Visual Affect in Solidarity Hashtags on Twitter: Toward a New Methodology

Author(s)
Geboers, Marloes; Van De Wiele, Chad

Publication date
2019

Document Version
Final published version

Visual Affect in Solidarity Hashtags on Twitter:

Toward a New Methodology

Marloes Geboers
Amsterdam U of Applied Sciences
PhD Candidate
Digital Methods Initiative, U of Amsterdam
@Marloes0910

Chad Van De Wiele
University of Illinois at Chicago
PhD Student, NSF-IGERT Fellow
Department of Communication
@chadvdw

EXISTING RESEARCH INTO LARGE N OF IMAGES

METHOD:

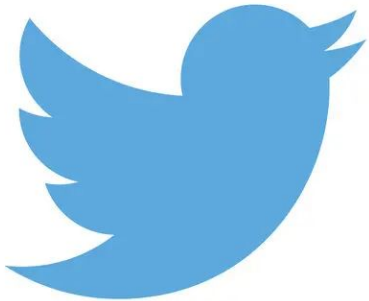
Although cultural analytics (Rose, 2016; Yamaoka, Manovich, Douglass & Kuester, 2011), provides an automated, computer-based process through which patterns can be detected in large numbers of images, this methodology does not take into account the circulation and **audiencing** (Rose, 2016) of such images.

AFFECT:

The latter (circulation and audiencing) are crucial to gaining knowledge on visuals and their affective potentiality in **networked spaces**, as patterns in resonance and visibility of certain images can reveal how affective publics (Papacharissi, 2015) bond.

DIGITAL OBJECTS

By studying how hashtag publics (Bruns & Burgess, 2015) react to images through digitally-networked behaviors (e.g., tagging, replying, liking, retweeting), we can detect certain visual objects and contexts that convey affect in particular discursive spaces.



STUDYING VISUAL SOCIAL MEDIA > MOVING AWAY FROM POSITIVE CONTENT

Visual social media are: “not necessarily a set of selfies, food porn, memes, and GIFs, marked in narcissism or frivolousness. They highlight affect, political views, reactions, key information, and scenes of importance” (Highfield and Leaver, 2016, p. 48)

RESEARCH QUESTIONS

RQ1: What visual objects characterize highly resonating images across three Twitter hashtag spaces, all relating to the Syrian war?

RQ2: How are highly resonating images contextualized across hashtag spaces?

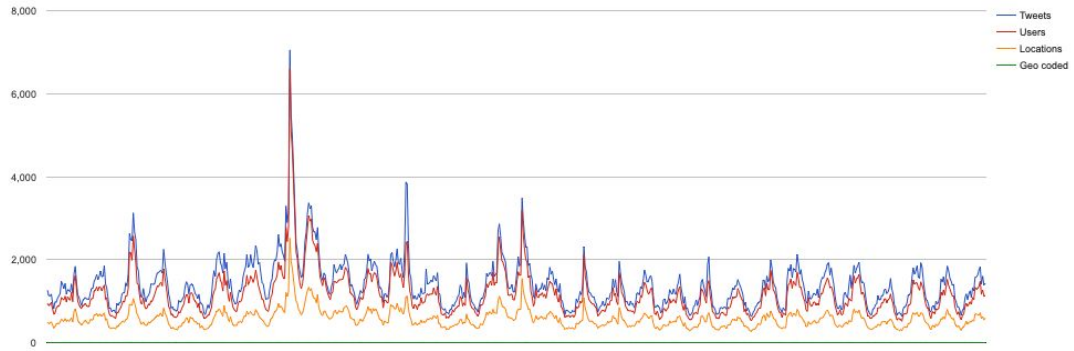
RQ3: To what extent is resonance of image and context a signifier of visual affect within communities present in these hashtag spaces?

RQ4: How do hashtags organize images and their circulation within Twitter?

RESEARCH PROTOCOL

Data was collected through the Twitter Capture and Analysis Tool developed by the Digital Methods Initiative (DMI-TCAT; Borra & Rieder, 2014), using a targeted query of relevant terms and hashtags surrounding the Syrian war.

