Alliance for My Idol:
Analyzing the K-pop Fandom Collaboration Network

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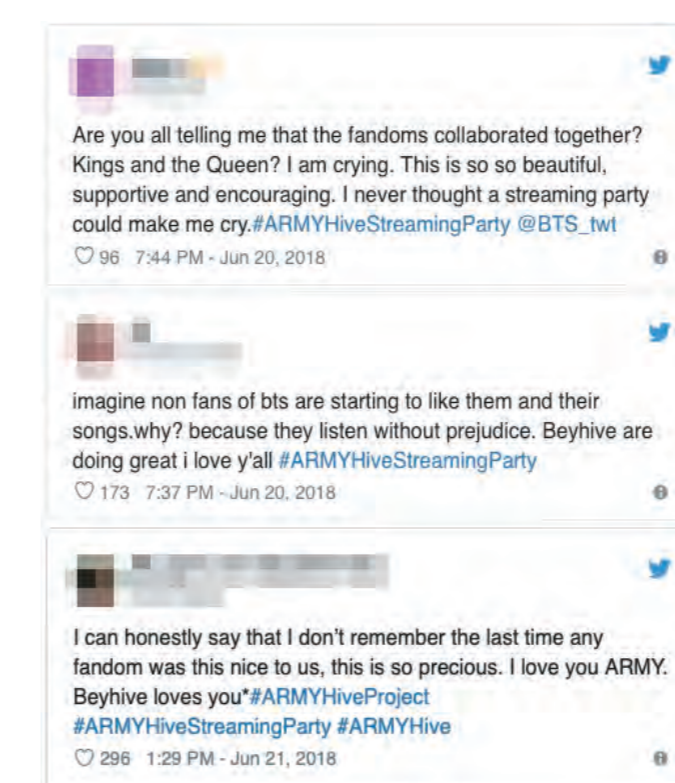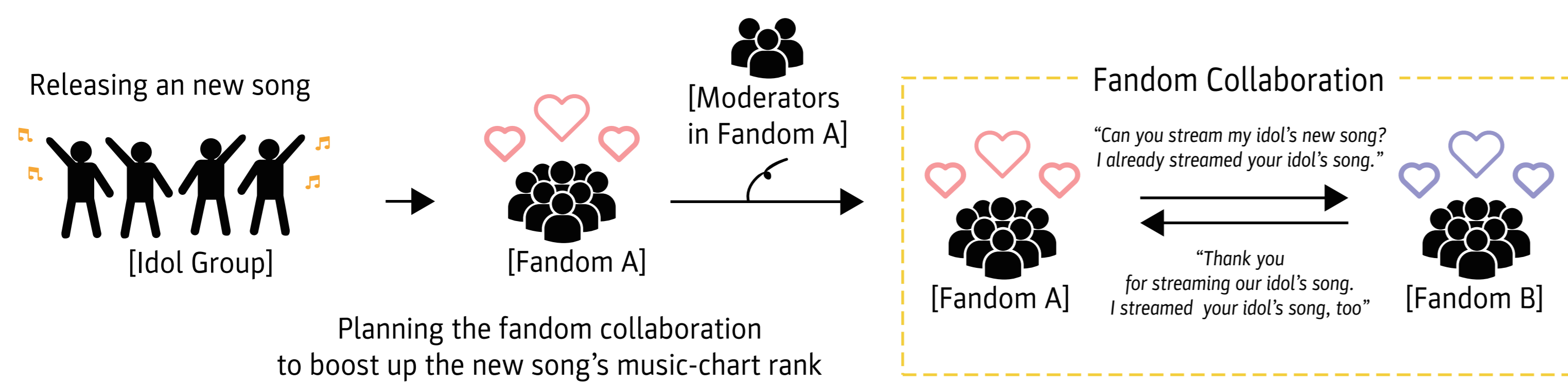
Introduction: How a fandom interacts with other fandoms?

Releasing an new song

[Idol Group] → [Fandom A] → [Moderators in Fandom A]

Planning the fandom collaboration to boost up the new song's music-chart rank

Fandom Collaboration

"Can you stream my idol's new song? I already streamed your idol's song."

