

# BREAKING THROUGH THE BUBBLE

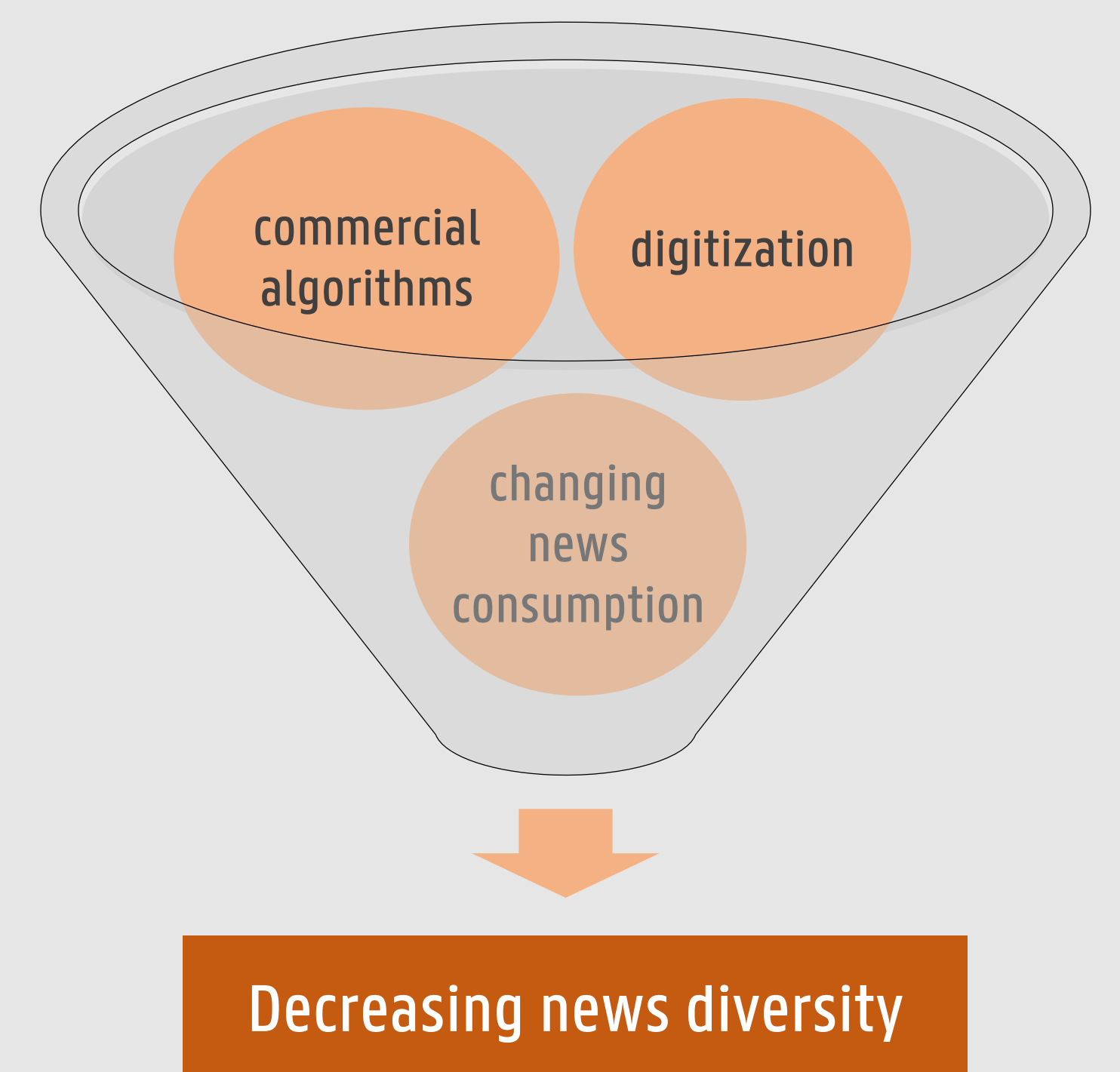
## #NEWSDNA: NEWS PERSONALIZATION THROUGH DIVERSITY

### News recommendation algorithms are not neutral

- News outlets are exploring **algorithmic news recommendation**
- These algorithms are based on **commercial logic**
- This means the public is exposed to **less diverse ideas and opinions** (e.g. the filter bubble effect)

### #NewsDNA

- Aims to develop a **new kind of recommendation algorithm** that is driven by **diversity**
- An interdisciplinary GOA research project over four faculties



imec-mict-UGent & Center for Journalism Studies, dept. ComSci

### What is news diversity?

- Open or reflective diversity?
- Which diversity dimensions to analyse?
- Analyse the production, consumption or distribution side?



