

Searching for the Global Audience: A Comparative, Multiple-Method Analysis of a Global Trending Topic on Twitter

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Twitter was one of the first social media platforms to launch a trending topics feature in 2008. This feature became a widely referenced, condensed descriptor of peaks in social media activity and a place where one could, ostensibly, see what the world was talking about. Yet, more than 10 years later, a lack of systematic research persists on what trends actually reveal, particularly about audiences on a global scale. This article takes a multiple-methods approach to critically unpack more than 15 million #Rio2016 tweets in English, Portuguese, and Russian. #Rio2016 is significant for becoming Twitter's top-trending topic globally in 2016 and for its Olympic context, comprising the world's biggest media event. The findings show that global trends mask both important cultural nuances in mediated practices and long-standing issues in communication research to promote an ephemeral, output-driven understanding of audiences. The present study advances media research through a comparative, empirical examination of trending topics and their global and institutional creators.

Keywords: audience, global, trending topic, Twitter, social media, multiple methods, comparative research, communication, Olympics

Twitter was one of the first social media platforms to launch a trending topics feature in 2008. Several years later, Facebook² and others followed suit, making the trends section a place where one could, ostensibly, see what the world was talking about and escape from the filter bubble of their own contacts. In turn, *global trends* came to be a condensed and seemingly neutral descriptor of people's mediated activity worldwide. Nonetheless, more than 10 years later, this label remains enshrouded by proprietary algorithms and a lack of systematic research. Given the international nature of an increasing number of events and

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Date submitted: 2020-05-13

¹ I would like to thank the University of Pennsylvania's Center for Advanced Research in Global Communication for their intellectual support during the writing of this article. I am also indebted to the anonymous reviewers of this work and to Christin Scholz, Kate Zambon, and Jasmine Erdener for their generosity with time and feedback.

² Facebook eventually removed its trending topics section in 2018 because of heavy criticism over its representation of and involvement in political issues.

communication platforms, a comparative understanding of audiences' communicative practices and a critical unpacking of what metrics such as global trends reveal and conceal are certainly overdue.

This article unmask some of the work behind the label *global trend*. It interrogates #Rio2016, which became Twitter's top global trending topic of 2016, within the unique context of the Olympic Games. A multiple-method, comparative discourse analysis of more than 15 million #Rio2016 tweets in English, Portuguese, and Russian reveals that geography is not so much a predictor of what content gets shared but, rather, how content gets shared on Twitter. Furthermore, the way content is shared emerges as strongly socioculturally informed.

In turn, I argue that the concept of a global trend belongs to the lineage of 21st-century datafication practices for the understanding and management of audiences. Global trends present, at best, an incomplete descriptor of audiences' new media participation; they presuppose similarity over difference and erase many of the cultural nuances that could be informative for scholars, practitioners, and audience members alike. Whereas the word *trend* originally described a process—it was a verb commonly used as *trendan* in the late 16th century to mean *revolve* or *run* in a particular direction (Trend, 2019)—today, *trend* has become a noun, which describes an output. Subsequently, global trends propagate a narrow, data-centric understanding of audiences and mask longstanding issues in communication research. The task then becomes reclaiming the rich communicative processes constituting trends and to do so in culturally sensitive ways.

Literature Review

Understanding Audiences

There is a long history of attempts by the media industry to measure, understand, and shape audience behaviors (Ang, 2006; Napoli, 2011). There is also a substantial body of communication research that critically analyzes these attempts and, specifically, examines the terms used to describe groups of people and their practices as they engage with various media (e.g., Butsch, 2008; Livingstone & Das, 2013; van Dijck, 2009). The latter research is often underpinned by the idea of social constructivism (Austin, 1962; Berger & Luckmann, 1966/1991). That is, the way we label something (whether it be a concept, practice, or person) is not neutral, and it not only shapes our attitudes toward that something, but also can ultimately shape the thing itself. In turn, analyses of a range of terms have emerged, each revealing some sociopolitical and historical baggage loaded onto audience-specific words.

Nonetheless, except for relatively few works (Butsch & Livingstone, 2013; Miller et al., 2016; Punathambekar & Mohan, 2019), comparative research for understanding mediated audience practices worldwide is limited. In addition, the methodological and metaphorical nationalism exhibited by many social science studies is no secret. Given that the vast majority of Internet users are non-Anglophone speaking and the predominant form of communication online is in languages other than English (Papacharissi & Yuan, 2011), scholars have appealed for the development of more global, inclusive vocabularies and theoretical approaches to describe people's online behaviors (Kraidy, 2009; Yang, 2014). So, what then can a deeper, comparative look into #Rio2016 reveal about audiences, their practices, and the term *global trend* itself?

To answer this question, I briefly examine the literature on trending topics and the Olympic context of #Rio2016 as it relates to audiences.

Trending Topics

In 2008, Twitter released its trends feature and designated itself as experts capable of recognizing, categorizing, and evaluating public discourses. In a rare statement explaining its inner workings, the company stated that an algorithm tailors trends “based on who you follow, your interests, and your location. This algorithm identifies topics that are popular now, rather than topics that have been popular for a while or on a daily basis” (Twitter Trending Topics FAQs, para. 2).

