



# Archive Of Our Own

## Fandoms and Tags

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同人小說領域中粉絲圈與標籤的關係

(2019/06)

# #內容警告

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#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

# 介紹

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## Archive Of Our Owns (AO3)

一個非盈利且開源的同人小說存檔網站

網站上的作品數量已經超過450萬

## 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。

# A03 上的標籤類型

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## 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"

# 資料來源

## 找AO3網站上作品數量最多的前20名粉絲團

每個粉絲團抓下約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 Potter	{ 'not rated', 'alternate universe - time travel', 'gen, m/m', 'master of death harry potter' }
Harry Potter	{ '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 Potter	{ '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 Potter	{ 'explicit', 'tumblr prompts', 'forbidden prompts', 'm/m, f/m, multi', 'tags in each chapter' }
Harry Potter	{ '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 Potter	{ 'ftm ron weasley', 'rare plants', 'alternate universe - college/university', 'alternate universe - modern setting', 'm/m', 'not rated', 'alternate universe - non-magical', 'pining', 'theatre class', 'travelling' }
Harry Potter	{ '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 Potter	{ 'psychological trauma', 'past child abuse', 'angst and hurt/comfort', 'm/m', 'abusive past', 'mature', 'heavy angst' }
Harry Potter	{ 'forensics', 'murder mystery', 'courtroom drama', 'past alcohol abuse/alcoholism', 'f/m', 'severus snape lives', 'miscarriage', 'suicide', 'mature', 'alternate universe', 'american legal system' }
Harry Potter	{ 'lily evans potter lives', 'bottom damon salvatore', 'albus dumbledore bashing', 'parent damon salvatore', 'james potter bashing', 'lily evans potter bashing', 'child harry potter', 'adopted harry potter' }
Harry Potter	{ '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 my life' }
Harry Potter	{ '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

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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

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## 統計圖表

- 標籤數量排名
- 標籤特徵
- 粉絲團特徵

## Association Rule Mining

- $\text{minsup} = 0.01 \sim 0.02$
- $\text{minconf} = 0.6 \sim 0.8$

## 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

術語解釋

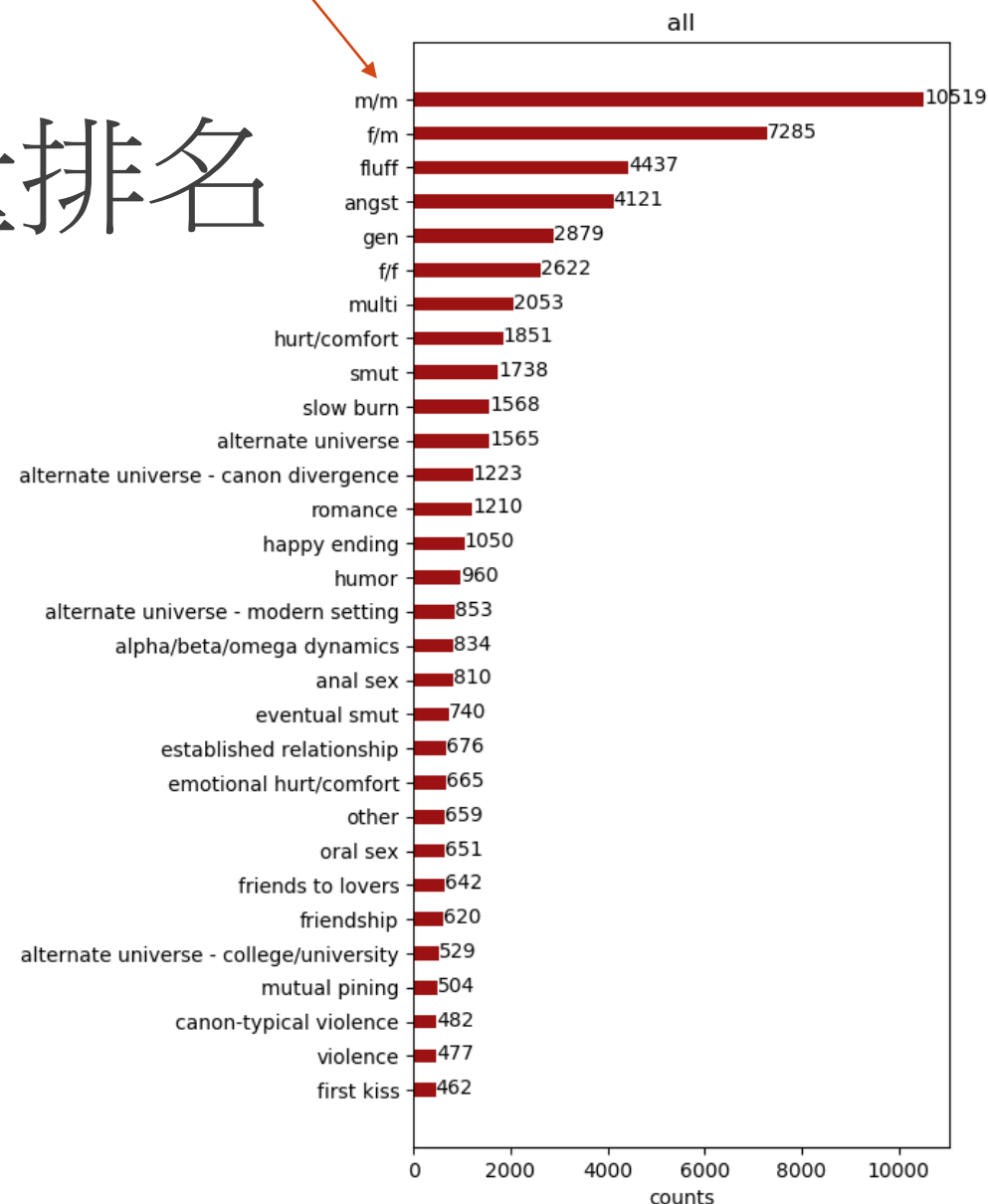
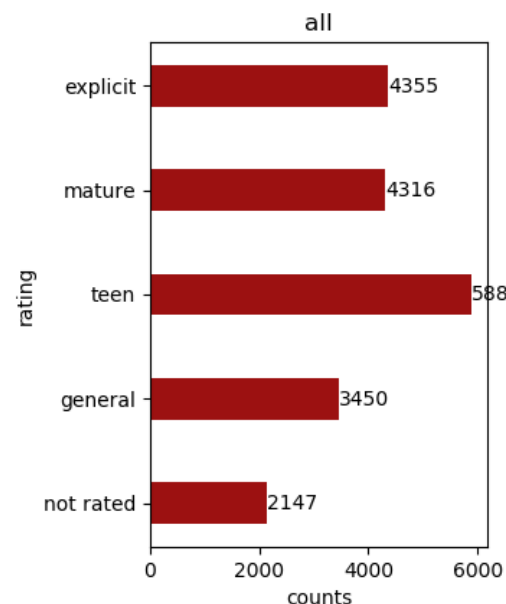
Fluff – 甜

