

# Extractivism: Extracting & Visualising Activist Events

## Goal

Support organisational scientists studying activist organisations through extracting, aggregating, and visualising the events they participate in.

## Why

Activists could have a significant role in shaping social views and opinions, e.g. Occupy, Arab Spring.

## Problem

Incomplete, incorrect, uncontextualized, and biased information.

## Solution

Extract event mentions from different news sources that could complement, contradict, or verify each other. Visualize the aggregated results to support analysis and discovery.

## Who

**Computer Science:**

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**Organization Sciences:**

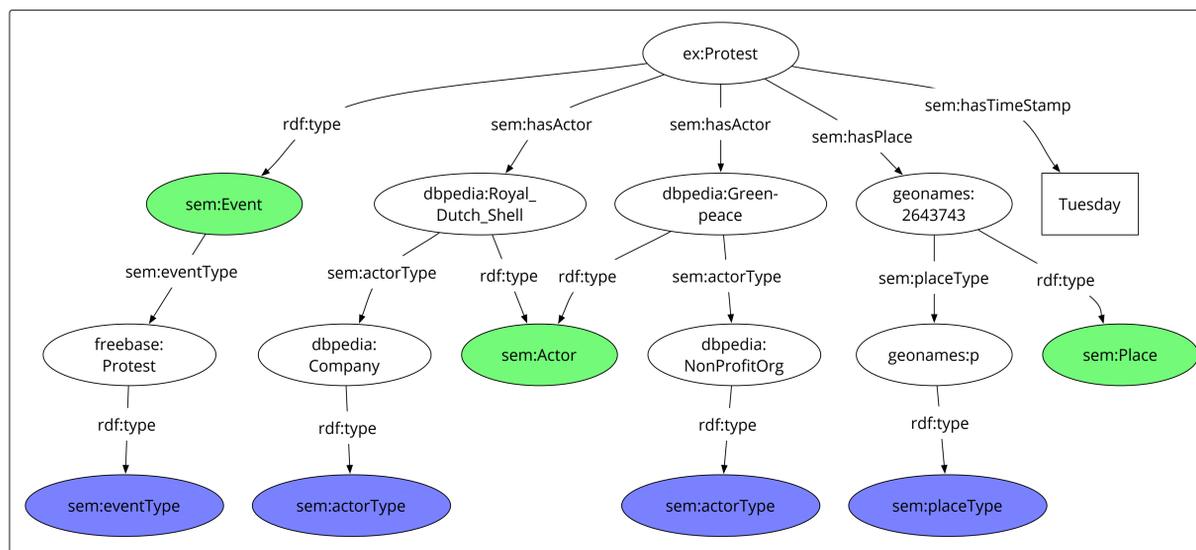
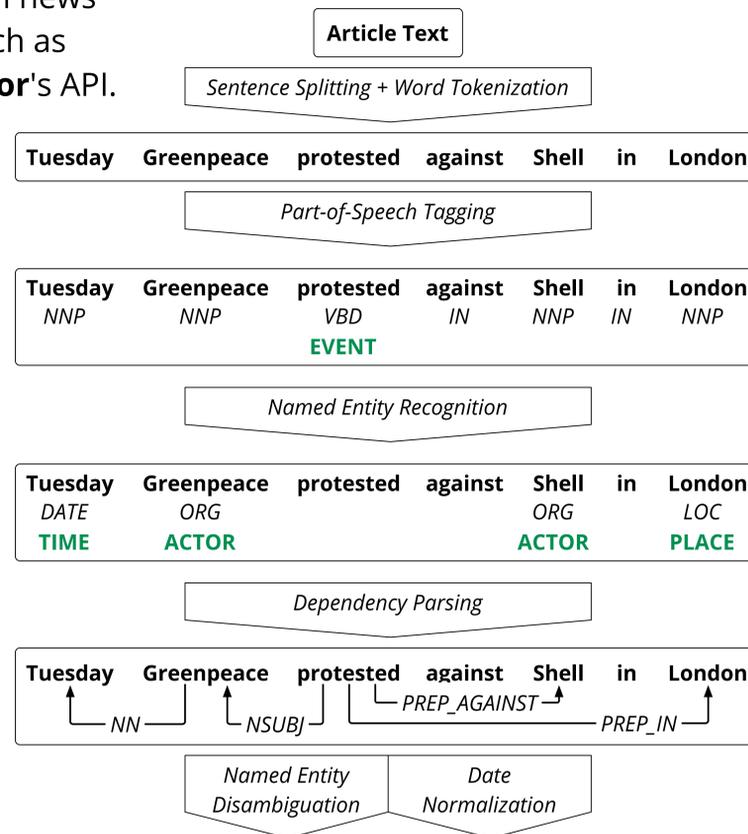
Maxine Kruijt, Frank de Bakker, Iina Hellsten