Twitter’s algorithmic calculations are based on new, drastic spikes in content rather than steady and sustained interest. In fact, the average lifespan of a trend is around 10 minutes (Neylan, 2019). This choice points to an important practical and ideological premise: The structure of Twitter trends allows for the quick elevation and hypervisibility of a topic and ensures the equally rapid dismantling and supplanting of it. Thus, Twitter trends capture neither a process nor an outcome, but rather a highly stylized flash output of audiences’ digital media engagement.

Initial research on Twitter trends was driven by the excitement of unprecedented access and ability to analyze large quantities of relatively unobtrusive human data.³ This research was primarily quantitative in nature and positivist in epistemology; it was preoccupied with detecting real-world events (Becker, Naaman, & Gravano, 2011) or tracking the spread of information (Kwak, Lee, Park, & Moon, 2010), with the goal of identifying and predicting human behavior. This style of research showed that peaks in Twitter activity often coincided with real-world events and strongly mirrored the peaks and troughs in their television coverage (Shamma, Kennedy, & Churchill, 2010).

Later quantitative studies revealed that people’s physical location plays only a minor role in shaping what topics they tweet about (Leetaru, Wang, Cao, Padmanabhan, & Shook, 2013). Instead, extreme sentiment polarity toward an issue (whether positive or negative) is a more important common feature across global trending topics (Palomino, Ribac, & Masala, 2019). In other words, Twitter trends emerge as an emotional rather than rational outpour in reaction to events, where emotions are largely quantified rather than qualified. These types of studies are largely in English and are based on quantitative methodologies coming from Science and Technology Studies departments, which ignore the human experiences and sociocultural dimensions behind content creation.

A secondary wave of research applied a variety of qualitative or mixed methodologies and resulted in more critical analyses of the meaning-making behind certain trending topics. This research was more interpretivist in epistemology and showed the importance of sociocultural backgrounds for shaping trends and styles of communication on Twitter (Freelon, Lopez, Clark, & Jackson, 2018). Yet,

³ For a poignant critique on what is also termed *big data* and the controversial nature of obtaining it, see boyd and Crawford (2012).

with few exceptions (Sumiala, Tikka, Huhtamäki, & Valaskivi, 2016), the majority of this more qualitatively based research still exclusively focused on the Anglophone world.

The present study adopted a multiple-methods approach as a step toward bridging the methodological and epistemological disconnect between the earlier quantitative and later qualitative works. By taking a comparative linguistic approach, the present study also expands beyond the Anglo-centric bias of social sciences research. Finally, the present study contributes to audience studies by critically examining a specific label for audience behavior and doing so in the unique context of the Olympic Games.

The Olympic Context

Context is critical for understanding trends. The Olympics carry a dense cultural history and present-day sociopolitical significance (Roche, 2002). They are a unique media genre because they evoke a global range of topics beyond sport (Chalip, 1992) and as such, attract unparalleled viewership often reaching more than half the world's population (International Olympic Committee, 2012). The Games are also an event with an unmatched concentration of international media and technologies. Despite this, systematic analyses of the Games' audiences are relatively scarce. Furthermore, these analyses often get pigeonholed into the specialized field of Olympic studies, limiting their potential to serve as valuable context for research in the broader field of communication and media studies.

Rio's Olympics took place between August 5 and 21, 2016, and became the first held in South America. They unfolded amid the perfect storm of Brazilian social, political, and economic crises; leading up to the games, there were a Zika epidemic outbreak, a disreputable transition in presidency, and a domino-like athletics-doping scandal for Russian athletes, which placed the credibility of worldwide athletics organizations under question (Girginov & Parry, 2018). As is frequently the case with non-Western Olympic hosts (Rivenburgh, 2002), Rio received negative media portrayals in the run-up to the Games, which ultimately helped drive audience interest in the Olympics.

It is important to note that the 2016 Olympics marked the first official partnerships between the International Olympic Committee (IOC), a Games-organizing committee, and any social media platform (the platforms that forged partnerships were Twitter and Twitter-owned Periscope and Vine; Snapchat; Facebook and Facebook-owned Instagram). After extensive negotiations about the terms of the deal, Twitter offered its services and expertise for free in exchange for a place in the official Olympic communications milieu during the Games (Rafael Sena, social media coordinator, Rio Organizing Committee for the Olympic and Paralympic Games, personal communication, November 3, 2017). Tweets about the Rio Olympics ultimately received more than 75 billion views around the time of the Games (Filadelfo, 2016), a remarkable figure, particularly when contextualized in an era with a global, digital media economy that is vying for a short, yet lucrative audience attention span (Davenport & Beck, 2001).

Methods

This article focuses comparatively on English, Portuguese, and Russian discourse on Twitter. It attempts to do justice to a complex topic by reiteratively mixing quantitative methods (automated content analyses and numerical data) with qualitative methods (interviews and discourse-based analyses), or what can also be thought of as big and small data, respectively. This contributes to a small but growing body of research that uses multiple methods and modalities to explore the social construction and circulation of social media content (Freelon et al., 2018; Hine, 2015; Sumiala et al., 2016).

