Archive Of Our Owns

Fandoms and Tags

同人小說網站中粉絲圈與標籤的關係

(2019/06)

#內容警告

#同人術語 #色情描寫 #少許中二內容 #可能... 只是可能...這份簡報中出現的某些標籤剛好是劇透，所以... #劇透警告

名詞介紹

Archive Of Our Owns (AO3)

非盈利且開源的同人小說存檔網站

https://archiveofourown.org/

網站上的作品數量已經超過450萬

同人小說 (Fanfiction)

利用原有的漫畫、動畫、小說、影視作品中的人物角色、故事情節或背景設定等元素進行的二次創作。

名詞介紹

粉絲圈 (fandom)

又稱迷文化群體、同好圈、飯圈等，指的是以共鳴或同志心理為基礎，由共同事物的愛好者所形成的次文化群體。

其成員通常花費大量時間精力在他們的愛好上，且通常會形成有著特定習俗的社群。有別於抱有一般好感的普通粉絲。

標籤 (tags)

在網路上，標籤是拿來標註並描述一份資訊的字詞，它能使資訊方便瀏覽及搜索。

通常是由資料的創建者或其觀看者加上的。

AO3上的標籤類型

Rating (分級)
- None、General、Teenage And Up、Mature、Explicit

Category (配對類別)
- None、Gen、M/M、F/M、F/F、Multi、Other

Warnings (警告)
- 例如: ”Graphic Depictions Of Violence”

Character (角色)
- 例如: ”Peter Parker”, ” Tony Stark”

Relationship (關係)
- 例如: ”Peter Parker/Tony Stark”

Freeform (自由發揮)
- 例如: ”Time travel”, ”Alternate Universe”

資料取得

AO3網站上作品數量最多的前20名粉絲圈

每個粉絲圈抓下約1000份最新的作品(2019-06)，按讚數至少100以上

並記錄每一個作品的粉絲圈與標籤，但不包含 “Character”和“Relationship”

共20155筆資料，預處理後總共有6465種標籤

fandom	tags
Harry Potte	{'not rated', 'alternate universe - time travel', 'gen, m/m', 'master of death harry potter'}
Harry Potte	{'marauders era (harry potter)', 'wolfstar', 'the noble and most ancient house of black', 'general audiences', 'marauders', 'siblings', 'jily', 'hogwarts', 'brothers', 'slytherin', 'm/m', 'gryffindor'}
Harry Potte	{'gryffindor bashing', 'sweet girls who love draco', 'viktor is such a sweetheart in love', 'draco malfoy & harry potter friendship', 'confused harry potter', 'so many ships', 'general audiences'
Harry Potte	{'explicit', 'tumblr prompts', 'forbidden prompts', 'm/m, f/m, multi', 'tags in each chapter'}
Harry Potte	{'gotham', 'f/m, gen', 'devil may cry 3', "marauders' era", 'superwholock', 'marauders', 'nightwatch', 'xreader', 'crossover', 'game of thrones - freeform', 'teen and up audiences', 'reader insert
Harry Potte	{'ftm ron weasley', 'rare plants', 'alternate universe - college/university', 'alternate universe - modern setting', 'm/m', 'not rated', 'alternate universe - non-magical', 'pining', 'theatre class', 'trar
Harry Potte	{'alternate universe - canon divergence', 'f/m, gen', 'hogwarts inter-house rivalries', 'book 6: harry potter and the half-blood prince', 'good albus dumbledore', 'good slytherins', 'sirius black
Harry Potte	{'psychological trauma', 'past child abuse', 'angst and hurt/comfort', 'm/m', 'abusive past', 'mature', 'heavy angst'}
Harry Potte	{'forensics', 'murder mystery', 'courtroom drama', 'past alcohol abuse/alcoholism', 'f/m', 'severus snape lives', 'miscarriage', 'suicide', 'mature', 'alternate universe', 'american legal system'}
Harry Potte	{'lily evans potter lives', 'bottom damon salvatore', 'albus dumbledore bashing', 'parent damon salvatore', 'james potter bashing', 'lily evans potter bashing', 'child harry potter', 'adopted harr
Harry Potte	{'goes through most of her years', 'may alan rickman rip', 'severus snape has a heart', 'patronus', 'potter', 'malfoys - freeform', 'professor/student', 'f/m', 'she dates bill snape is jealous', 'this is
Harry Potte	{'gay draco malfoy', 'background relationships', 'past harry potter/ginny weasley', 'mentioned cedric diggory - freeform', 'teen and up audiences', 'bisexual harry potter', 'm/m'}

預處理

1. 將所有字母轉成小寫、刪除所有的[\?\!\.\,]
2. 人工找出一些常被組合使用的詞，將這些組合詞拆開
   (像是 “A”和”B”兩個標籤可能組合成: “A with B” 或 “A and B” 或 “A/B” 之類)
3. 刪除所有出現次數小於某一定值的標籤