Based on spikes in Twitter user activity (November 18 - December 18, 2018)



HASHTAG QUERIES

Hashtag groups were selected based on frequency and co-occurrences, and grouped based on Meraz's (2018) inductive categorization of hashtags.

1. **Topical #** (war, humanrights, politics, protests, stopwar)

2. **Persons and geography #** (assad, iran, trump)

3. **Sentiment #** (eyesonidlib)

PRELIMINARY FINDINGS

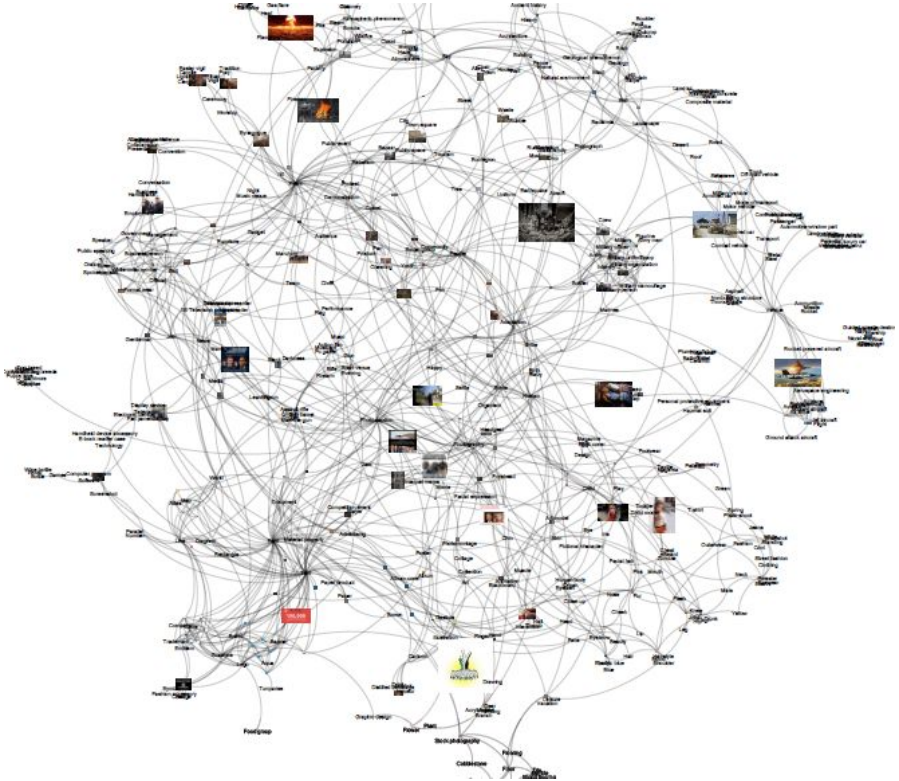
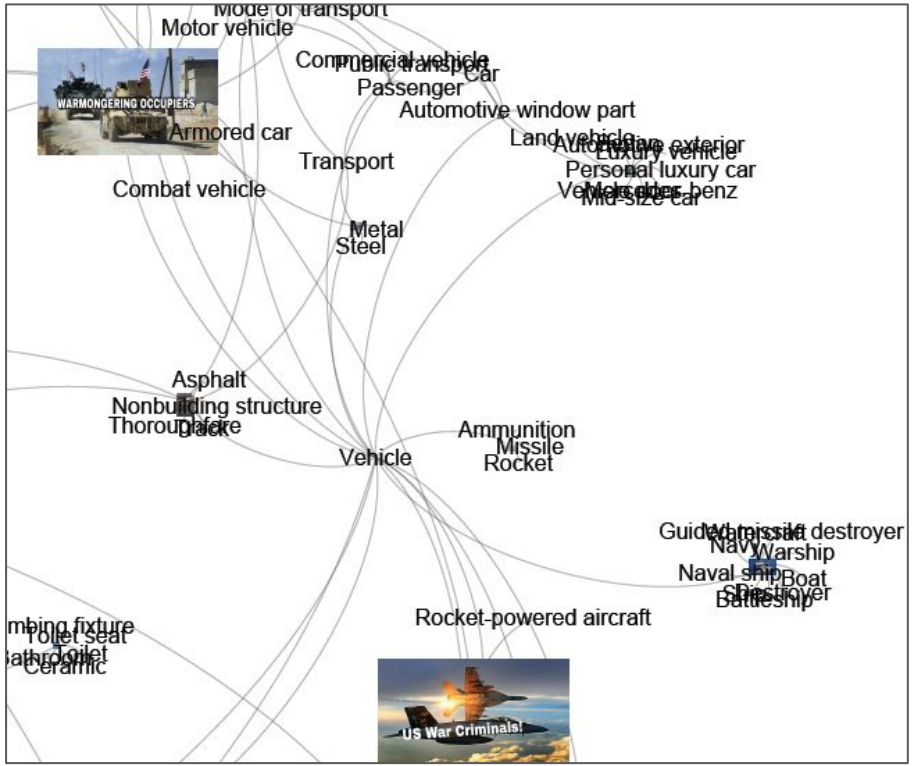