Data Collection

This research comprises a data set of more than 15 million #Rio2016 tweets in English, Portuguese, and Russian. These were all of the tweets available through the University of Pennsylvania's Annenberg School live-streaming algorithm, which captures between 1% and 40% of all tweets for a given hashtag at any moment. To the extent possible, metadata such as geolocation⁴ and user device were obtained. In addition, tweet collection was divided into three temporal periods: before the Olympics (July 29–August 4, 2016), during the Olympics (August 5–August 21, 2016), and after the Olympics (August 22–August 28, 2016). This was based on the expectation that chronology would structure people's discourses and, as the findings indicate, in a number of ways, it did.

Using a hashtag is a widely adopted means for trend detection (Atefeh & Khreich, 2015), and although there were numerous ones available, #Rio2016 was selected for being the most popular Olympic hashtag. Furthermore, English, Portuguese, and Russian were chosen as the languages for comparative study because of their significance in the Olympic context; the 2012 Olympics were held in the United Kingdom, the 2014 Winter Games were held in Russia, and the 2016 Olympics were held in Brazil. English also represented the most popular language on Twitter and on #Rio2016, with Portuguese and Russian relatively close behind (Mocanu et al., 2013). Subsequently, this language selection captured the majority of relevant discourses available on Twitter and it allowed for the comparative study of a variety of audiences, including those from the West, Global South, and Eastern Europe. To the extent possible, the tweets represent the audience voice of #Rio2016, meaning that official media Twitter accounts (e.g., @BBC, @NBC) were screened pre- and postcapture and removed from the data. Similarly, accounts that resembled bots (e.g., sent very high numbers of tweets) were removed.

Convenience and snowball interviews of top Olympic officials and #Rio2016 Twitter users were also obtained. Interview questions were based on a semistructured design (Wengraf, 2001). Finally, official documents and report analyses were gathered (see Table 1 for a list of data sources). All data in Russian and Portuguese were subject to automated translation and additional review by native speakers.

⁴ Whereas only around 2% of tweets in a given day have their user controlled geolocation feature enabled (and thus are able to provide geolocation coordinates), approximately three quarters of users have set a specific location as part of their personal profile (Leetaru et al., 2013). I use the latter metadata to analyze the user geolocations.

Table 1. Data Sources.

Source	Quantity	Data
Total unique #Rio2016 tweets captured in English, Portuguese, and Russian through Twitter's streaming API. Data obtained from July 29 to August 28, 2016	English: 11,620,597 Portuguese: 3,334,387 Russian: 183,010 Total: 15,137,994 (This equals about 10% of all #Rio2016 tweets generated during Olympic time)	Word frequency count Geolocation Retweet count User/follower count Mention (@) count Temporal frequencies Smaller subsampling for coding
Semistructured interviews	Media professionals: 7 Twitter users: 10 Total: 17	Contextualization of tweets Insider information about the Olympics and Twitter
Policy documents and official reports	Total: 12	Olympic facts and figures

Data Analysis

Database queries, such as retweet counts, geolocation analysis, and word frequencies, were performed on the 15 million tweets to obtain a quantitative overview of the data. Simultaneously, random subsamples of 250 tweets were taken from each linguistic group and timeframe. These subsamples eased subsequent manual content analysis (Goldbeck, Grimes, & Rogers, 2010), which used open-axial coding, and was based on grounded theory (Corbin & Strauss, 2014). The content analysis produced five content categories of #Rio2016 tweets (see Tables 2 and 3). Next, I applied discourse theoretical analysis (Carpentier & De Cleen, 2007) to explore the collection of tweets, interviews, and supporting documents in a deeper, qualitative manner.

In brief, discourse theoretical analysis falls within the critical tradition of discursive analyses (Gee, 2014) and pays particular attention to the social context and broader implications of particular discourses. The practical steps for conducting this analysis include the search for and accumulation of themes into clusters (moments of relative discursive stability), which are then used to help explain larger-level, social formations. In this case, four clusters informing global trends emerged through a combination of iterative data analysis and literature review: retweets, temporal dynamics, word frequencies, and linguistic-cultural specifics. Subsequently, discourse theoretical analysis allowed for the comparative understanding of trending topics and their constituent communicative practices, as well as for a broader examination of the concept of global trending topics in relation to audiences in the digital era.

Findings

The findings begin with an overview of the data and are then presented under four broad clusters drawn from the discourse theoretical analysis described in the Methods section. Approximately 4 million unique accounts were responsible for about 15 million #Rio2016 tweets in English, Portuguese, and Russian. This suggests that the global trend was constituted by a vast majority of people who sent fewer than 10

Olympic tweets, with most sending just one. Mapping the self-reported geolocations of the Twitter users showed a close relationship between language and country in Portuguese and Russian. In English, most of the tweets stemmed from the United States and the United Kingdom, but closer analyses showed that this linguistic group represented a more geographically and culturally heterogeneous set of people.

