

Fandoms, Trending Topics and Social Capital in Twitter

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Abstract

It is increasingly common to see hashtags about celebrities, musicians and famous people among the Trending Topics (TTs) on Twitter. In this paper, we examine fans strategies to put their hashtags in the Top Ten list of trending topics and the social values created and used during the process. To discuss these appropriations, we studied the case of hashtags created by fans from a Brazilian pop rock band, *Restart*. We used a quanti-qualitative approach through online and offline ethnography (with 71 interviews) and the collection and analysis of 20 Trending Topics and six networks extracted from them during the second semester of 2011. As results, we discuss how the groups of fans of *Restart* learned to create hashtags in a cooperative way in order to spread their relations with their idols; which strategies they used to create the hashtags and get them into the TTs; and how they fight back the tags created by anti-fans, generating what we call Fan Wars. Finally, we show how fans are able to create bonding ties, network clusterization and influence visibility of information in Twitter.

KeyWords

fandom; social capital; twitter; trending topics.

Since its launch, Twitter has been able to gather more than 100 million¹ users around the world. The tool has become popular also among celebrities (Marwick, 2010; Kwak et al, 2010) whose presence brought yet another public: fans and groups of fans we will refer to as fandoms (Hagittai & Litt, 2011). The presence of these fandoms created new appropriations and practices, which is changing Twitter's dynamics. Among Trending Topics (TTs), for example, it is increasingly common to find hashtags about celebrities, such as fan's tributes, critics, requests etc. (Monteiro, 2011). However, the mechanism through which fans are using Twitter to spread their message has not, to our knowledge, been explored.

In this context, this paper seeks to explore the fans practices in Twitter, focusing on hashtags and Trending Topics. More specifically, our main objective is to discuss fan's strategies to put their hashtags in Trending Topics through a case study of the fandom of the Brazilian band "*Restart*". In order to do this discussion, we gathered data through a combined quanti-qualitative approach, using online and offline ethnography, interviews, observation of from 20 Trending Topics and the networks extracted from 6 of these. Our results show that through practices that increase the clusterization in the group, *Restart* fans are able to cooperate in order to reach and maintain their hashtags in Twitter's TTs, to quickly win fights against anti-fans and other fans for TTs, and learn how to lure Twitter's spam detection.

Fandoms, Fans, Social Capital and Twitter

Fandom is a concept without a clear definition. While Fiske (1992) defines it as "a collective strategy, a communal effort to form interpretative communities that in their subcultural cohesion evaded the preferred and intended meanings of the power bloc", Baym (2007, p.1) argues most definitions involve a "collective of people organized socially and their shared appreciation of a pop culture object of objects", which is the way we will further use this term in this paper.

¹ <http://mashable.com/2011/09/08/twitter-has-100-million-active-users/>

Although fan studies pre-date the internet, the emergence of digital media that allowed groups of fans new practices and new forms of connections (Baym, 2000; Hills, 2002), specially with social network sites (SNSs). They allow people to more directly find and connect to others with the same likes and dislikes, which is key for fans and fandom emergence. Social network sites, thus, create a new space for fans to appropriate and share their practices (Booth, 2010).

Fans tend to look for other fans that share the same passion and interest, which allows them to build a collective identity (Baym, 2000). In social networks, this characteristic is often related to homophily. Homophily usually refers to the tendency of people who are similar to connect to each other. Newman & Dale (2005) showed that homophily is related to strong social ties (bonding ties) and social capital, especially because they focus on very specific interests. Strong ties are related to the amount of intimacy, engagement and trust shared by two actors in the social network, in opposition to weak ties, which are related to connections that don't share these values (Granovetter, 1973). Putnam (2000) calls these bonding (strong) and bridging (weak) ties. Social networks enable people to interact, and thus, to build social values Putnam regard as "social capital".

Fan groups and Social Capital

Social capital is, according to Putnam (2000) to the connections among individuals and the values that arise from them. These connections are closely related to the ability of social groups to engage themselves and to values such as reciprocity and trust. Social capital is thus based on the value social structure creates to actors, in the sense that through this structure, they can achieve benefits as individuals or as groups. It is also a result of each actor's investments in a social network. Online social networks are not only able to create these values, but also, to create new forms of social capital (Ellison, Steinfeld & Lampe, 2007; Recuero, Araújo & Zago, 2011).

