Trust and Privacy in Anonymous Online Communities

Outline

- The meaning of Retweet
- Trusting an anonymous informant
- The Mexican Drug War
- Anonymous “tuitteros” and Citizen Reporters
- “Big Data” analysis of Narco-tweets
- Matching the Virtual with the Real World
- The Rise and the Fall of an Anonymous Citizen Reporter

To Retweet means to ...

- Why do you Retweet (verbatim)?
- Would you Retweet something you disagree with?
- Would you Retweet a political message you disagree with?
- Why?
Anonymity in Social Media

- Would you follow the advice of an anonymous user?
- ... if your safety depended on his advice?
- ... if his advice has been Retweeted?
- ... by your trusted friends?

Why?

The Mexican Drug War

- ~60,000 deaths
- ~230,000 displaced

- Crises part of everyday life
Typical Emergency Response

Information blackout

"Fearing for their lives and the safety of their families, journalists are adhering to a near-complete news blackout, under strict orders of drug smuggling organizations and their enforcers, who dictate via daily telephone calls, emails and news releases what can and cannot be printed or aired."

"The news blackout extends to government officials. In Nuevo Laredo, the mayor mysteriously disappears for days and refuses to discuss drug violence. The military general who presides over the soldiers patrolling the city does not hold news conferences, issue statements or answer questions from the media."

Internet Users¹
17% (yr. 2000) → 34% (yr. 2010)
34 million users

Social Media¹
61% of Internet users

Twitter²
20% of SM users
5th largest country
Increased Violence
Weakened Institutions
Social Media Adoption

Anonymous “twitteros”

Caution on Lazaro Cardenas Avenue around Del Paseo, people report a recent risky situation
#MtyFollow #RiesgoMty 18:35

Monterrey
Population: ~4,000,000

Reynosa
Population: ~600,000

Saltillo
Population: ~800,000

Veracruz
Population: ~700,000
### How many tweets?

**Aug 2010 → Nov 2011**

609,744 tweets

<table>
<thead>
<tr>
<th>City</th>
<th>Hashtag</th>
<th>Tweets</th>
<th>Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monterrey</td>
<td>#mtyfollow</td>
<td>211,278</td>
<td>27,170</td>
</tr>
<tr>
<td>Reynosa</td>
<td>#reynosafollow</td>
<td>155,786</td>
<td>9,043</td>
</tr>
<tr>
<td>Saltillo</td>
<td>#saltillo</td>
<td>153,879</td>
<td>16,347</td>
</tr>
<tr>
<td>Veracruz</td>
<td>#verfollow</td>
<td>87,801</td>
<td>12,522</td>
</tr>
</tbody>
</table>

### What kind of tweets?

<table>
<thead>
<tr>
<th>City</th>
<th>Mentions</th>
<th>Retweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>#mtyfollow</td>
<td>20.5%</td>
<td>40.1%</td>
</tr>
<tr>
<td>#reynosafollow</td>
<td>24.8%</td>
<td>15.9%</td>
</tr>
<tr>
<td>#saltillo</td>
<td>19.9%</td>
<td>29.9%</td>
</tr>
<tr>
<td>#verfollow</td>
<td>22.5%</td>
<td>35.3%</td>
</tr>
</tbody>
</table>

Disseminating > Interacting

### How often?

- **#reynosafollow**
  - Daily median: 249

- **#mtyfollow**
  - Daily median: 340

- **#saltillo**
  - Daily median: 219

- **#verfollow**
  - Daily median: 494

### What are people tweeting?

@AnaRent @TrackMty Balacera Monterrey Reportan RiesgoMty

@EJpmVideoMty @DesDeLaPasta @surrealismo @sensaciones dunas balacera

©2013 CIAC U. Guadalajara
What are people tweeting?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Types of Words</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>places</td>
<td>zona, san, sur, altura,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>garza, col., av.</td>
</tr>
<tr>
<td>2</td>
<td>shootings</td>
<td>#balacera, balacera,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>balazos, detonaciones</td>
</tr>
<tr>
<td>3</td>
<td>report</td>
<td>reportan</td>
</tr>
<tr>
<td>4</td>
<td>people</td>
<td>gente, alguien</td>
</tr>
</tbody>
</table>

Who is tweeting?

Curators

Average citizens

Interviews [M-H 2012]

“Angela”

Followers: 25K
Tweets: 35K
Hours/day: 15
Age: early 20’s

“Claudia”

Followers: 30K
Tweets: 60K
Hours/day: “many”
Age: ?

(in Spanish)
Initial Data Collection

- ~260,000 Tweets, in Spanish collected by Andrés Monroy-Hernandez
- ~30,000 users, mostly anonymous/pseudonymous
- ~300 days, Nov. 2010 – Aug. 2011
- Based on #MTYfollow hashtag
- More data collected on demand from Twitter archives by Eni Mustafaraj

Employ “big data” statistical methods & visualization

Color-coding users according to tweet volume

Visualizing Mutual-Follows

Users with more than 75 mutual follows Tightly connected

Visualizing Retweet Network

Major curator "@GodFather"

Size: in-degree (PageRank)
Timelines for @GodFather

Looking closer: Mentioning vs Retweeting

Big Data Stuck...

- What is going on on the ground?
- Who is, really, @Godfather?
- What are they talking about him/her?

- How do you find out?
- Who do you ask?
- How do you trust them?
- Why should they trust you?
Interview of a curator

- Attended the talk via Twitter
- Connected with audience
- willing to talk under anonymity
- Young woman, idealist, wanting to help
- Recruited by @trackMTY to be part of MexicoNuevaRevolucion
- Worried since what “happened to @trackMTY”
- Points to an important point missed by “big data analysis”
Introducing @trackMTY

- Young woman, idealist, wanting to help
- Pseudonym: Melissa Lotzer
- Started the MNR in March 2010
- Believes she started #MTYfollow
- Credited for helping lift the siege of Comales, April 2010
- Attacked by trolls several times (@trackmty with rn instead of m, @MelissaLotzer with one s instead of ss, …)

The MNR movement

Blog del Narco on Comales siege March-April 2011

- A sequence of deadly events in Monterrey and nearby towns
- Mayors calling for “eagles” to take on “hawks”
- She is organizing the “aquilasMTY” movement
- Accused that she is working for the Zetas
- Slow to respond, loses credibility with followers
- Her anonymity is compromised in August 2011, along with photos, friends, home address…
- Re-emerges months later, starts building up her reputation slowly
The "aguilasMTY" movement

Why I do what I do

I’m completely sure that trackmty was the reason why many people started using twitter. I receive comments daily by followers that are opening a twitter account to a family member just to follow me [...] They tell me: please take care of my mom, she will be reading your tweets, she will not be reporting cases because she doesn’t know how to use a blackberry or so. Many similar cases like that happen every day.