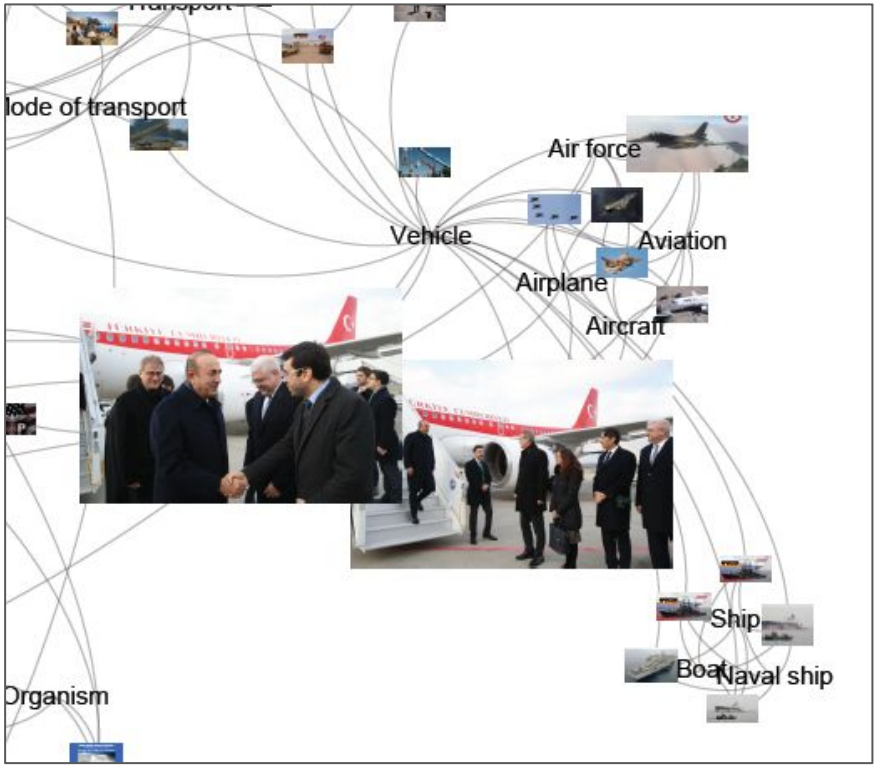
Image-Label Networks:

The *Google Cloud Vision API* was used to automate the annotation of networked visual objects.

