

同人小說領域中粉絲圈與標籤的關係

### #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

# 介紹

#### 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。

### 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"

# 資料來源

找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,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', 'alt  | ernate universe    | - time travel', | 'gen, m/m',    | master of d   | eath harry p | otter'}         |                |               |               |                |               |               |               |                    |
| 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', 'tum   | blr prompts', 'fo  | rbidden prom    | pts', 'm/m, fa | m, multi', 't | ags in each  | chapter'}       |                |               |               |                |               |               |               |                    |
| Harry Potte   | 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   | 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', 'tran |                    |                 |                |               |              |                 |                |               |               |                |               |               |               |                    |
| Harry Potte   | 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 I         |                    |                 |                |               |              |                 |                |               |               |                |               |               |               |                    |
| Harry Potte   | Potte ('psychological trauma', 'past child abuse', 'angst and hurt/comfort', 'm/m', 'abusive past', 'mature', 'heavy angst'}  |                    |                 |                |               |              |                 |                |               |               |                |               |               |               |                    |
| Harry Potte   | 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 pot  | ter lives', 'botto | n damon salv    | atore', 'albus | dumbledor     | e bashing',  | 'parent dam     | on salvatore   | e', 'james po | tter bashing  | ', 'lily evans | potter basi   | hing', 'child | harry potter  | ', 'adopted harr   |
| Harry Potte   | ('goes through  | most of her yea    | rs', 'may alan  | rickman rip    | , 'severus si | nape has a h | ieart', 'patro: | nus', 'potter' | , 'malfoys -  | freeform', 'j | professor/stu  | ıdent', 'f/m' | , 'she dates  | bill snape is | jealous', 'this is |
| Harry Potte   | {'gay draco ma  | lfoy', 'backgrou   | nd relationshi  | ps', 'past har | ry potter/gi  | nny weasley  | 7', 'mentione   | ed cedric dig  | ggory - freef | form', 'teen  | and up audi    | ences', 'bise | exual harry   | potter', 'm/m | n'}                |

### 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
- 。標籤特徽
- 粉絲圈特徽

#### **Association Rule Mining**

- minsup = 0.01~0.02
- minconf =  $0.6^{\circ}0.8$

訓練簡易神經網路

#### BL佔了整個資料集的一半 10519/20155

all

# 統計圖表 - 標籤數量排名

explicit :

mature

teen

general

not rated

rating

術語解釋

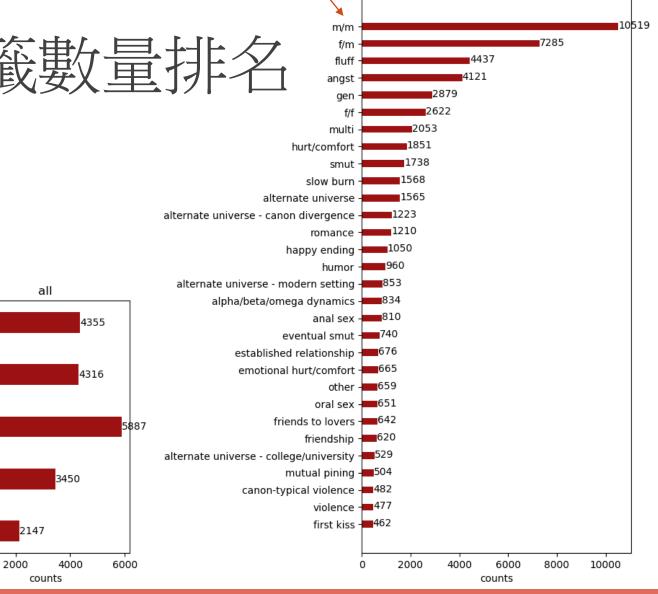
Fluff - 甜

Angst - 虐

Smut - 肉(色情)