Mapping the global trend through the geolocation of content creators (and later analyzing smaller samples of tweets) also highlighted that the vast majority of #Rio2016 tweets—even those in Portuguese—did not come from people physically in Rio and at the Olympic Games (São Paulo was the most active Brazilian city on Twitter). Therefore, the #Rio2016 trend presented a global refraction of a lived event: a remediation of the Olympics via worldwide citizen discourses. In addition, a closer look at where in each country the tweets came from confirmed the geographic bias of Twitter: Most users were concentrated in large, metropolitan areas. This impacted discourses on #Rio2016 primarily through an urban stratification of participants and expressions, adding a particular lens on the relationship between the Games and global #Rio2016 trend.

Retweets

The most striking initial finding from the 15 million #Rio2016 tweets was that more than 70% were retweets of professionally created content. The media outlets receiving the most retweets were @NBCOlympics, @BBCSport, @CBCOlympics, @RedeGlobo, and @MatchTV; the first three are the American, British, and Canadian official Olympic broadcasters and the other two are the Brazilian and Russian equivalents, respectively. This high percentage of retweets supports previous research that indicates that mainstream media largely set the conversation across various screens and play the most significant role in determining what topics trend on Twitter (Asur, Huberman, Szabo, & Wang, 2011; Hutchins & Sanderson, 2017; Shamma et al., 2010). However, in comparison to Asur et al. (2011), who found that approximately 30% of the tweets in trending topics in 2010 were retweets, six years later, this figure had more than doubled.

One explanation for this increase is that the sheer volume of content and dominance of professional media outlets on social media platforms have significantly grown. Given the steep fees⁵ that these media corporations pay for the exclusive rights to broadcast the Olympics, it is no surprise that they wish to attract as much audience attention across all channels possible, and one way to do that is through cross-platform partnerships and a tsunami of content. For example, for a total of 19 days, or fewer than 400 hours of actual competition during the 2016 Games, NBC streamed more than 4,500 hours of live, digital Olympic content (NBC Universal Press Release, August 22, 2016) and secured partnerships with Twitter for its promotion.

The high volume of retweets in the three languages indicated that Twitter users primarily took on the role of filters and amplifiers of certain mainstream discourses, exercising voice and narrative power via curation. However, by retweeting professionally created content, Twitter audiences also reinforced the dominant media industry storyline and power relations. Nonetheless, despite the common and dominant

⁵ NBC alone has paid a record \$7.75 billion for the exclusive rights to broadcast the Olympics in the United States from 2014 to 2032.

practice of retweeting professionally created content, informative cultural nuances among the linguistic groups emerged. Next, I describe and contextualize some of these nuances. In turn, I argue that geography and the cultural differences associated with it not only play a role in determining the substance of a global trend, but perhaps, even more so, the shape of it.

Tweeting Over Time

Whereas the biggest peaks on Twitter overall corresponded to significant moments of competition, the days when the most tweets were created differed somewhat by language group (see Figure 1).

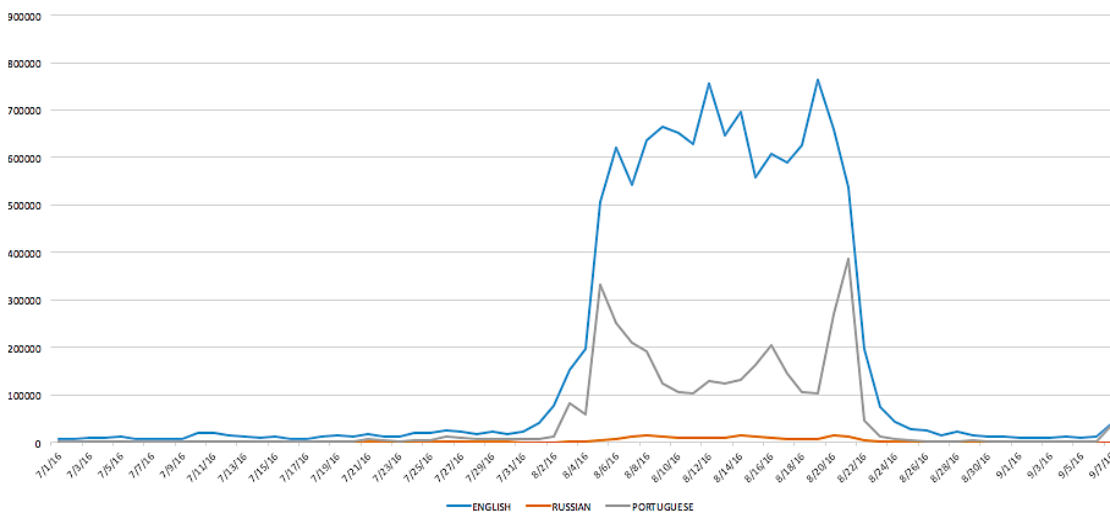


Figure 1. Twitter activity by language group. This graph shows a running timeframe of 18,870,583 #Rio2016 tweets in English, Portuguese, and Russian within an expanded couple of months before, during, and after the Olympic Games. The figures have been adjusted to account for time differences and to give a relative comparison between numbers in each of the languages.