[Fandom A] ⇄ [Fandom B]

"Thank you for streaming our idol's song. I streamed your idol's song, too"

Fig: Examples of collaborative tweets: BTS fandom → Beyonce fandom

Lovelyz fandom's community page

Post title written by a BLACKPINK fan (visitor)

Screenshot of streaming Lovelyz 's song

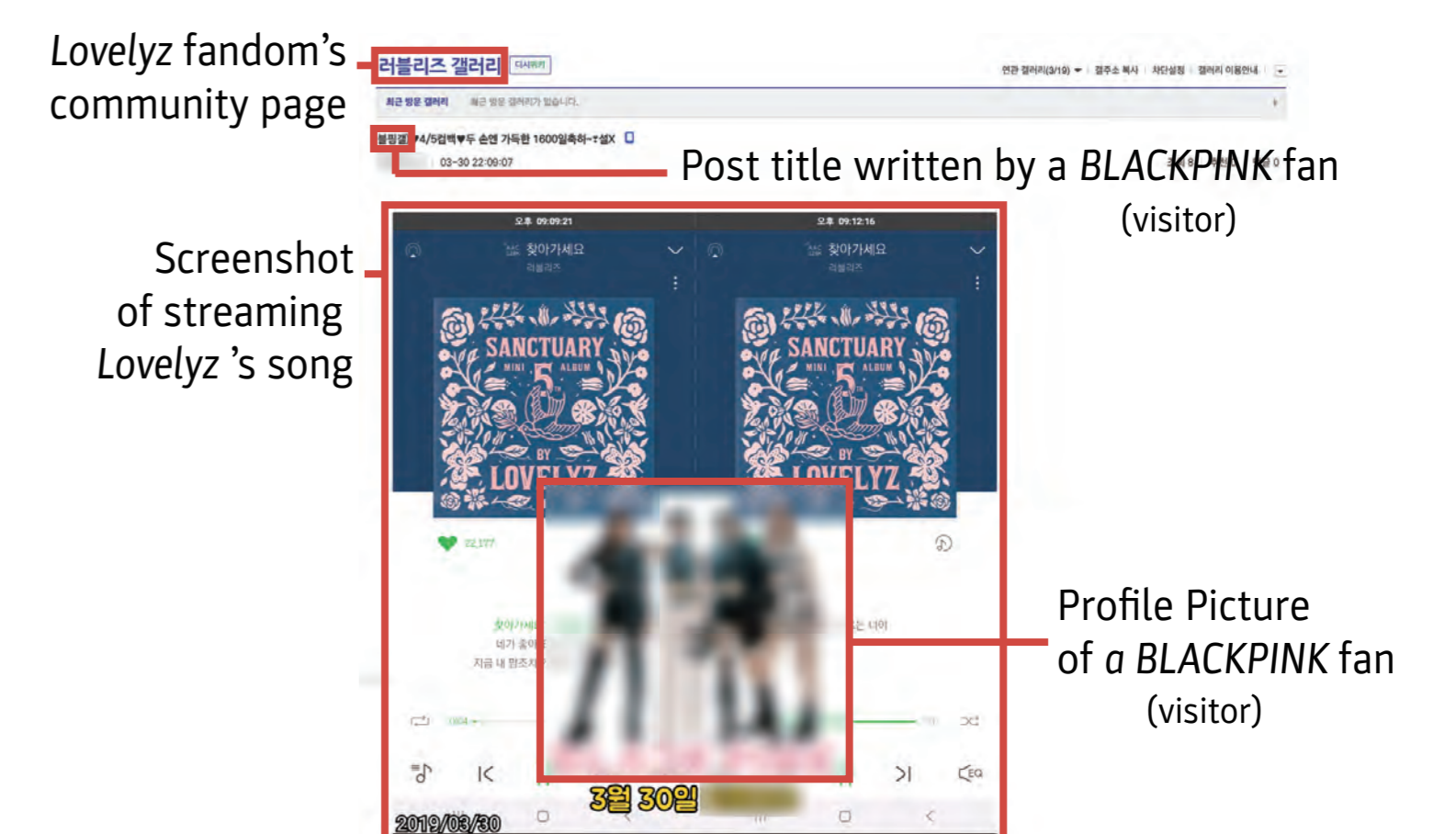Profile Picture of a BLACKPINK fan (visitor)