Fan groups and fans commonly engage in cultural practices that allow them to gain more visibility or reputation in social media. They also engage in building information repositories, acting as curators and editors and exchanging goods (Amaral

& Amaral, 2011). Because of these practices, fandoms are often compared to communities (Baym, 2007) in the sense they are very engaged and committed to the group. Fan groups, thus, are built upon bonding ties, which are able to generate more cooperation and more engagement than bridging ties (Putnam, 2000).

Trough social network sites, fans are able find other forms of interaction, connections and social values such as reputation and visibility (Amaral & Amaral, 2011). Also, they can find each other, connect and cooperate more easily and feel more close to their idols (Hagittai & Litt, 2011). Cooperation and engagement are key values to fandoms. Without them, there are only fans, not groups (as they lack the collective identification and the sense of group Baym, 2000 and Fiske, 1992 argue they need).

Fan groups, Hashtags and Trending Topics

Twitter is usually considered a microblogging or micromessaging service (Java et al, 2007). Nonetheless, it also publicly displays social networks, allowing users to interact and to create profiles. Therefore, it is also a social network site. While early studies focused on Twitter as an information or conversational tool (Java et al, 2007), more recent studies have shown more complex appropriations and movements that emerge in the tool, for example, its usage for online activism (Gaffney, 2010), for journalism (Zago, 2011) and also by celebrities (Muntean & Peterson, 2009, Marwick, 2010).

It is the arrival of celebrities in Twitter that drove in another phenomena: the fans and the fan groups. Because idols started using Twitter as a channel to reach fans and to "officially" talk to press, fans are also using Twitter as a channel to reach to their idols (Monteiro, 2011). Fans also feel that they have an affective connection with their idol when they were mentioned or replied by them (Amaral & Amaral, 2011). This new population of users creates several new phenomena in Twitter. In this paper, we chose to focus on how fans are influencing one of the key Twitter features, the Trending Topics.

Trending Topics (or popularly "TTs") are a list of the ten most recurrent topics in any given time, classified by country or "worldwide" (which shows the most

discussed things in all Twitter). According to Twitter "trending topics reflect what new or newsworthy topics are occupying most people's attention on Twitter at any one time"². Twitter hashtags, keywords, and phrases become trending topics when the number of people who use them increases rapidly in a short period of time.

Twitter currently employs a proprietary algorithm to display *trending topics*, consisting of terms and phrases that exhibit "trending" behavior. While Twitter's trending topics sometimes reflect current events (e.g., "world cup"), they often include keywords for popular conversation topics (e.g., "#bieberfever," "getting ready"), with no discrimination between the different types of content. (Becker, Naaman & Gravano, 2011, p.02)

Thus, they are the reflection of topics that are popular in tweets, a reflection of an organic information movement among social networks. Several studies focused TTs as organic ecosystem of information (Becker, Naaman & Gravano, 2011; Zubiaga et al, 2011).

Lately, however, we have been observing a different movement, where TTs about idols and celebrities are more and more common. In order to achieve this, fans organize themselves to create what we will call "artificial trending topics", which are not topics created by thousands of users talking about the same thing, but rather topics created by a small group of users, who cooperate and activate their social ties to create a huge amount of tweets and avoid Twitter's mechanisms of spam detection³ (Recuero & Araujo, 2012).

The SNSs have an historic tradition of trolls⁴ and haters (Donath, 1998). These are the anti-fans (Alters, 2007), or users who hate a certain fan group. Sometimes, fan groups are so overwhelming that they can take an entire list of TTs (Figure 1) thus creating dissatisfaction among other users and creating anti-fans. These anti-fans also create hashtags and spread them in organized ways to influence trending topics against

²<https://support.twitter.com/entries/101125-about-trending-topics>

³ Twitter has a strong policy against spam (<https://support.twitter.com/articles/18311-the-twitter-rules>).

⁴ According to Donath (1998, p.14): "The troll attempts to pass as a legitimate participant, sharing the group's common interests and concerns; the newsgroup members, if they are cognizant of trolls and other identity deceptions, attempt to both distinguish real from trolling postings and, upon judging a poster to be a troll, make the offending poster leave the group."

the idols, which also generate more action from fans. These disputes create what we are calling "fan wars" in this paper and may last for several hours or days, hijacking trending topics during the entire time.



Figure 1: Trending Topics in Brazil on January 10th, 2012. Note that at least 6 topics refer directly to fans.

To understand how online social networks create, share and activate these values is key in this work. Online groups of fans are social networks that are creatively using Twitter as a way to display their love for their idols. Because they share bonding ties, engagement and commitment, they are able to artificially influence and take over Twitter's Trending Topics.

