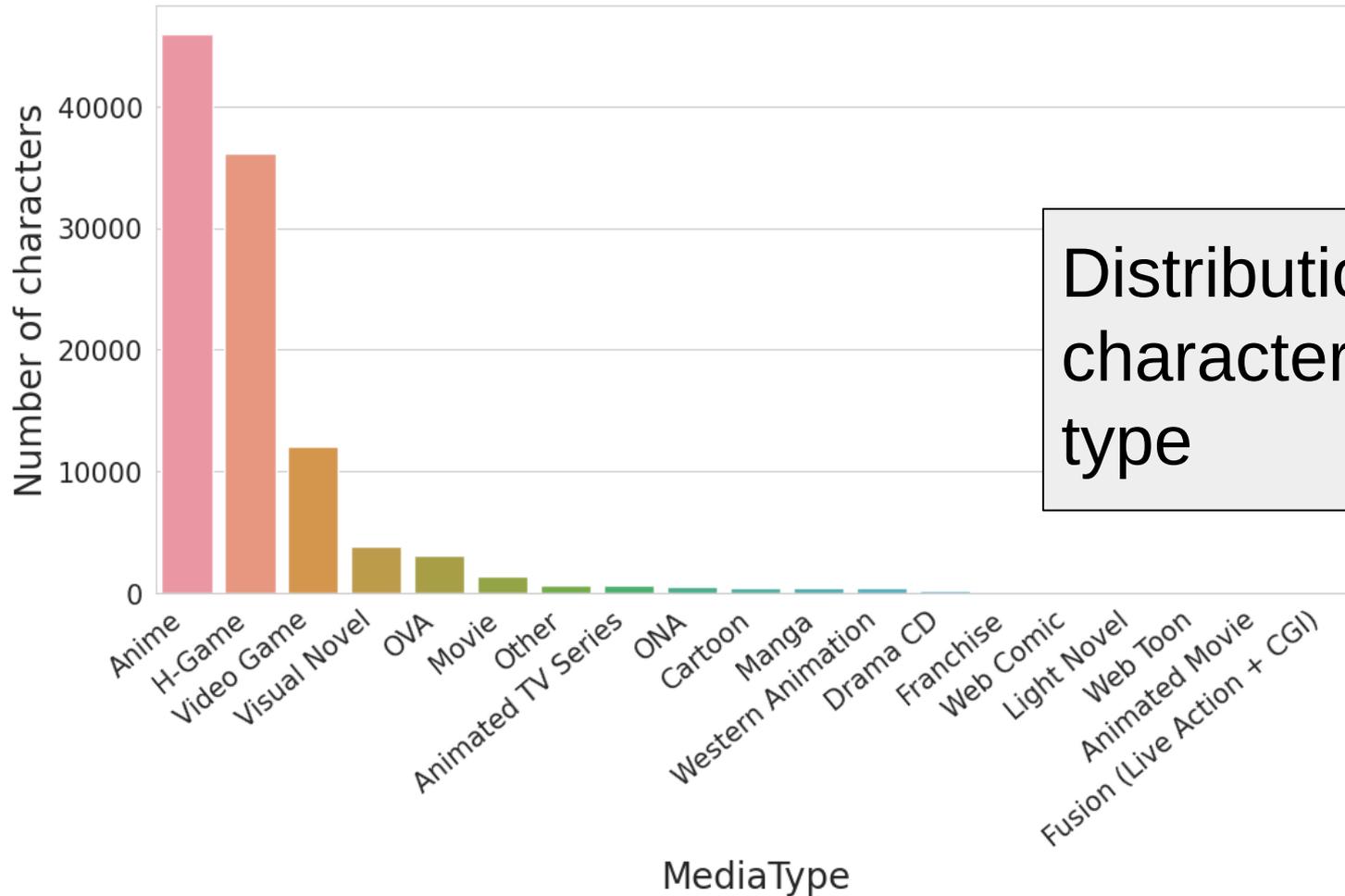


Distribution of ACDB characters by gender, age and year

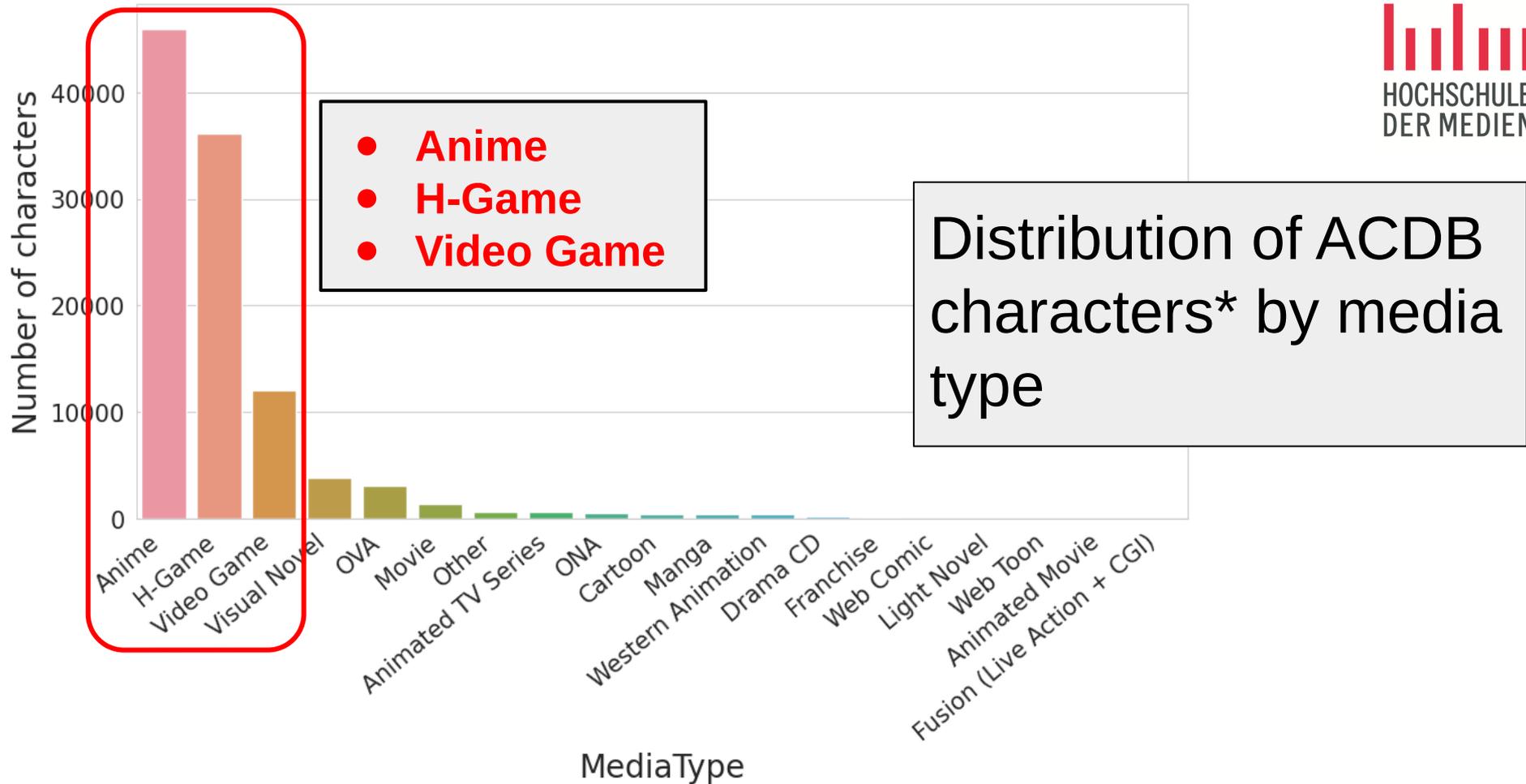