The peaks for each linguistic group marked strong athletic performances from their specific nations; therefore, lumping all #Rio2016 tweets together into a single global discourse erases some of those nuances.

Table 2. Category Key.

Category	Description
News	Timely Olympic events and competition results
Opinion	Personal comments about specific athletes and sports, flashbacks to other Olympic Games, and non-time-sensitive content
Scandal	Olympic-related scandal or controversy
Cheering	Emphatic response
Random	Non-Olympic-related tweet using #Rio2016

Furthermore, although news content dominated Twitter in all three languages prior to the Games, once competition began, the majority of the tweets (which represented the bulk of #Rio2016 content) turned to emphatic, cheering-based communication (see Tables 2 and 3, based on analyses of 250 tweet subsamples). The notable exception to this was the Russian sample, which remained dominated by factual news throughout all three time periods, although the news itself was often emphatic or controversial. Once the Games ended, cheering remained the primary form of content in English, but news and scandals became prominent again in the Portuguese and Russian cases. This supports previous research that shows that affect and sentiment polarity (whether positive or negative) are important common features of global trending discourses (Palomino et al., 2019).

Table 3. Five Content Categories of #Rio2016 Tweets by Games Phase.

Language	Games phase	Percentage of tweets				
		News	Opinion	Scandal	Cheering	Random
English	Before	37	26	12	24	1
	During	30	19	7	42	2
	After	19	22	12	40	7
Portuguese	Before	40	20	11	28	1
	During	28	22	12	37	1
	After	32	22	12	33	1
Russian	Before	44	9	22	12	13
	During	52	4	9	30	5
	After	38	2	33	22	5




In general, controversial topics labeled "scandal" made notable appearances throughout all of the samples and tended to be language-specific. For instance, 1% of the Portuguese sample referenced a variation of #ForaTemer, which translates to #OutTemer and referred to the 2016 disreputable transition in Brazilian presidency; 2% of the Russian tweets referenced the World Anti-Doping Agency (WADA) in #ShameWADA⁶ to highlight the IOC and WADA's polemic decision to place a blanket ban on all Paralympic Russian athletes from competing in the Games, irrespective of whether they tested negative for doping; and 0.1% of the tweets in English had a variation of #BlackWomenDidThat, a racial-feminist commentary about the successes and inequalities faced by Black women in sport. Hashtags associated with this latter movement became significantly popular and they were sometimes hijacked and used to draw attention to other topics (including by a Russian Twitter account posting in reference to the WADA scandal). In turn, #Rio2016 emerged as a communicative bridge in each of the languages: It connected the Olympics, a universal topic, with much more contentious and country-specific issues. Subsequently, the category of scandal presented one of the few exceptions in which the style of content was similar, but the substance differed significantly across the language groups.

⁶ Unlike #ForaTemer, #ShameWADA was frequently written in English, making it a strategy for global attention (even if the rest of the text in the tweet was most often in Russian).

The Most Common Words

An examination into the 15 million tweets revealed the top-20 most frequently used words and symbols in each language (see Table 4). The most striking commonality across the three groups and timeframes was the topic of women and, specifically, support for women in sport. Comparatively, gender was rarely explicitly mentioned for men. Subsequently, #Rio2016's heightened attention toward women in sport marks a reversal of what has been the traditional, under-representative broadcast coverage of female athletes (Cooky, Messner, & Hextrum, 2013). Furthermore, although #Rio2016 may have been largely influenced by broadcast television, these findings point toward a more critical appraisal of televised content.

Table 4. Most Frequently Used Words per Language.

English	Portuguese	Russian
	BRASIL [BRAZIL]	золото [gold]
you		Россия [Russia]
gold	vai [Go]	медаль [medal]
medal	OURO [GOLD]	
team	medalha [medal]	сборная [national team]
win	parabéns [Congratulations]	серебро [silver]
first	FINAL [FINAL]	сборной [team]
final	AGORA [NOW]	наш [our]
we	melhor [best]	спасибо [Thank You]
women(s)	hoje [Today]	Мы [we]
proud	gente [people]	турнир [tournament]
our	nós [we]	финал [finals]
Rio	futebol [football]	бронз [bronze]
congratulations	vôlei [volleyball]	завоевал [won]
now	atletas [athletes]	США [USA]
men(s)	mundo [world]	Поздравляем [Congratulations]
best	meninas [Girls]	Ефимова [Efimova]
time	feminino [Female]	нас [us]
winning	Alemanha [Germany]	женская [women's]
day	Neymar [Neymar]	гимнастика [gymnastics]

Still, there were some differences in the way women were mentioned: English tweets were often much more critical of the sexist portrayal of women in the media, whereas the Portuguese and Russian tweets were more celebratory of their sporting success (see Figure 2). A Portuguese tweet (text only—original tweet no longer available) translates to “RT @aelingalathyns: people, these women are dominating everywhere!!! Volleyball, beach volleyball, football, handball and rhythmic gymnastics!! #Rio2016 #Olympics #Brazil.”