Methodology

In this paper, we proposed an analysis of the hashtag/Trending topics ecology through a case study of the *Restart* band fan groups in Twitter. *Restart* is a Brazilian band formed by 4 boys between 18-20 years old. They called themselves a happyrock band, a mixture of colorful clothes and happy rock songs. Because of the invention of a "new genre" of rock the band got plenty of hate both from critics and public. As Pe Lanza - the vocalist - affirmed in their biography, the change of style - before *Restart* they were called C4 - was inspired by American bands such as All Time Low and Cash Cash. All the boys have more than 700k followers on Twitter, being Pe Lanza the most

popular one, with 1mi590k followers. Usually they use twitter to promote concerts, promotions and interact with fans – including "blessing" new fan clubs."

Our main research question was "How and why fans create and maintain hashtags in Twitter's Trending Topics?". Through a both qualitative and quantitative approach, we gathered different datasets from observation, tweets and interviews and show how these strategies emerge and how groups of fans organize themselves to artificially influence the TTs. While the qualitative approach helped us to understand fandoms and fans in Twitter and their values, the quantitative approach allowed us to gather tweets and analyze the social networks. This combined approach allowed the finding of "Fan Wars" within Trending Topics, which enriches and illustrates our results.

Qualitative Approach: Online and Offline Ethnography

Our qualitative approach comes from online and offline ethnography (Orgad, 2009) of the *Restart* fandom in Twitter. This study has been developed during whole the year of 2011 and it is based on participant observation, interviews and a field diary, often using qualitative data collection methods. We interviewed 43 fans selected during two *Restart* concerts⁵ in 2011 and other 28 through social network sites. These interviews were conducted as conversations, where fans were asked about their relations with each other, the band and Twitter. We were able to gather a large amount of data about the fans practices, ideas and codes.

We also observed 20 hashtags created by the *Restart* fans during the second semester of 2011. The hashtags were observed through Twitter's search feature and conversations with fans. The goal was to understand how the hashtag is created, why and through which mechanisms they spread and reach the Trending Topics.

For this paper, we will focus on the data gathered from the interviews and the observation of hashtags created by fans in Twitter, bringing the data that helps us understand the values and practices related to hashtags and Trending Topics.

⁵ The concerts were in two different Brazilian capitals: Porto Alegre (in the south) and Salvador (in the northeast).

Quantitative Approach: Mapping Fans Networks

In order to understand how the social networks fans create in Twitter can help them achieve the Trending Topics and how they active their ties, we gathered quantitative data from 20 hashtags created by the *Restart* fans during the second half of 2011. These tags were all in Twitter's Trending Topics, even if for a short amount of time. We didn't collect all the hashtags that made in Trending Topics because they are extremely volatile. Rather, we collected an arbitrary sample of hashtags that appeared in the period.

These hashtags were monitored using the Twitter's search feature and NodeXL⁶. In order to choose the tags, we monitored trending topics weekly, selecting the hashtags that referred to the band or to their members. We were able to collect over 22,000⁷ tweets regarding these hashtags, collecting not only the users who tweeted using the hashtag but also the relations between them (for example, followers and types of tweets - mentions and replies).

In this paper we will present the part of this data that support the qualitative evidence about fan practices regarding fan wars and fan groups cooperation. To analyze the data and create the graphs we also used NodeXL, always showing the clustering coefficient of these networks. Clusters are usually more dense regions in a graph (Scott, 2000). They can refer to a group of more interconnected users in Twitter. The clustering coefficient, thus, shows us how well connected are the nodes in our graph. Examining the clustering coefficient can help us understand how interconnected are the groups of fans and how valuable is this network structure for some of their practices.

Results

In our case study we were able to find several aspects that enlighten how social capital built through Twitter allows fans to cooperate and engage in new social and

⁶ NodeXL: <http://nodexl.codeplex.com/>

⁷ Due to NodeXL and Twitter limitations, however, we were not able to gather all tweets regarding each hashtag.

informational practices that influences the Twittersphere as a whole.

Restart Fan Groups as a Social Network

Restart fans are strongly active in Twitter. These fans chose to use the tool as the main space for all their activities. Each account (which we will call "fan account") is usually held by more than one fan and they take turns using it. For example, the fan account @POARestart_RS is owned by one of the interviewees, Vitoria. However, Brenda, who is Vitoria's friend, also helps her and her access to the account. Fan accounts can have several participants and although fans also have personal accounts, it is usually through the fan accounts that they interact more with the group.