Distribution of ACDB characters by gender, age and year



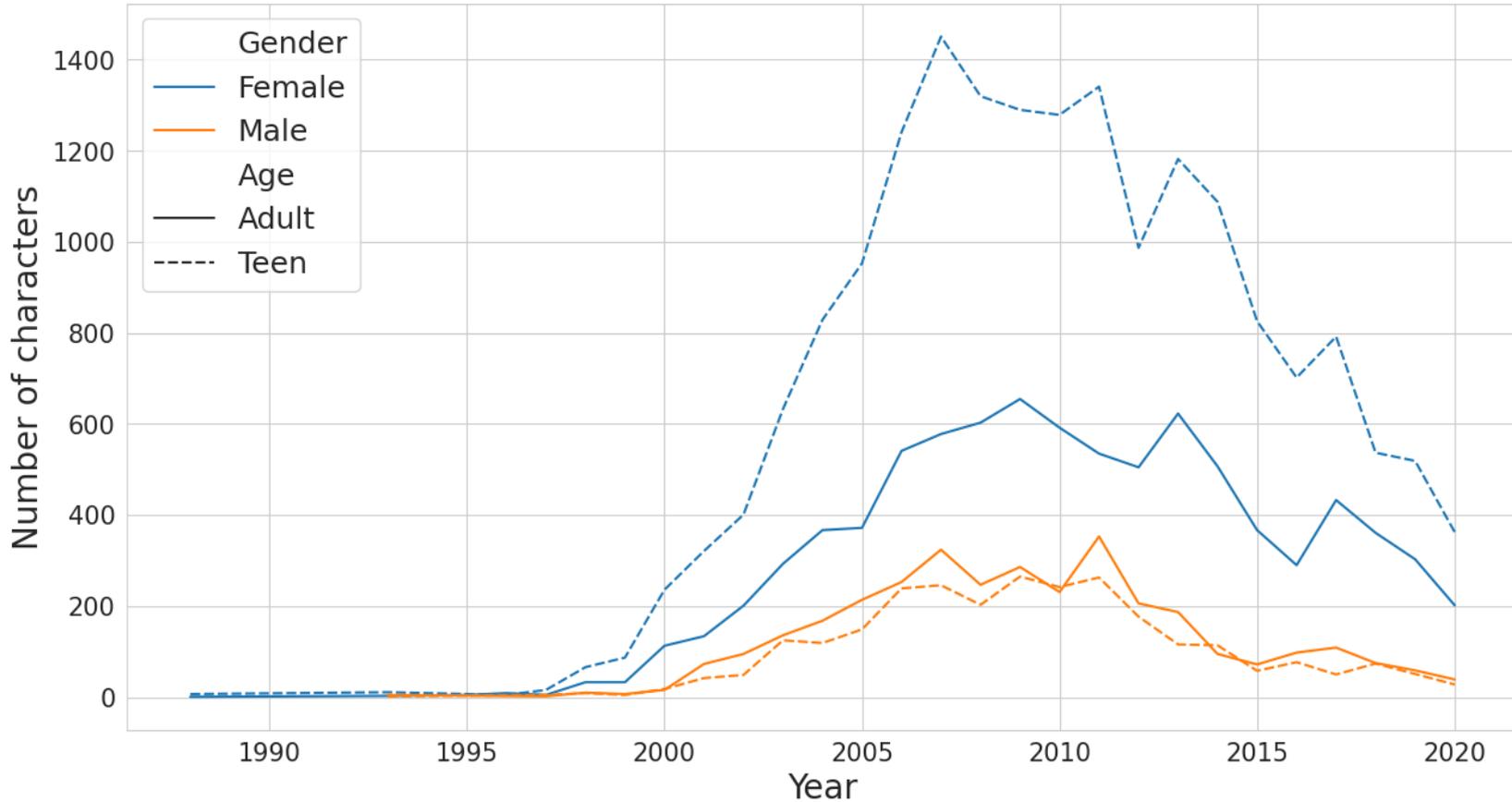


* Removed characters with publication year 2021 and/or with missing media type.