Angst – 虐

Smut – 肉(色情)

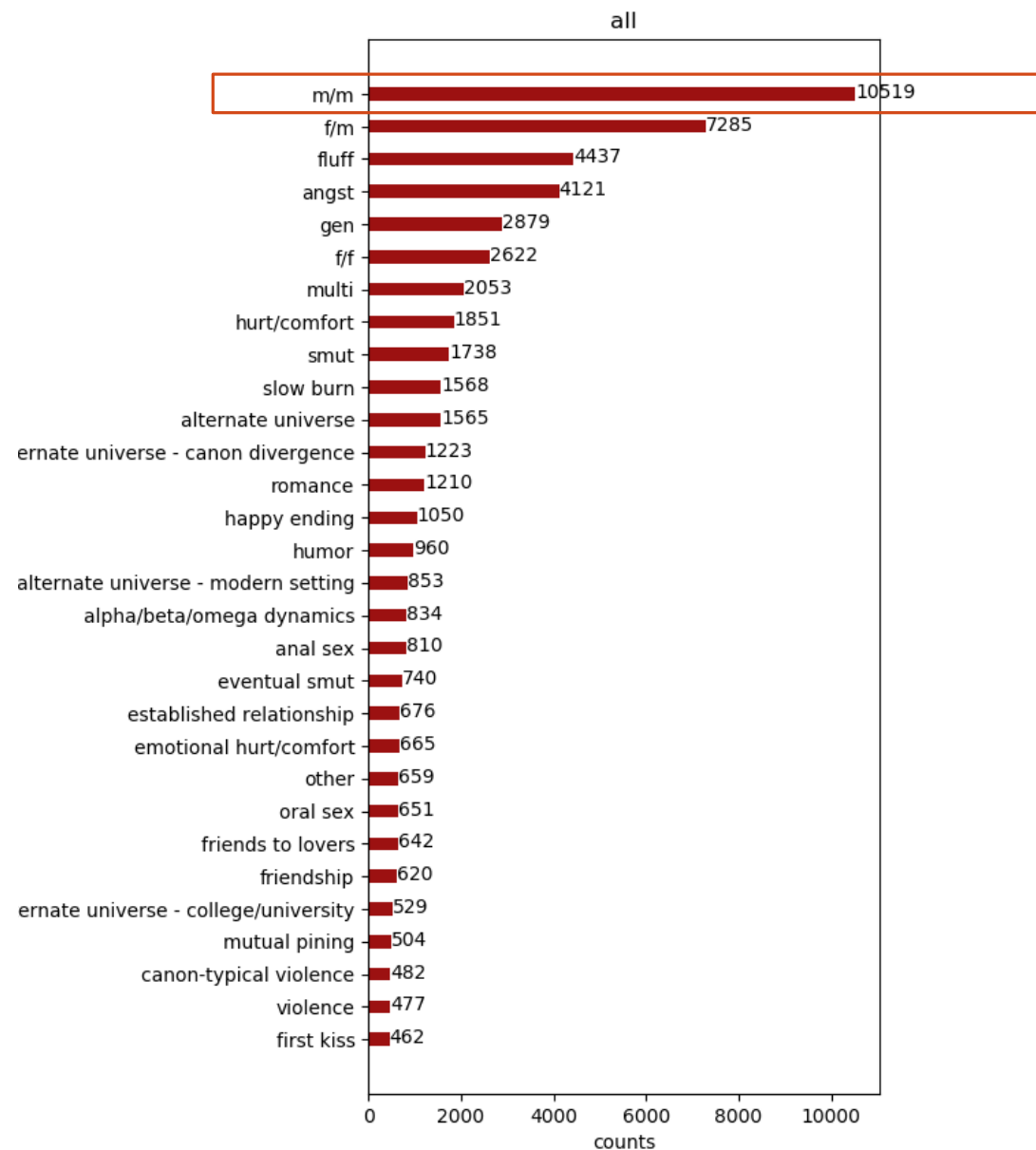