分析

統計圖表

- 標籤數量排名
- 標籤特徵
- 粉絲圈特徵

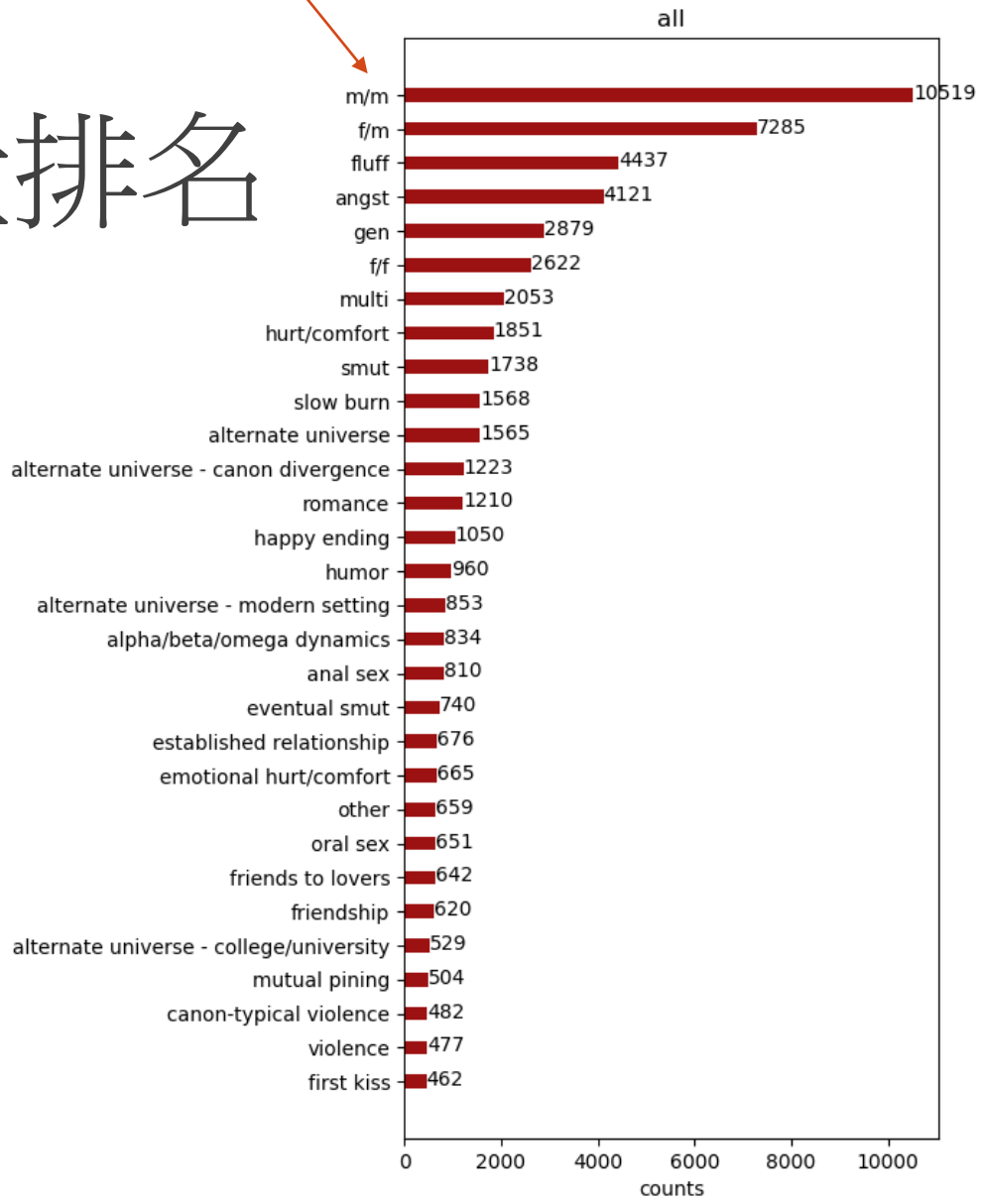
Association Rule Mining

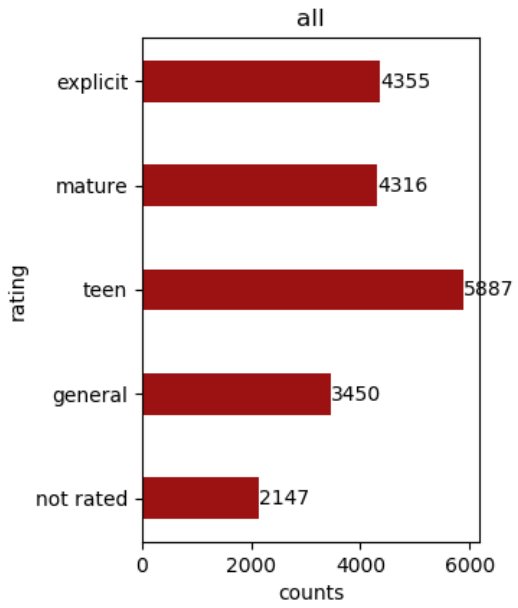
- minsup = 0.01~0.02
- minconf = 0.6~0.8