As one fan explains: *"I dedicate myself to Twitter because it is something quick and practical, and I can talk to everyone"*. Because the tool makes fans feel closer to the band members, they feel it is the ideal place to interact with each other and, of course, with their idols (similarly to what Hagittai & Litt, 2011 found).

Fans use Twitter as the space for the fan group itself and to show their identity as fans. It is in Twitter and through Twitter that they exchange information about their idols, share ideas and organize themselves. Thus, being connected to several other fans (or fan accounts) that share the same passion is strategically important to have access to social values such as information (Putnam, 2000), reputation and collective discussions about the idols (Baym, 2007).

Restart fans have a clear vision of these values. They cherish connections and have a specific process to popularize their tweet accounts to each other and to legitimate the group. They call it "nomination process". Their method is simple: popular fan accounts ask if someone wants to be nominate; unknown fan accounts show interest in gaining visibility tweeting them back, then other people start to retweet the nomination, spreading the info about new groups of fans. The "nomination process", thus, is a way to nominate someone for the other fans to follow. Thus retweeting some information creates value to fans, like a sponsorship, in a very similar way as described by Recuero, Araújo & Zago (2011).

"Fans ask for help to promote their own fandom because they want more

followers” says Brenda, owner of a popular fan account. She also affirms that usually they choose to do a “promotional time”, when they ask if someone wants to be helped. “The best time to do this is at the beginning of the evening because it is the peak hour, lots of people are online” she says. Even though it is an common practice, she said that the whole "nomination process" can be very tricky: “Our main goal is to inform, [ask others to] vote for singles to gain airplay in radios, help videos to be in the top 10 on TV shows, and people sometimes think nomination is the most important thing in the world, which is not. We also nominate them, but it’s not our priority”.

The "nomination process" is ubiquitous within *Restart* ’s fan accounts and represents not only a legitimation of the account, but also, the chance to have more followers, which is an important value in Twitter (Recuero, Araújo & Zago, 2011). Promoting someone else’s twitter account, besides a nomination process, is also form of participation and support, also forms of social capital (see Putnam, 2000).

Having fan accounts following each other has also an indirect value: it increases the network's clusterization, thus drawing fans closer. This structure of very connected fans is key for a phenomenon we call "fan wars", which we will discuss further on. By having more connections, fans enhance the values they share and the ability to quickly cooperate to influence Trending Topics.

Another type of recognition may be achieved by receiving an answer from the idol himself or herself. The direct mention by the idol is even a bigger achievement than the Trending Topic hashtag, because every fandom obviously follow the idol. One fan explained she tried every day for months to talk to Pe Lu (one of the *Restart* members), until one day she tweeted "*can't you just send me a kiss? I'm dying*", whereat the band member answered "*I'll send you two*". The fan shows a screenshot of the tweet as a trophy.

These processes highlight the fact that groups of fans also want to be recognized by other fans. This recognition and legitimation imply the creation of reputation and popularity which are types of social capital gathered through social ties created in Twitter (similarly to what Recuero, Araújo & Zago, 2011 discuss). Also, practices such as the "nomination process" are able to generate more connections, thus, more social

capital such as engagement and reputation. Engagement allows cooperation, which will enable the fans to put their hashtags in Twitter's Trending Topics more easily.

Hashtags and Trending Topics

For a group of fans create a Trending Topic hashtag is a huge triumph. Achieving a TT is not only an honor, but also a legitimation of the fan that is recognized by the others. The following tweet exemplifies this feeling fans share when a hashtag they created gets to the TTs: "*Where is the girl who created the tag? She must be dying right now!*" (Fan tweet).

Creating a "famous" hashtag also implies the fan account or /and the fan group have power and followers. Sometimes, when a hashtag created by fans starts to become popular in Twitter, other people start to complain about it, thus creating even more volume of tweets using the tag. While people don't seem to be aware that when they use the tag they contribute for its maintenance in the Trending Topics, fans don't mind, as long as they keep the hashtag in the list.

Types of Trending Topics

The fan groups motivations to create a hashtag and making it a Trending Topic may vary. Examining these goals, however, is important to understand which types of values fans create and seek when they are acting in TTs. We found five types of hashtags based on the goals of the fan account:

1. **Tribute** - The motivation is to show the world their love for the idol. Examples: PeLanzaNossoOrgulho, (Pe Lanza our Pride - Pe Lanza is the head singer of the band); HappyBDayPeLu (Happy Birthday Pe Lu - another member of the band); LuanSantana&Restart -OrgulhodoBrasil (Luan Santana and *Restart* Brazil's pride - Luan Santana is a popular country singer).
2. **Promotion** - The motivation for the Trending Topic is to promote something the band is currently doing or something fans find important. Examples: #LancamentoDVDRestart and DVDHappyRockSunday (about the launch of the

band's new DVD); #Restart NaEliana, #Restart NoRaulGil, (all about the band's featured in popular TV shows); "E HOJE SEI SEI SEI" (part of one of the band's new single lyrics), PeLunoRockGol (about Pe Lu, another of the band's members, participation in MTV's popular show Rock Gol).