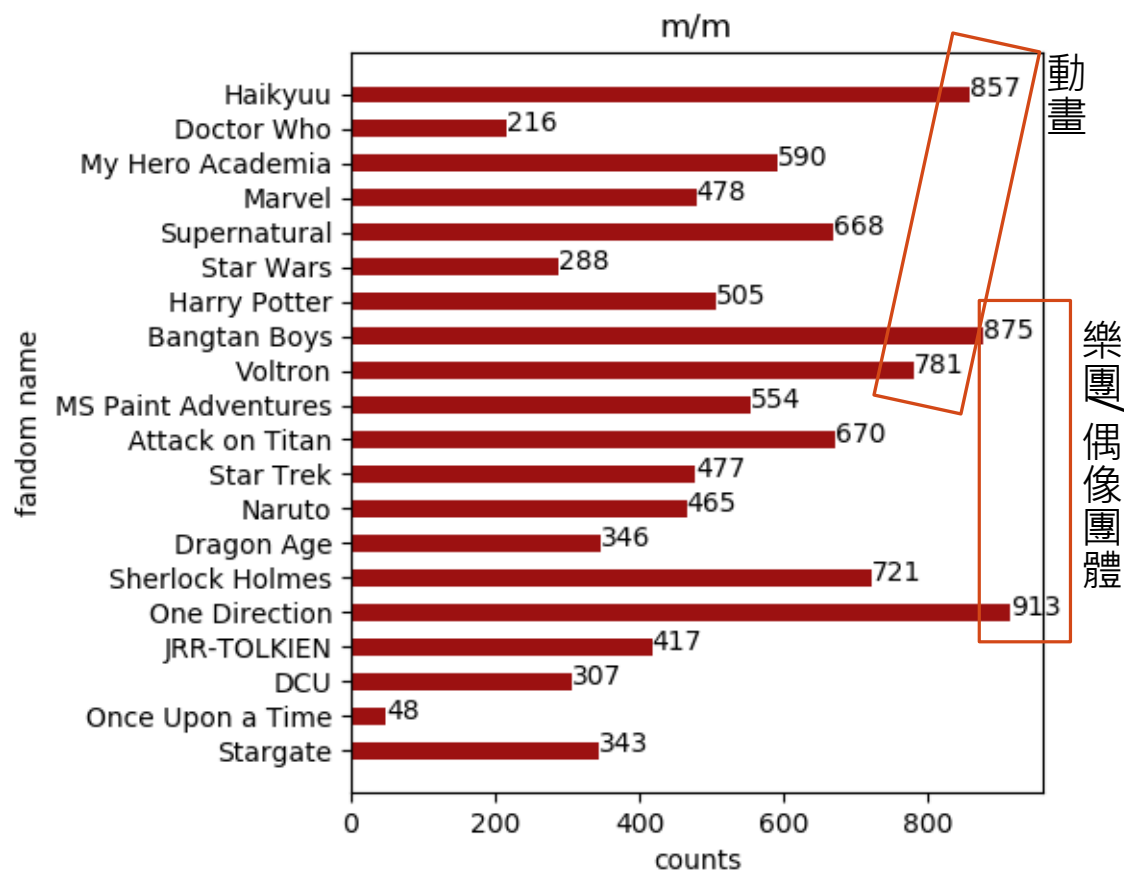
Hurt/Comfort – 傷害與安慰