Fig: An example of a collaborative post: BLACKPINK fandom → Lovelyz fandom

Fandom Activity Data & Fandom Collaboration Network

Dataset

Period	Jan. 1st ~ Nov. 25th 2018
Target Fandom	321 fan pages in DCinside
Post	18,817,412

a popular interest-based online platform in South Korea

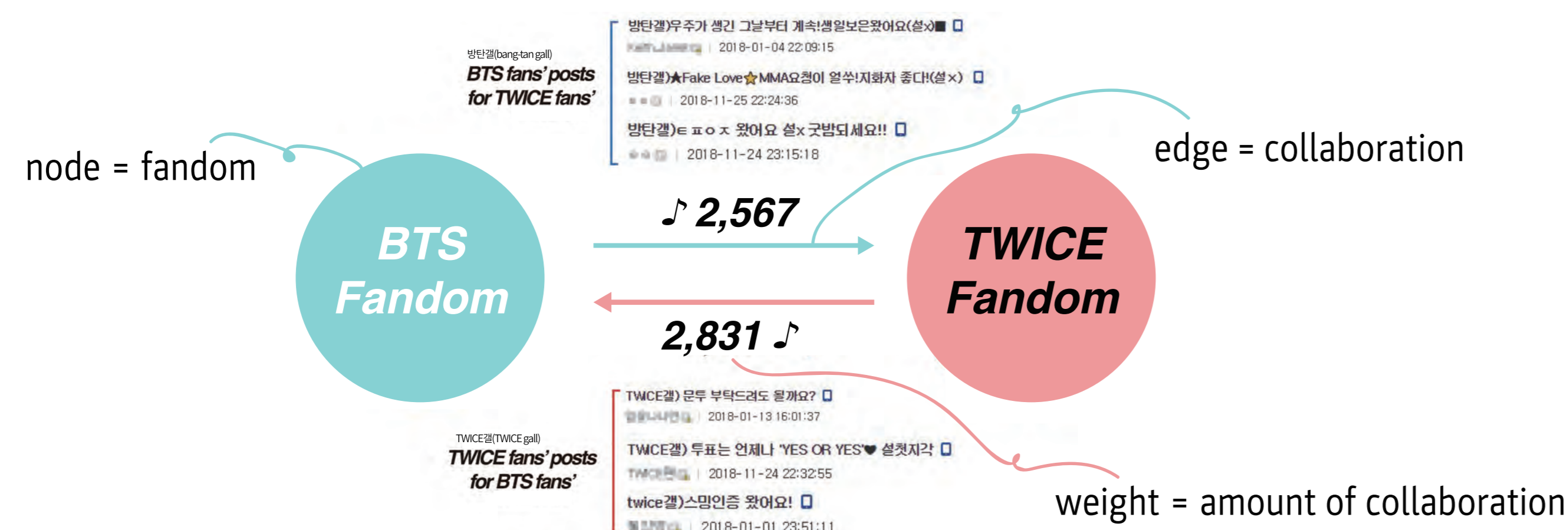## Definition of Fandom Collaboration Network

node = fandom

BTS fans' posts for TWICE fans

BTS Fandom

♪ 2,567

2,831 ♪

TWICE Fandom

edge = collaboration

TWICE fans' posts for BTS fans'

weight = amount of collaboration

Fig: The links between the 'BTS' and 'TWICE' fandoms in the fandom collaboration network