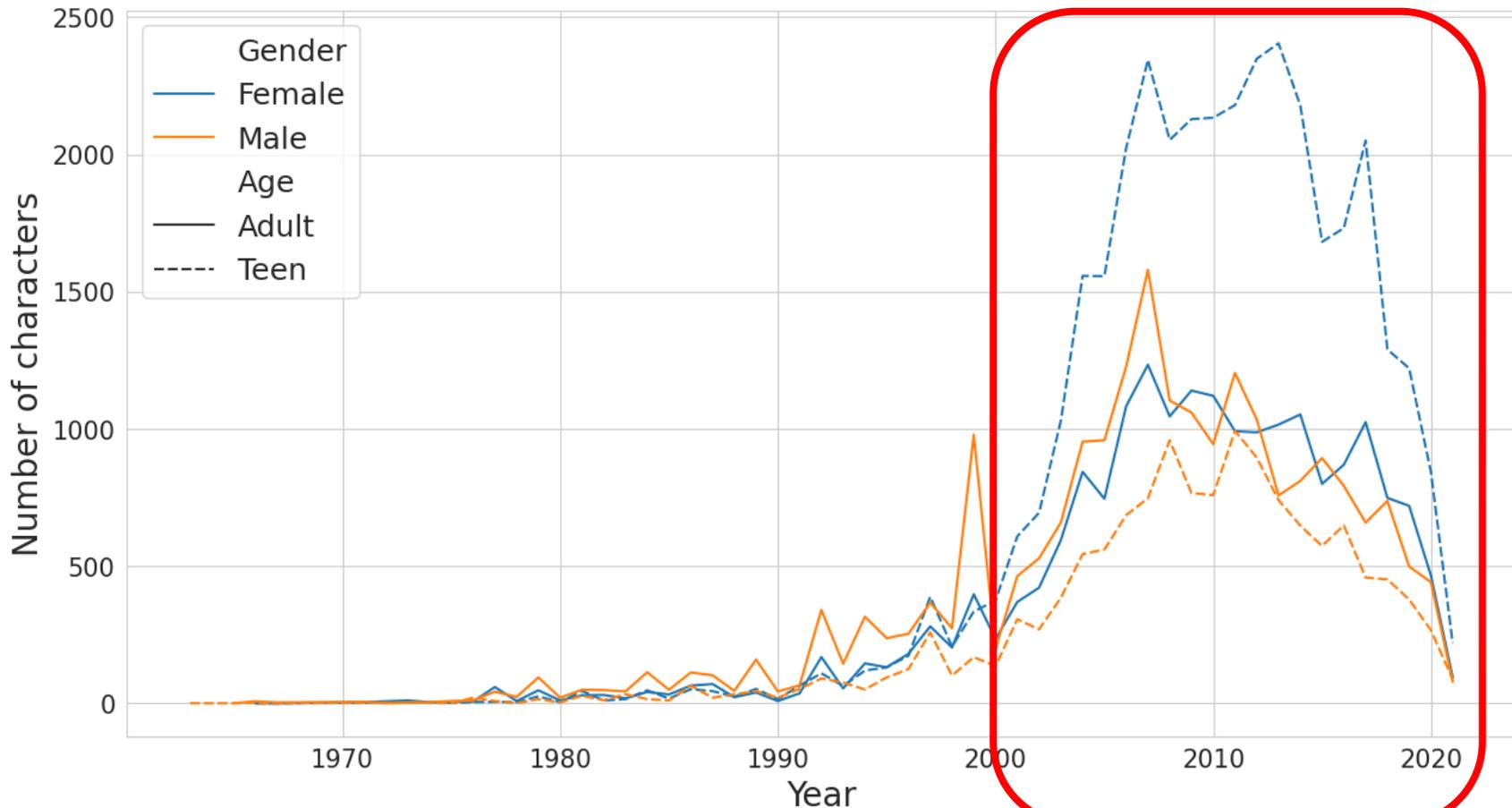


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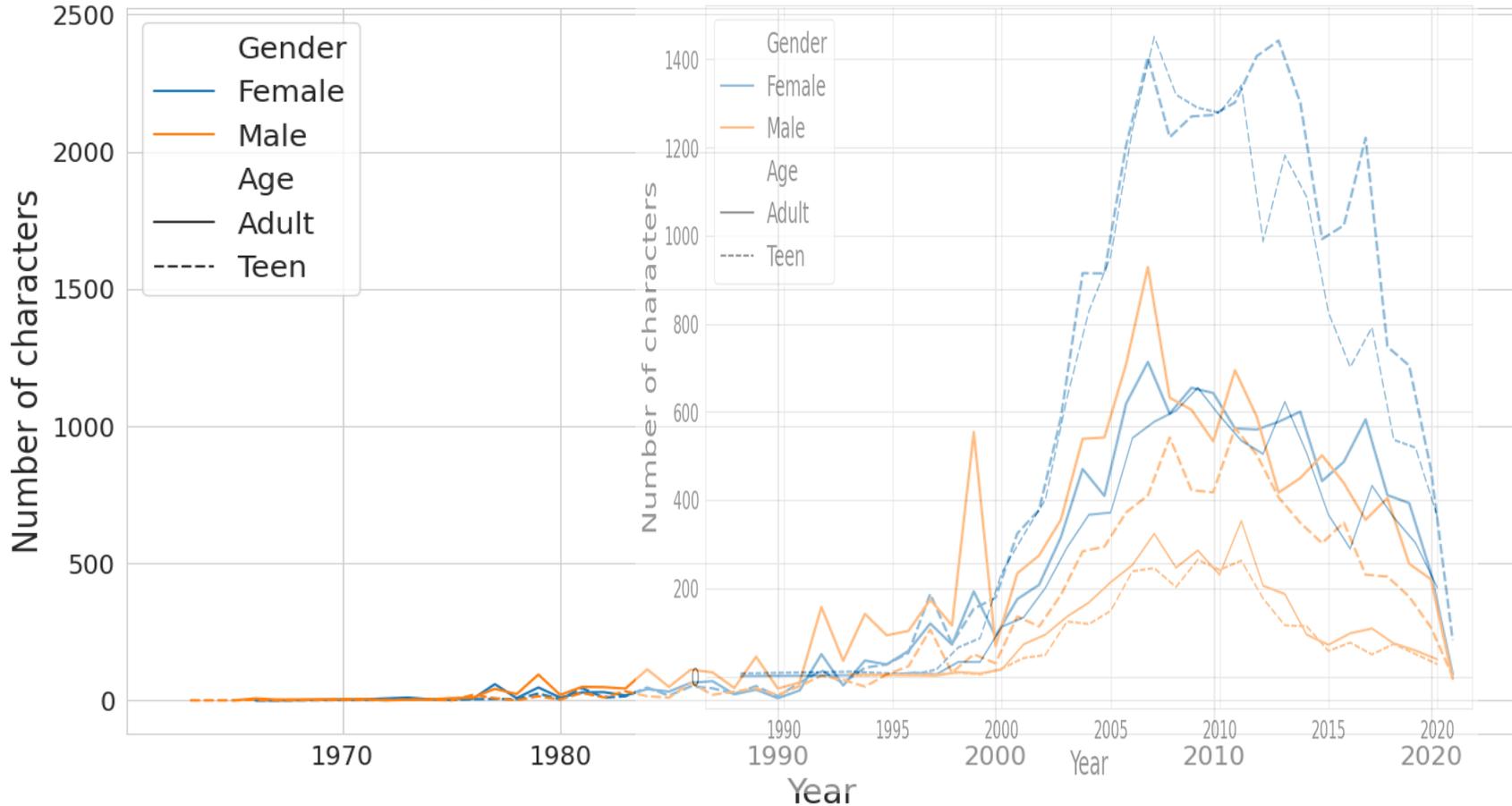
