Can Semantics Help with Rumour Detection in Social Media

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Phemes & social media

- **Memes** are thematic motifs that spread through social media in ways analogous to genetic traits

- We coined the term **phemes** to add truthfulness and deception to the mix

- Named after ancient Greek Pheme, "*embodiment of fame and notoriety, her favour being notability, her wrath being scandalous rumours*"

http://en.wikipedia.org/wiki/Pheme
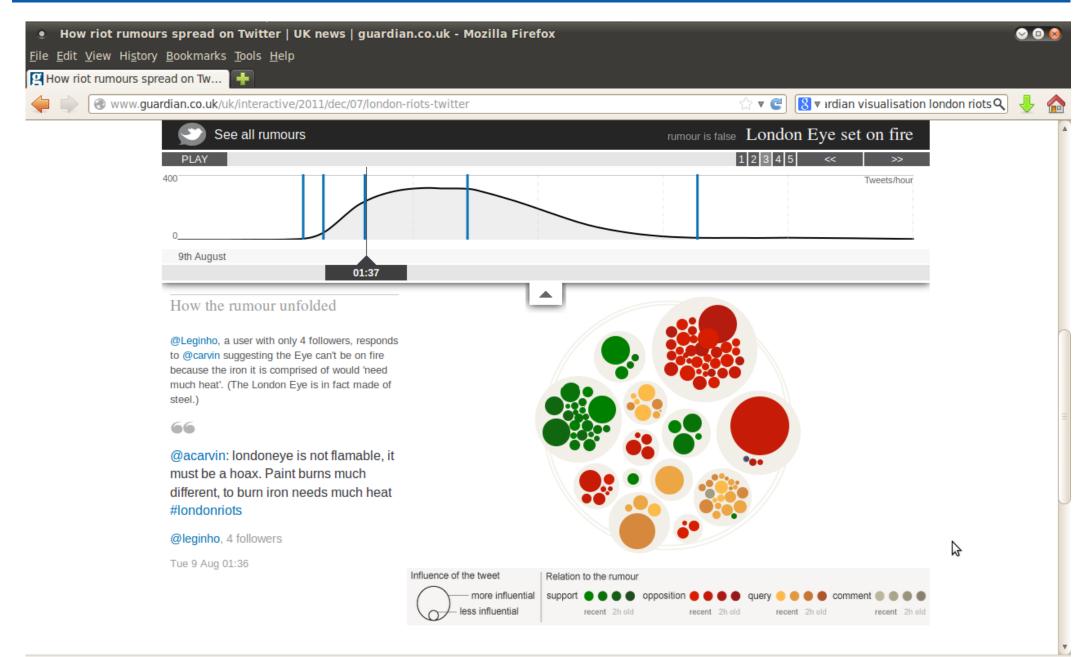
Social Media is Rife with Phemes

Social Media is Rife with Phemes (2)

Rumour analysis: Now Mostly Manual

- **Rumours are challenging**
  - Some rumours could take days, weeks or even months to die out
  - Ill-meaning humans can currently outsmart computers (and humans) and appear genuine

WE ARE INVESTIGATING...

- Ontologies for modelling phemes

- Use a priori knowledge (LOD) and reasoning to detect contradictions

- Model pheme spread across media, social networks, and time

- Pheme visualisation: media maps, impact maps, geographical maps

Application areas

- ## Open-source social intelligence tools for <u>data journalism</u>

  - Involves journalists from SwissInfo.ch, the Guardian, New York Times, and other media

- ## Improving healthcare

  - What health-related rumours are discussed in patient-clinician consultations
  - Preventative medical advice, e.g. warn patients not to trust certain rumours, when researching their disease online

Acknowledgement