訓練簡易神經網路

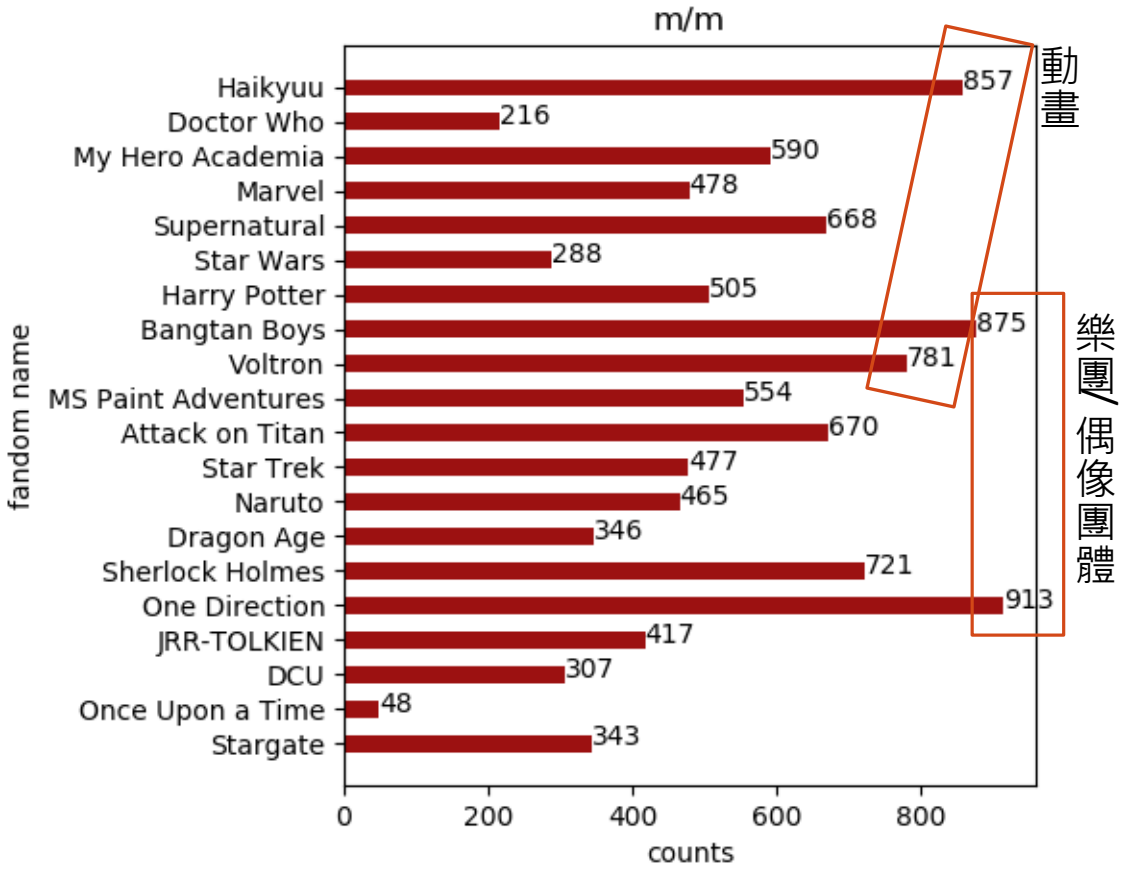
BL佔了整個資料集的一半 10519/20155

統計圖表 - 標籤數量排名





統計圖表 - 標籤特徵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Doctor Who 216
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Marvel 478
Supernatural 668
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Harry Potter 505
Bangtan Boys 875
Voltron 781
MS Paint Adventures 554
Attack on Titan 670
Star Trek 477
Naruto 465
Dragon Age 346
Sherlock Holmes 721
One Direction 913
JRR-TOLKIEN 417
DCU 307
Once Upon a Time 48
Stargate 343
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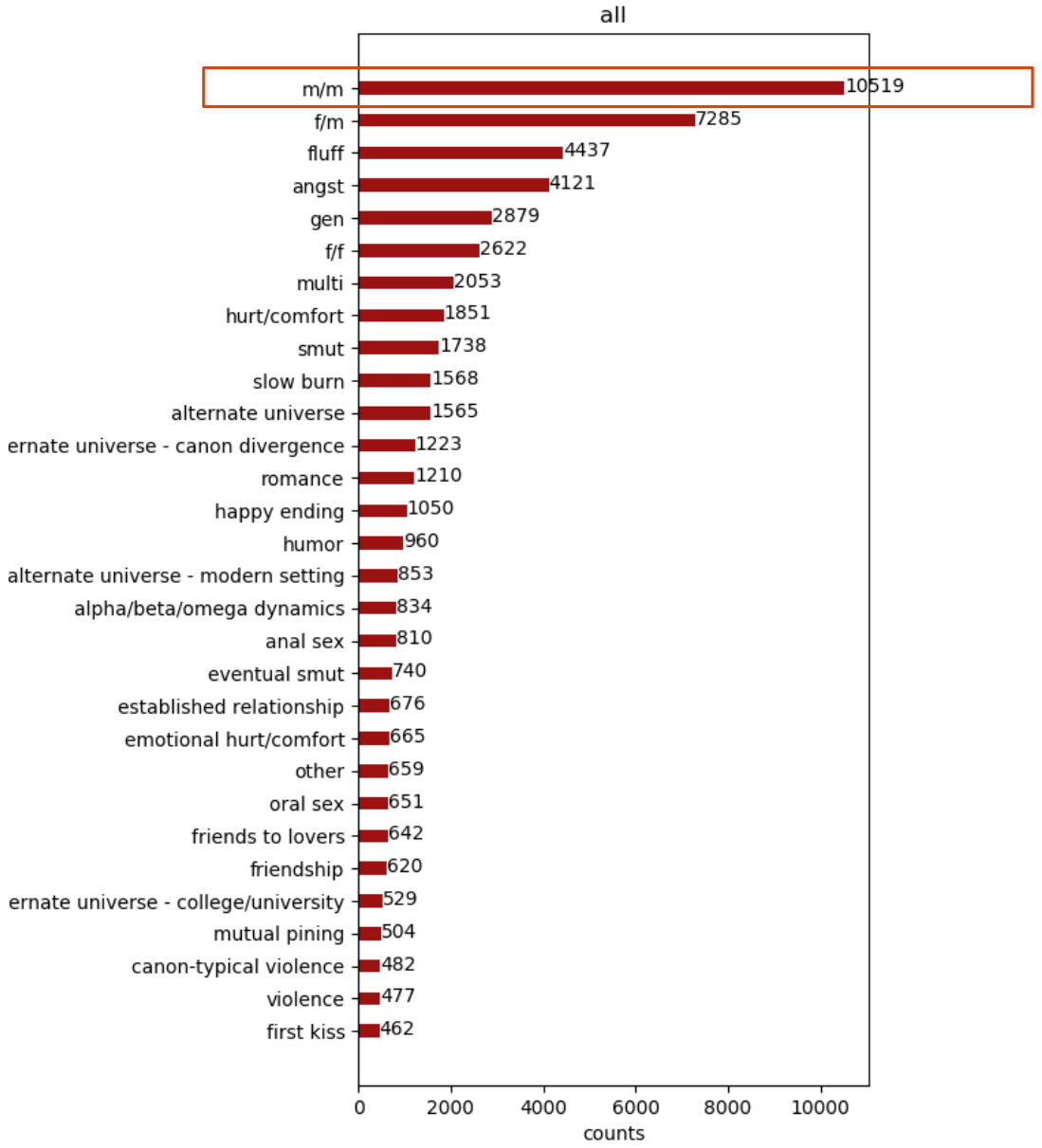
動畫
樂團/偶像團體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smut 1738
slow burn 1568
alternate universe 1565
ernate universe - canon divergence 1223
romance 1210
happy ending 1050
humor 960
alternate universe - modern setting 853
alpha/beta/omega dynamics 834
anal sex 810
eventual smut 740
established relationship 676
emotional hurt/comfort 665
other 659
oral sex 651
friends to lovers 642
friendship 620
ernate universe - college/university 529
mutual pining 504
canon-typical violence 482
violence 477
first kiss 462
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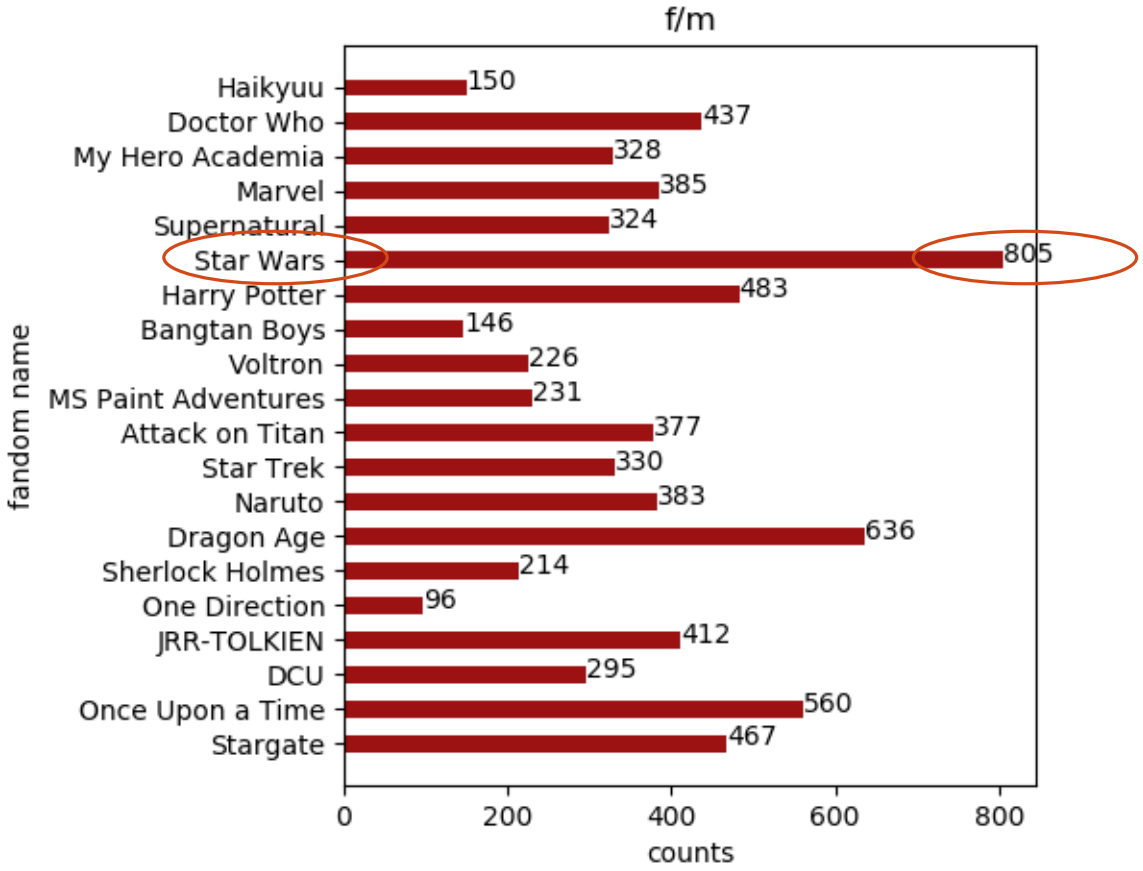
counts

