A Qualitative Content Analysis of 19,000 Medieval Studies Conference Tweets

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ABSTRACT

This poster examines the content of nearly 19,000 tweets archived from two large Medieval Studies conferences in both 2014 and 2015. The study sought to examine beyond anecdote how Medieval Studies scholars use Twitter in the context of the academic conference. Content analysis was done by hand so as to ensure accuracy. The study discovered that, for these scholars, note taking comprises the majority of the tweets. The additional prevalence of activity such as sharing resources, conversation, and whimsy show that conference tweeting is the digital extension of the community-building activity of face-to-face conferences. These findings invite academics, event organizers, and programmers to explore ways to enhance the conference experience based on data-driven analysis of user needs.

CCS Concepts

• **Human-centered computing** → **Empirical studies in collaborative and social computing** • *Human-centered computing* → *Social networks* • *Human-centered computing* → *Social networking sites*

Keywords

Scholarly Communication; Social Media Analysis; Content Analysis; Information Seeking; Medieval Studies

1. INTRODUCTION

The presence of a Twitter backchannel at academic conferences has become standard since the platform's launch in 2006. However, confusion is often voiced about best practices and concern is sometimes raised over a lack of understanding about what is happening out of sight in the digital backchannel. This study seeks to show what activity actually occurs in the Twitter conference stream to provide a data-driven analysis of academic community and dispel rumor and confusion.

Studies of Twitter's conference use have frequently focused on fields in the sciences, computer science, and digital humanities and they have either applied qualitative content analysis to small conferences [1], or they have applied text analysis algorithms to very large datasets [2, 3, 4]. By contrast, this research looks at Medieval Studies, a traditional, though interdisciplinary, humanities field, using a hand coded content analysis of a relatively large dataset composed of 18,885 tweets from two annual conferences over two years. I undertook a content analysis as it provides information not easily discerned through automated text analysis while allowing for the processing and analysis of a larger dataset than close reading would allow.

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2. METHODS

2.1 Data Collection and Analysis

In 2014 and 2015, I archived tweets that used the official conference hashtag from the two largest Medieval Studies conferences in the world. The International Congress on Medieval Studies at the University of Western Michigan, with around 3000 attendees, (#kzoo2014, #kzoo2015), provided 3657 tweets from 2014 and 5902 from 2015; and the International Medieval Congress at the University of Leeds (#IMC2014, #IMC2015), with around 2000 attendees, provided 2846 tweets from 2014 and 6480 from 2015. Due to confusion at the beginning of the Kalamazoo 2014 conference about the conference hashtag, I included both #kzoo14 as well as #kzoo2014. I used the same strategy for Kalamazoo 2015. There was not confusion about the Leeds hashtag, so I only archived the official hashtag for those conferences. I used a tool developed by education technologist Martin Hawksey, TAGS (Twitter Archiving Google Sheet) [5]. The archive for each conference covers the dates of the conference itself as well as one day afterward.

Table 1. Number of Tweets and Average Tweets per day, excluding Retweets per Conference per Year

Conference	Number of Days Archived	Number of Tweets	Average Tweets Per Day
#kzoo2014	5	3647	731
#kzoo2015	5	5902	1180
#imc2014	6	2846	474
#imc2015	6	6480	1080

All tweets (excluding retweets) have undergone a qualitative categorization using open coded content analysis into 9 categories. A researcher from the field of Medieval Studies (me) conducted the content analysis, as accurate categorization required subject knowledge. Categorization sought to uncover user intent beyond the level of anecdote, seeking to discover what drives academics to use Twitter as a tool and a space for engagement at conferences. The categories are listed in Table 2 below. In addition, there is an "Unknown" category for tweets such as spam or if the conference hashtag overlapped with another use (e.g. the #imc2014 and #imc2015 hashtags overlap with an Ironman competition).

Table 2. Tweet Categories

Category	Brief Description

Establish Online Presence	Declaring presence at the conference, 'wish I were there'; 'good morning, everyone', & general statements
Jot Down Notes	Note taking during sessions
Comment	Opinions about presentations/sessions, including excited note taking (with all caps or exclamation points)
Conversation	Responding to a person or attempting to start/provoke a conversation
Sharing Resources	Link to a website or provide a citation
Announcement	Info about a social meet up, activity, or session (if included room information)
Recap	Link to compiled notes, Storify or other Twitter archives, posting conference talk online
Organizational Question	Question or comment to conference organizers about logistics
Whimsy	#medievaldonut, conference dance, Pseudo-society, absurdist humor

2.2 Limitations of Dataset

The archive includes only tweets using the designated hashtags. One consequence of this limitation is that conversations frequently move away from the hashtag because Twitter does not automatically include the hashtag in a reply tweet in the same way it automatically includes all users mentioned. Conversations also "leave" the hashtag because they are seen as more private, or not of interest to the larger audience of the official hashtag.

Examining only tweets which use official hashtags reveals a strikingly positive tone in conference Twitter activity. "Subtweets," tweets that comment on something or someone without officially mentioning them or using an official hashtag, are not captured through hashtag archiving methods. A "subtweet's" author is unlikely to want their negative feedback broadcast to colleagues on such a public channel and officially archived. Thus, the potentially negative aspects of Twitter - the shaming, the bullying, the negativity - that are known to exist are often not recorded through traditional data collection methods.

3. RESULTS AND CONCLUSIONS

While the Medieval Studies conferences used Twitter as a note taking tool at percentages comparable to fields such as digital humanities [1] in 2014, early findings show that there was an increase of nearly 18% in 2015 as note taking tweets rose from

One trend discovered in this analysis that appears to be unique to medieval studies scholars is the category of humor that highlights quirks of conferences in the field: "whimsy." For each year, between 3.4-6.1% of tweets fell into this category, which includes hashtags (e.g. #medievaldonut) and active users (e.g. @ChicChaucer, which discusses conference fashion). While a small portion of the total tweets, this category of activity was the most retweeted and contributes to the sense of community and activity of community building that comes from conferences, both face-to-face and digitally.

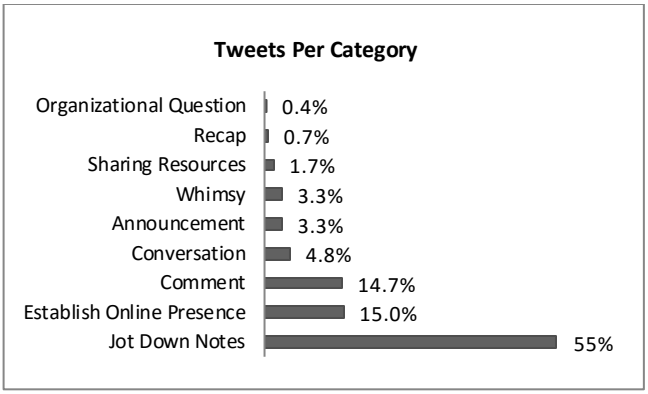

Figure 1. Percentage of Tweets per Category over the Entire Dataset

4. CONCLUSION

This study examines the content of Twitter activity to complicate a narrative of Twitter's role in the academic conference. While there are many conversations about the increasing use of Twitter to digitally supplement the face-to-face conference experience, this study uses data from an interdisciplinary humanities field to illuminate academic communities of practice. Results of the study could also be used by event organizers to enhance the Twitter backchannel through a data-driven understanding of how attendees prefer to use the online space. Developers could also use the results of this study to create supplementary tools and spaces to enhance digital backchannels to suit the real needs of users.

5. REFERENCES

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