Hurt/Comfort - 傷害與安慰

Slow Burn – 劇情慢熱



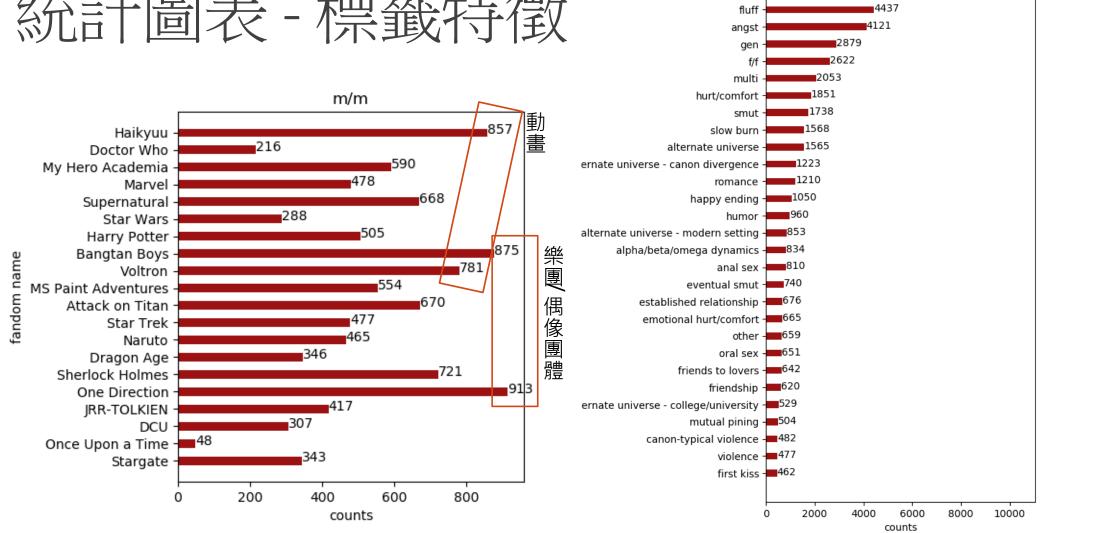
7285

m/m

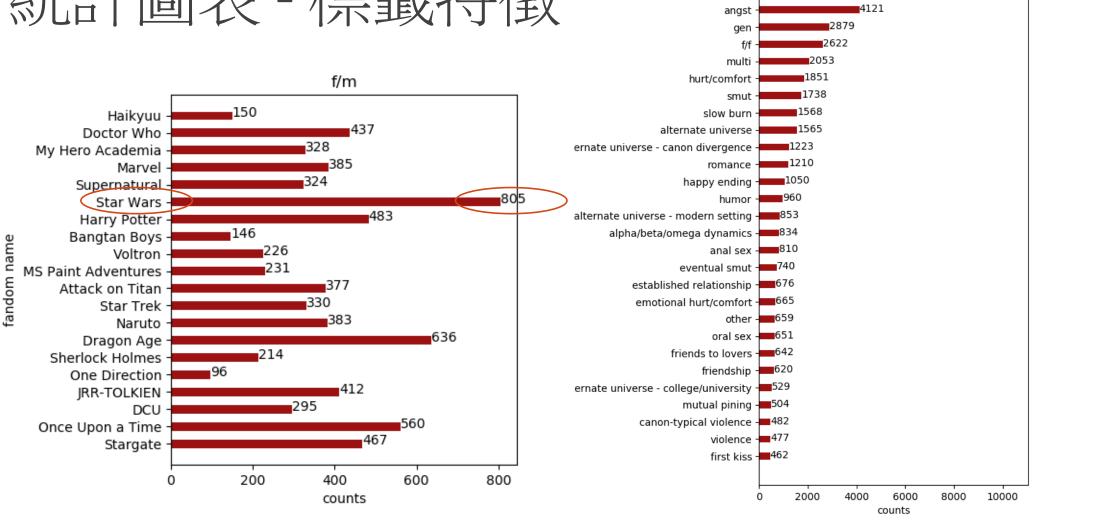
f/m

10519

### 統計圖表 - 標籤特







all

4437

7285

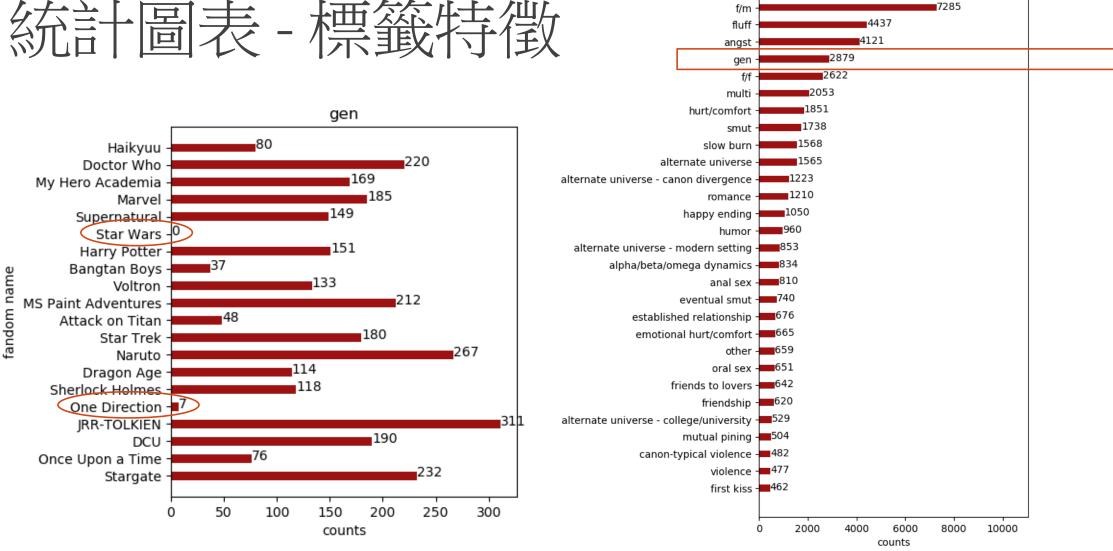
m/m

f/m

fluff

**1**0519



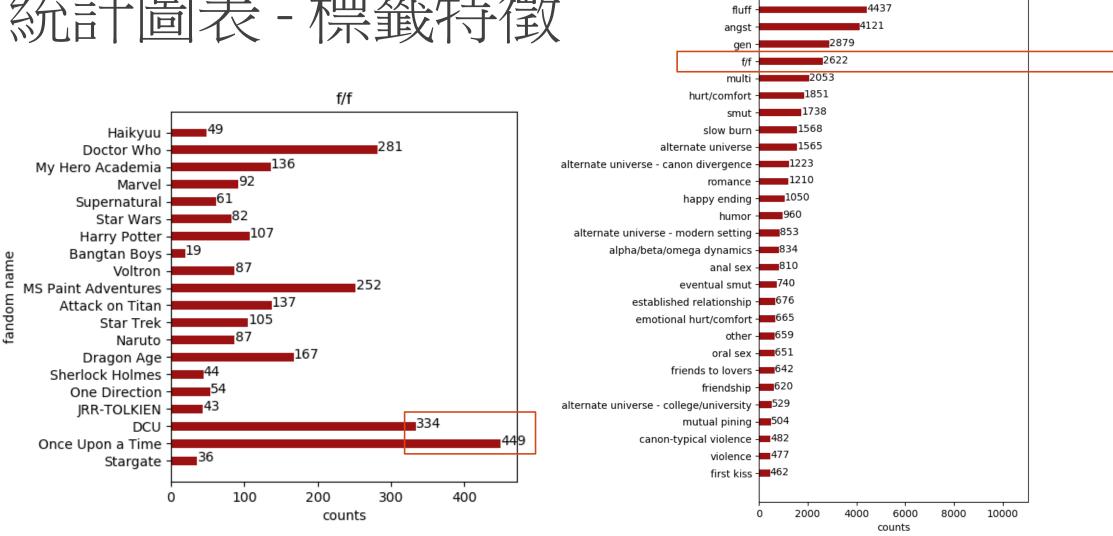


all

m/m

**■**10519





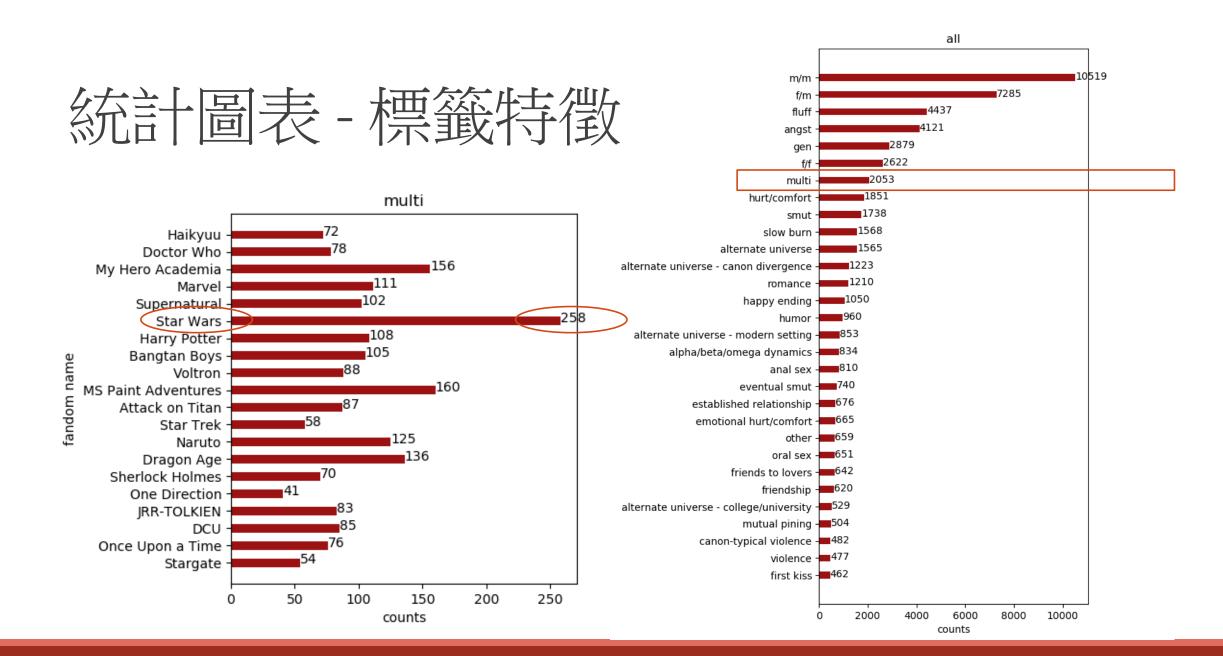
all

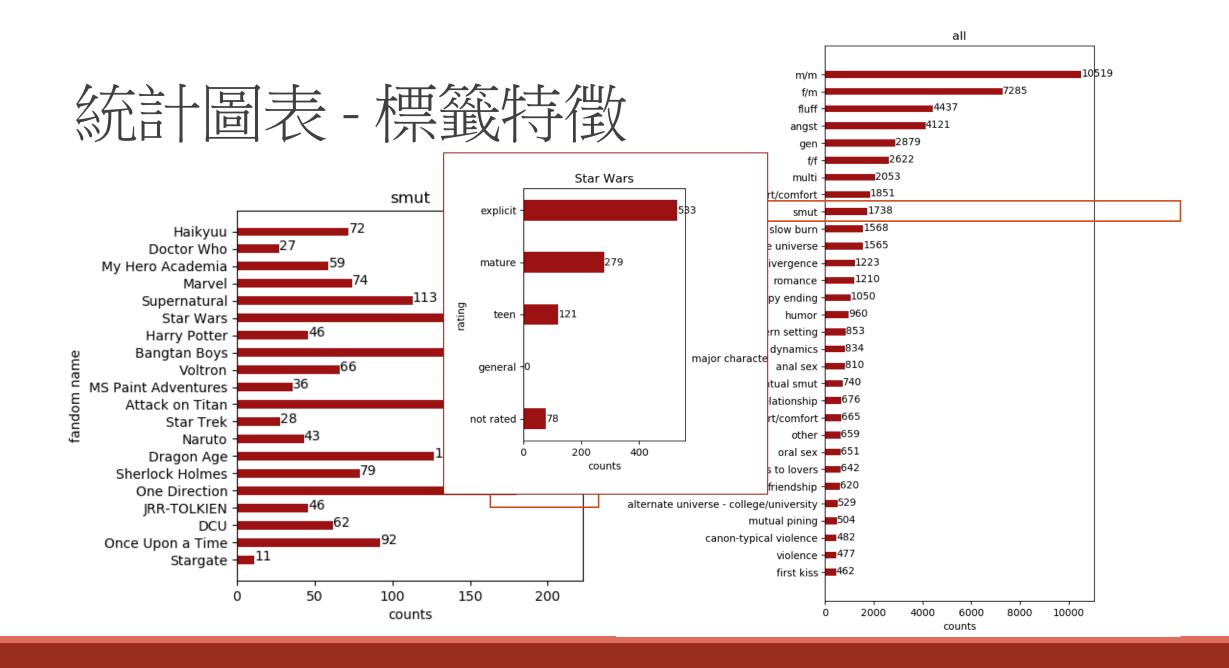
7285

m/m

f/m

**■**10519





### Association Rule Mining

結論:

本本情節終究是最有規則的

### Association Rule Mining

```
minsup = 0.012minconf = 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

```
(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 - 西對類別

```
(alpha/beta/omega dynamics, ) --> (m/m, )
(alternate universe - high school, ) --> (m/m, )
(anal sex, ) --> (m/m, )
(anal fingering, ) --> (m/m, )
(blow jobs, ) \rightarrow (m/m, )
(explicit, anal sex, ) --> (m/m, )
(mpreg, ) --> (m/m, )
(pining, ) \rightarrow (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

- 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 17.Once Upon a Time (TV) 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· 19.Naruto (火影忍者) 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
- 18.Stargate All Media Types (星際之門及所有改編 作品)
- 20.Shingeki no Kyojin | Attack on Titan (進擊的巨人)

# Thank you