



Unequal Framing in Times of Hardship? How Newspapers from Germany, Spain, the United Kingdom and Switzerland Portray Syrian and Ukrainian Refugees – Evidence from a Deductive and Inductive Automated Content Analysis



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ABSTRACT

The mostly welcoming attitudes toward refugees from Ukraine stand in stark contrast to restrictive policies and often negative attitudes toward refugees from Syria in Europe. By emphasizing certain aspects of reality whilst leaving out others, media framing plays an important role in the public image of both refugee groups. To better understand how the different refugee groups were framed in European media, we applied Latent Dirichlet Allocation (LDA) topic modeling and a thorough manual analysis and validation process to identify frames from the topic modeling results. We identified eleven generic and issue-specific emphasis frames in a sample of 84,623 newspaper articles from Germany, Spain, the UK, and Switzerland from 2014–2022. The frames were grouped into four overarching frame categories: Fate, Threat, Value and Context Frames. Syrian refugees were mostly portrayed negatively through Threat Frames and Context Frames, whereas more positive humanitarian and victimization perspectives were pronounced in Fate Framing of Ukrainian refugees. The findings indicate more negative and delegitimizing framing patterns in news coverage about Syrian compared to Ukrainian refugees.

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Introduction

In recent years, striking differences in the reception of refugees across European democracies were evident, particularly in public sentiments and policies. Especially since the arrival of large numbers of refugees from Syria in Europe in 2015, public anti-refugee sentiments were on the rise, whereas public attitudes toward Ukrainian refugees in 2022 were mostly positive (Czymara, 2020; De Coninck, 2022). These observations prompt the question how international media coverage may have contributed to such appreciable differences in policies and public opinions toward different refugee groups.

Extant literature points to media coverage as driving anti-immigration attitudes, particularly through framing effects on emotions and stereotypical cognitions (Eberl et al., 2018; Lecheler et al., 2015). Negative attitudes toward Syrian refugees are indeed associated with negative media framing—several studies observed an increase in negative framing of Syrian refugees in recent years, for example by portraying them as security threats (Greussing & Boomgaarden, 2017). This aligns with literature concluding that immigrants from Africa and the Middle East (MENA region) are portrayed in more negative terms than other migrant groups, often emphasizing the risk they allegedly pose on security, economic, or cultural terms (Bleich, Stonebraker, et al., 2015; Cooper et al., 2021).

Despite evidence that refugees from the Middle East and Northern Africa are consistently framed more negatively than migrants from Eastern Europe (Ford, 2011; Kovář, 2022), it is not yet clear how the framing of Syrian refugees differs from that of Ukrainian refugees, a relatively new group of refugees who may be perceived as relatively similar to citizens in Western and Eastern European host countries. With this study, we therefore aim to explore the divergent media framing of Syrian versus Ukrainian refugees, revealing how divergent public images toward different newcomers may resonate with news frames. To this end, we used LDA topic modeling to inductively analyze the framing of refugees in German, Spanish, Swiss, and British newspapers. This inductive endeavor was informed by existing conceptualizations of refugee framing, which aided the interpretation of inductive findings. Specifically, the topic clusters were treated as building blocks of frames (Matthes & Kohring, 2008) and inductively re-interpreted as frames by exploring the interconnections and context-bound meaning of frame elements. As a core contribution, this paper provides a comprehensive set of frames facilitating the analysis of framing differences between Syrian and Ukrainian refugees for this study and diverse refugee framing analyses for future research.

Theoretical framework

The building blocks of refugee frames in journalistic reporting

Entman (1993) defined the concept of framing as “making some aspects of reality more salient in a text in order to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (p. 52). This broad definition necessitates a narrower conceptualization of frames for empirical analyses (D’Angelo, 2018). Due to our focus on different perspectives in the framing of Syrian and Ukrainian refugees, we specifically study *emphasis frames*. These frames foreground certain aspects, suggested interpretations, and arguments of an issue to emphasize certain perspectives on it (Cacciatore et al., 2016).