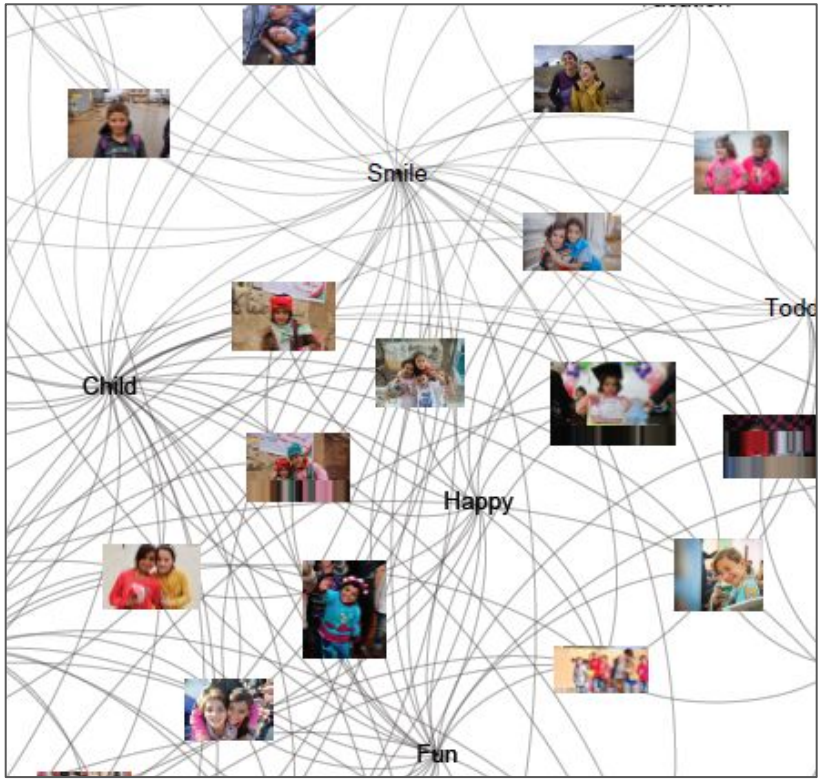
Using the plugin tool, Memespector:
(https://github.com/amintz/memespector-python)

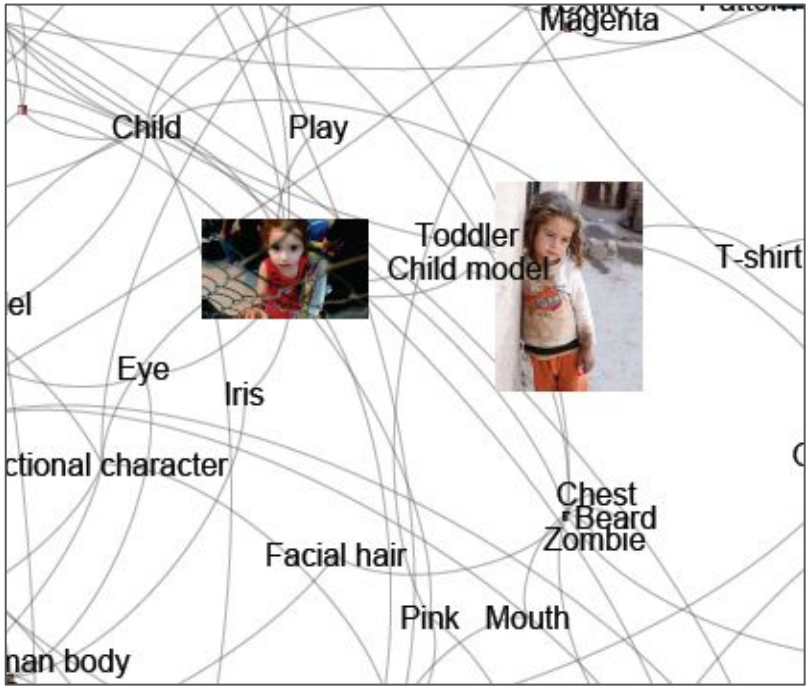
VEHICLES: TOPICAL # AND PEOPLE #





CHILDREN SENTIMENT # AND TOPICAL #





WHY DO VISUAL ANALYSIS THROUGH COMPUTATIONAL METHODS?

Is the 'only' advantage being able to analyze large N of images?