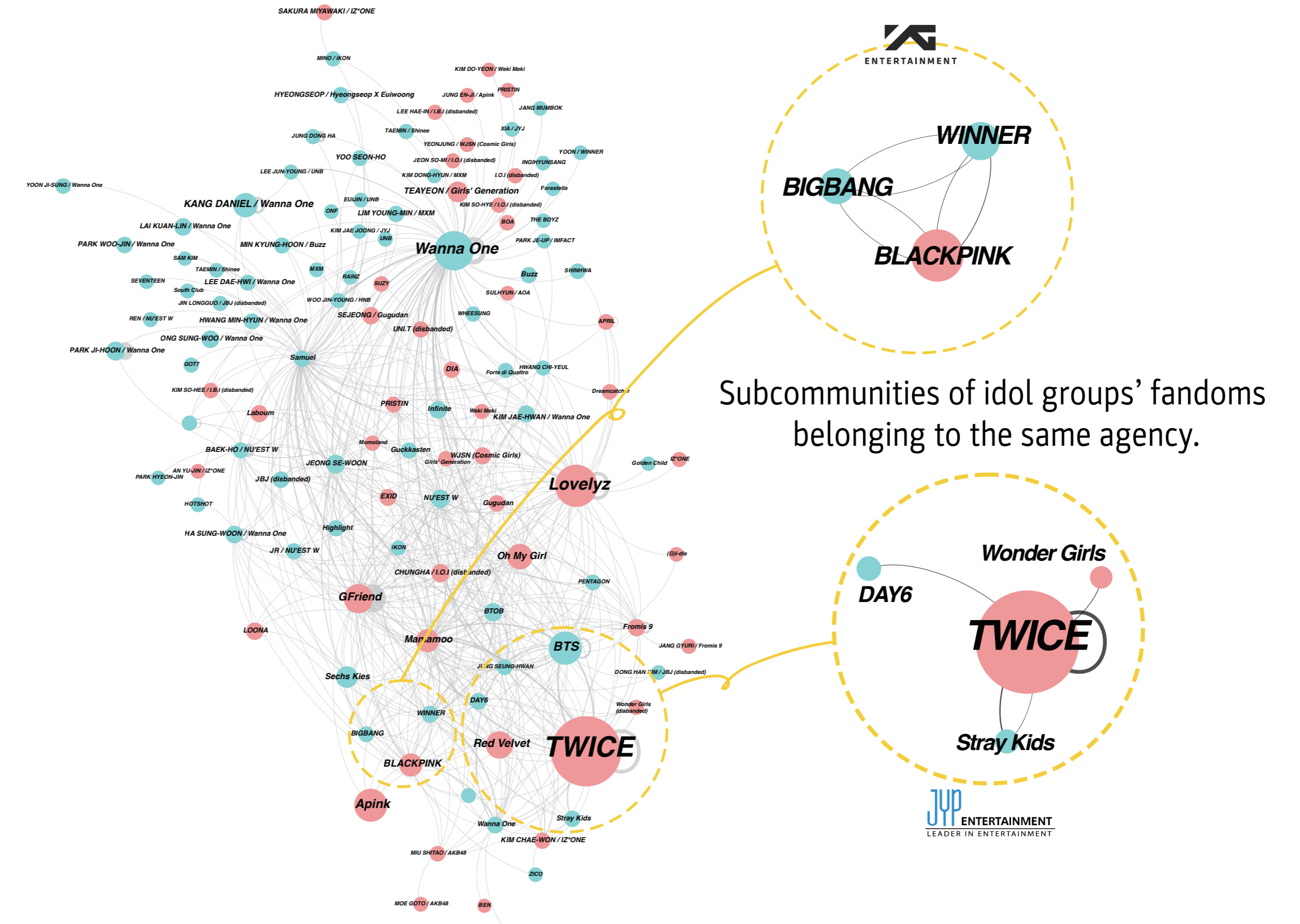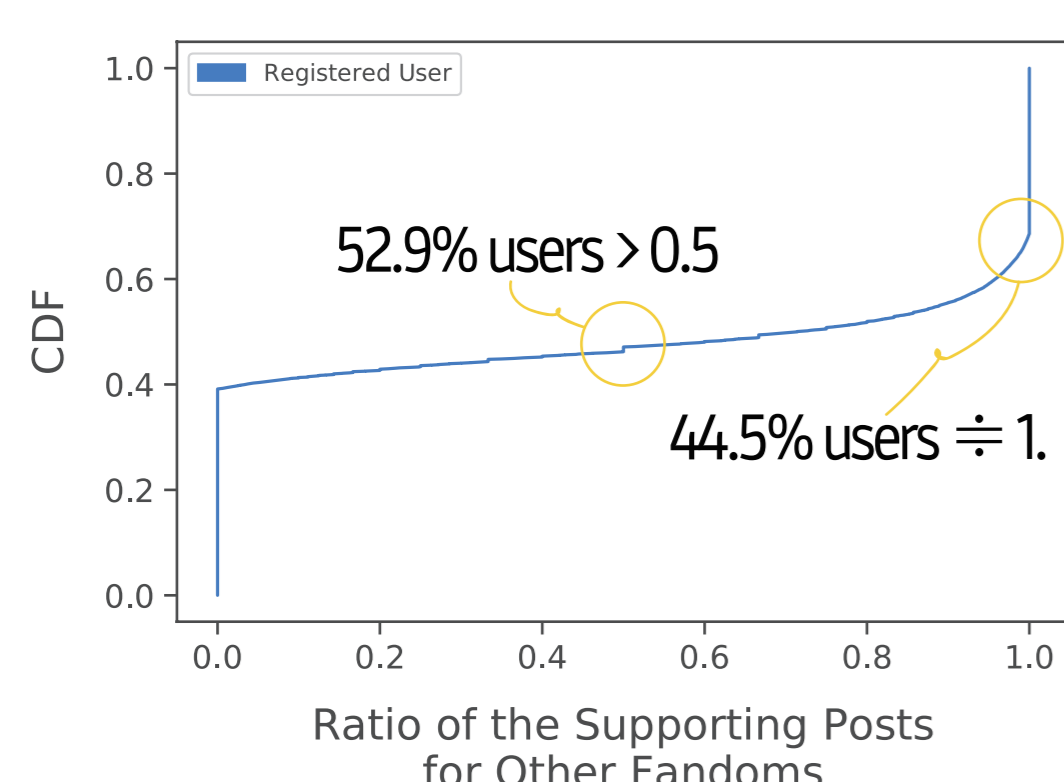Subcommunities of idol groups' fandoms belonging to the same agency.