The effect of h-games



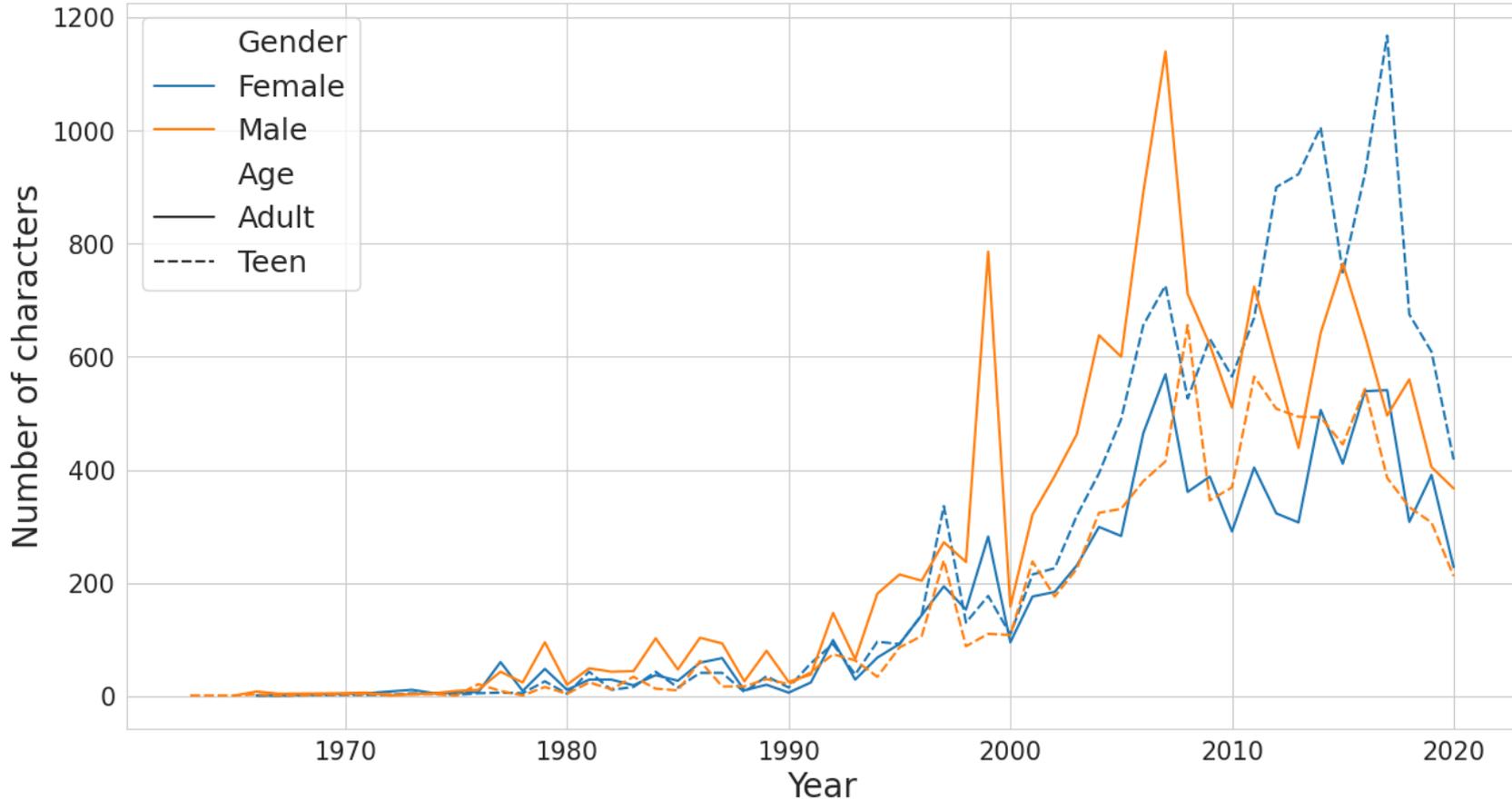
Distribution of ACDB characters by gender, age and year