統計圖表 - 標籤特徵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Marvel 385
Supernatural 324
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Harry Potter 483
Bangtan Boys 146
Voltron 226
MS Paint Adventures 231
Attack on Titan 377
Star Trek 330
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Dragon Age 636
Sherlock Holmes 214
One Direction 96
JRR-TOLKIEN 412
DCU 295
Once Upon a Time 560
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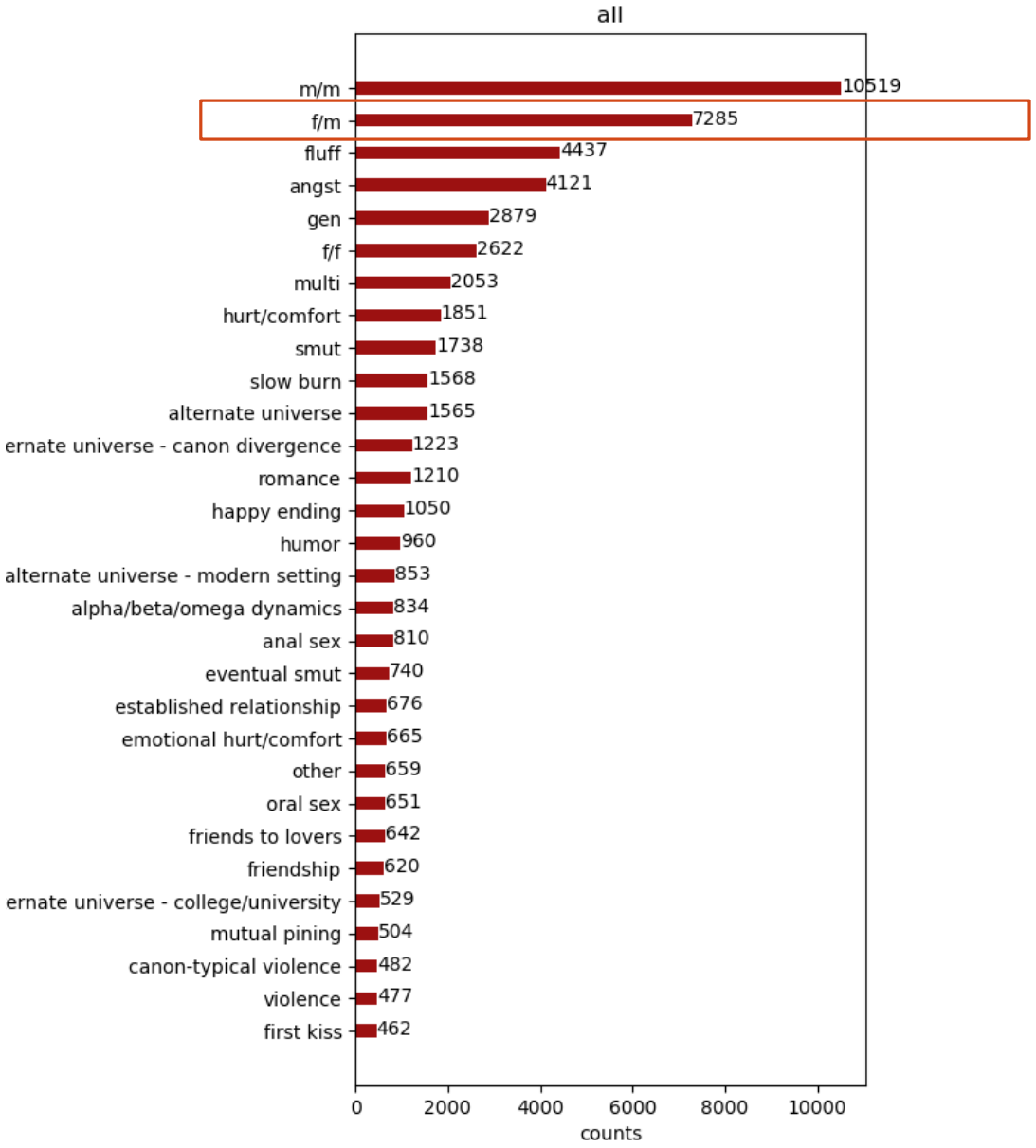
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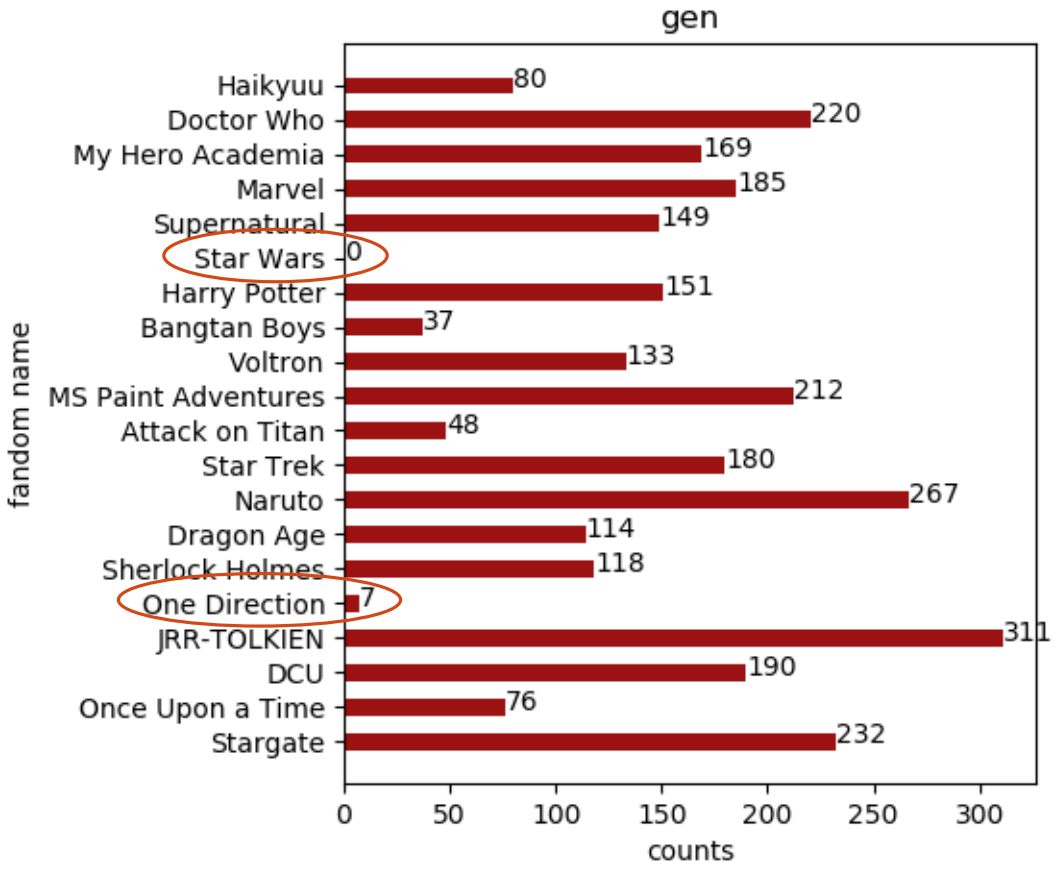
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Doctor Who 220
My Hero Academia 169
Marvel 185
Supernatural 149
Star Wars 0
Harry Potter 151
Bangtan Boys 37