In line with the conceptualization of emphasis frames suggested by Matthes and Kohring (2008), the separate elements of emphasis frames discussed by Entman (1993) can be regarded as framing devices or building blocks of frames. These building blocks are re-connected as more overarching patterns of interpretations by social actors, such as journalists, who make sense of societal issues by engaging in framing. The suggested interpretations forwarded by frames may differ regarding their connection to specific issues, and the construction of frames based on framing devices may be contingent upon journalistic cultures or national settings. Given that some refugee-specific frames are re-occurring across different contexts whereas other frames are context- and issue-bound, refugee framing is not fixed but dynamic (Eberl et al., 2018; Heidenreich et al., 2019). We therefore analyze both generic frames independent of external events, and issue-specific frames especially pronounced in certain contexts (D’Angelo, 2018). For this, we aim to recalibrate and extend existing refugee frames and frame categories through the theoretical lens of Entman (1993) by combining deductive and inductive approaches.

Different social actors may engage in the process of framing. As we are interested in the news coverage on refugees, we focus on journalists as main actors involved in frame building (Brüggemann, 2014). Here, the concept of journalism cultures is relevant to consider (Hanitzsch et al., 2011). Such cultures can be understood as the ideas and practices journalists use to defend their societal role and perceive their work as conducive to the society they are part of. This meso-perspective on journalism acknowledges that news framing is not just produced by journalists as individuals but considers that journalism is a dynamic cultural phenomenon changing according to cultural norms, values, and professional role perceptions.

This perspective implies that journalistic cultures can differ across national settings. We mainly included countries from the Western journalism culture, which share values and role perceptions regarding objectivism, interventionism, and the distinction between facts and opinions (Hanitzsch et al., 2011). Yet, there are important variations within this Western cluster: Although Germany may be characterized mostly by a journalism culture that prioritizes detachment and noninvolvement, journalism in Spain and Switzerland are somewhat closer to more involved and interpretative roles. We can further expect that the cultural background of journalists and the societal context in which they operate may predict the construction of frames. Specifically, in the western cluster of journalism culture focused on in our study, it can be expected that the similarity of Ukrainian refugees to the cultural background of journalists corresponds to more humanitarian and less threat-based frames as compared with the stronger, socio-cultural, difference to Syrian refugees from the MENA region.

The diversity of frames in news reporting on refugees

Migration is a public issue where framing is particularly applicable given its discursive relevance and impact on societies (Matthes, 2014). Accordingly, mass communication research has covered it thoroughly, especially since the peak of the refugee movement from Syria to Europe in 2015. Here, two central conceptual problems can be observed. First, findings are difficult to compare across studies. Although several authors aimed to create common sets of refugee frames, new frames are, despite conceptual similarities, not always integrated with other frame categories. This complicates keeping track of dynamic processes in refugee framing. Second, the field's focus points are heterogeneous. Some studies analyze refugee framing (Greussing & Boomgaarden, 2017; Liu, 2023), others focus on (im)migration (Lawlor, 2015; Lecheler et al., 2015), and oftentimes, the terms (im)migration, flight, migrant and asylum, and associated actors, are used imprecisely, sometimes synonymously.

Since migrants and refugees are not identical, comparability across studies on different terms is not necessarily given. We focus on refugees as this term is comparable across the two contexts studied, referring to movements of citizens from one (threatened) country to another. As terms like migration and immigration also include labor-related and other forms of migration, we perceive the term refugees is best applicable to Syrian and Ukrainian refugees attempting to find a safer place in the context of heightened safety crises.

To analyze the framing of the two refugee groups, we propose a refugee framing categorization based on the literature while remaining open to potential new, previously unobserved frames in an innovative methodical approach integrating deductive and inductive components that build upon Matthes and Kohring's (2008) framing device conceptualization. The refugee framing categorization we propose as a theoretical basis for the empirical part of this study

comprises major streams of refugee framing research while being more centered on refugees than the general focus on migration framing used by Eberl et al. (2018). Our proposed categorization consists of *threat*, *humanitarian*, *victimization*, *institutional*, and *benefit* frames.

Threat frames constitute a central frame category in refugee framing research, albeit in different forms (Lecheler et al., 2019). Threats associated with refugees range from threats to the economy (Eberl et al., 2018) and security (Greussing & Boomgaarden, 2017) to host countries' culture (Berry et al., 2016). Economic threat frames emphasize costs of refugees for host countries (Eberl et al., 2018), oftentimes highlighting refugees' purported greed, contesting the "legitimacy of asylum seekers' claims" (Greussing & Boomgaarden, 2017, p. 1751). Security threat frames associate refugees with criminality and dangers for society, including associations with terror and sexual assault (Greussing & Boomgaarden, 2017). Finally, in the context of Syrian refugees in Europe, cultural threat frames are found to be salient in the literature (Berry et al., 2016). Security and cultural threat frames often construct a social identity framing with orientalist perspectives on refugees (Bleich, Bloemraad, et al., 2015; Said, 1979)—a supposedly inferior Middle Eastern Other threatening the supposedly superior and culturally homogenous European or national in-group.