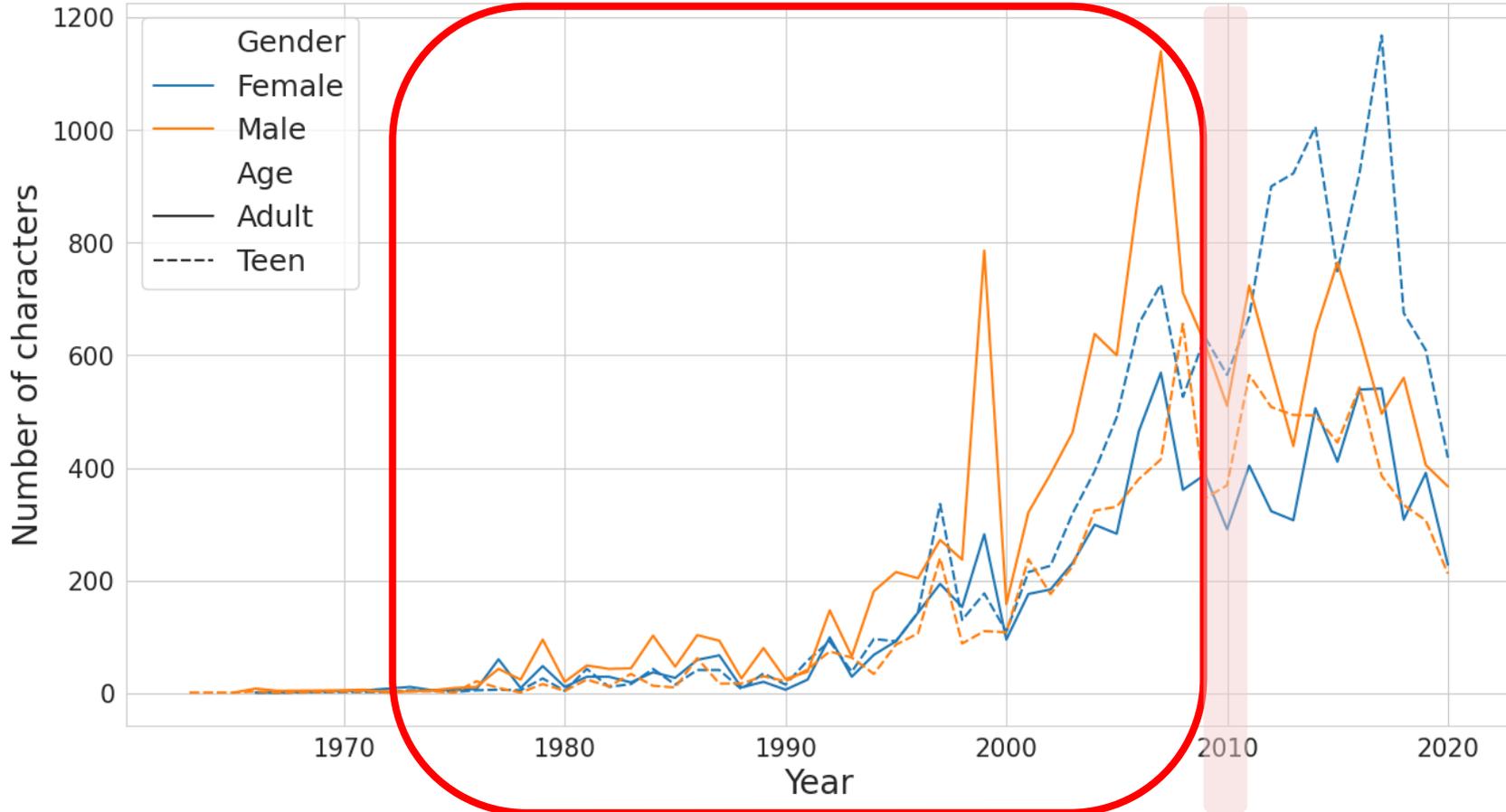
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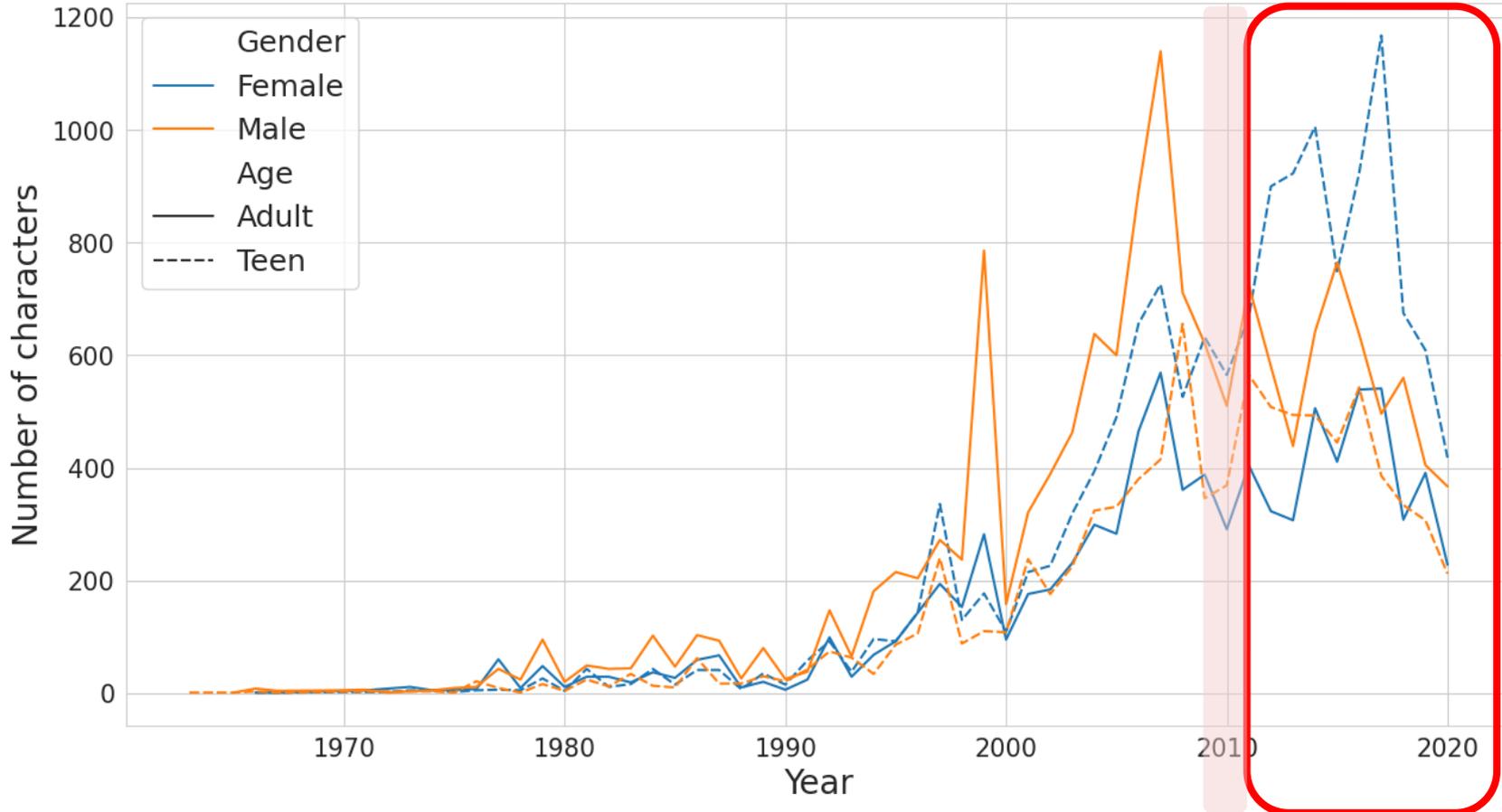
The anime and video games population