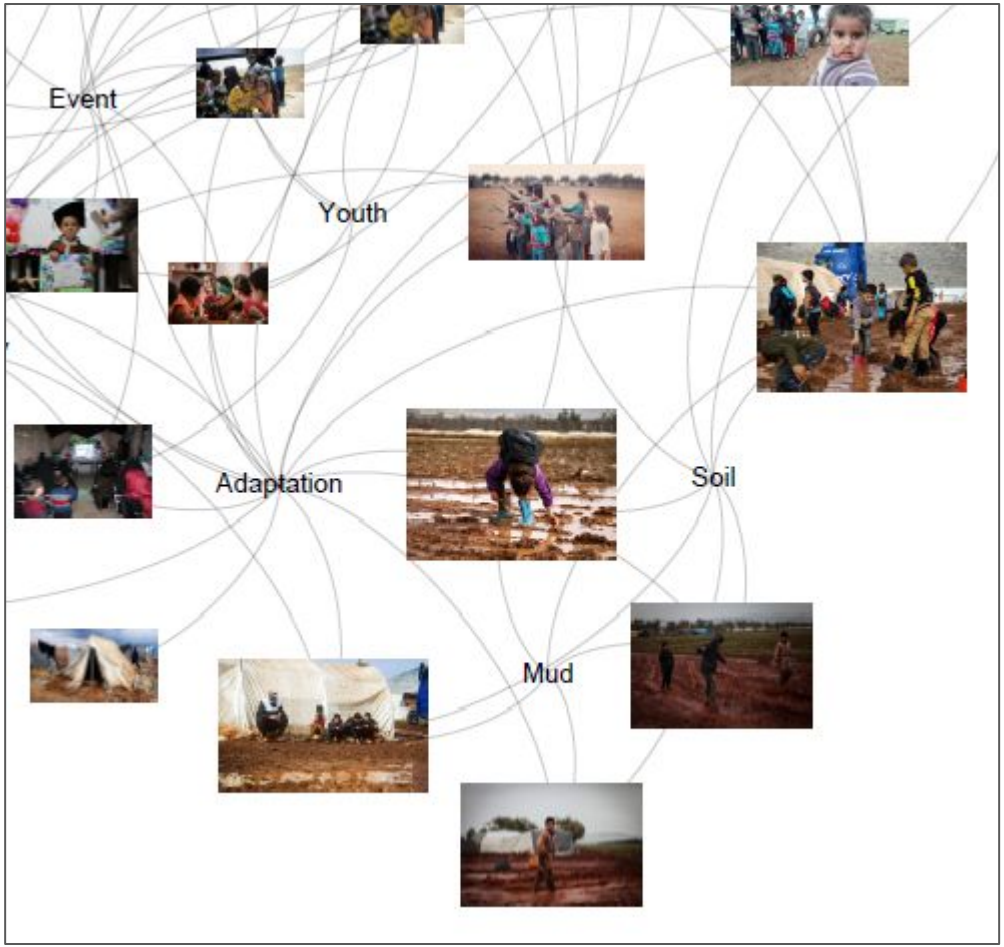
This approach makes visual dynamics of hashtag spaces readable through clustering by digital objects (i.e., similar images).

Essentially creates a reverse similar image search that may be applied to social media platforms.

In combining computational methods with network analysis we argue that we may **make the computational more qualitative** by:

- *Making visible the strength of relations between visual objects through the clustering of similar images.*

- *Detecting objects and their affiliated terms that co-occur.*



CONCLUSIONS (SO FAR)

The proposed methodology/protocol proves to be useful when wanting to gain insight in the intentional and strategic visual tactics of protagonist and antagonist actors that are influential in certain hashtag networks.

Through their contextualization and the resonance of tweets, we might lay bare what visual content within tweets tend to have affective potentialities.

IMPLICATIONS AND OPPORTUNITIES

On the performance of the Google API and grasping the expressive content of images:

Are there biases based on how the machine is trained?