Voltron 133
MS Paint Adventures 212
Attack on Titan 48
Star Trek 180
Naruto 267
Dragon Age 114
Sherlock Holmes 118
One Direction 7
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DCU 190
Once Upon a Time 76
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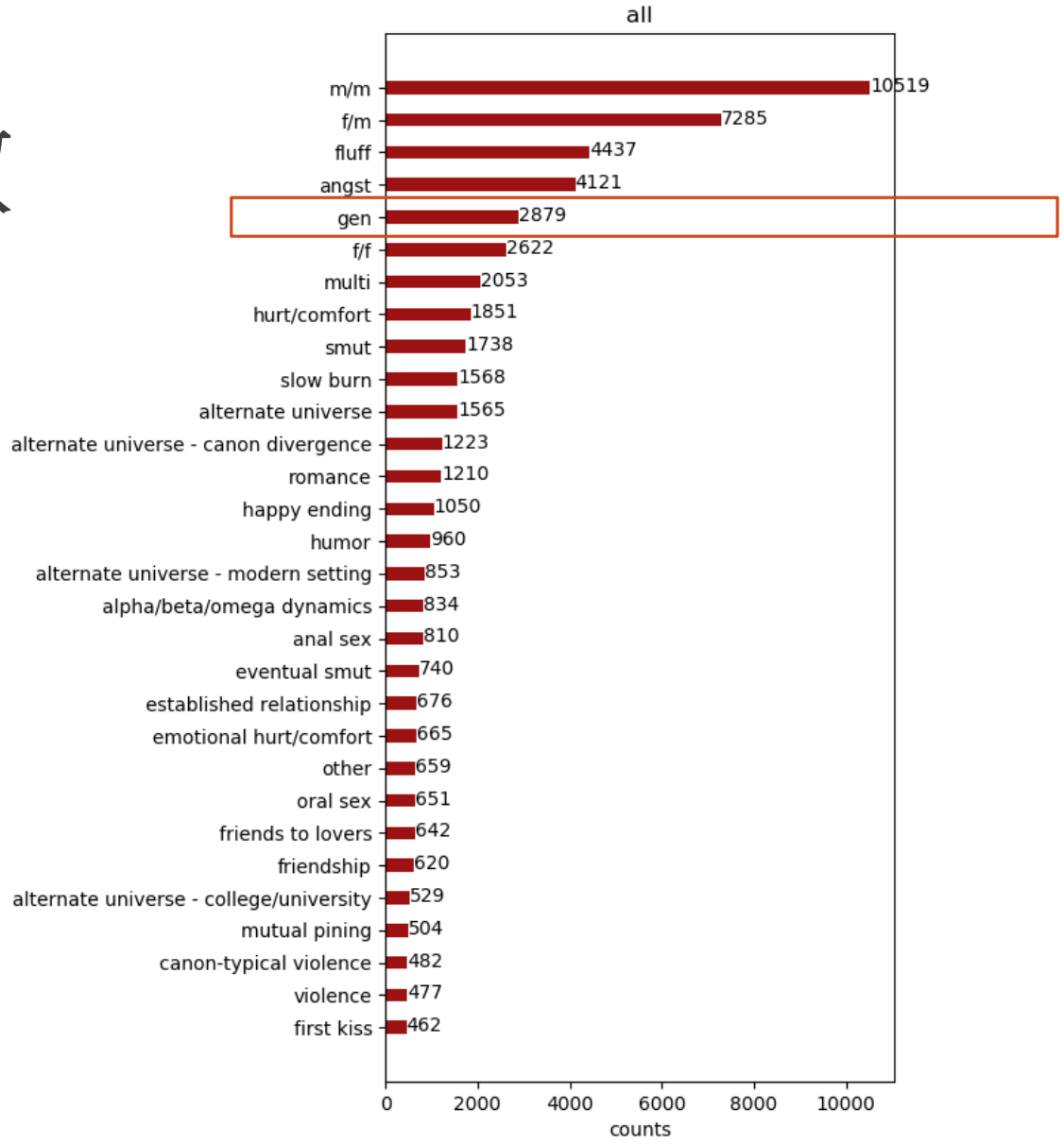
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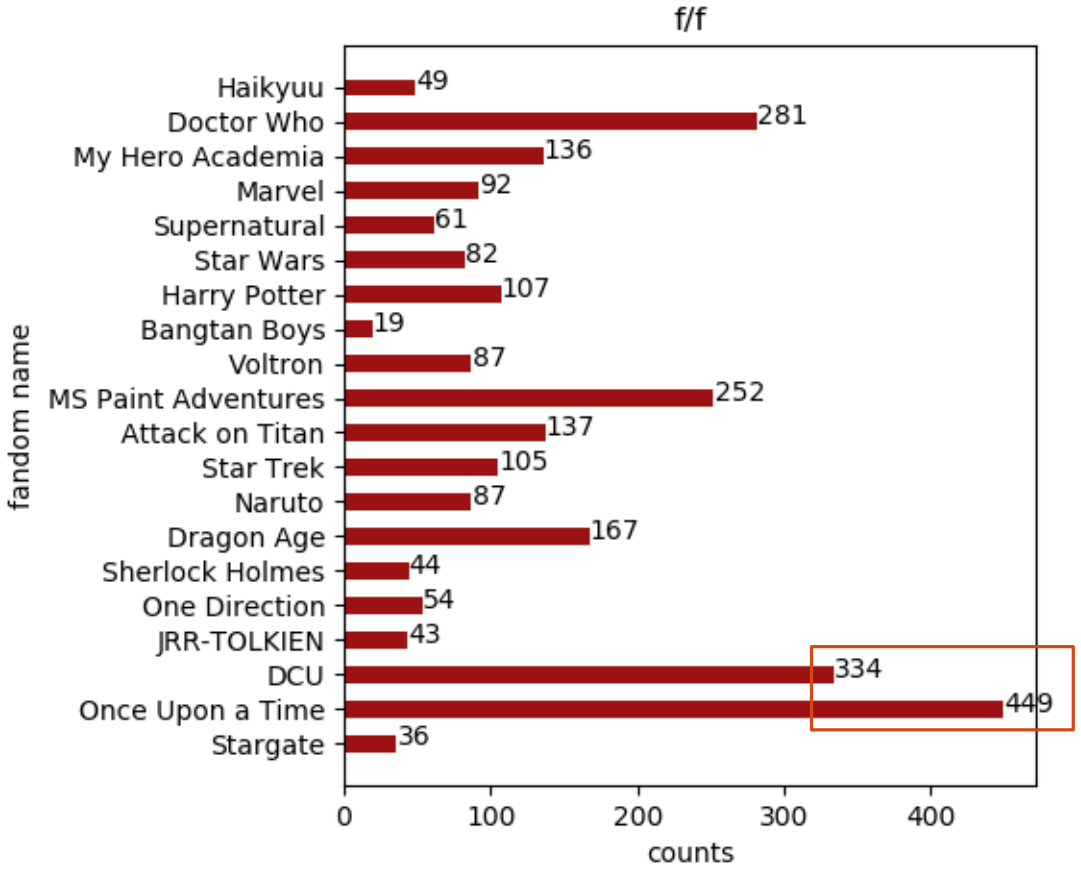
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My Hero Academia 136
Marvel 92
Supernatural 61
Star Wars 82
Harry Potter 107
Bangtan Boys 19
Voltron 87
MS Paint Adventures 252
Attack on Titan 137
Star Trek 105
Naruto 87
Dragon Age 167
Sherlock Holmes 44
One Direction 54
JRR-TOLKIEN 43
DCU 334
Once Upon a Time 449
Stargate 36