3. **Response** - The goal is to answer to a hashtag or media story (usually negative) or even someone famous who may have said something negative about the band. TTs in this category: MaisRespeitoMenosInveja (More respect, less envy) which was an answer to the topic #menoscormaisrock (less color, more rock - *Restart* is known by their "colorful" clothes, and usually referred to as "the colorful band"; #CalaBocaR7, (shut up R7) against a story published by the Brazilian portal R7 about a rumor that the band had ended⁸.
4. **Requests** - The goal for these TTs is to make a request for the band or for other fans. For example: #VoteRestart (vote for *Restart*) which was a topic asking other fans to vote for *Restart* as the "best band" in MixTV (and was also used for top ten MTV and other awards during the year), *Restart* VoltapraPOA (*Restart* come back to POA, asking the band to come back to a Brazilian city).
5. **War** - Topics that are created within fan wars to answer other - usually negative hashtags. Although they also make a statement and answer other tag, these topics differ because of the motivation. Fans don't want simply to put one tag in Trending Topics, but to put one tag in first place or to replace offensive tags. Trending Topics in this category: #pelanzacausainveja - "Pe Lanza, the lead singer of *Restart* - causes envy" was a hashtag created by fans to answer other very offensive hashtags created by anti-fans: #pelanzauzacalcinha (Pe Lanza - the singer of the band - uses panties) and #pelanzadaocu (Pe Lanza makes anal sex). However, these "war" hashtags can be made in a war between groups of fans (for example, which one gets to be the first in Twitter's TTs). The collected hashtags were divided among the categories (Table 1):

⁸ <http://entretenimento.r7.com/jovem/noticias/restart-nao-acabou-ah-que-pena-20111215.html>

Table 1: Number and types of fan hashtags collected in Trending Topics.

| | Number of Hashtags |
|-----------|---------------------------|
| Tribute | 3 |
| Promotion | 9 |
| Response | 2 |
| Requests | 2 |
| War | 6 |

To reach Trending Topics is also a way to be seen and to make a statement. Hashtags are created and spread to generate visibility and popularity, not only for the group of fans itself, but also for the fan account. However, the key motivation is higher: Fans feel they have a commitment with the band and a mission to propagate their work to the world.

The majority of the observed trending topics are promotions, which shows that fans are highly engaged in advertising and telling others about their idols. Thus, fans are not only generating value for the group of fans itself, but also for *Restart* band, acting like PRs and promoting the band's actions, new releases and products. The band is very aware of this power and frequently asks the fans for something (for example, to spread the work about their new release or to vote for them in some award).

These types of Trending Topics are all about visibility, which is another type of social capital (Recuero, Araújo & Zago, 2011). They show fans are able to make information they find relevant visible and to reduce the impact of negative information.

Strategies for achieving TTs and maintaining a hashtag in the top ten

Fans create a hashtag for everything: The birth of a band member's nephew, the birthday of one of the idols, the last wish of another fan or event the fact that the band is appearing in national television. Everything is a reason for a hashtag in TTs. However, to create and move one hashtag among the top ten, avoiding Twitter's spam mechanisms is not an easy task. Fans need to create ways to "activate" their social ties and cooperate so their hashtag can be seen. But how they do this? Which are the strategies they use?