Slow Burn – 劇情慢熱

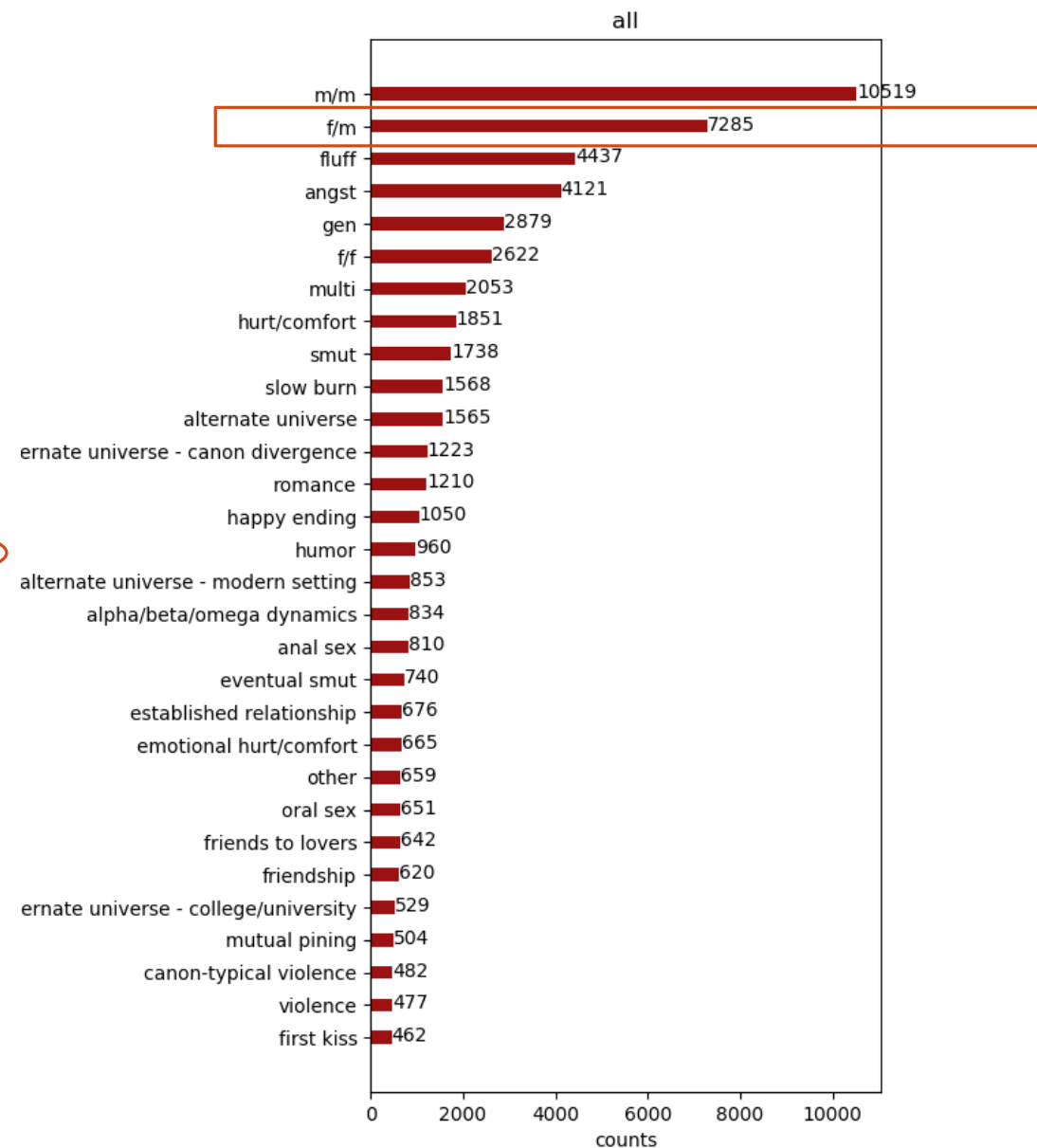
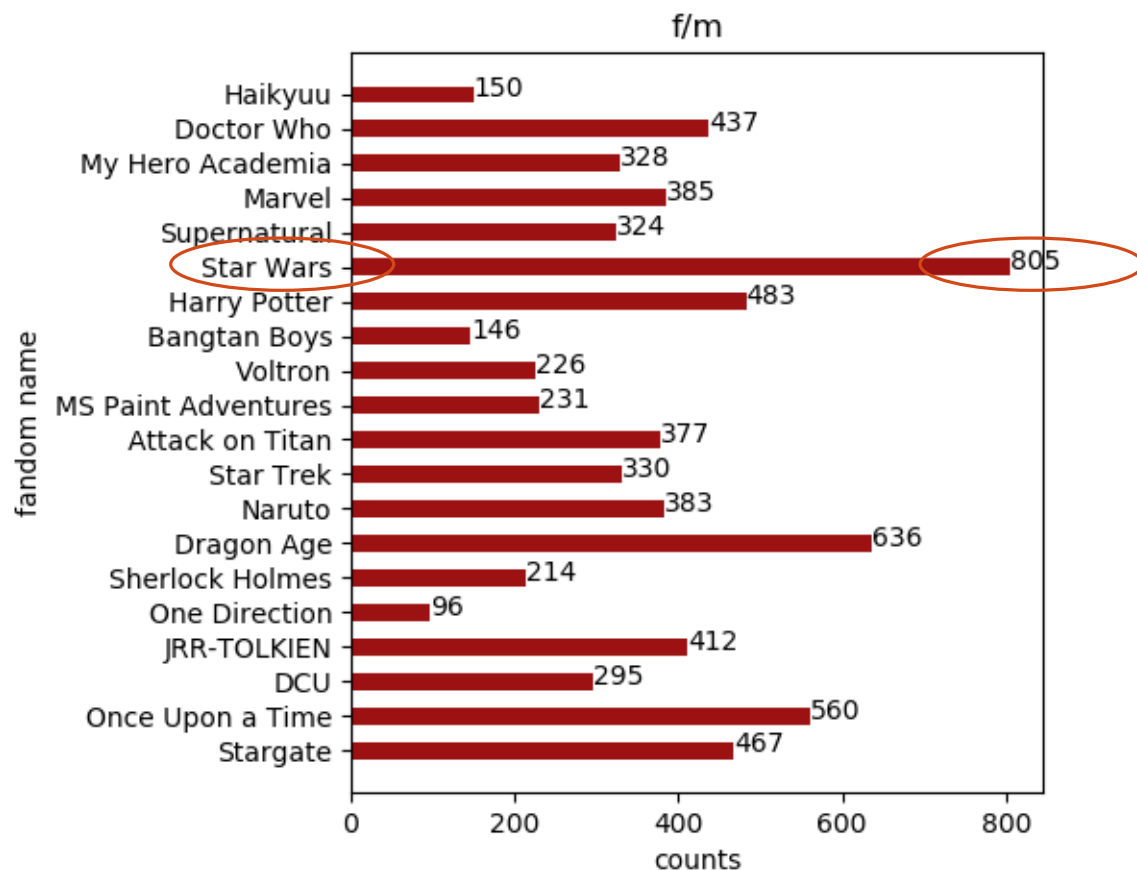