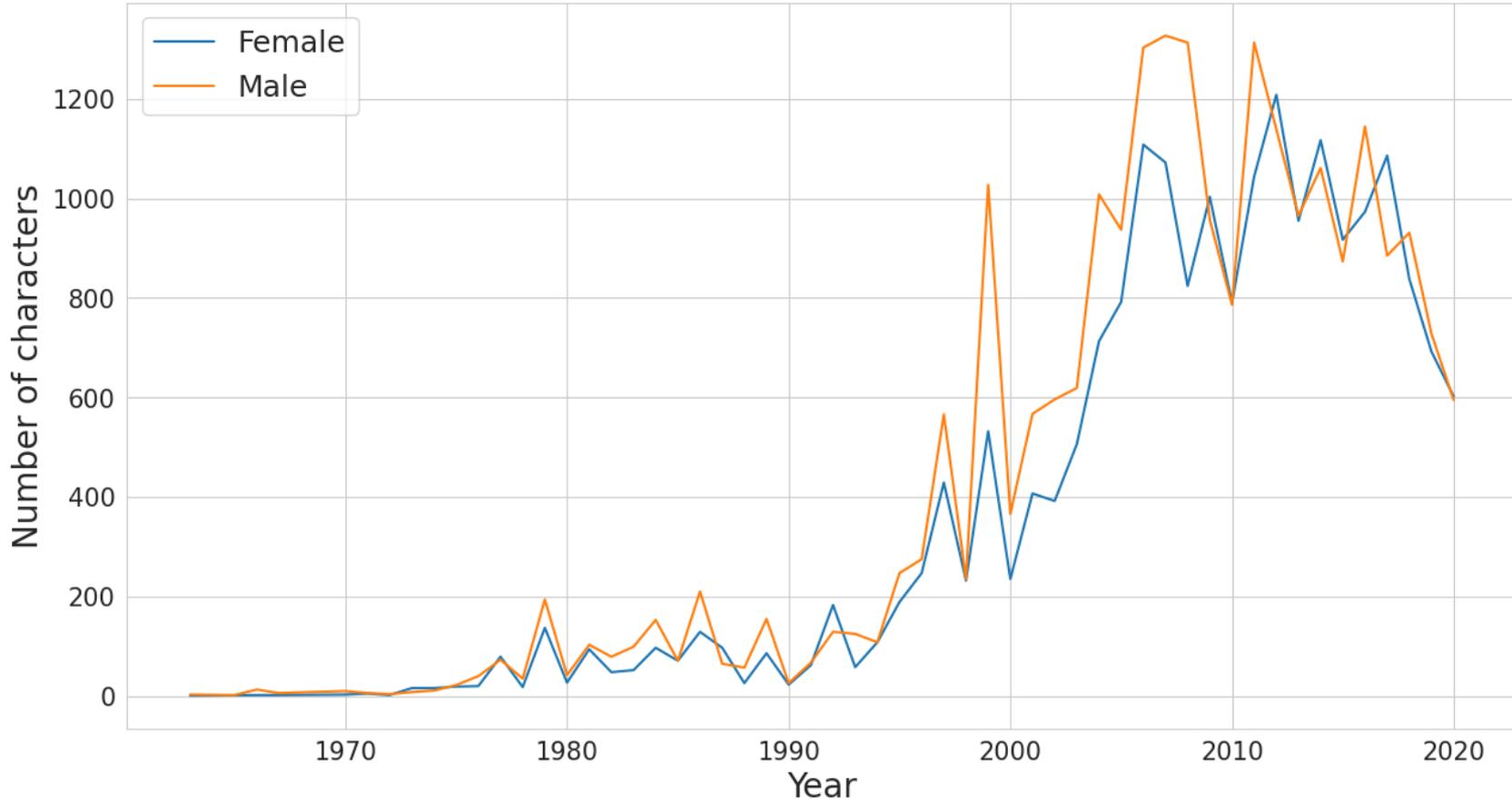
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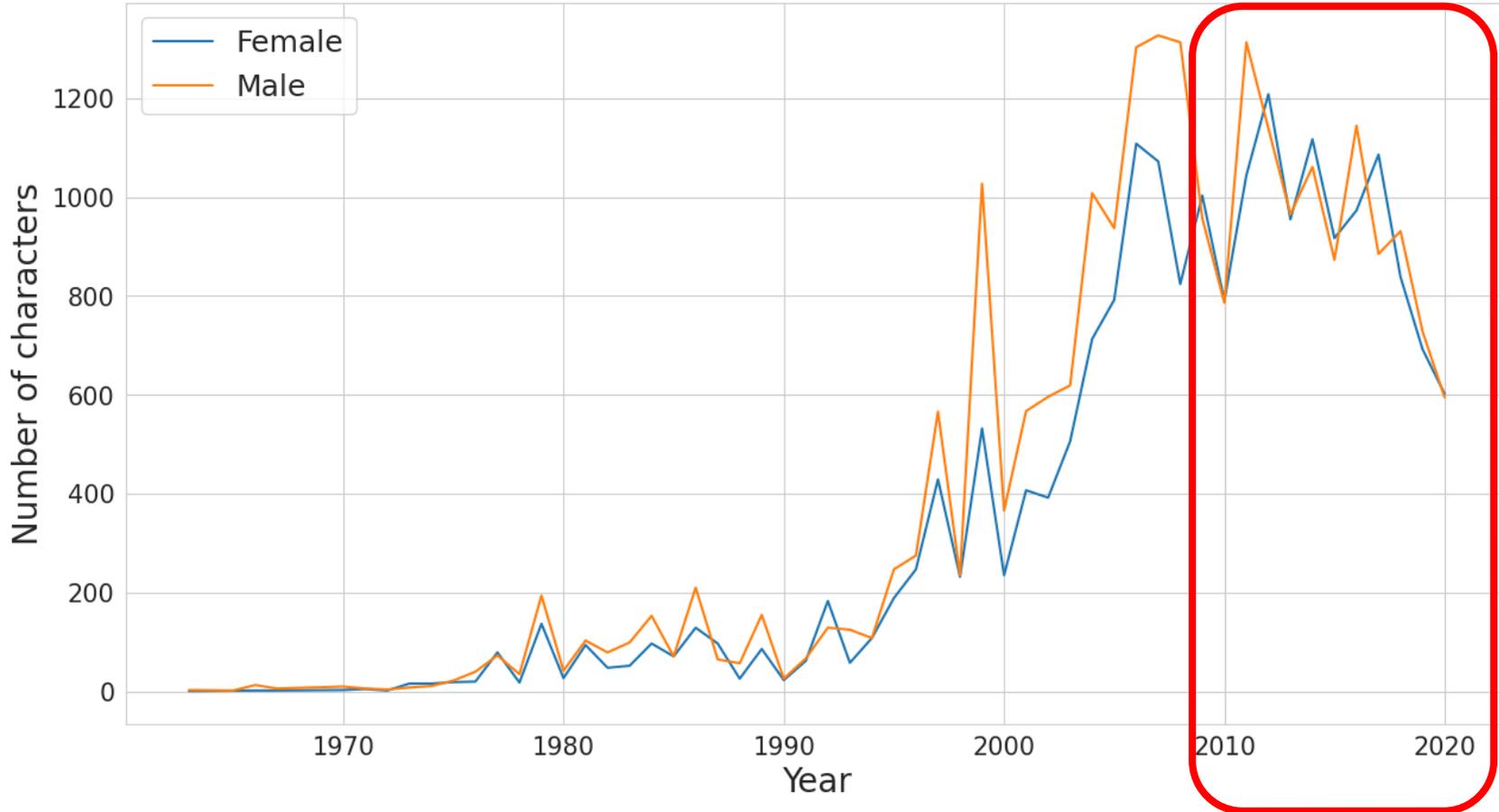
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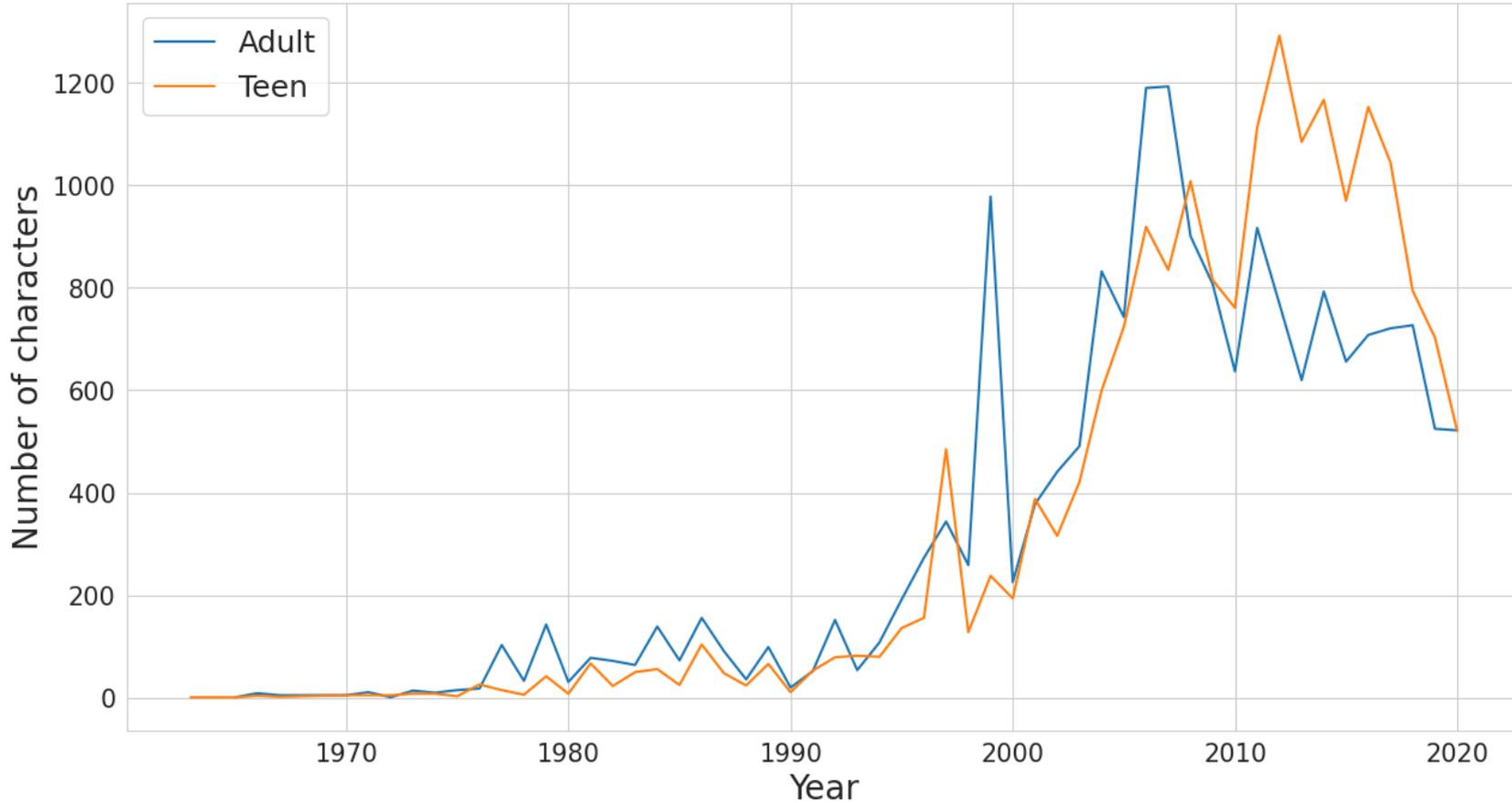
The anime population: gender