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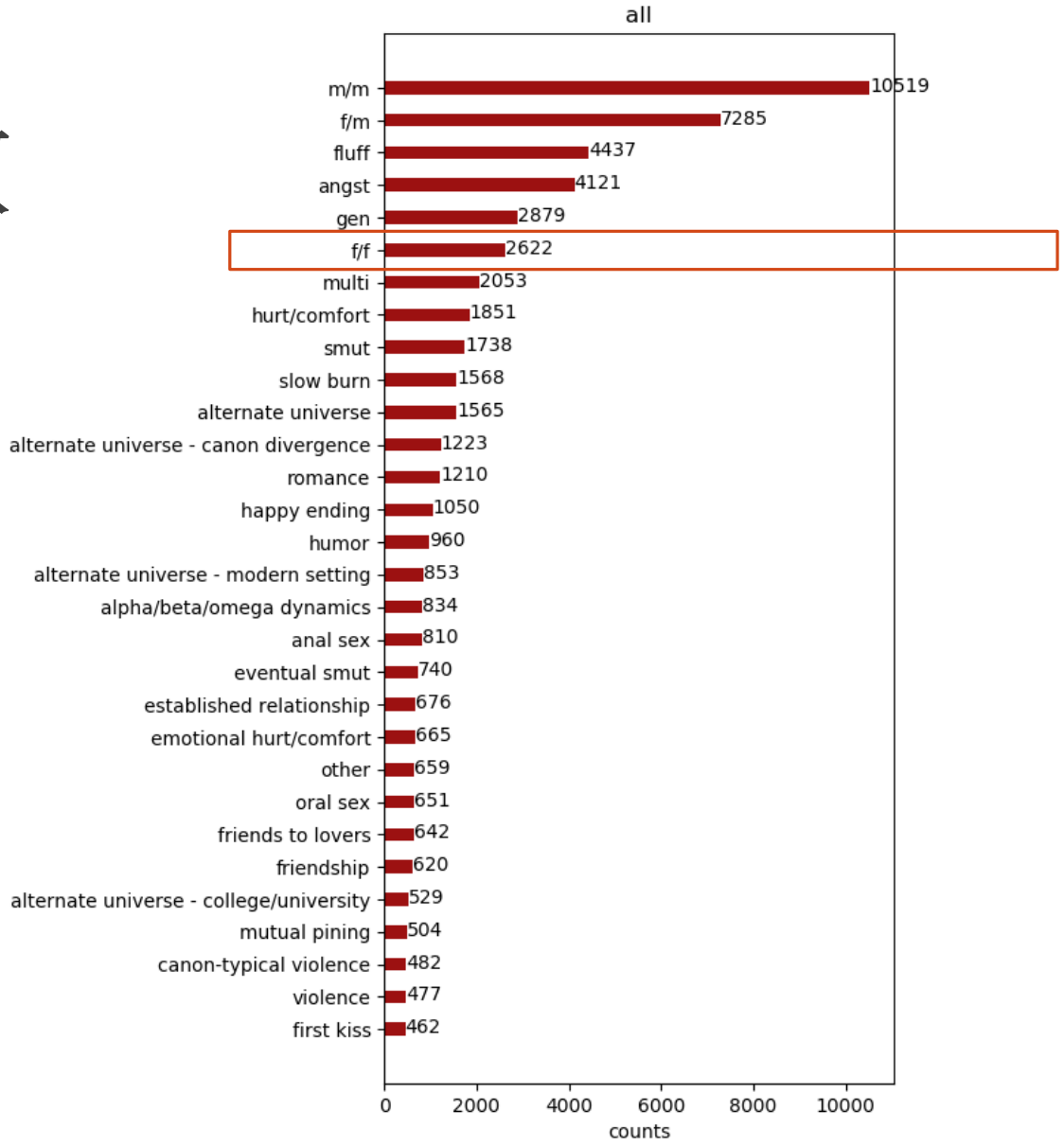
counts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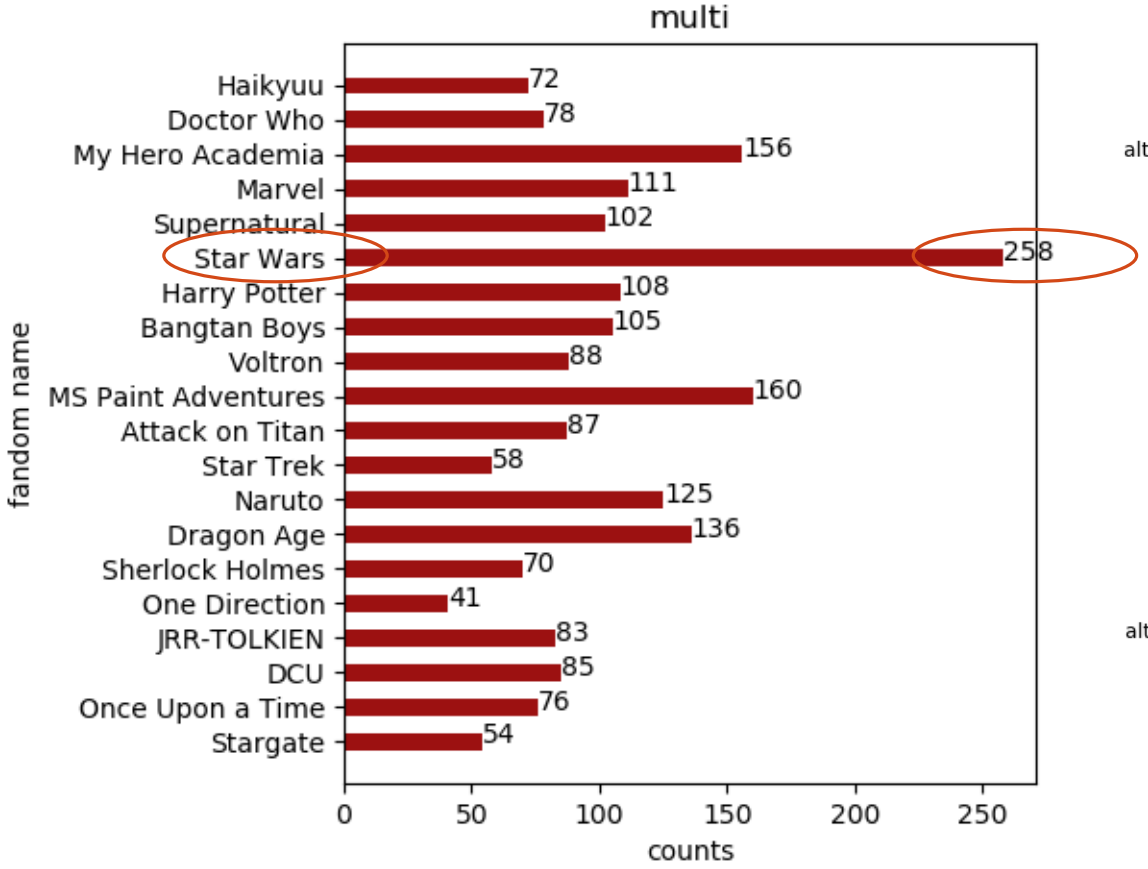
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fandom name
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Doctor Who 78
My Hero Academia 156
Marvel 111
Supernatural 102
Star Wars 258
Harry Potter 108
Bangtan Boys 105
Voltron 88
MS Paint Adventures 160
Attack on Titan 87
Star Trek 58
Naruto 125
Dragon Age 136
Sherlock Holmes 70
One Direction 41
JRR-TOLKIEN 83
DCU 85
Once Upon a Time 76
Stargate 54
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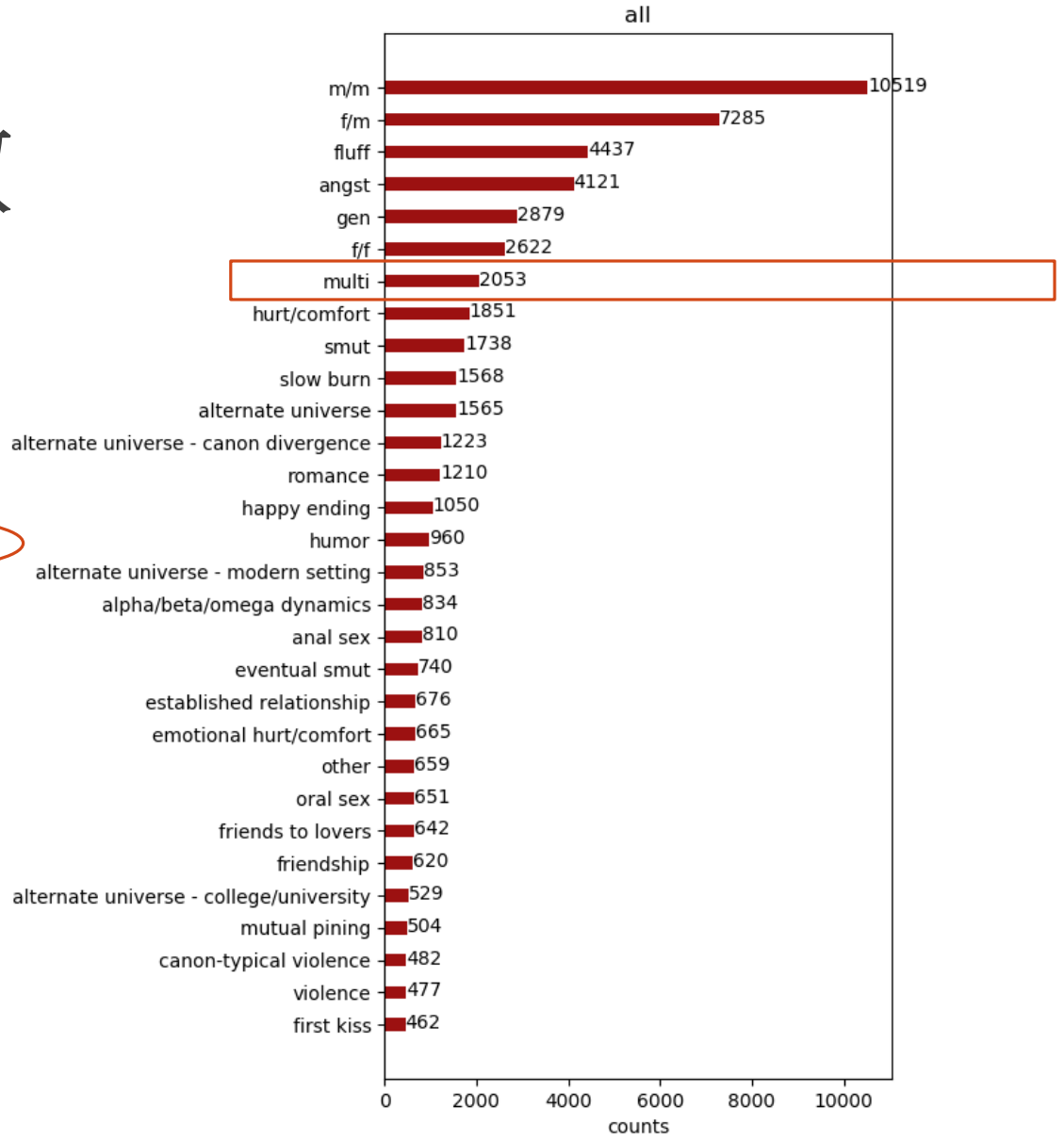
counts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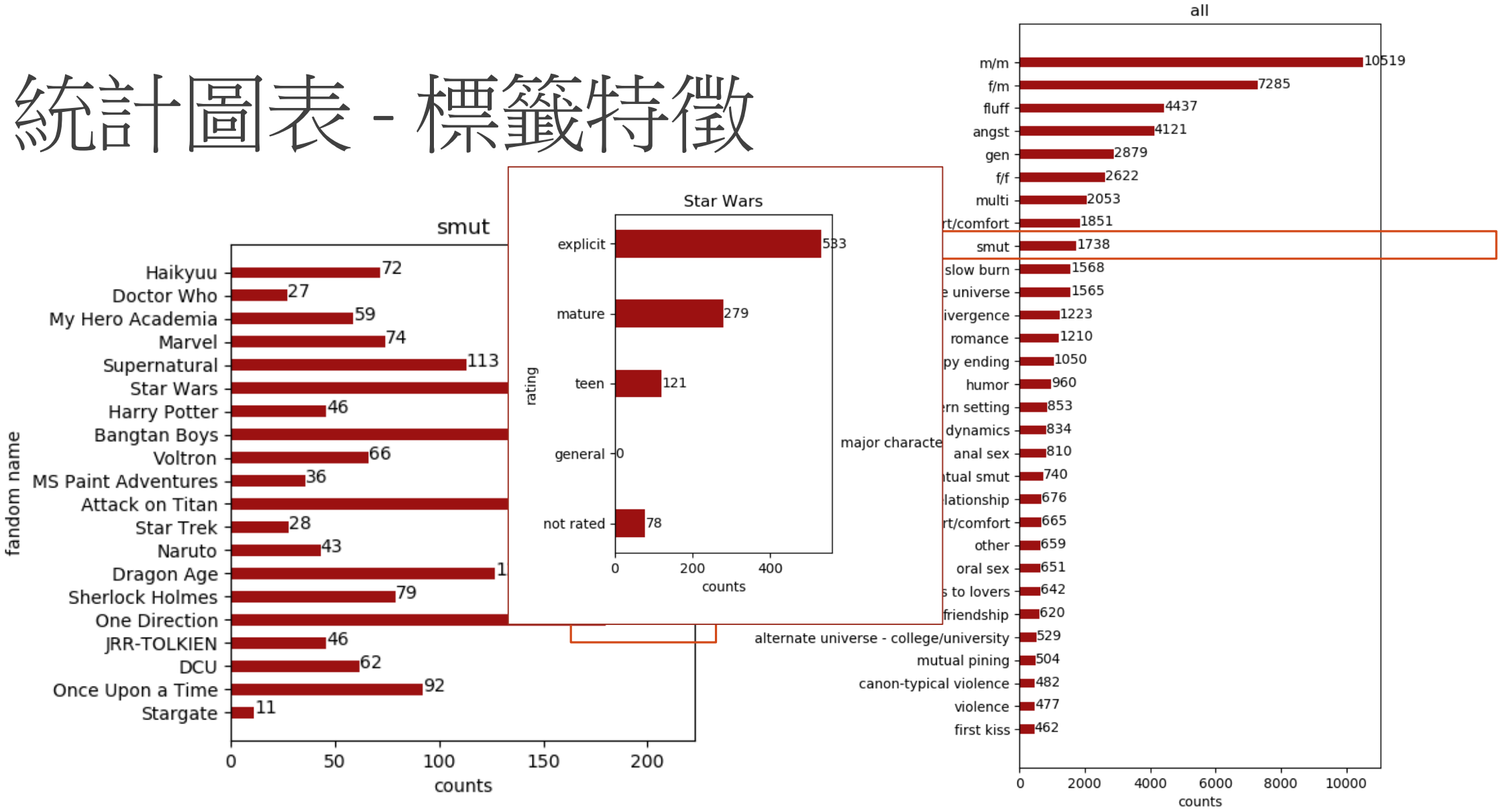
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fandom name
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Doctor Who 27
My Hero Academia 59
Marvel 74
Supernatural 113
Star Wars
Harry Potter 46
Bangtan Boys
Voltron 66
MS Paint Adventures 36
Attack on Titan
Star Trek 28
Naruto 43
Dragon Age 1
Sherlock Holmes 79
One Direction
JRR-TOLKIEN 46
DCU 62
Once Upon a Time 92
Stargate 11
0 50 100 150 200
counts
Star Wars
rating
explicit 533
mature 279
teen 121
general 0
not rated 78
0 200 400
counts
major characte
all
m/m 10519
f/m 7285
fluff 4437
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canon-typical violence 482
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first kiss 462
0 2000 4000 6000 8000 10000
counts