Fig: The fandom collaboration network with the top 1% weighted edges

Result

Q1. How prevalent is fandom collaboration in K-pop?

52.9% users > 0.5

44.5% users ÷ 1.

$$Ratio = \frac{Collaborative\ Posts}{Posts\ in\ other\ fandom\ community}$$

>> Many users actively participate in fandom collaborations

Q2. Do more active fandoms participate in more fandom collaborations?

Spearman rank correlation coefficient	
	# of posts
Weight Indegree	0.72***
Weight Outdegree	0.77***

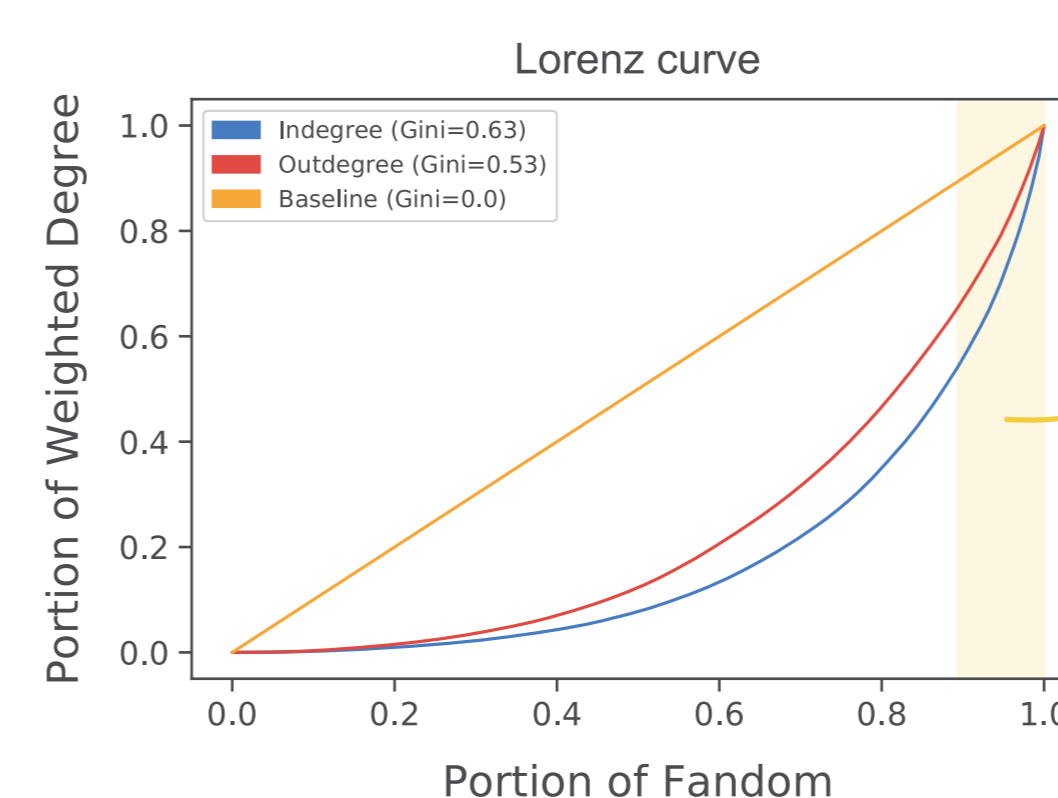>> The active fandoms → actively participate in the fandom collaborations