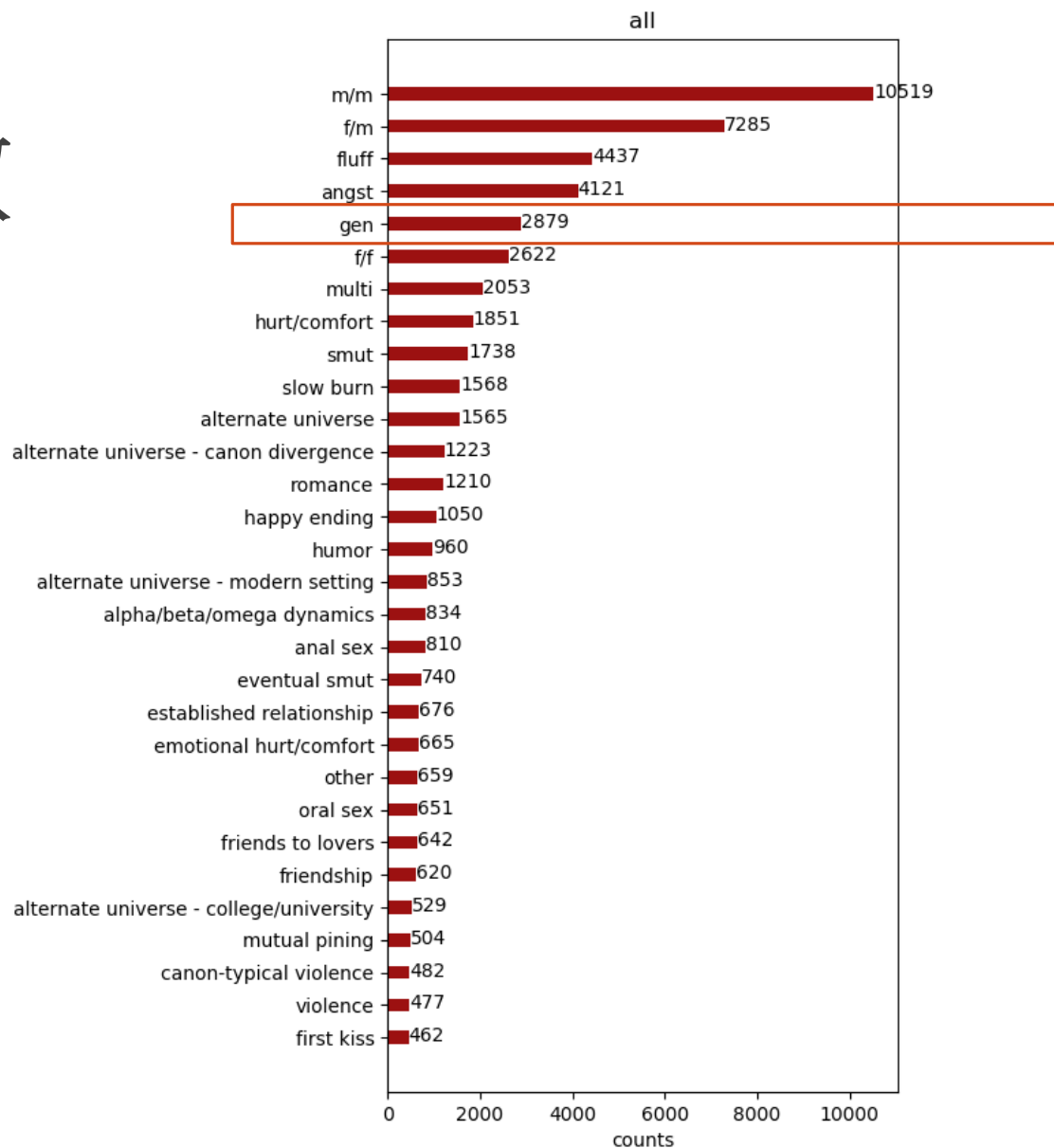
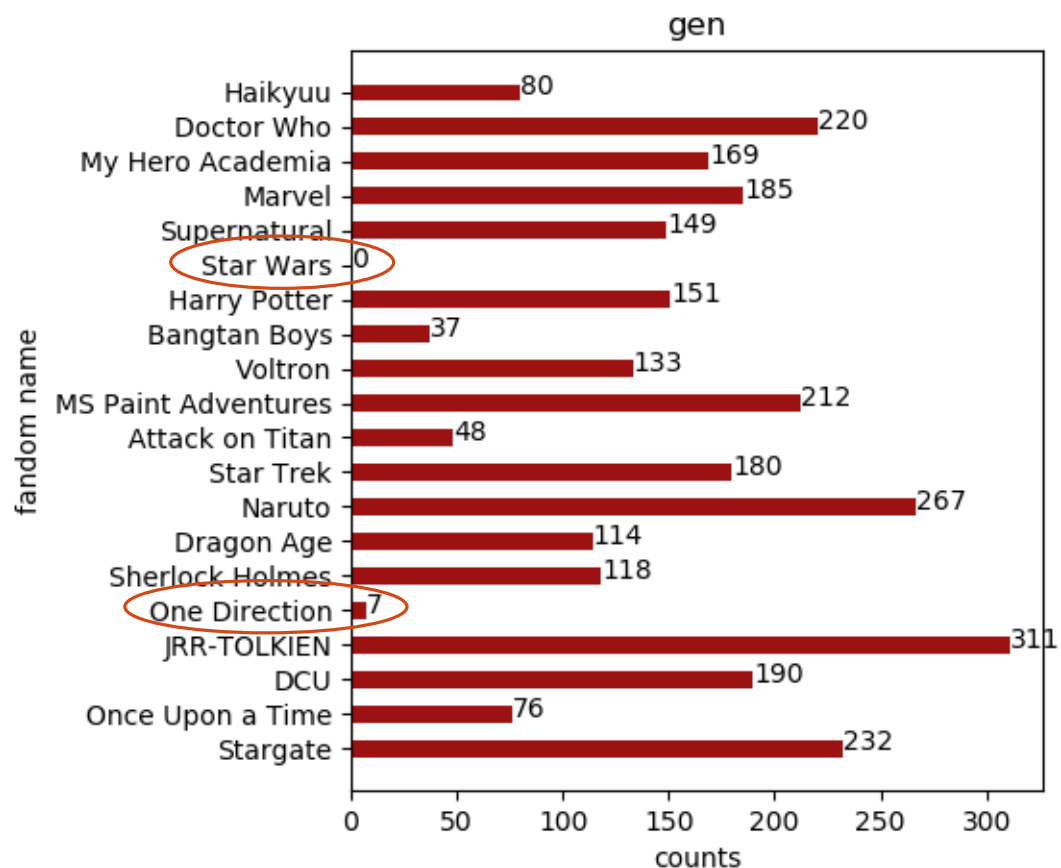
# 統計圖表 - 標籤特徵