Law & Technology

### A right to diverse information?

- Should governments play a role in ensuring access to diverse news sources?
- Opportunities to foster **"diversity-sensitive design"**



Language and Translation Technology Group

### What's in the news today?

- Deep semantic analysis of news articles
- Going beyond traditional content models
- Identifying and extracting **content dimensions** to measure diversity



Information Technology

### How to put theory into practice?

- Traditional recommender systems are based on **item similarity and popularity**
- Design and deploy a novel algorithm using various content dimensions

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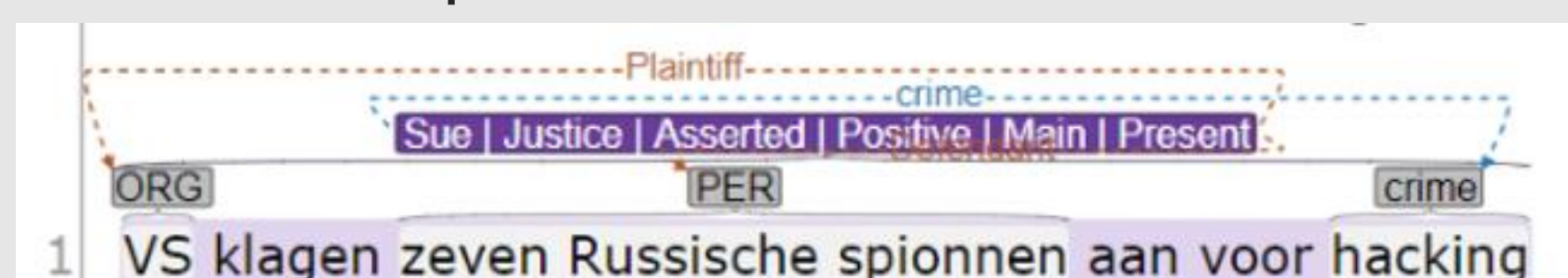
## Automatically identifying and extracting News Events

### Traditional content analysis = shallow

- Based on a variety of (conflicting) metadata
- News topics (e.g. "business", "politics", "Brexit") give an idea of the content but nothing specific
- We try a more **fine-grained approach**

### Our current focus = News Events

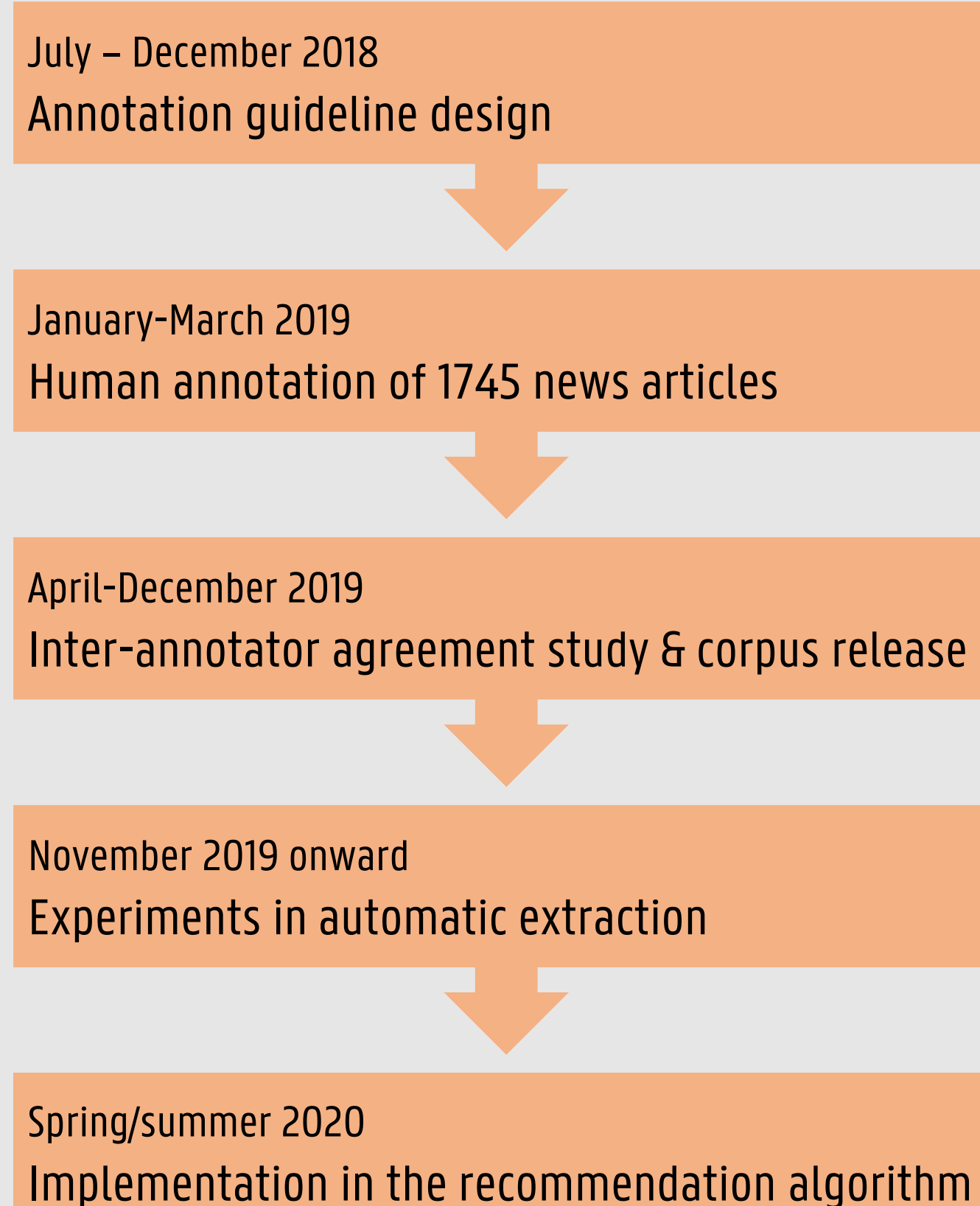
- Exact descriptions of events mentioned in the news



- Goal: automatically extract events from news text
- Should lead to more **semantic article clustering**

### Future = incorporate tone of voice

### Process



### Project consortium

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