1. **Activating the fan groups** - Using twitter and other social media tools (such as LiveMessenger or GTalk, fans chose a hashtag they want to make the statement they want. In order to do so, the organizers often use war metaphors, such as "Troops let's conquer the TTs (...)" or "To rank up the tag" or messages that appeal to the bonding connection they feel with each other: "Let's show our love!", "United *Restart* Family!" (the fan groups call themselves *Restart* family). Using these metaphors, fans are able to reach the values they share with other fans, such as a collective identity and the bonding ties they share. The more one engages in a crusade to make a hashtag a TT, the more love one has for their idol. Depending on the type of hashtag they want to promote, they also may use different motivational tweets. "Let's show how WRONG is this tag!", "Come on guys! I'm not seeing anyone using the tag around here!" or even "Help promote the band".
2. **Tweeting everything with the hashtag of the moment** - When the hashtag is chosen fans then start twitting everything with it. For example: "where do you live? *Restart* NaEliana", "dying with a headache *Restart* NaEliana" "I'm thirsty, be right back *Restart* NaEliana" "I can't believe that I spent the whole night tweeting and I'm not even tired #*Restart* NoTvXuxa" "Can someone please nominate my twitter? I just need 20 followers to complete 400 *Restart* NaEliana", "sweetie, I'm following you back *Restart* NaEliana", "I think I'm going to study later *Restart* NaEliana", "I play video games, I love sneakers and plain shirts and I'm still a girl #*OrgulhoFamiliaRestart* " "Famila*Restart* CausaInveja so many jealous people, it's quite funny".
3. **Teaching each other how to avoid spam detection** - Claiming to other fans, organizers also tweet about the strategies other fans should use. For example: "Tweet everything with the hashtag!"; "Don't forget to not tweet too many times the same thing!"; "RT the tag, guys!". This strategy allows the group to literally attack TTs, generating thousands of tweets in a very short time.
4. **Cooperating with other fan groups** - For fans, often maintaining a top ten hashtag is difficult. Sometimes, it is because there is something else that is capturing everyone's attention (such as some news or event), sometimes, because anti-fans start a counter movement. Thus, other strategies are key to achieve this One

interesting example was the hashtag *LuanSantana&Restart* *OrgulhodoBrasil* (Luan Santana and *Restart* Brazil's pride). The topic appeared on December of 2011 and dominated trending topics for almost an entire day. The movement was a result of a cooperated action between two different groups: *Restart* and Luan Santana (a popular country singer). While the fans also used other strategies, it was the fact that both groups of fans were tweeting with the hashtag that was capable to make the topic last for so long.

Fans seem to understand the value of connections and even though they share them more freely with other groups of fans of the same idol, they are not so willing to connect to other idols' fandoms. Thus they don't nominate other fan groups. "*My heart is Restart* " explains Julia, owner of a fan account, "*I can't betray them by following others*".

These actions often create expectations that a "true" fan will help the group, engaging him or she in the movement to get the hashtag in the TTs. Fans are, thus activating their ties through social capital, specially, through reputation.

The strategies fans use to reach Trending Topics work because fans are interconnected. They follow each other within the same group of fans and it is a general accepted rule that to be part of the fandom, one has to be connected to other fans. Thus, connections are a key resource to fans and are able to create the social capital they need to "activate" a hashtag. Clusterization, thus, is very important to allow information, knowledge and cooperation within the fandom.

Fan Wars

Another phenomenon found in our research was the "fan wars". These wars are created by different fandoms or fans and anti-fans that actively engage in a dispute for the Trending Topics.

We found two types of Fan Wars. The first one was one group of fans against other group of fans, where the dispute was about "who is the best" and fans that want to

show which idol has the biggest group of fans and which group loves their idol more, by reaching the number one place in Trending Topics. This type of "fan war" is about which group of fans is the strongest, largest and more loving of their idols.

In Figure 2 we can see Brazilian Trending Topics on October 30th, 2011. These TTs show a war between several groups of fans (among them, the *Restart* fans) for the first place in the list, which was held by Paramore (another band) fans.



Figure 2: Trending Topics in Brazil in October 30th. Note that all the topics refer to fans.

"Come on guys, we are almost there", tweeted a fan asking others to keep the effort in order to make the *Restart* hashtag the first one. Tweets like this one in our corpus showed that fans were committed; using the strategies they learned with each other to achieve their goal.

The second type of war was established between fans and anti-fans. Mostly, these wars seem to start when a grupo of fans is making too much noise in Twitter and annoying other users, who start tweeting hashtags against the idols to infuriate the fans. One example was the hashtag #pelanzadaocu (Pe Lanza makes anal sex), which insinuates that Pe Lanza, the lead singer of *Restart* was a homosexual in a derogative way. The hashtag appeared in the Brazilian's TTs on early morning of July 12th of 2011, with others such as "#pelanzatemxoxota" (Pe Lanza has a vagina, insinuating he was a

girl), infuriating *Restart* fans. Quickly, fans created not one hashtag, but several in order to take over the TTs. After two hours, the entire Brazilian TT's was dominated by hashtags such as #pelanzadainveja (Pe Lanza causes envy), #pelanzameuorgulho (Pe Lanza, my pride), etc. But how did they do it?