Figure 2. English tweet criticizing women's media coverage.

Another notable finding across language groups was the frequent presence of emoji (see Table 4). Several days before the start of the 2016 Games, Twitter announced that in partnership with the Rio Organizing Committee for the Olympic and Paralympic Games and IOC, it would release 257 emoji, its largest collection to date. The emoji appeared automatically when people tweeted certain keywords such as Olympics (see Figure 3). Twitter's push for these symbols should be read within a larger capitalist ideology and its own business strategy, too; Twitters' TV playbook, TVxTwitter, informs media clients that including visuals in tweets results in higher user engagement and a bigger chance of getting content retweeted (Midha, 2015). Furthermore, the release of the large, new emoji collection itself generated much publicity for Twitter.



Figure 3. Example of the Olympic emoji collection.

Nonetheless, the collection produced two, somewhat contradictory impulses: In theory, it standardized global communication and linguistic differences via use of relatively universally understood symbols. In practice, it further splintered the global Twitter experience of the Games because it produced visual differentiation by default. The new emoji were available for only seven of 40 supported languages on the platform, including English, Portuguese, and French,⁷ but not Russian. As Table 4 shows, the result was that the new emoji appeared in English only, whereas the Portuguese and Russian groups used regular, limited, and manually inserted emoji.

#Rio2016 in Portuguese

Comparatively, the Portuguese tweets were the most socially oriented and emphatic. Several of the most frequently used Portuguese words included people/we (*nós/a gente*), the world/everyone (*tudo mundo/o mundo*), and words were frequently capitalized (see Figure 4). There were even tweets castigating Brazilian live audiences for their overly emotional behavior in the Olympic stadia. Brazilians were critiqued by the media too for being unaware of how to behave properly during live Olympic events, when to be quiet to allow athletes to concentrate, and how to cheer responsibly; namely, by not audibly booing opponents from other nations ("*Vaias e Gritos*," 2016). The notion of an emphatic discourse on Twitter was also supported by Brazilian Twitter users who saw the platform as a useful tool for tapping into the communal feeling of the Games: "Twitter brings out the opinions and even the mood of the people in a way that is more human than in TV coverage" (Bernardo, personal communication, October 2, 2017).



Figure 4. Emotional Portuguese tweet: Translates to "HEART EXXXXPLODING #Rio2016 #ClosingCeremonyOlympicGames."

Another notable finding emerging from the Portuguese tweets was the high frequency of *novelero* retweets. The term *novelero* is a culturally designated label for a specific social media (often Twitter) user, who is a fan of Brazilian telenovelas, a type of broadcast soap opera. A *novelero* strives to be an opinion leader by presenting a continuous, humoristic strand of commentary, frequently based on memes of telenovela characters and plots, as well as other popular television shows. Oftentimes *novelero* content, which reappropriated non-Olympic memes into the Olympic context, would be retweeted alongside #Rio2016 (see Figure 5). This mixing of popular media discourses with Olympic discourses served to localize the Games by relating them to content and practices more familiar to a Brazilian audience.

⁷ Although French is a less frequently used language on Twitter than Russian, it is an official Olympic language.



Figure 5. Portuguese *novaleiro* tweet showing telenovela actress: Translates to "I believe that Brazil will participate in the 2018 World Cup #Rio2016 #Football."

#Rio2016 in Russian

Russian discourses on Twitter differed significantly in style from the English and Portuguese: First, they had the highest percentage of retweets of the three groups (almost 80% compared with 72% in English and 66% in Portuguese); second, the majority of tweets contained links to news pieces. Limited research implies that Russians' appetite for news across all media platforms stems from relative political instability (Deloitte, 2016); however, the present study complicates this reading to suggest several other explanations. First, the history of Russian's new media use is quite telling: Russian metaphors for the Internet "build on Soviet era references such as samizdat (grassroots underground publications) or a virtual extension of Soviet era kitchen table debates" (Alexanyan, 2013, p. 240). Furthermore, the early blogging platform LiveJournal largely set the standard for social media use in Russia and, in many respects, the core users of social media remain an avant-garde and politically motivated elite group.

Analyses into the metadata of the Russian tweets also revealed a qualitatively different experience of how they were sent: The Russian sample had the highest percentage of tweets sent from what was likely a desktop (almost 30%) versus approximately 15% in English and Portuguese. Of course, sending a tweet from a desktop, in what is possibly a seated position indoors, implies a different type of engagement with media content versus sending a tweet from a cell phone, which could be done in a variety of contexts. The former allows for more time and focus on a topic and is evidenced by the retweets sent in Russian, which often contained longer-format news links.

A couple of interviewees shed light onto the high percentage of retweets and news story links: Some people felt more credible in their opinions by citing official news sources, and they felt that by retweeting another source, they could sidestep taking direct responsibility for a comment, particularly if it were controversial or about a sensitive topic (Igor, personal communication, April 10, 2017). Furthermore, some Russians did not think of Twitter as a serious medium for self-expression because of its character constraint; however, adding links to longer pieces helped to sidestep this concern (Polina,

personal communication, April 19, 2017). Finally, there was sometimes a playfulness in retweeting official opinions; retweeting does not equal endorsement (sometimes it is mockery) and so, retweets need to be interpreted in the sociopolitical context of the particular person who sent them (Igor, personal communication, April 10, 2017).