We propose victimization and humanitarian frames as further categories as introduced for instance by Berry et al. (2016). Both frames are conceptually similar to Eberl et al. (2018) welfare frame, emphasizing refugees' hopeless situation and need for humanitarian aid (Greussing & Boomgaarden, 2017; Ramasubramanian & Miles, 2018). However, they differ in their perspectives and better capture issue-specific differences: Humanitarian frames emphasize refugees' human right for asylum and aid provided in host countries, and thus potentially also hosts' generosity (Berry et al., 2016). Victimization frames, in contrast, focus on the "desperate plight of refugees, [as] victims of circumstances they are not responsible for" (Greussing & Boomgaarden, 2017, p. 1757). Consequentially, victimization frames underline refugees' desperate situations and generate empathy among the population. Both frames can focus on empathic perspectives with a positive intention toward refugees; however, they are also ambivalent, potentially featuring dehumanizing stances. Positioning refugees as victims may reduce their agency by depicting them as powerless subjects of situations beyond their control.

Additionally, we integrate institutional frames, which highlight bureaucratic and organizational consequences and challenges for refugees, referring specifically to "abstract governing and political bodies without reference to physical geography and/or culture" (Ramasubramanian & Miles, 2018, p. 4496). This is relevant considering the different legal situations for refugees from Ukraine and Syria in the EU. Coverage of respective legal challenges for refugees in their admission are probable, as observable

for instance in *The Independent's* coverage of these differences (Hundal, 2022), and as reflected in the importance of this frame observed in previous studies (Ramasubramanian & Miles, 2018).

Finally, to better account for potential differences between the framing of Syrian and Ukrainian refugees, we integrate benefit frames, which associate positive implications with the hosting of refugees, such as economic or cultural benefits (Liu, 2023). For instance, the Ukrainian refugees' arrival has been viewed as potentially reducing the current shortage of skilled workers in Germany (Andreae, 2022). The proposed frame categorization, shown in Table A1 of the Online Supplemental Materials, meets the major trends in refugee framing research. The frames were found in diverse contexts over time and constitute a set of frames applicable for the study of the framing of Syrian and Ukrainian refugees.

The detailed conceptualization of threat frames additionally allows for issue-specific analyses. However, the literature review of existing frames may not be exhaustive, as the new context of crisis surrounding more recent flows of refugees may have paved the way for additional frames. Our analysis is therefore not just geared at confirming existing frames but also at detecting new ones. Specifically, the inductive part of the analysis aims to confirm, recalibrate and extend this frame set as well as to uncover additional disregarded and new refugee frames and framing devices to approximate a comprehensive list of frames suited for analyzing framing of different refugee groups. This step is integrated with a deductive step to make sense of the found frames and framing devices (Matthes & Kohring, 2008), based on the set of frames introduced here. Thus, we aim for uncovering new frames in addition to interpreting the already established patterns of meaning as emphasis frames and framing devices, i.e., specific causes and moral elements, by integrating our findings with existing conceptualizations: We contextualize our findings in existing theories to confirm and interpret the inductive findings of our endeavor. The following exploratory research question structures this process:

RQ1: Which frames were used for the portrayal of refugees from Syria and Ukraine from 2014 to 2022 in established newspapers in Europe?

Framing differences across Ukrainian and Syrian refugees

Several studies analyzed differences in the framing of migrant groups from different backgrounds, comparing the framing of Syrian refugees with the framing of other migrants, e.g., Eastern European labor migrants without a refugee background (Kovář, 2022; Verleyen & Beckers, 2023). Although differences in media portrayals or framing of Syrian versus Ukrainian refugees have not been analyzed empirically, extant research points to crucial differences in the framing

of Muslims or immigrants from Africa and the Middle East versus other groups (Bleich, Stonebraker, et al., 2015). Centrally, people with a Christian background, which includes Ukrainian refugees studied in this paper, are covered less negatively than other refugee groups (Ford, 2011). Thus, it can be argued that, in the context of this study, the Christian newcomers that form an irregular (i.e., their movements is caused by a sudden armed conflict instead of more longstanding structural factors) group of asylum-seekers perceived as similar in background to people in the host countries, are framed in more positive and humanitarian terms (Goodman et al., 2014) compared to others with a Muslim background. To comprehensively map differences in the framing of Syrian and Ukrainian refugees in Europe, we pose the following second research question:

RQ2: How does the framing of Ukrainian and Syrian refugees differ?