Because fans are very connected it is easier for them to activate their ties in Twitter and quickly create a hashtag to answer the offending one. We mapped both fan (#pelanzacausainveja - Pe Lanza causes envy) in Figure 3, and anti-fan hashtags (#pelanzadaocu), in Figure 4, in order to show how these networks are organized.

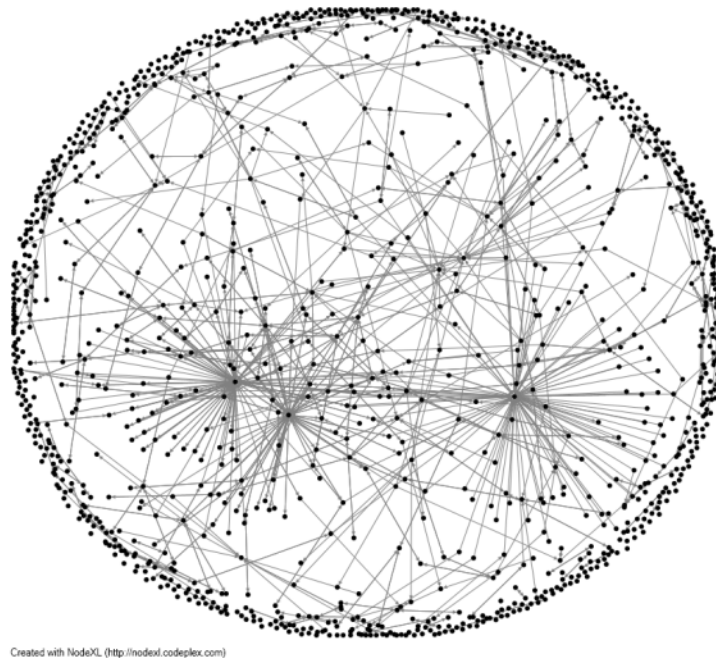


Figure 3: Users who tweeted the hashtag #pelanzadaocu and follow each other

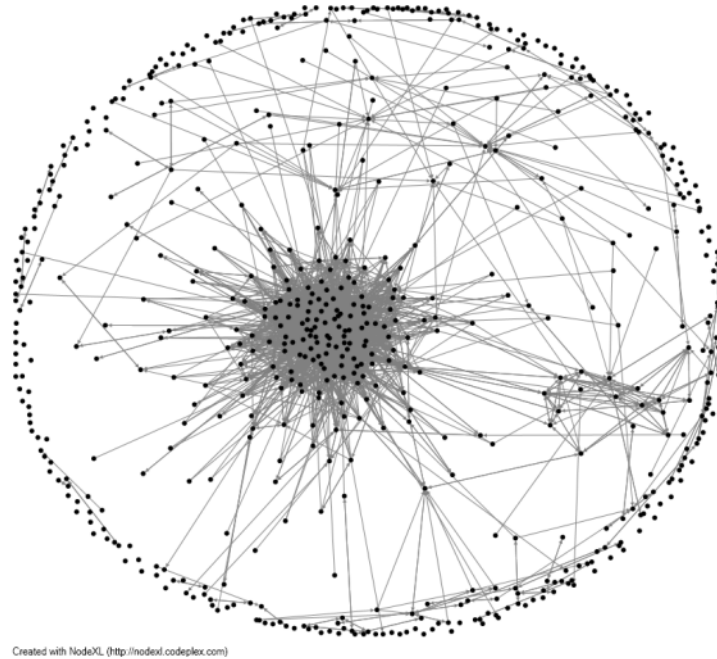


Figure 4: Users who tweeted the hashtag #pelanzacausainveja and follow each other

The hashtag #pelanzacausainveja had 3716 tweets mapped and an average clustering coefficient of 0,124. The hashtag #pelanzadaocu had 1462 tweets mapped and found an average clustering coefficient of 0,040. The average in and out degree in this network was 0,096. This same pattern of network was frequent among all the three fan wars Trending Topics we collected data about (see tables 2 and 3.)

Table 2: Anti-fans Topics

| | Tweets | Edges | Vertices | Clustering Coefficient |
|--|---------------|--------------|-----------------|-------------------------------|
| #pelanzauzacalcinha (Pe Lanza wears ladies panties) | 1234 | 1048 | 883 | 0,054 |
| #pelanzaboquete (Pe Lanza makes blow jobs) | 3270 | 1685 | 479 | 0,085 |
| #pelanzadaocu (Pe Lanza makes anal sex) | 1462 | 1144 | 1184 | 0,040 |

In the data, the edges represent the number of twitter accounts (profiles) which participate tweeting about each trending topic. The vertices represent the number of

connections (ties of followers/following) in the network. The more vertices and less edges, the more connected is the group, thus, clustering coefficient should be higher. If the clustering coefficient is low, it means the group of edges is less connected.