The Russian tweets also used what could be described as the most group-cohesive language: The effect of frequently opting for pronouns such as *our* created a sense of group solidarity based around the Russian Olympic athletes and the concept of the nation (see Figure 6). This became particularly pronounced in cases in which the Russian tweets showed discontent against the IOC and WADA's decision to place a blanket ban on all Russian Paralympic athletes from competing in the Games. It is also worth highlighting that the Russian-language sample mentioned a foreign country,⁸ the United States, in its top-15 most frequently used words (see Table 4). As Ryazanova-Clarke (2011) suggests, the concept of "the West" as "the other" is frequently evoked in Russian media—and now in Russian Twitter discourses—as a tool for constructing and solidifying Russian identity.

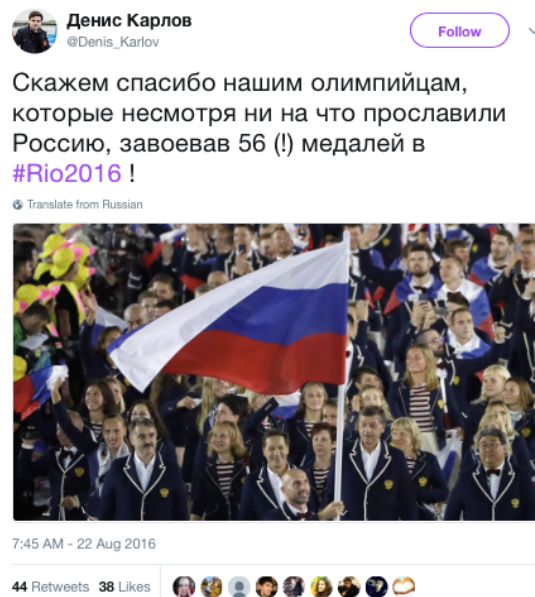


Figure 6. Russian solidarity tweet: Translates to "Let's say thanks to our Olympians, who despite everything glorified Russia winning 56 (!) medals in #Rio2016!"

⁸ Notably, *Germany* followed by *Neymar* (the name of Brazil's top football player) appeared in the 20 most frequently used words in Portuguese. However, a closer examination reveals important differences in use from the Russian example. In Portuguese, *Neymar* and *Germany* were often used to reference the embarrassing 2014 Fédération Internationale de Football Association defeat Brazil suffered to Germany, whereas in Russian, the United States was frequently referenced in a critical manner itself.

#Rio2016 in English

The English tweets were created by the most geographically and culturally heterogeneous group of users, which partly explains why detecting broader patterns was more difficult compared with the other two languages. Nevertheless, at least one notable finding did emerge: The top-20 most retweeted accounts in English revealed that nine accounts, almost half, belonged to broadcasters and five of those belonged specifically to American television shows and hosts. This suggests that English-speaking #Rio2016 was likely composed of a significant group of American users, and often employed as a second screen to comment on television coverage.

Previous research has identified similar television talk-back behavior in Western contexts, highlighting the strong connection between Twitter and broadcast media (Deller, 2011; Pederson et al., 2020). Of course, Twitter has certainly welcomed and boosted this close and increasingly institutionalized relationship with television. Yet, although Twitter discourses may be increasingly corporatized, television talk-back remains, at least on the fringes, a nuanced practice that can be quite political and sometimes run contrary to dominant media representations. For instance, the present study shows that tweets about race and the coverage of women in sport can serve as a digital watchdog for society and the media industry, writ large.

Discussion

So what then does the term *global trend* reveal and conceal about audiences? First, it assumes that there is such a thing as a global audience. Of course, there truly were many people taking to Twitter using the hashtag #Rio2016, and the resulting global trend is ultimately an abstraction of this behavior. Nevertheless, it is worth interrogating the unity of global audiences in both experiential and theoretical terms. By conceptually framing and technologically displaying the Rio Olympics as a trend, Twitter essentially depoliticized people's discourses by blurring important differences. The label of a trend then conjures a blanket process of homogenization or crude globalization, which presupposes similarity over difference and culturally and temporally disembodies discourse from people and place. In this sense, the term *global trend* belongs to a broader tendency called the "datafication of society" (Andrejevic, 2014; boyd & Crawford, 2012; Livingstone, 2019); however, the society in question now is supposedly the whole world.

Despite the ability and relative ease of tweet translation (Twitter partners with Bing to offer rather questionable translations in a variety of languages), there was no obvious cross-language communication in any of the tweets examined. Instead, particularly in the Russian case in which language use more veritably circumscribed national boundaries, a nationalistic use of Twitter emerged supporting previous research that argues that sport (Billig, 1995) and new media (Imre, 2009) actually exacerbate nationalistic discourses, despite their global potential. In turn, the *global* in *global trend* refers to people from many geographies talking about something—but not talking together.