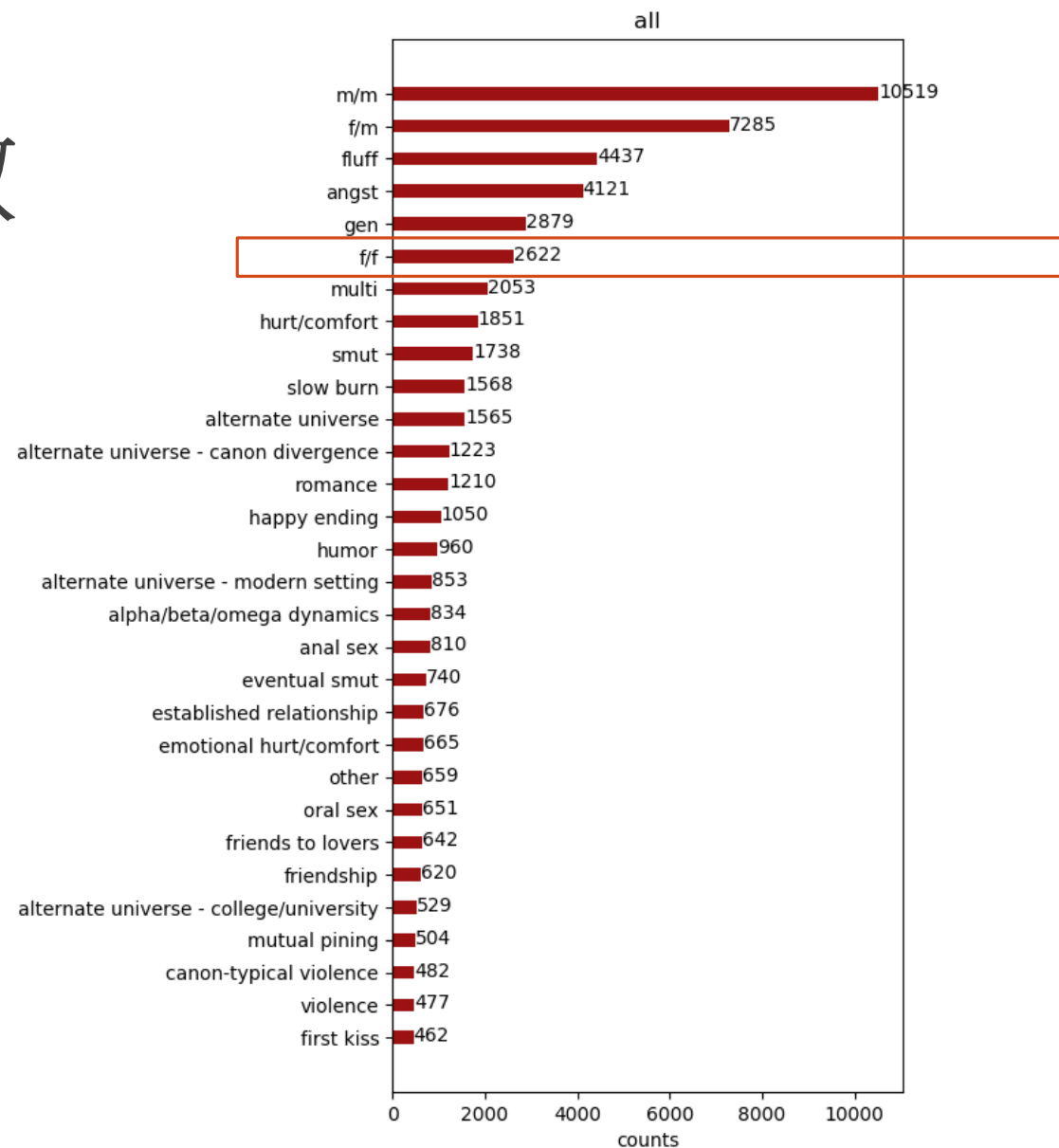
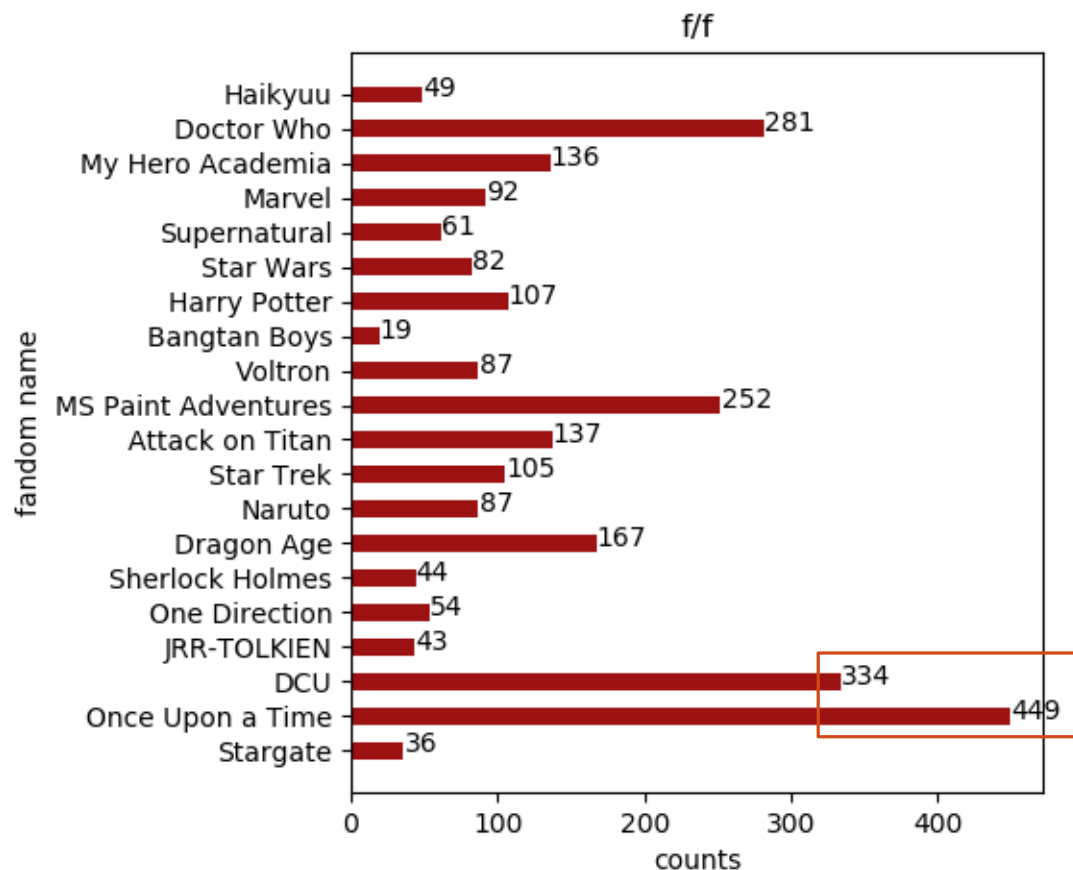
# 統計圖表 - 標籤特徵



