

Image based Misinformation on WhatsApp

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WhatsApp

- Peer to peer messaging platform
- 1.5 Billion monthly active users
- Multimedia heavy – roughly 50% is images and video
- End-to-end encrypted

Image based misinformation

- Much more powerful!
- Almost no large scale studies.
- Closed platforms are important!
 - Sense of intimacy and trust

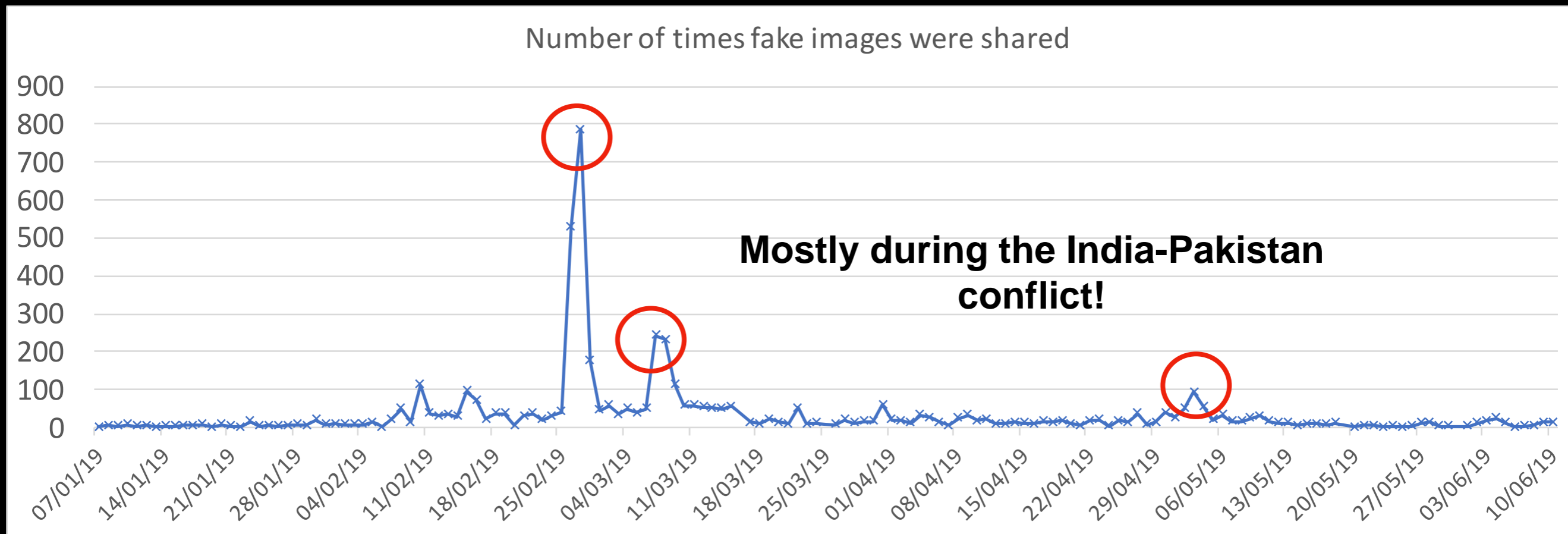
Dataset

- WhatsApp
 - Over 6,000 public political groups from India
 - ~2 million images
 - Over 6 months starting December 2018

Fact checked images

- Fact checking websites
 - ~450 images
- Manual annotation
 - 3 journalists
 - ~400 images

When were these images shared?



Primary Categories

- Images taken out of context (~30%)

Out of context images



“Cheap fakes”



Primary Categories

- Images taken out of context (~30%)
- **Photoshopping (~20%)**

Photoshopped images



Primary Categories

- Images taken out of context (~30%)
- Photoshopping (~20%)
- **False statistics and quotes (~10%)**


Fake Quotes/Stats




"I have seen many Leaders failing to perform under pressure, but PM Narendra Modi is perhaps the only leader I've come across who's unaffected under pressure."

BILL GATES
BUSINESS MAN











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DECLARES CONGRESS AS ONE OF THE MOST CORRUPT POLITICAL PARTIES IN THE WORLD



Top 10 corrupt political party in the world 2017

1.  Pakistan Muslim League Nawaz, PML(N)- Pakistan
2.  National Resistance Movement - Uganda
3.  Progressive Action Party - Cuba
4.  **INDIAN NATIONAL CONGRESS - INDIA**
5.  Vietnam's Communist party - Vietnam
6.  Kuomintang - China
7.  Nationalist Fascist Party - Italy
8.  Nazi Party - Germany
9.  Communist Party of China- China
10.  Communist Party of the Soviet Union - Russia

Source: BBC Survey

Primary Categories

- Images taken out of context (~30%)
- Photoshopping (~20%)
- False statistics and quotes (~10%)
- Other

Misinformation topics

- Primarily political
 - Memes/Nationalism/Religion
- Rumors/Urban legends
- Feel good stuff
- **Health (roughly 15%!)**

Why is this important?

- Automated fact checking
 - Out of context images ✓
 - Photoshopped ✓
 - Fake quotes/stats ✗

Why are they sharing these?

- Caring about others
 - Low cost of forwarding (much easier than fact checking)
- Lack of awareness
 - Personal belief in these networks
- Malicious intent? (hard to identify)
 - Prejudice and ideology rather than out of ignorance or digital illiteracy.

What could be done?

- Only central authorities can make a difference!
- Need to have a common repository

Summary

- Categorized image misinformation
- Public groups
- The same categorization generalizes across countries and platforms

Thank you!

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