Table 3: Fan Topics

| | Tweets | Edges | Vertices | Clustering Coefficient |
|--|---------------|--------------|-----------------|-------------------------------|
| <i>#Restart</i> thebest | 10977 | 431 | 9331 | 0,253 |
| <i>#OrgulhoRestart</i> (<i>Restart</i> Pride) | 1596 | 201 | 1477 | 0,196 |
| <i>#pelanzacausainveja</i> (<i>Pe Lanza</i> causes envy) | 3716 | 628 | 3495 | 0,124 |

As we can see in this data, not only are fans much more connected than anti-fans, but they also are more effective in quickly creating a big amount of tweets and reaching the Trending Topics. This is not something random. Actually *Restart* fans are more efficient because they are far more interconnected than anti-fans. This interconnection is key for bonding ties and social capital (Putnam, 2000). Thus, fans have more engagement, trust and commitment and activate this social capital when they activate their network in a fan war.

Fans also have a sense of collective identity and identification with other fans and the idols (Baym, 2007). This is also an important motivation for them to participate in a fan war. For example in tables 2 and 3, we can see that fan networks have far less edges, in general, than anti-fans. However, these networks have much more tweets per fan. Also, seems that the "nomination process" helps the fan accounts to achieve a higher clustering coefficient. Because fans are very connected it is easier for them to activate each other. Users who follow each other and share bonding ties (Putnam, 2000) are more likely to engage with each other because they share trust and commitment. Thus, they are more willing to spend time and invest effort in tweeting to reach the TTs than the anti-fans.

These wars always seem to end with fans being able to swap the anti-fans

hashtags out of the Trending Topic's list Fans seem to be more engaged and more capable of acting quickly like a group in order to swap depreciative hashtags out of TTs. We observed three wars between fans and anti-fans of *Restart*, for example. Usually, in a matter of minutes fans were able to dominate not only the first place, but also the entire trending topic list with their pride hashtags.

Sometimes, anti-fans and other users help fans by trolling their hashtags. For example, the tag *#FamiliaRestart CausaInveja* (*Restart* Family causes envy) was replicated by several other users with other contexts, such as *"#FamiliaRestart CausaInveja aos Teletubbies* (*Restart* Family causes envy to the Teletubbies) or *"#FamiliaRestart CausaInveja ao arco-íris* (*Restart* Family causes envy to the rainbow) and so on. These are trolling ways where anti-fans can make a statement about *Restart* and their fans without the war. However, they also increase the potential of a fan hashtag to reach the Trending Topics. Once we analyze the disputes between fans and antifans on twitter, it seems irrelevant to point it out which group started each trend. Mainly because the whole dynamic is cyclic: If antifans start a trending using a negative tag such as *#lesscolormorerock*, in a couple of hours, fans reunite their forces/power and begin to spread the exact opposite, reviding, trending *#morecolorlessprejudice*, and vice versa. Then, the battle stays on and it's interesting to observe which group is able to perpetuate a trend for more time – with fans winning most of the time because of their organization and union. It's interesting to highlight the importance of the random tweets, especially for the antifans side. They incorporate the tag to mock, troll and/or prove their points but don't hate the band itself, only what they represent (bad teen pop songs). The same occurs with Justin Bieber, One Direction and other teen idols. By trolling, people help the antifans to get what they want.

Conclusion

Restart fan groups use frequently the word "Family" to describe the relation they have with each other and the bond they feel they have with the band and other fans. Social network sites allow these connections to flourish more easily because they allow users to find each other through their likes. Through Twitter, *Restart* fans are not just

able to connect to each other but also with their idols, negotiating values and creating visibility to their goals. This fact creates a unique ecology in Trending Topics, which we sought to discuss in this paper.

As Putnam (2000) argues, social capital is key for social engagement. Through Twitter, interaction and designed new social practices (such as the "nomination process"), fans are able to create a collective identification (Baym, 2007), which produces more homophily, and social capital (Newman & Dale, 2005) and more clusterization. Through these ties, they manage to influence Twitter's Trending Topics and create visibility to the messages they want.

This phenomenon of artificial creation and maintenance of hashtags in Trending Topics by a small set of users seem to become increasingly common in the Twittersphere. To understand how social networks create and exchange values through the appropriation of SNSs is relevant to also understand the emergence of new informational ecologies.

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