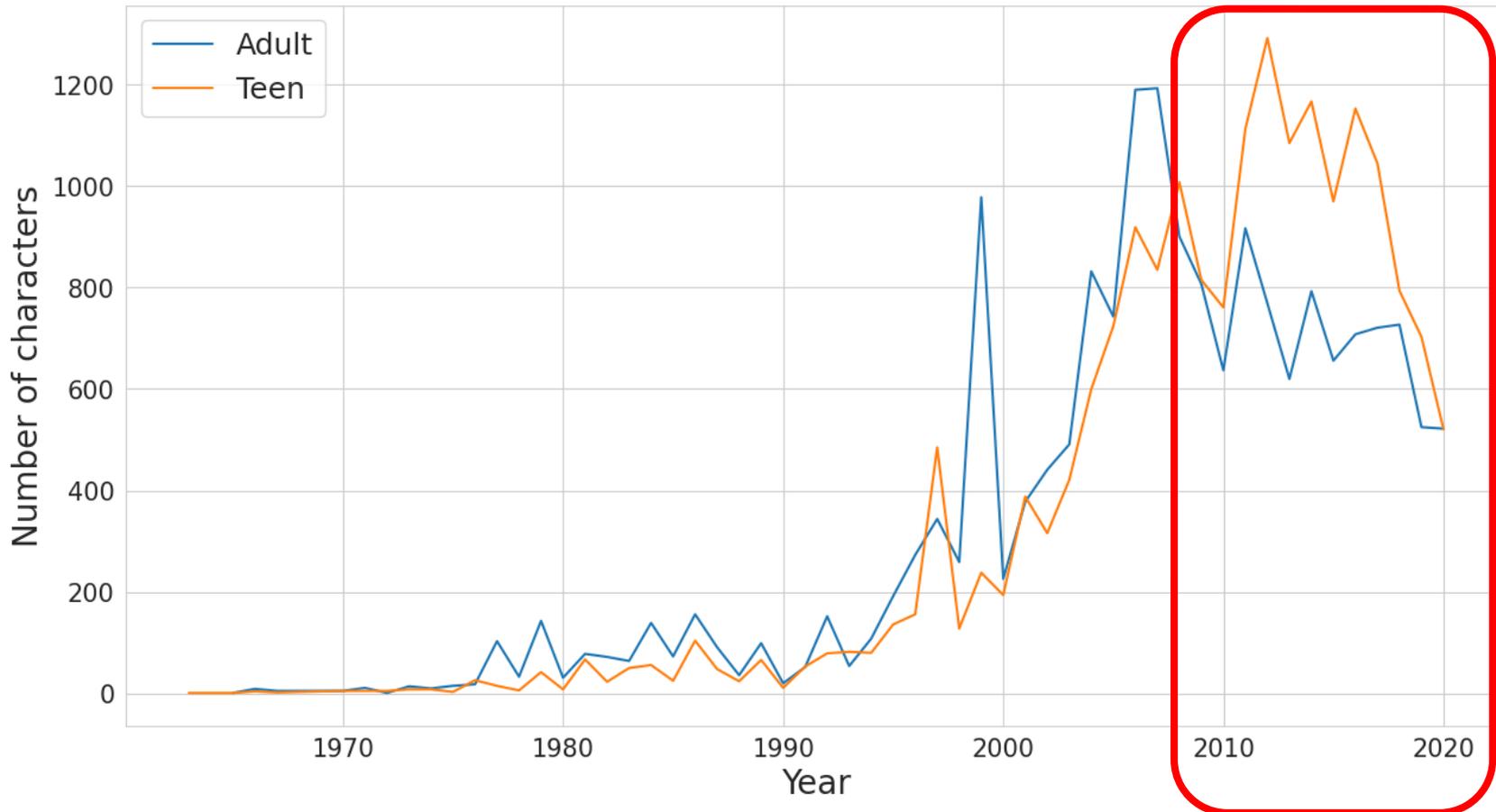
The anime population: gender



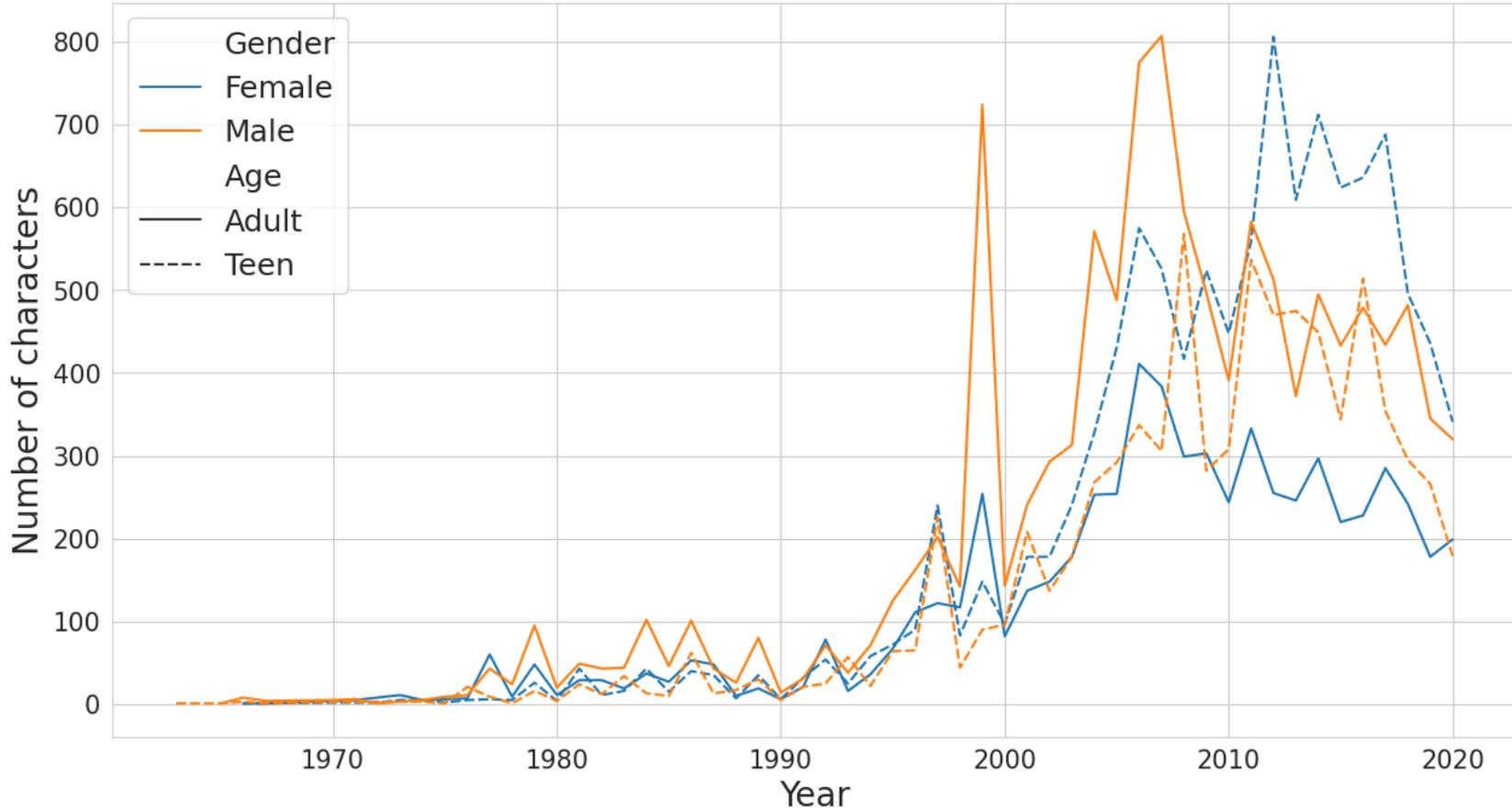
The anime population: age



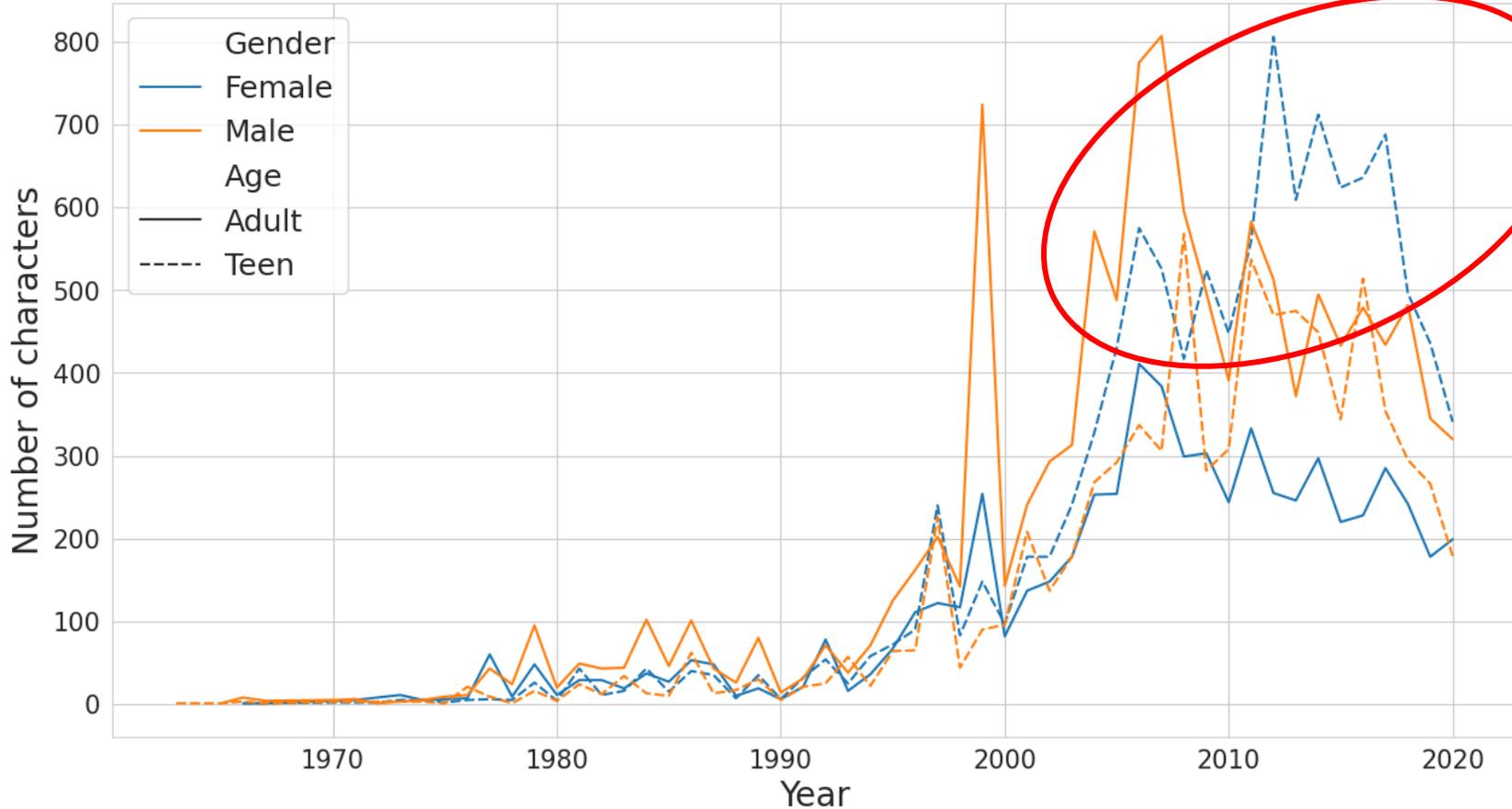
The anime population: age



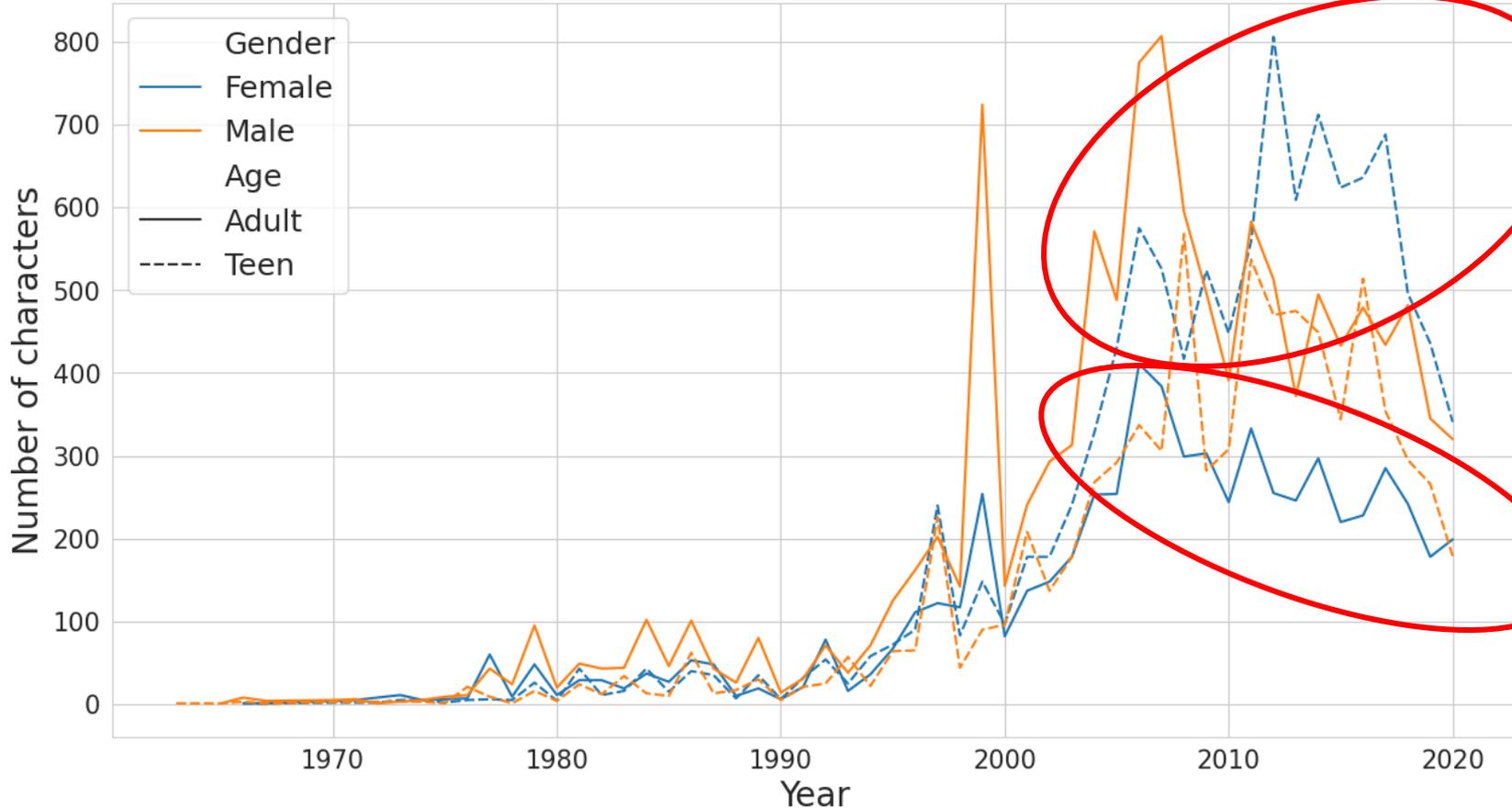
The anime population: gender and age



The anime population: gender and age



The anime population: gender and age



Back to our initial questions

Q1: Who populates anime?

- Teen female characters become dominant from ~2010
- Gender and age group diversity is relatively low

Q2: What does the fictional population represent?

- “Reality” vs. Taste vs. Genre conventions vs. ...

Q3: Moving beyond representation: What does the analysis imply?

- Changes in the **content** being produced
 - Potential influence of “otaku specific media”
- Changes in the **focus of the community** creating the database
 - The example of the video games character population
- An **interplay of both** of the above
 - Further evidence from smaller media type categories (e.g. OVA vs movie populations)

Database bias or actual change in anime?

- **Possible source of database bias 1:** Characters that are left out of the database
 - Random sample of 30-30 anime that are in the database with publication dates 2001-2009 and 2011-2019
- **Possible source of database bias 2:** Anime that are left out of the database
 - Random sample of 30-30 anime that are NOT in the database with publication dates 2001-2009 and 2011-2019
- **If the data were complete our results would be even more pronounced**



Actual change in anime

Considering the Japanese critical discourse

Correspondence with the Japanese critical discourse

- Tamaki Saitō (2000): Explosion of “**beautiful fighting girl**” works in the nineties
- Hiroki Azuma (2001): Rise of **database consumption** from the late nineties
- Gō Itō (2005): Gangan manga and the centrality of **kyara** from the nineties
- Satoshi Maejima (2010): **Sekaikei** and post-Evangelion works from the late nineties

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wor
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from the late nineties
- A shift has happened during
the mid- to late nineties
- from the
yara from

Hypothesis for the developments highlighted by both the theorists and the large-scale data

1. **Changes in individual works**, and **new trends** becoming increasingly stronger from the second half of the nineties onward
2. **Strong impact of “otaku specific media”** during the naughties
3. **Shift increasingly felt in the whole of anime production** from the end of the naughties

Large-scale quantitative analysis together with case study based qualitative analysis

- Analyses in the Japanese critical discourse
 - Help **guide quantitative research**
 - Help **interpret results** from quantitative research
- Results from large-scale quantitative analysis
 - Help **test/verify claims** from case-study based analyses
 - Help **provide further starting points** for theorization
- Together the two approaches help paint a better picture of the phenomena being examined

Thank you for your attention!

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

Visit our project website:

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

Visit the JVMG database:

<https://mediagraph.link/>