THE USE OF TWITTER DURING THE 2014 CRISIS IN UKRAINE: A TALE OF THREE LANGUAGES

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San Diego, CA, August 11-12, 2015
In the Social Media Lab, we’re interested in studying how social media ...
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Today’s focus:
2014 EuroMaidan Revolution | Revolution of Dignity

"2014-02-21 11-04 Euromaidan in Kiev" by Amakuha. Licensed under CC BY-SA 3.0 via Wikimedia
Outline

- Background
- Review of Social Media Platforms
- Twitter Use
- Conclusions
Today’s focus:
2014 EuroMaidan Revolution | Revolution of Dignity

November 21, 2013 - Ukraine gov. suspended the trade & association agreement with EU
February 18-19, 2014: Protests in Kyiv (capital) Turned Deadly
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February 18-19, 2014: Protests in Kyiv Turned Deadly
February-March, 2014: Pro & Anti-Maidan Protests Spread Across Ukraine

source: http://liveuamap.com
February-April 2014: A wave of Anti-Maidan protests in South-East

Photo credit: Andriy Makukha. Licensed under CC BY-SA 3.0 via Wikimedia Commons
March 2014: Annexation of Crimea by Russia

source: http://liveuamap.com
April 2014: Anti-Terrorist Operation (ATO) against pro-Russian Self-proclaimed republics: Donetsk People’s Republic (DPR) & Lugansk People’s Republic (LPR)

source: http://liveuamap.com
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• Background
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Review of Social Media Platforms: Websites – still important, linking to social media accounts

http://euromaidansos.org/

@gruzd 2014 EuroMaidan Revolution
Review of Social Media Platforms: Blogs

http://fakecontrol.org/blog/2014/03/04/george-bush/
Review of Social Media Platforms: Blogs

Example: Combating Misinformation

Source: http://visual.ly/top-7-7-false-statements-russian-media-about-Ukraine
Review of Social Media Platforms

Youtube & ustream.tv: Activists, News agencies, Gov.officials

https://www.youtube.com/watch?v=I_cNDGU7k98

http://www.ustream.tv/recorded/44404145

Future unrests: Twitter's Periscope?
Review of Social Media Platforms
Instagram: Photo Sharing during Rallies

13,208 images
6,165 Instagram users
2.14 average number of images per user
5,845 unique tags
21,465 total tags

http://www.the-everyday.net
Review of Social Media Platforms
Wikipedia: Editors’ Debate about the Status of Crimea

Should we change the name to Republic of Crimea yet? [edit]

It is clear that Crimea is now going to declare independence from Ukraine and join Russia. The vote just passed. -- Cheesenibbles (talk) 22:05, 16 March 2014 (UTC) And it is shame that Wikipedia suffers from proposers of propaganda from both sides. Wikipedia should remain the biggest free encyclopedia, not the fight-scene between different views and tensions. The biggest disappointment would be to let this article use for propaganda purposes of involved sides, USA, EU and Russia... However, the residents of Crimea chose to join Russia, so it should be mentioned. It should also be mentioned how many turned out to vote and the exact result of the vote. — Preceding unsigned comment added by 85.10.37.112 (talk) 00:15, 17 March 2014 (UTC)

Such a designation has not been officially recognized yet by any major government or the United Nations. It is not in Wikipedia's charter to recognize the existence of nations. The views may be presented if they done so objectively, are relevant, and notable. Wikipedia should remain neutral. That is in Wikipedia's charter. Daydreamer302000 (talk) 10:31, 17 March 2014 (UTC)

As of now it has been recognized by Russia. It is a free state and should be treated as such. -- Cheesenibbles (talk) 02:17, 18 March 2014 (UTC)

Yes, it has, and by no one but Russia. So, no, international law leaves it under Ukraine. 71.171.89.90 (talk) 14:14, 18 March 2014 (UTC)

Yes and no. IMO this article is/ should be about the geographical area considered the Crimea, not the political lines in the sand (in the same way that the article on Kosovo is separate to the article on the Republic of Kosovo. We should however change the map to reflect that political it's no longer part of Ukraine and update the description accordingly. -- Richardeast (talk) 19:49, 17 March 2014 (UTC)
Review of Social Media Platforms

Facebook Groups & Pages: Activists

https://www.facebook.com/groups/223479324489867

https://www.facebook.com/EvromaidanSOS
Review of Social Media Platforms
Vkontakte & Odnoklassniki.ru (Facebook alike)

2014 EuroMaidan Revolution
Recent papers on Pro- and Anti-Maidan VK groups


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We Study Online Groups from a Network Perspective

1) Represent data as a network

Nodes = People

Edges /Ties = Relations (ex. Who is a friend with whom, Who replies to whom, etc.)

