Research Incentive Fund Report

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Images of Protest:
Understanding Ukraine's Euromaidan Movement through Twitter's Visual Media

My "Images of Protest" project examines the visual content contained in social media associated with Ukraine's Euromaidan protest movement in early 2014. Using funds provided by an InULA Research Incentive Grant and an IUBL Librarian Support Grant, I obtained a dataset from Gnip, Twitter's exclusive data partner. This dataset consisted of all tweets posted between Jan. 16 and Feb. 24, 2014 that contained an image link and were tagged with one of the three Euromaidan hashtags (Ukrainian: #Євромайдан; Russian: #Евромайдан; English: #Euromaidan). This time period was chosen because it included the most intensive periods of protest and violence associated with the Euromaidan movement.
The dataset contained nearly 900,000 tweets and over 70,000 unique image URLs posted by about 20,000 users. I analyzed this data set using an exploratory mixed-methods approach that combined quantitative and qualitative measures with the goal of understanding the types of users posting images, the languages being used, the location where the tweets originated, and content of the images and texts. In addition to this analysis, I traveled to Ukraine in summer 2014 and conducted 13 ethnographic interviews about the Euromaidan protests, which provided additional contextual information for interpreting the Twitter data.

I presented the preliminary findings of this study at the 2014 Annual Meeting of the American Anthropological Association and will present a second paper at the 2015 Council for European Studies' International Conference of Europeanists. A preliminary report of my findings will also appear in *CritCom*, the Council for European Studies' Forum for Research and Commentary on Europe. I include the full text of this report below. I plan to continue to develop and expand on this study with additional field research in Ukraine in 2015-2016.

Images of Protest:
Ukraine's Euromaidan in Twitter Visual Media

The Euromaidan Protests

On November 21, 2013, demonstrators gathered on *Maidan Nezalezhnosti* (Independence Square) in Kiev, Ukraine to protest the Ukrainian government's suspension of negotiations finalizing the European Union (EU)-Ukraine Association Agreement,[1] a document that was intended to foster greater economic and social integration between the EU and Ukraine. Beginning as a relatively small

[1] The EU-Ukraine Association agreement outlines an extensive set of political and economic commitments between Ukraine and the EU. It includes provisions for governmental reform, economic growth and support, and cooperation in sectors such as energy, environment, education, and industry. Additional information about the agreement and the full text is available at http://eeas.europa.eu/top_stories/2012/140912_ukraine_en.htm.

gathering of mostly activists, students, and journalists,[2] participants in the protest began using Twitter hashtag "Euromaidan" (Ukrainian: #Євромайдан; Russian: #Евромайдан; English: #Euromaidan) to communicate information about the demonstrations. Euromaidan soon became shorthand for the opposition movement, and as the protests grew, these hashtags continued to be utilized as a way to provide real-time textual and visual information, as well as commentary and discussion about unfolding events for audiences in Ukraine and abroad.

While the Euromaidan protests began as a response to a particular policy decision of Ukrainian President Viktor Yanukovich, the demonstrations quickly spiraled in size and intensity, and became characterized by a cycle of standoffs punctuated by increasingly violent confrontations between protestors and government forces in and around the *Maidan*. The square was forcibly cleared on Nov. 30, 2013 by members of the *Berkut* (Ukraine's special internal security force), an action that radicalized many protestors and shifted the demonstration's emphasis from changing the specific decision to suspend negotiations with the EU to a more general opposition of the politics of the Yanukovich government (Onuch & Sasse 2014, Savin 2014:5-6). The *Maidan* was quickly reoccupied and reinforced as protesters built barricades around the square. On Jan. 16, 2014, Yanukovich supporters in the *Verkhovna Rada* (the Ukrainian Parliament) passed strict anti-protest laws by a dubious show-of-hands vote, provoking a further intensification of the protests, and clashes between demonstrators and police units on Jan. 19-23 that resulted in the first deaths of the demonstrations (almost all of these laws were repealed on Jan. 28). The standoff between the protesters and security forces culminated on February 18, 2014, when police units and snipers surrounding the square resorted to firing live ammunition in a confrontation that resulted in the deaths of at least 103 protesters and 13 police officers.[3] The decision to fire on the demonstration precipitated the removal of President Yanukovich, who was impeached and charged with mass killings by a newly appointed government (he subsequently fled to Russia).

Euromaidan Images on Twitter

Given the centrality of social media in the Euromaidan movement, we became interested in the insights that might be gained from the analysis of large-scale Twitter data during this period of civil unrest. Studies of Twitter data typically limit their analysis to the textual and network aspects of Twitter, which are more easily machine-processed than visual materials that are attached to or embedded within tweets. For this reason, and because of the importance of visual imagery to the Euromaidan, in this study we chose to focus on the production and consumption of the images circulating on Twitter during the protests. Tweeted images are qualitatively different than text-only posts. Because of a tweet's strict 140-character limit, users often turn to images to expand their posts or to make a particular point or argument, as well as to provide documentary evidence of events, making these images an especially rich source for understanding the real-time processes of social movements.

In order to investigate these uses of media on Twitter, we obtained a dataset from Gnip, Twitter's exclusive data partner, consisting of all tweets containing an image and tagged with the Euromaidan hashtag in Ukrainian, Russian, or English between Jan. 16 and Feb. 24, 2014. This time period was chosen because it includes the most intensive periods of protest and violence associated with the Euromaidan movement, but excludes tweets associated with the subsequent crisis that began on

[2] A Facebook post at about 8:00 pm on Nov. 21 by journalist Mustafa Nayem is generally considered the beginning of the Euromaidan protests. See http://www.opensocietyfoundations.org/voices/uprising-ukraine-how-it-all-began.

