

We use qualitative data analysis and deep learning to study protest videos from Eastern Europe.

Kaleidoscopic Patterns of Protest: Qualifying and Quantifying Visual and Textual (Self-)Representations in Eastern European Protest Cultures

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1. Introduction

- Prior to Russia's invasion in Ukraine: protest movements on the rise in Eastern Europe
- Protests as multimodal and performative communicative acts (visual symbols, slogans) are used by protesters to motivate protests and by governments to delegitimize them.
- The mediated (self-)representations form an integral part of the protests themselves.

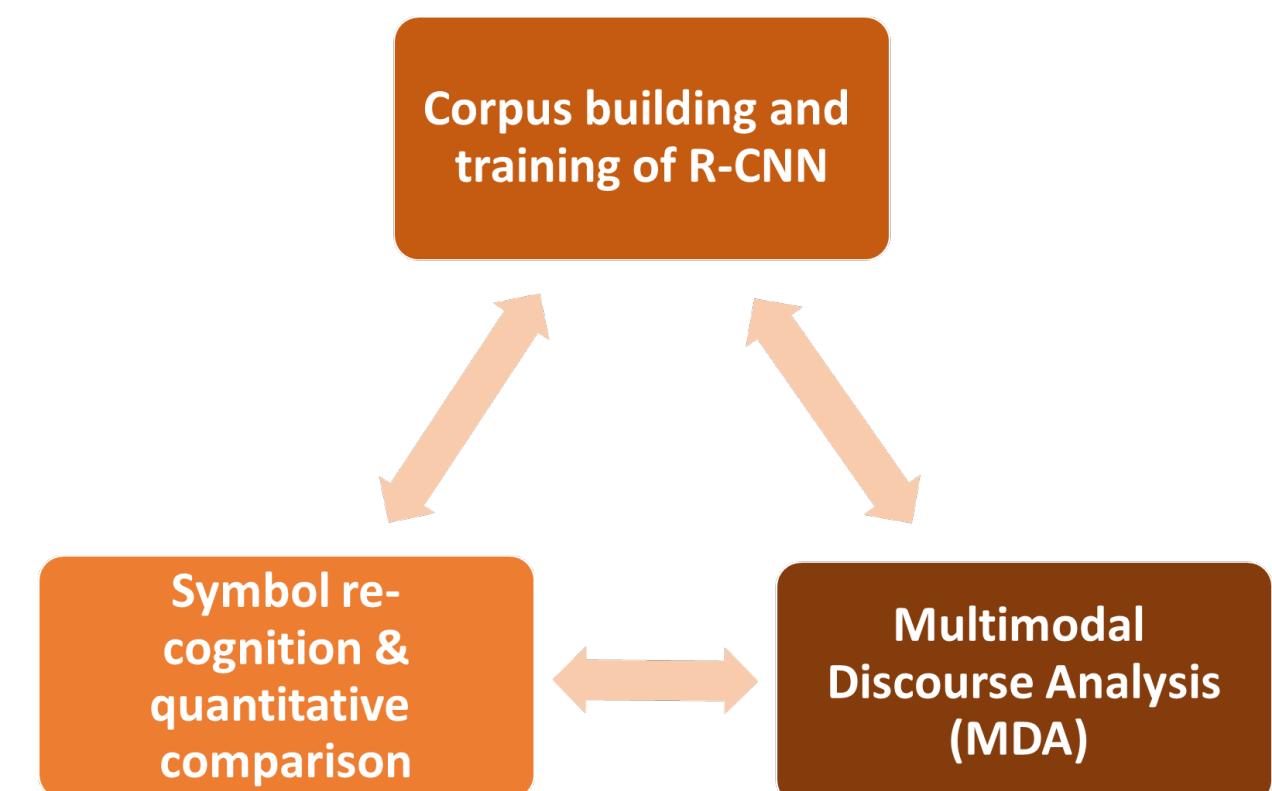
2. Corpus

- YouTube videos and social media (self-representations)
- Television (state representations)
- Documentaries (artistic representations)

3. Research Questions

- Which patterns shape the visual and textual (self-)representations of protest?
- What are the similarities and differences across countries, media resources and topics?
- How are symbols of protest re-contextualized in different media?