2) Apply Social Network Analysis (SNA)
Advantages of Using Social Network Analysis

• Reduce the large quantity of data into a more concise representation

• Makes it easier to understand what is going on in a group

Once the network is discovered, we can find out:

• How do people interact with each other,
• Who are the most/least active members of a group,
• Who is influential in a group,
• Who is susceptible to being influenced, etc…
Building Twitter Communication Network

Nodes = People

Ties = “Who retweeted/replied/mentioned whom”

Tie strength = The number of retweets, replies or mentions
Example: Twitter Communication Network about Ukraine

Ukraine police storm Kiev protest camp – live updates

At least 18 killed and more than 200 seriously injured in clashes in Ukrainian capital

in pictures: violent clashes in Kiev

## Tweeting about Ukraine in 3 languages

**Source:** Twitter Search API  
**Request Rate:** Hourly, up to 1000 tweets  
**Time frame:** Feb 18, 2014 – March 14, 2014

<table>
<thead>
<tr>
<th>Presumed Language</th>
<th>Україна</th>
<th>Україна</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td># Tweets</td>
<td>200,956</td>
<td>527,112</td>
<td>591,394</td>
</tr>
<tr>
<td># Unique Users</td>
<td>46,641</td>
<td>141,541</td>
<td>246,113</td>
</tr>
</tbody>
</table>
Netlytic – Data collection and analysis tool
http://netlytic.org
Україна 2014-02-18 - 2014-03-14

- Dataset Name: Україна
- Total Messages: 200,956
- Unique Posters: 46,641

Deadly clashes on Euromaidan in Kiev
Russia approved the use of military in Ukraine
Ukrainian interim Prime Minister of Ukraine visited the US
Dataset Name: Украина
Total Messages: 527,112
Unique Posters: 141,541
Twitter Communication Network
Top 10 Mentioned Users (mostly Russian news agencies & journalists)

**LIFENEWS** - @lifenews_ru
Informatsionnyy kanal LIFENEWS – pervyy po srochnym novostym! Eksklyuzivnyye video po samym glavnym temam dnya lifenews.ru

**ЄВРОМАЙДАН** - @euromaidan
#Євромайдан #Евромайдан #Euromaidan Ukrainian Revolution

**СРОЧНЫЕ НОВОСТИ (“Breaking News”)** - @molnia_me
First to know! Subscribe to the major topics of the day, photos, videos from the event!

**Голос России (“Golos Rossii”)** - @ruvr_ru
The official account radio "Voice of Russia" - exclusive interviews, analysis and expert commentary, Russia

**Alexey Venediktov** - @aavst
Chief editor of Ekho Moskvy radio station

**Fedor Shchepetov** - @ruredaktor
Freelance journalist, Moscow

**RT in Russian** Verified account - @RT_russian
RT news, Moscow

**Вести.ru** Verified account - @vesti_news
News TV program and television channels "Russia 1" and "Russia 24", Russia

**Maxim Ponomarev** - @maximcjk

**Ilya Varlamov** Verified account - @varlamov
Journalist, architect, photographer, founder of Urban Projects. Moscow
Україна (2014-02-18 - 2014-03-14) Cluster #1
Created with Netlytic.org

Name: radiosvoboda
Visibility: 
Node color: 

Centrality values:
page rank: 5.452
betweenness: 0.0
indegree: 43
outdegree: 0
total degree: 43

Connection between radiosvoboda and:

04atika
airel76
andrey_sobotayk
anaveragebitchville
antiterroristua
artymarykiv
bokerbiger
0cisven