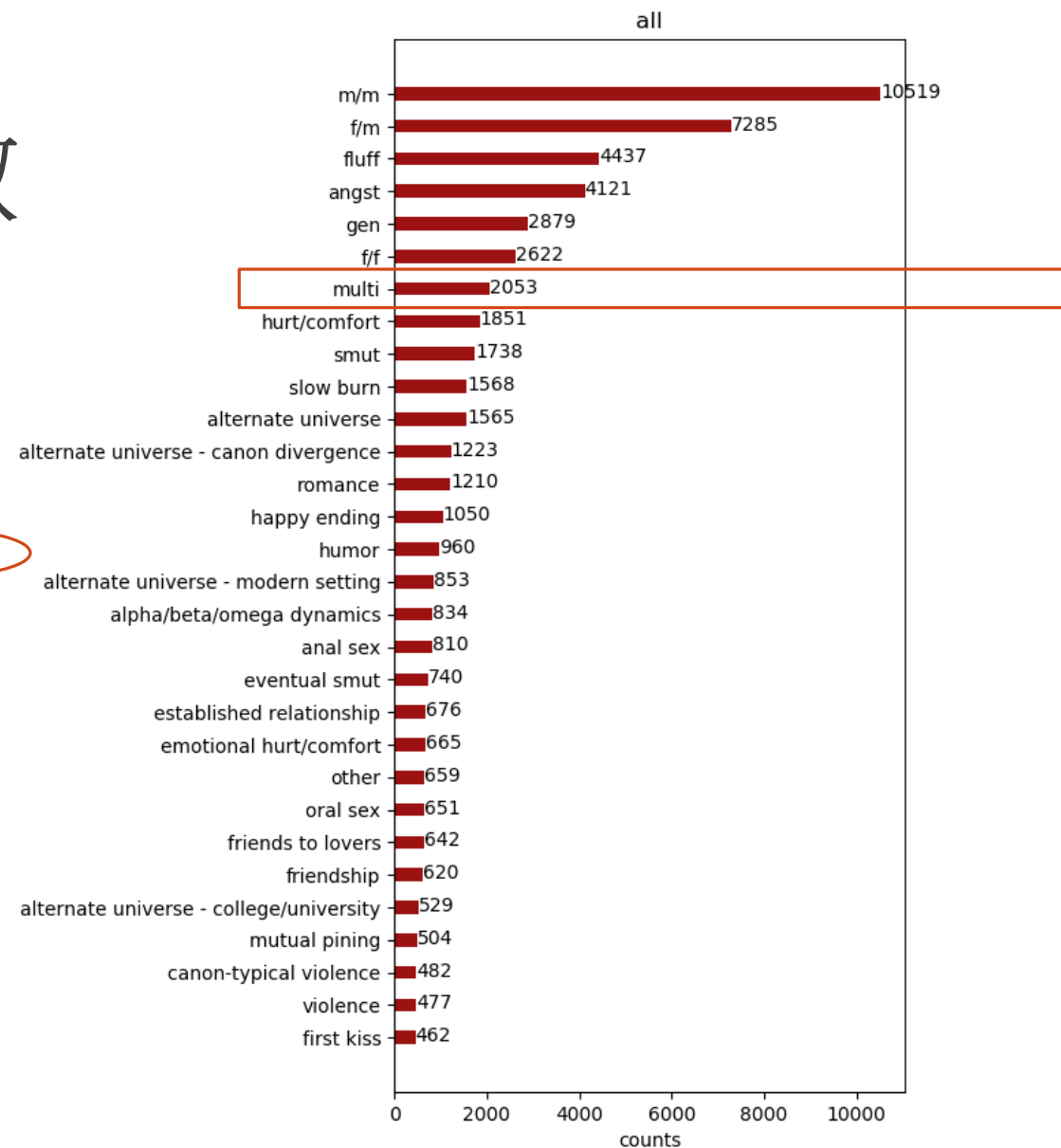
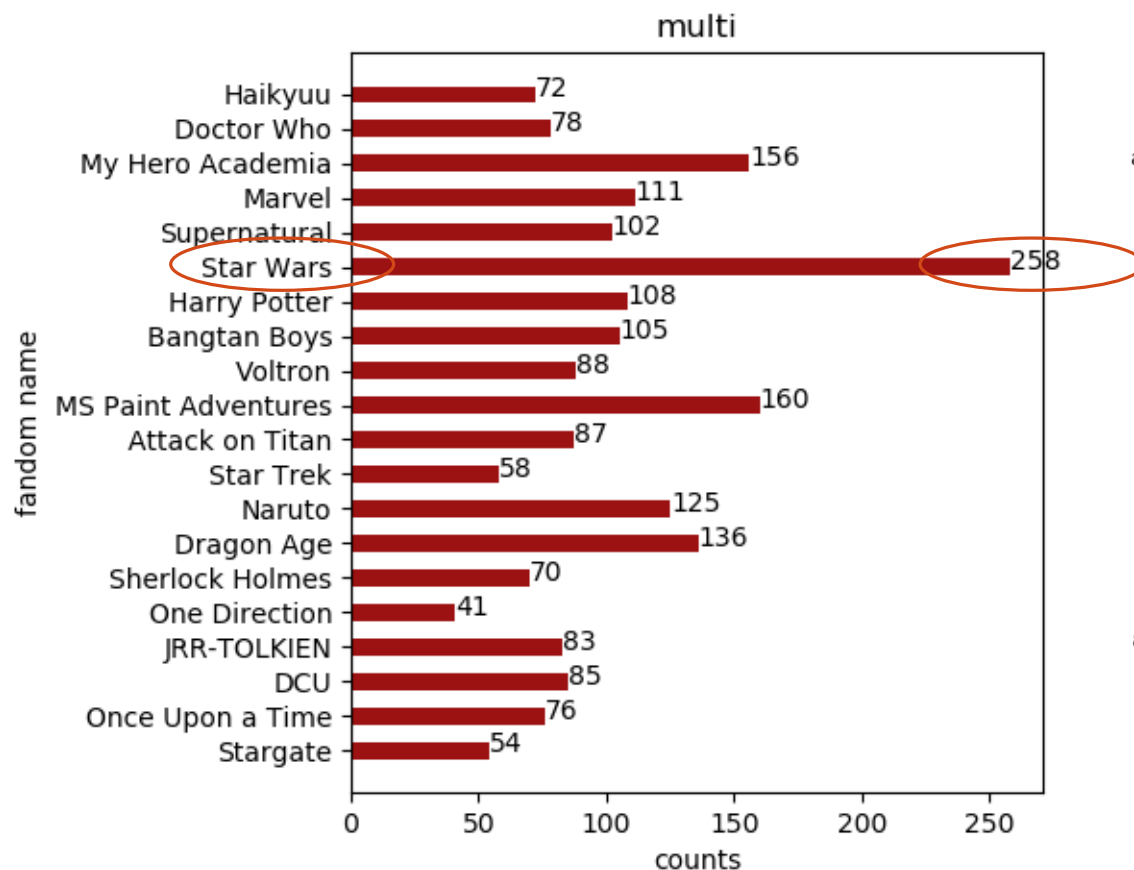
# 統計圖表 - 標籤特徵