4. Methods



- Use deep learning to identify specific symbols
- Analyze statistical differences between official and user-generated content, traditional and new media, different countries
- Select images and videos for qualitative multimodal discourse analysis (MDA)

5. Expected Outcomes

- Dichotomous representations of protest in official and unofficial sources
- YouTube videos and documentaries: diverse and polyphonic representation
- Reuse of images in different contexts
- Methodology: best-practice example for analysing a large visual media corpus

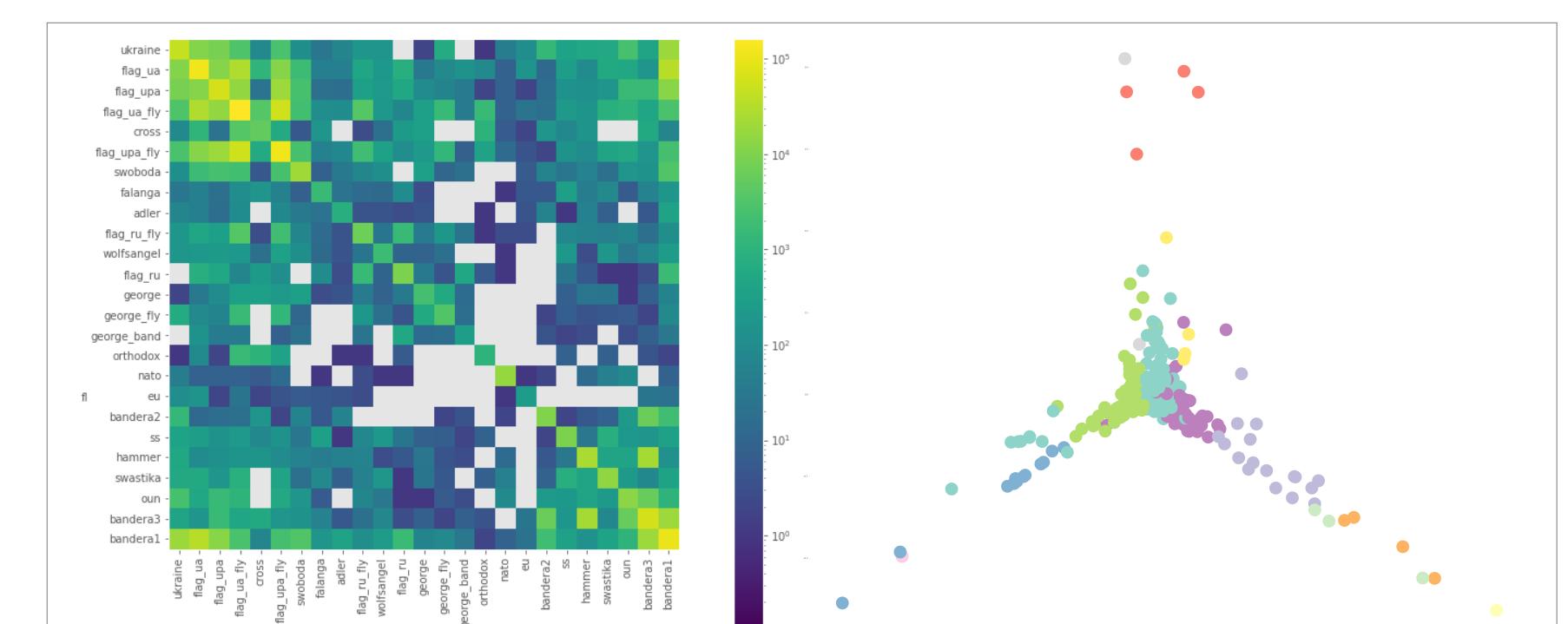
Automatically Annotated Video Frame



Per-Category Segm AP of Symbol Recognition

Category	mAP	Category	mAP	Category	mAP
bandera 1	52.962	bandera 2	75.438	bandera 3	83.650
crest bg	83.072	crest by	84.087	crest by opp	71.723
crest me	72.738	crest pl	88.285	crest rs	76.234
crest ua	41.392	cross	35.618	cross orthodox	38.685
cross serbian	70.247	eu	65.126	falanga	49.673
flag bg hanging	58.628	flag bg waving	68.266	flag by hanging	75.524
flag bg waving	80.001	flag by opp waving	30.986	flag by opp waving	37.250
flag me hanging	74.230	flag me waving	94.675	flag rs hanging	69.894
flag rs waving	69.869	flag ru hanging	40.152	flag ru waving	64.079
flag soc hanging	73.437	flag soc waving	84.485	flag ua hanging	43.399
flag ua waving	45.136	flag upa hanging	11.081	flag upa waving	35.334
george hanging	38.060	george waving	56.608	george folded	40.598
hammer sickle	31.685	nato	85.251	oun	56.942
ss rune	27.394	swastika	33.306	swoboda	60.679
three fingers	45.443	wolfsangel	57.564		

Co-Occurrences and Isomap



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