Radіо Свобода
@radiosvoboda
Авторська сторінка Радіо Свобода: Новини/Аналітика/Фото/Відео
Київ - radiosvoboda.org

TWEETS: 55K
FOLLOWING: 171
FOLLOWERS: 76.8K

Follow
Ukraine 2014-02-18 - 2014-03-14

- Dataset Name: Ukraine
- Total Messages: 591,394
- Unique Posters: 246,113
Top 10 Mentioned Users (mostly news accounts)

Euromaidan PR - @EuromaidanPR
Official International Public Relations Secretariat for the Headquarters of National Resistance of the EuroMaidan, Kyiv, Ukraine

RT - @RT_com
RT (Russia Today) is a global news channel broadcasting from Moscow and Washington studios to over 100 countries around the globe.

Anonymous - @YourAnonNews
YourAnonNews supports digital and AFK activism.

BBC News (World) Verified - @BBCWorld

Agence France-Presse Verified - @AFP
News - and the stories behind the news - from AFP’s reporters around the world. France

East of Brussels - @EastOfBrussels
Personal Blog about the European Neighbourhood/ Association Policy (ENP/EAP)

KyivPost Verified - @KyivPost
The Kyiv Post is Ukraine’s leading English-language newspaper. #Kyiv, #Ukraine

Christopher Miller Verified - @ChristopherJM
Editor at leading English-language newspaper @KyivPost. Also freelance correspondent covering Ukraine. RPCV (Ukraine). Kyiv, Ukraine

Wall Street Journal Verified - @WSJ
In our 125th year, breaking news and features from the WSJ. New York, NY

Reuters Top News Verified - @Reuters
Top and breaking news, pictures, and videos from Reuters. Around the world
Topics over Time in Tweets that mentioned “Ukraine”
Created with Nattylic.org
Name: ac360
Visibility: Show node

Node color: 

Centrality values:
- Page rank: 3.805
- Closeness centrality: 0.0
- Betweenness: 0.0
- In-degree: 42
- Out-degree: 0
- Total degree: 42

Connection between ac360 and:
- 50mimi
- akzine
- bobcpower
- bradlape7
- b_vicini
- caulinframer
- duletihp6
- dwartelski
- jeannegriffin3
- johny5th
- julfull
- kfkj
- lillies
- liu030
- mcardlenyc
- mazkaz77
- mymirez
- nycart
- nyuleaffortune
- lauriespoon
- reality1st
- skian
- sumenn7063
- vepersmk
- viper1600
- xennanx
- yardale
- yvonneharrington
- nectarin
- natterjack
- nataliecb
- natterjack
- nathanclarke
Summary: Social Media Use during the 2014 EuroMaidan Revolution

• First “Social Media” Revolution in Ukraine
  • 2004 “Orange Revolution” (Pre-social media)
    • Internet penetration in Ukraine ~12% (Lysenko & Desouza, 2010)
    • Facebook was founded in 2004, Youtube-2005, Twitter-2006, Instagram-2010

• Use of multiple social media platforms
  • Prior social media “revolutions” primarily focused on a single platform: Facebook revolution in Tunisia (2010/2011); Twitter revolution in Iran (2009/2010)
  • Content is often duplicated across multiple platforms

• Social media used by both Pro & Anti Maidan activists
  • Pro-Western vs Pro-Russian groups

• Twitter use by news agencies, activist groups, governments, elective officials and politicians

• Twitter use for “locals” vs. for Westerners (in English)
Who is Tweeting about Ukraine in 3 languages

Most mentioned Twitter Accounts in public tweets that mentioned:

Source: Twitter Search API
Request Rate: Hourly, up to 1000 tweets
Time frame: Feb 18, 2014 – March 14, 2014
Study Implications:
Can we predict a successful social movement?
Can we predict movement’s longevity?

#OccupyGezi Supporters in Victoria, BC

#OccupyGezi: Gezi Parki Protest, Turkey (2013)
Photo credit: Karl Schönswetter
Future Work

• Explore the roles of isolates
  – lurkers, spammers, trolls, or fake accounts?
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