The few extant studies on framing of Ukrainian refugees from Crimea after 2014 and preliminary findings about their framing in 2022 show security-related threat frames as hardly prevalent in news coverage whereas humanitarian and victimization frames were salient (Zawadzka-Paluckta, 2022). Although Syrian refugees were also framed through humanitarian and victimization frames in 2015, they were additionally framed through security threat frames (Greussing & Boomgaarden, 2017). The presence of humanitarian and victimization frames is often accounted to public compassion with refugees, threat frames rather to Syrian refugees' national and cultural background, and thus Islamophobic tendencies (Varvin, 2017). This could mean that Ukrainian refugees were not framed as negatively in 2022. This is supported by previous research comparing immigrants with a Muslim background to other groups, including Christians and people from Central and Eastern Europe (Ford, 2011). Specifically, immigrants from North Africa and the Middle East (i.e., the MENA region), which includes Syrians, are often framed more negatively as security, cultural and economic threats than other groups (Bleich, Stonebraker, et al., 2015), including people with a Christian background (Ford, 2011). This resonates with the findings of Cooper et al. (2021) in the context of the 2017 refugee movements: Refugees from MENA countries were significantly more likely to be associated with security and safety threats than other groups of refugees. There are also country-level differences in the framing of refugees that can be associated with the cultural context and proximity of refugee groups; newspapers tend to be more sympathetic to refugees when they are close to the host country, as became apparent in the media discourse in the UK surrounding the settlement of refugees (Cooper et al., 2021).

Especially in light of right-wing populist movements in Europe cultivating negative sentiments toward non-Western out-groups and the alleged threat of Islam (Aalberg et al., 2017), negative sentiments toward Syrian

refugees are often picked up by media. Using their own communication channels, populist actors further promote distinctions between native ordinary people and so-called dangerous Muslim refugees (Matthes & Schmuck, 2017). Driven by media logics, such populist viewpoints may be uncritically covered by mainstream media, acting as a disseminator of negative sentiments toward different non-Western refugee groups (Bos & Brants, 2014).

Against this backdrop, across many Western European countries where right-wing populists are successful, negative threat frames emphasizing dangers of Syrian but not Ukrainian refugees may be prominent interpretations. This is supported by extant research revealing negative sentiments and threats emphasized for (Muslim) African and Middle Eastern refugees (Bleich, Stonebraker, et al., 2015) versus the more positive and humanitarian frames that are emphasized for irregular (i.e., caused by specific events rather than more structural and long-standing issues) newcomers that more closely reflect the Christian host population (Goodman et al., 2014). We thus hypothesize the following expectation about the framing of Ukrainian versus Syrian refugees:

H1: During the respective crises' peaks in 2015 and 2022, Syrian refugees are portrayed through a diverse set of humanitarian, victimization, and security threat frames whereas Ukrainian refugees in 2022 are prominently portrayed through humanitarian and victimization but not security threat frames.

As suggested in previous literature, the framing of different refugee groups may depend on the national context. As such, journalistic discourses around refugees may resonate with the values and existing sentiments toward different refugee groups across countries (Berry et al., 2016; Cooper et al., 2021). Accordingly, several comparative studies analyzed the framing of refugees in different European countries. However, many focused on the UK and Germany, and few compared more than two countries (e.g., Berry et al., 2016). Eberl et al. (2018) therefore pressed the need to study framing “throughout several countries that differ [...] their political system, their media system, their net migration figures and even their migration policies” (p. 219). Following this suggestion, we analyzed the refugee framing in countries differing along these lines, namely Germany, Spain, the UK, and Switzerland, as seen in [Table A2](#) of the Online Supplemental Materials. Our sample frame includes countries with varying levels of restrictive versus liberal migration policies (Beine et al., 2016), varying levels of refugee numbers in the crucial periods of the comparison (2015 and 2022), and varying levels of polarization and differing media systems (Brüggemann et al., 2014). Additionally, in some

countries, current threat frames related to refugees may be more economical in scope (i.e., the UK and Brexit) whereas other countries in which a longer tradition of right-wing nativism is apparent in the (journalistic) culture may be more likely to frame refugees from MENA regions as a cultural or security threat (i.e., in Switzerland). This means that we explore whether variations in the discursive opportunity structure for positive and negative media portrayals of refugees (i.e., due to varying restrictive policies, media systems, polarization, or populist cultivation of anti-immigration sentiments) resulted in similar or different framing discourses.