Association Rule Mining

結論：本本情節終究是最有規則的

使用參數

- min support = 0.012
- min confidence = 0.75

我將結果分成三種

- 配對類別的規則
- 限制級的規則
- 其他

Association Rule Mining - 術語解釋

Fluff – 甜 (令人愉悅的情節/內容)

Angst – 虐 (令人感到不安或負面情感的情節/內容)

Smut – 肉 (色情/擦邊球之類的情節/內容)

Hurt/Comfort – 傷害與安慰 (劇情套路)

Slow Burn – 慢熱劇情

Pining – 專情暗戀 (劇情套路)

Association Rule Mining - 術語解釋

MPREG – 男性懷孕

Alpha/Beta/Omega Dynamics – 人類有三種生理性徵並因此劃分為三個階級的世界觀設定，主要特性為在此設定下，類似於其他動物，人類能感知荷爾蒙氣味、有發情期，且部份男性擁有懷孕機能。

Association Rule Mining - 配對類別

(Supernatural, explicit,) --> (m/m,)

(One Direction,) --> (m/m,)

(One Direction, explicit,) --> (m/m,)

(Bangtan Boys,) --> (m/m,)

(Bangtan Boys, angst,) --> (m/m,)

(Bangtan Boys, mature,) --> (m/m,)

(Bangtan Boys, fluff,) --> (m/m,)

(Haikyuu,) --> (m/m,)

(Haikyuu, fluff,) --> (m/m,)

(Haikyuu, teen and up audiences,) --> (m/m,)

(Voltron,) --> (m/m,)

(Star Wars,) --> (f/m,)

(Star Wars, multi,) --> (m/m,)

(Star Wars, m/m,) --> (multi,)

Association Rule Mining - 配對類別

(alpha/beta/omega dynamics,) --> (m/m,)

(alternate universe - high school,) --> (m/m,)

(anal sex,) --> (m/m,)

(anal fingering,) --> (m/m,)

(blow jobs,) --> (m/m,)

(explicit, anal sex,) --> (m/m,)

(mpreg,) --> (m/m,)

(pining,) --> (m/m,)

(smut, anal sex,) --> (m/m,)

(teen and up audiences, m/m, f/f,) --> (f/m,)

(teen and up audiences, f/m, f/f,) --> (m/m,)

Association Rule Mining - 限制級

(oral sex,) --> (explicit,)

(masturbation,) --> (explicit,)

(oral sex, m/m,) --> (explicit,)

(vaginal sex,) --> (explicit,)

(explicit sexual content,) --> (explicit,)

(anal fingering, anal sex,) --> (explicit,)

(anal sex, m/m,) --> (explicit,)

(oral sex, f/m,) --> (explicit,)

Association Rule Mining – 其他

(smut, eventual smut,) --> (fluff,)

(angst, smut,) --> (fluff,)

(angst, smut, m/m,) --> (fluff,)

(angst, smut, f/m,) --> (fluff,)

(happy ending,) --> (angst,)

(happy ending, fluff,) --> (angst,)

(happy ending, f/m,) --> (angst,)

(happy ending, m/m,) --> (angst,)

(explicit, fluff, f/m,) --> (smut,)

(mating cycles/in heat,) --> (alpha/beta/omega dynamics,)

附錄: 數量前20名粉絲圈 – 標籤名 (中文翻譯)

1. Marvel (漫威)
2. Supernatural (超自然檔案)
3. Harry Potter - J. K. Rowling (哈利波特)
4. Sherlock Holmes & Related Fandoms (夏洛克·福爾摩斯及相關作品)
5. DCU (DC宇宙)
6. 방탄소년단 | Bangtan Boys | BTS (防彈少年團)
7. Star Wars (星際大戰)
8. Doctor Who & Related Fandoms (超時空奇俠/神秘博士及相關作品)
9. Voltron: Legendary Defender (聖戰士：傳奇護衛)
10. TOLKIEN J. R. R. - Works & Related Fandoms (J·R·R·托爾金 - 個人作品及相關著作)
11. Dragon Age - All Media Types (闇龍紀元及所有改編作品)
12. Star Trek (星艦迷航記)
13. One Direction (Band) (一世代 (樂團))
14. 僕のヒーローアカデミア | Boku no Hero Academia | My Hero Academia (我的英雄學院)
15. Haikyuu!! (排球少年)
16. MS Paint Adventures
17. Once Upon a Time (TV)
18. Stargate - All Media Types (星際之門及所有改編作品)
19. Naruto (火影忍者)
20. Shingeki no Kyojin | Attack on Titan (進擊的巨人)

Thank you