Asian American Chicago Network: A Preliminary Study of Facebook Group Use By Immigrant Groups

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Abstract

Through analyzing data from posts and about users, we describe how one particular Facebook group helps immigrants to the U.S. use social media to build a local community. As a preliminary study in intercultural communication through social media, we analyze one case, the Asian American Chicago Network (AACN) Facebook group, and uncover common topics users discuss and relationships between user tenure and various indicators of leadership and interaction. Our small finalized results from this preliminary project suggest that members of AACN likely use it (1) to build a professional network in the U.S.A., and (2) to reinforce and affirm their Asian culture and identities.

Author Keywords

Asian American; Social Media; Facebook Group.

ACM Classification Keywords

H.4.3 Communications Applications

Introduction

Different cultural norms and social conditions may pose problems for people in this immigrant and minority ethnic group who lack crucial information about their new society [7]. In the age of social media, users are

utilizing digital tools to help with these problems [2,8]. Though research on the relationship between the intercultural studies and social media is increasing [3,9], little research addresses the question of how social media help immigrants to acculturate to the United States. Some research examined the use of social media by individual immigrants without focusing on a particular virtual community. Sawyer and Chen [8] conducted interviews with international students to understand how individual immigrants use social media to adapt to new environments. Other studies focused on virtual intercultural communities among nonimmigrants. For instance, McEwan and Sobre-Denton [6] examined how social media facilitated virtual third cultures in online spaces for college students from diverse ethnic background. They argued that because of the plethora of cultural influences in virtual spaces, people no longer need physical contact to create third cultures. The virtual community offered a space for virtual third culture, which can supplement, if not supplant, traditional intercultural relationships.

As these studies show, interviews, surveys, and literature reviews are the most common methods for analyzing immigrant social media use in existing literature. The research questions existing research addresses focus either on individuals or on the creation of virtual third cultures. Our project differs from earlier work both in method and in focus. We use distant readings of the content in AACN and analysis of user characteristics to understand how members use the AACN Facebook group and what that use reveals about the attitudes and needs of immigrant and minority ethnic groups. These results contribute to our knowledge of how immigrant communities use social media and for what purposes.

About AACN

AACN was founded in 2011 as an offline group and now has roughly 3000 members. Its Facebook group was created in 2012 and has almost 2000 members. According to its profile description [1], AACN is focused on connecting Asian Americans to new friends and to the city of Chicago and its resources. The group uses a definition of Asian American that is less strict that a citizenship definition and includes members who are brand new to Chicago as well as lifelong Chicagoans.

Methods

Our data was collected from AACN Facebook group timeline in October 2015. We analyze data stored in two formats: (1) the complete Facebook timeline feed, including its 759 posts and their replies, and their metadata; and (2) user files which were created from the timeline data and include user information such as user id, posts from the user, replies from the user, active tenure of the user, etc. Only 280 out of 1918 users have ever posted in the group, so the latter data format only includes 280 entries. We follow Huffaker's [5] automated text analysis approach to analyzing posts in online communities.

Content Analysis

We use the timeline feed data to take a distant reading of the content, with statistics of word frequency and a visual representative of word cloud. We also use Linguistic Inquiry and Word Count (LIWC) default content analysis to examine topics that AACN discussed most. This analysis is based on LIWC own dictionary and includes categories such as, "feeling", "health", "leisure", "money", etc.

Table 1: Variables and their definitions

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Variable	Definition
Number of Posts	the number of all activities created by one user, including posts and replies
Number of replies	the number of all replies created by one user
Tenure	the number of days between the first time and last times the user posted
Activeness	average number of posts per day
Talkativeness	the number of words that posted by one user
Language diversity	ratio of unique words to total words

User-based Analysis

Our study examines relationships among four variables about each user: number of posts, number of replies, tenure, and activeness. We also calculate measures of language use by processing text in the user files, which includes both posts and replies: talkativeness and linguistic diversity. See Table 1 in sidebar for variable definitions. To find out the relationship between these variables, we use correlation analysis.

Results and Findings

Encouraging offline interaction.

The word cloud (see Figure 1) on the side bar and word frequency based on the timeline feed shows high frequency words such as, "event", "out", and "meetup" that indicate AACN's great interest in face-to-face activities. Moreover, words like "bar", "place", "st", and "time" reveal location and time information which are common in offline events' announcements.

Serving as a professional network

LIWC results reveal that work-related words achieve 3.06% frequency in total text, more than three times the frequency of other categories of words: e.g., religion (0.13%), home (0.76%), health (0.23%). Words frequency also shows that "Work" repeats 796 times, "professional" 726 times, "position" 575 times, "company" 563 times, "job" 532 times, "career" 210 times, "resume" 170 times. The high frequency of these words suggest people regard AACN as a place to discuss their professional lives.

Supporting sub- and traditional culture maintenance Besides being Asian American, members in AACN also point out their sub-culture: "Korean" appears 457 times, "Chinese" 409 times, "Taiwanese" 312 times,



Figure 1. Word cloud of AACN Facebook group posts

"Japanese" 218 times, "Thai" 105 times. References to food and festivals also indicate cultural maintenance: "festival" 377 times, "custom" 292 times, "lunar" 232 times, "dim sum" 424 times, "sushi" 164 times.

Long-standing members are more likely to initiate conversations

The correlation matrix of all six variables (see Table 2) shows correlations between tenure and replies, which indicates that users who have longer history of posting in the group reply frequently to others. The correlation between posts and tenure is similarly strong, suggesting that users stay active over time. We also examine individual posts and find that long-standing members' original posts are both frequent and long while their replies are less frequent and short, suggesting they are more likely to initiate threads than to continue others' threads.

Table 2: Correlation matrix for all variables of user log

Variables	Mean	SD	-	7	m	4	Ŋ	9
1. Number of posts	2.70	14.22						
2. Number of replies	3.86	12.27 0.77	0.77					
3. Tenure	130.54	234.38 0.45	0.45	0.50				
4. Activeness	0.11	0.49	0.49 0.02	0.04	-0.08			
5. Talkativeness	176.54	989.78 0.97	0.97	0.66	0.40	0.02		
6. Language diversity	75.70		19.43 -0.01	0.03		0.06 0.04	0.00	

Discussion and Future Directions

We find that immigrants are using social media not only for cultural work [6] but also to develop professional networks, which is novel compared to language reported in other immigrant social media use [2,6] and online group studies [5]. Also, contradictory to McEwan [6] that virtual groups can supplant real-world ones for the formation of third culture, our study indicates that external events are highly encouraged. This poster reports preliminary results from a single Facebook group. Our next steps will include more sophisticated automated analysis techniques such as supervised learning that have been successful in our other social media projects [4] and analysis of additional immigrant online communities. We are especially interested in the relationship between participation in AACN's Facebook group and self-identity. For instance, do newcomers and long-time members have the same perceptions of community within the group? How do members endeavor to build community through the group? We will conduct interviews with users to address related questions.

Limitations

Our study includes 759 posts and replies. Given this amount of data and the single group it comes from, we must be careful not to over-generalize our findings. Using LIWC word count also has limitations. Word counts are rough measures of meaning that do not necessarily capture the semantics or intention of texts, and words with multiple meanings such as "work" can pose challenges for interpretation.

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