Q3. Are fandom collaborations reciprocal or parasocial?

>> 89.1% edges are bidirectional → Reciprocal Fandom collaborations

Gini = 0.2
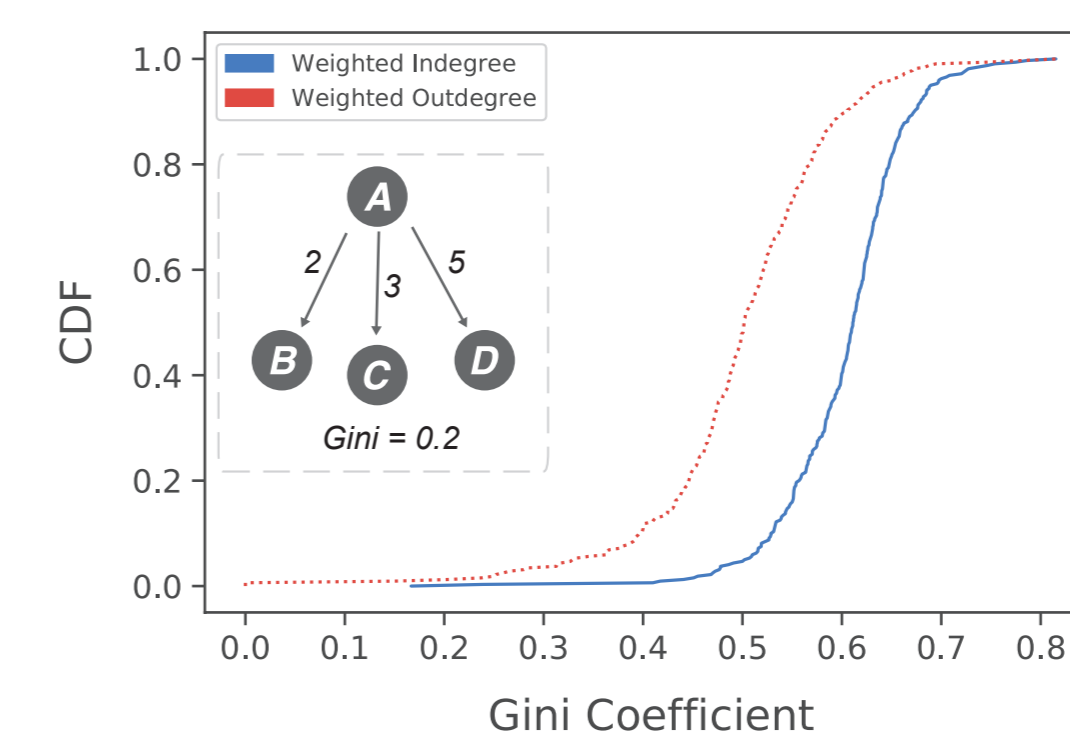
>> High Gini coefficient → Skewed Fandom Collaborations

Q4. Are there fandoms that play more roles in fandom collaborations?

Lorenz curve

>> TOP 10% Fandoms account for
· 42.4% weighted indegree
· 31.5 % weighted outdegree

Future Work

· Fan interview study
· External (seasonal) effect analysis / Hub & Community analysis