Migration Reframed? Multilingual analysis on the stance shift in Europe during the Ukrainian crisis.

Sergej Wildemann L3S Research Center Germany Erick Elejalde L3S Research Center Germany

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Abstract

The war in Ukraine created a large wave of refugees leaving the country. Four months after the 2022 invasion, the UN Refugee Agency (UNHCR) reported 5.1 million¹ Ukrainian refugees [1]. By September 2022, more than 4M people have registered for protection schemes in European countries, especially in Poland with more than 1.3M and Germany with more than 700k persons². This makes the situation in sheer numbers comparable with the European refugee crisis of 2015-2018.

The conflict in Ukraine and the resulting migration received much attention in mass and social media. At the same time, there seems to be a more positive framing of migration, specifically toward refugees from Ukraine. Before the escalation of the conflict, media coverage and government policies on migration mainly focused on other groups coming from conflict zones, such as Syria, Ethiopia, or Afghanistan. However, they tend to be addressed in the context of economic and security threats [6, 3]. Attitudes towards migration are influenced by information from the press [8, 5] as well as by political agendas in the respective European countries. Media analysis has shown frequent negative terminology such as 'illegal', 'violence', 'terrorist' used in this context [7, 4, 3]. Moreover, news reports have linked certain crimes or socioeconomic issues (e.g., the rise of unemployment) to immigration [14, 2]. In contrast, in 2022, the humanitarian crisis at the EU border resulting from Ukrainians fleeing the war prompted a massive reaction of support by the western media and a great display of solidarity from the European public in particular. Several differences might have triggered this change, including (a) the intensive reporting about the war situation raises empathy (there was also a more "welcoming" culture during the war in Syria) and (b) the demographic difference in the migrant population (about 90% of the refugees from Ukraine are female²). Another significant difference seems to be (c) the cultural proximity of Ukraine to the EU compared to refugees from the Middle East [12].

We investigate whether the impression of a stance shift towards migration is substantiated by how the topic is reflected in online news and social media, thus linking the representation of the issue on the Web to its perception in society. The abundance of audience interactions on Twitter with the news provides a precious source of data for understanding users' engagement patterns and evolving opinions on sensitive topics [11, 10]. Starting from 5.5M Twitter posts published by 565 European news outlets in one year, beginning September 2021, plus replies from their audiences, we perform a multilingual analysis of migration-related media coverage and associated social media interaction in Europe. In particular, we focus on the five western and central European countries France, Germany,

¹Until June 16th, there were 7.7 million border crossing from Ukraine since February, but 2.5 million crossed back to Ukraine in the same period [1].

 $^{^{2} \}tt https://data.unhcr.org/en/situations/ukraine$

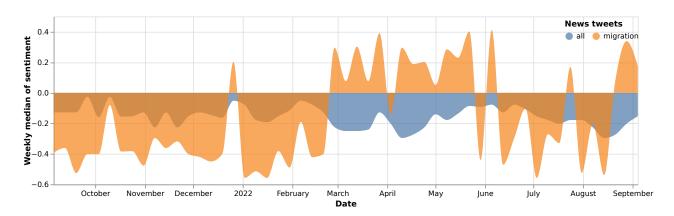


Figure 1: Median online sentiment over time in all news (blue) and migration-related news (orange). Poland 2021-2022.

Italy, Poland, and Spain. To characterize the change in the tone of the discussion, we contrast the language and related sentiment used by the mass media in their online coverage of refugee crises before and after February 2022 (see an example for Polish media in Figure 1). Moreover, we examine the reaction of the EU audience through their engagement on Twitter with related news. We use an original and effective methodology based on NLP and machine learning to learn the users' stances. The novelty of our approach to stance detection lies in its systematic multilingualism and in the context-dependent way the content is collected. In contrast to other approaches [9, 13] we do not rely on keywords or hashtags to select suitable responses to measure a user's targeted attitude toward migrants and refugees, but instead leverage the topics set by the news.

The results of our analysis show that there is a reframing of the discussion in news media. Comparing November 2021 and March 2022, this is evident in the change in terminology, e.g., from "migrant" to "refugee", often even accentuated by phrases such as "real refugees". Pre-invasion media discourse concerns seemed dominated by ethnocentrism or worries about the impact of migration on society. In terms of a change in public perception, however, the picture is more differentiated than expected. We can observe a noticeable stance shift in the positive direction for all countries at the beginning of the Ukraine invasion, starting in February 2022. This change can be seen most clearly in Poland, which is also the country most affected by the subsequent refugee movement. There, a lasting change in attitude is also evident, while the effect in the other countries is less stable and fades after about 3 to 4 months. In contrast, the impact of another recent crisis at the Belarus-EU border³ in Poland is accompanied by a noticeably negative attitude both in the public and media coverage. Additionally, we find that the media sentiment leads the public stance with the one-week lag showing the highest F-statistic in a Granger causality test (F = 26.11, p < .0001).

Lastly, we look at the performance of cross-lingual stance classification. By training the model on all languages except the test language, we investigate the transferability of knowledge from richer datasets to other languages. Our experiments demonstrate that a model tuned for this task can sufficiently generalize to be applied to additional languages or countries.

Our multilingual stance detection method has proven very effective for the study performed. Generalizability to unseen languages can further extend the impact of our methodology by easing the comparison of the situation in multiple countries, which can yield further insights into societal processes such as migration. There are various directions for future sociology and technology research. Examples include a deeper analysis of the reasons for the differences between European countries, distinction in the interaction of individual media with their audience, and the analysis of narratives around migration.

³https://www.iom.int/news/iom-and-unhcr-call-immediate-de-escalation-belarus-poland-border

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