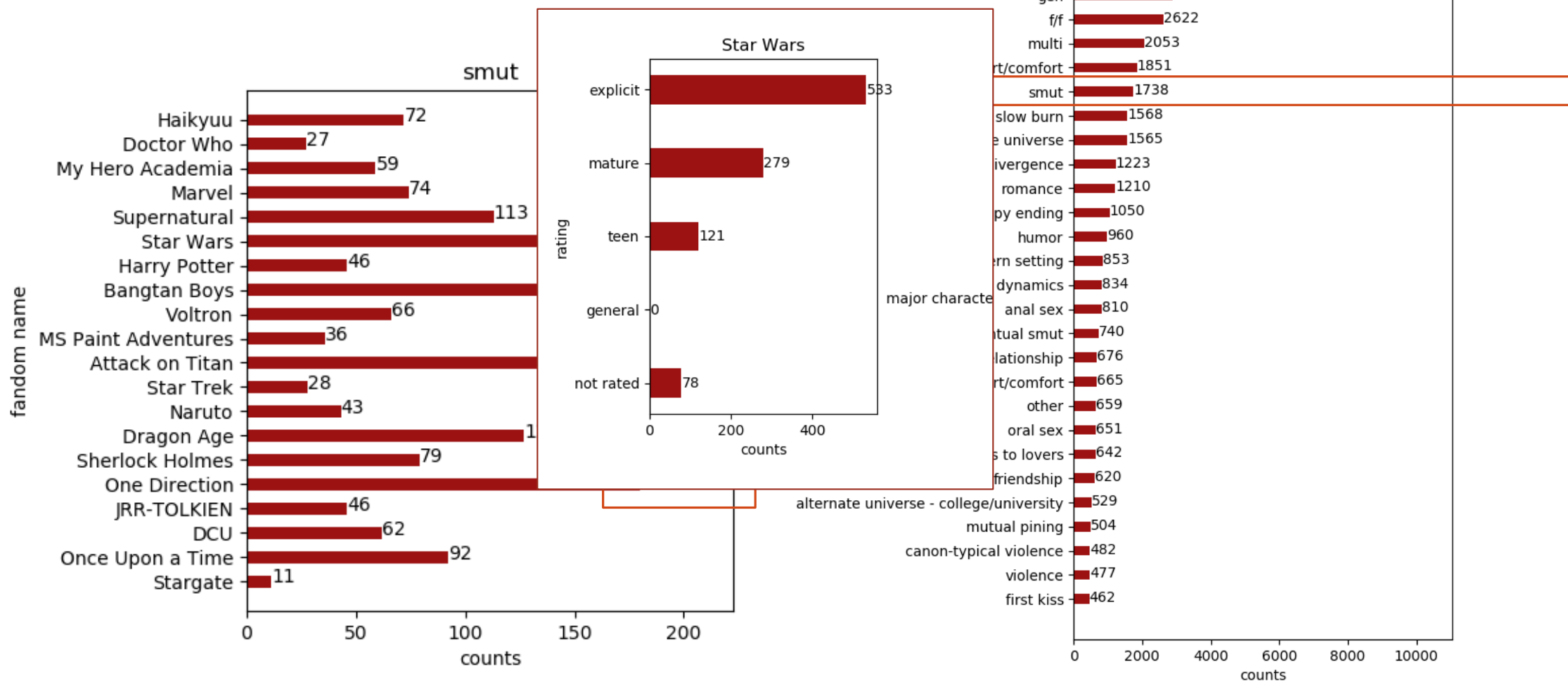
# 統計圖表 - 標籤特徵



# 統計圖表 - 標籤特徵



# 統計圖表 - 標籤特徵



# Association Rule Mining

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結論：

本本情節終究是最有規則的

# Association Rule Mining

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$\text{minsup} = 0.012$

$\text{minconf} = 0.75$

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 - 配對類別

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(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

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

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

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

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

# Association Rule Mining - 限制級

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(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

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(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

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