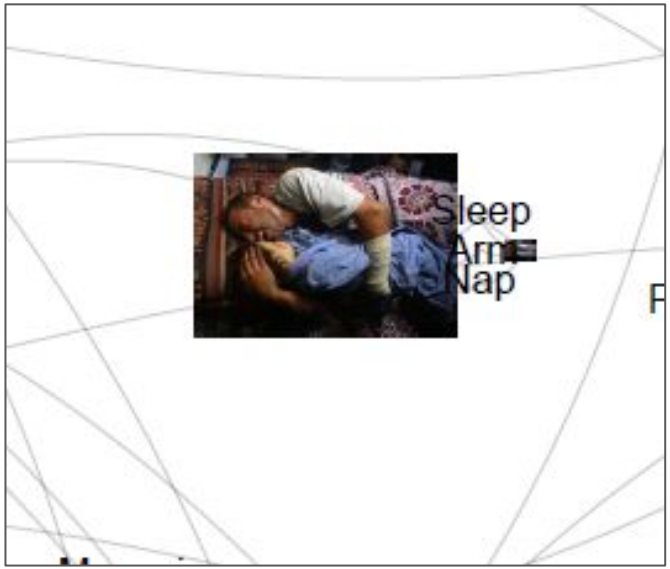
Through which forms of expression is affect yielded: motifs, style, aesthetics, etc.?

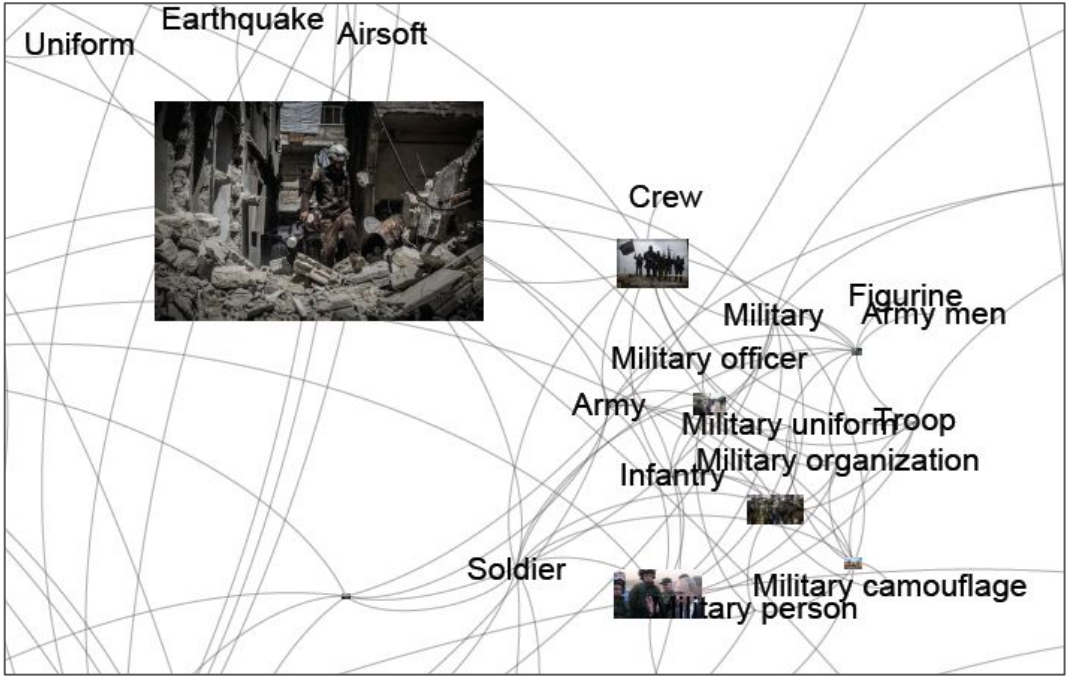
Within digitally-networked (affective) spaces?

Why and under what conditions does content resonate?

How does this change over time?

ON BIASES


Sleep
Nap


Uniform
Earthquake
Airsoft
Crew
Figurine
Military
Army men
Military officer
Army
Military uniform
Troop
Military organization
Infantry
Soldier
Military camouflage
Military person

EARLY FINDINGS FOR CONTEXTUALIZATION

Image-Text Networks:

Using *WordIJ* (Danowski, 2013), image-text networks were constructed to reveal the networked contextualization of digital objects.

THANK YOU

CONTACT:

Marloes Geboers
Amsterdam University of Applied Sciences
PhD Candidate, Digital Methods Initiative University of Amsterdam
m.a.geboers@hva.nl

Chad Van de Wiele
University of Illinois at Chicago
PhD Student, NSF-IGERT Fellow
Department of Communication
cvande25@uic.edu