It is worth noting that the idea of global audiences is highly contested in the media industry itself. The head of Nielsen's Digital Globalization Department shared that "global business is something abstract; it only exists because there are local customers" (Bruno Herrmann, personal communication, November 27, 2017). Additional interviews with media professionals yielded mixed feelings about global audiences, too.

An interviewee shared that her company had a pendulum-like approach toward the issue: It would pivot between localizing media content and trying to appeal to an international audience; however, this was based on transitional leadership and “gut feelings” rather than substantial research (Anonymous, personal communication, March 28, 2019).

Although the present study does not presuppose to answer the question of whether there are global audiences or not, it serves as a reminder of the necessity to measure and contextualize audience practices. The high percentage of retweets in Russian is a good example: Measuring retweets alone misses important structuring information about Russians’ new media use and the sociopolitical context of each user who has a variety of reasons for sending any given tweet. A related takeaway is the importance of tailoring not only media content, but also opportunities for audience participation in more culturally appropriate ways.

The notion that mediated activity of global audiences can be captured and measured, as well as who has the ability to do so, is also worth interrogating. Although the visibility and traceability of some behaviors online make features such as trends possible, proprietary algorithms and nondisclosure agreements mask their inner workings, leaving researchers in a position of playing catch-up, producing a skewed image of audiences and their practices. One way to alleviate this concern is through more multiple-method and collaborative research, including partnerships between industry and academia, which would mutually benefit from the mixing of scales of data and analytical approaches.

Instead, through the current ideological work of global trends, the measurement of audience discourses becomes further entrenched in the hold of new media companies, like Twitter, with the inside tools and access to big data. In turn, global trends become one means by which social media platforms insert themselves into our broader media ecology by reifying what Couldry (2005) calls “the myth of the mediated center”: the idea that society has a shared reality and, further, that media like Twitter are able to portray it. In addition, given that global trends are organizationally sanctioned, measured via proprietary algorithms and entwined in corporate partnerships, they wedge a private, commercial dimension in the public nature of many of the discourses and events they report on. By measuring global trends, Twitter is no longer just assuming the role of the digital town square or public sphere; it is now purporting to be the megaphone of the globe or, in its own words, “the pulse of the planet.”

In turn, future research could critically consider what happens when private platforms become so central to the creation and understanding of audiences. Who does the construction and circulation of terms such as *global trend* benefit? What type of audience understanding is cultivated through global trend metrics, which measure the echoing, emotive output of people’s ephemeral communication, often in the form of retweets of professional content?

Conclusion

The comparative analyses showed that geography and culture not only played a role in shaping what people tweeted about but, even more so, how they tweeted about it. Although #Rio2016 was broad enough a hashtag to encompass a range of topics, sporting successes pertaining to each linguistic groups’ core nation and athletes constituted the majority of global discourse. However, contextual nuances such as

the Brazilians' mixing of Olympic and telenovela content or the Russians' sharing of longer news stories marked a culturally conditioned media engagement.

The high volume of retweets of professional media outlets (constituting more than 70% of #Rio2016 tweets) supports previous research that showed that mainstream media largely anchor the conversation across various screens and play the most significant role in determining what topics trend on Twitter (Asur et al., 2011; Hutchins & Sanderson, 2017). Within this context, #Rio2016 users primarily took on the role of filters and amplifiers of certain mainstream discourses, exercising voice and narrative power via culturally conditioned curation. Nonetheless, by retweeting professionally created content, Twitter users also, ostensibly, reinforced the dominant media industry.

It is worth adding a note here to problematize linguistic or national variations. Sporting events often serve to reify the notion of the nation as a unified locality and to an extent, through the select categories of English-, Portuguese-, and Russian-speaking groups, this article has subscribed to a similar logic, too. Of course, the idea of national or audience cohesion is problematic (Anderson, 2006; Fraser, 1990), marking a limitation of comparative discourse studies. Yet, as research has equally shown, there is value to comparative work that cannot be gleaned otherwise (Butsch & Livingstone, 2013). Furthermore, to the extent possible, I have attempted to contextualize the groups of people constituting each linguistic category through such techniques as mapping and interviews.

In sum, despite advances in technology, global trends' logical preoccupation with tracking the spread of information harks back to the early days of communication and audience research, which was similarly and singularly focused on the diffusion of messages (Katz & Lazarsfeld, 1966; Shannon & Weaver, 1949). Much of this early research has been critiqued and productively rebutted for blind spots in context and audience/receiver interpretation. Similarly, the approach toward global audiences is limited: It compares content among Twitter users in different countries by assuming equality among them across other parameters such as access and literacy. This, too, harks back to simpler models of international communication (Kraidy, 2003) and enforces the Western-centric (and specifically Silicon Valley-driven) metric of output and visibility as the golden standard for measuring and understanding communication practices. Hence, although the term *global trend* may sound like a technologically progressive approach toward audiences and data, it masks longstanding problems and inequalities. What has been lost in this current rendition of the term is the productive vitality and instability of the word: Reclaiming these processes—particularly on an international scale—is an important task for future research.

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