[3] In total, there were 128 confirmed deaths (110 civilians and 18 police officers) during the protests. A full list is maintained on Wikipedia: http://en.wikipedia.org/wiki/List_of_people_killed_during_Euromaidan

February 27, when Russian military units began occupying strategic locations on the Crimean peninsula.

This dataset contained 884,232 tweets, 102,160 (11.55%) original posts, 782,072 (88.45%) retweets, and 70,347 unique image URLs, which we analyzed using an exploratory mixed-methods approach that combined quantitative and qualitative measures with the goal of understanding the types of users posting images, the languages being used, the location where the tweets originated, and content of the images and texts.

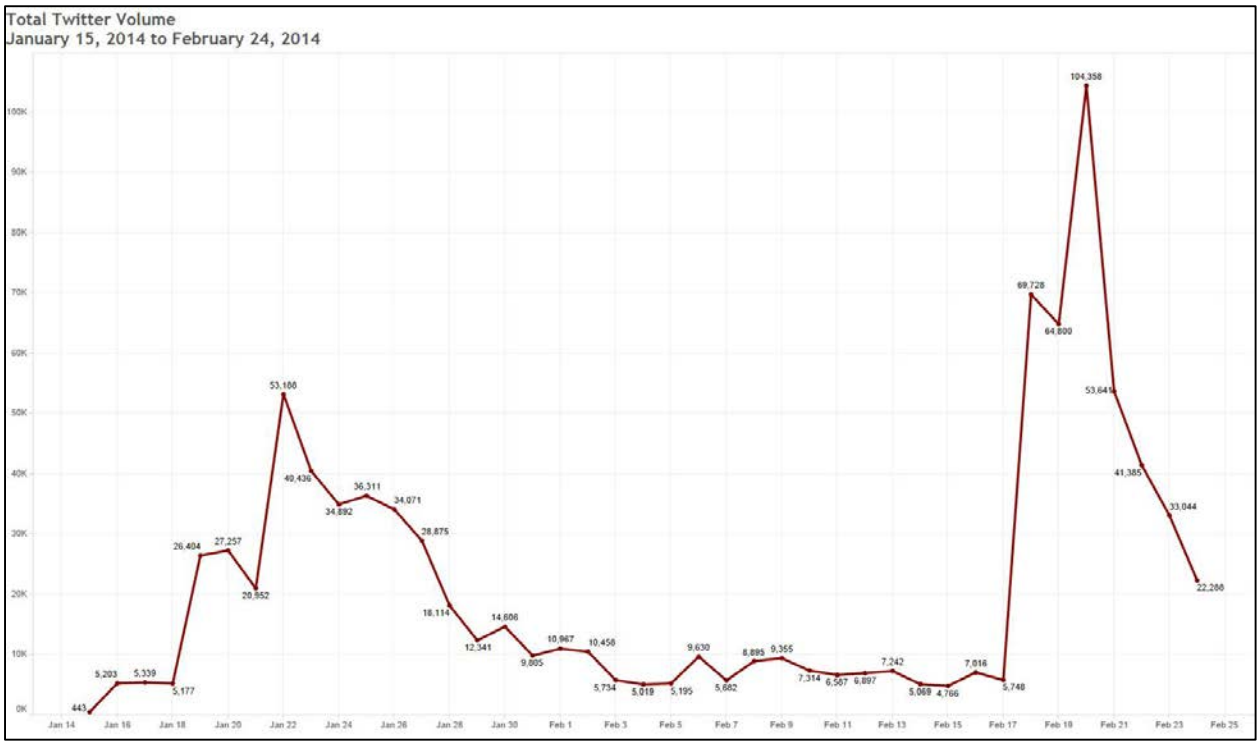

Fig. 1: The total volume of tweets in the dataset analyzed. The peaks in traffic correspond to the days when the most violence occurred.

Twitter Users

20,180 unique users contributed tweets to our dataset, but a relatively small number of users accounted for a disproportionate percentage of the images posted (93% of users posted 10 times or less; the median number of posts per user was 1, and the mean number of posts was 5). Of the top twelve content-posting accounts, four were accounts managed by activist media organizations, two by individual activists, one by a documentary webcam bot, one by a spam bot, and the remaining four by individuals who could not be readily identified as activist or non-activist. These figures suggest the merging of media outlets and policy activism, which has been one key feature of the Euromaidan movement.

Language

The languages used in the original posts were almost evenly divided into four groups: Russian (25%), Ukrainian (21%), English (30%), and all other languages combined (24%). This distribution is similar to findings in other studies of Euromaidan Twitter usage (SMaPP 2014:3), and likely reflects a combination of Kiev's status as a bilingual city, the international character of interest in the protests, and Twitter's user base skewing towards English speakers. The prevalence of English in the language use distribution may also reflect activists' efforts to engage with the international community by choosing to tweet in English (SMaPP 2014:4).

Location

It is extremely difficult to determine the location from which particular Twitter posts originate. Very few users turn on Twitter's geolocating functionality,[4] forcing us to estimate based on self-reported information. About 40% of the posts in our dataset contained a location in the associated user-profile information.[5] Of these posts, 62% (13.1% of the total) indicated a location in Ukraine and 30% in Kyiv (6.39% of the total), while 15% (3.1% of the total) indicated a location in Russia. No other country accounted for more than 1% of the total. Although we must exercise caution in extrapolating from this self-reported metadata, it would appear that a large number of the users contributing images to this dataset were located in Ukraine and Kyiv, although it is impossible to ascertain from this information whether or not particular users were directly participating in the protests and posting their own images or if they were circulating images found elsewhere.

[4] According to Leetaru et. al. (2013) Less than 2% of all Twitter posts contain exact location metadata.
[5] This information is provided by the account holder in a free-text field.