[www.mona-project.org](http://www.mona-project.org)

## Extraction Pipeline

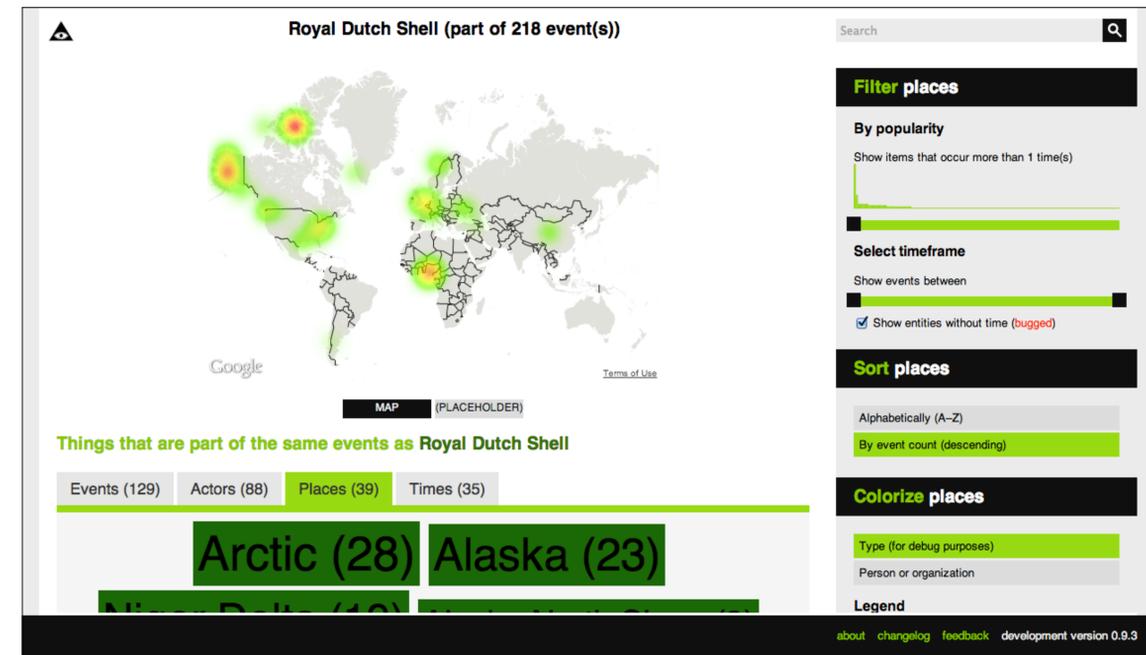
Our pipeline extracts events from news articles using NLP technology such as **Stanford CoreNLP** and **TextRazor's** API.

- 1 We split the article into sentences and words.
- 2 We identify verbs - these are the **Events**.
- 3 Any named entities become **Actors, Places, or Times** depending on their type.
- 4 We parse grammatical dependencies to relate Events to Actors, Places, and Times.



- 5 Together, the verb and its dependent named entities form an event as shown in the graph above. We use the **Simple Event Model (SEM)** as a schema.
- 6 The process is repeated for every article and sentence in each article. The resulting events are exported as RDF or JSON for further usage in visual analytics applications.

## Visual Analytics



Geographical overviews help answer questions like: What is the intensity of activist activity in certain areas? What is the chronological spread from one area to another?



Event type clouds help answer questions like: What is the current state of a conflict that activists are involved in? Are there primarily things being said, or are more concrete actions undertaken?