Methods

Our overarching goal is to offer a comprehensive overview of emphasis frames about refugees from Syria and Ukraine in newspapers in Germany, Spain, the UK, and Switzerland from 2014 to 2022 in a combination of inductive and deductive steps. We aim to confirm and update the refugee frame categorization we proposed in the literature review. An excellent tool to fulfill this goal lies in the LDA method together with a qualitative interpretative step. LDA is an inherently inductive approach as it suggests topic clusters without supervision and without feeding it with preconceived structures or frames. However, for interpreting the topic clusters, we used existing framing typologies reviewed in the theoretical framework, and deductively assessed how the different frame-elements of emphasis frames (e.g., causal interpretations, moral evaluations; see Matthes & Kohring, 2008) were indicated by the topic clusters. This approach is based on Matthes and Kohring's (2008) understanding of frame elements that, when occurring in clusters, constitute frames (p. 263). We connected and interpreted the topic clusters we identified to existing frames and extended existing conceptualizations when the clusters did not fit existing frames. Thereby, we aimed to construct these frames and framing devices based on patterns of interpretation related to problem definitions, causal interpretations, moral evaluations, and/or treatment recommendations (Entman, 1993).

Topic modeling techniques are stochastic approaches used for mapping "latent semantic structures of a massive text collection" (Chauhan et al., 2022, p. 145:2). Their basic assumption is that data consists of a number of topics (k) distributed over the sample, with topics being clusters of inherently connected terms (Blei et al., 2003). For uncovering these patterns, the (multinomial) distribution of terms per document, hence the words and their co-occurrence in the sample, are induced (Blei, 2012). We used a topic modeling tool with particularly high quality in content summarization and information retrieval, Latent Dirichlet Allocation (LDA). The choice of

LDA is explained in detail in Appendix 3 of the [Online Supplemental Materials](#).

Topic modelling and framing

Each topic, represented by a term-collection, portrays a semantic structure present in the data. Therefore, they are often interpreted as (emphasis) frames (Heidenreich et al., 2019; Jacobi et al., 2016). This interpretation of topics as frames was validated with findings demonstrating its suitability for measuring emphasis frames as patterns of interpretation, with an excellent identification of frames also compared to manual framing analyses (Jacobi et al., 2016). To achieve this quality, they “require extensive and problem-specific validation” (Grimmer & Stewart, 2013, p. 267). We carried out this validation, focusing on content validity by combining inductive, automated identification of topics inherent to topic modeling with issue-specific, theoretically founded interpretations of the results; patterns and clusters resulting from the automated approaches were subjected to a thorough analytical interpretation step. Thus, the inductive findings of the LDA approach were interpreted manually and informed by existing conceptualizations of emphasis frames (Matthes & Kohring, 2008).

During this manual step, the conceptualization of frames as patterns of emphasis and interpretation along dimensions of problem definitions, causal interpretations, moral evaluations, and/or treatment recommendations were considered (Entman, 1993). In the output of the LDA models, we thus specifically sought to identify different framing devices that made salient these aspects of reality, for example, by forwarding a certain cause of the threats of refugees (i.e., victimization frames placed responsibility outside the locus of refugees’ control). This crucial interpretation step looked for connecting elements between terms within clusters. This allows combining advantages of qualitative and quantitative framing analyses, as we could uncover frames inductively, but also identify previously derived categories from large datasets. As frames are patterns of interpretation that resonate with a given socio-cultural context, we regard the manual interpretation phase as crucial in the (automated) identification of frames.

Sampling

The articles for the analysis were derived from online and print versions of newspapers from Germany, Spain, the UK, and Switzerland. We did not include Eastern European countries due to a lack of availability of materials. Newspapers were chosen because they reach large audiences and offer perspectives from different political stances so long as sampling from politically diverse sets of outlets (Salgado & Nienstedt, 2016). To represent

a diverse set of newsroom dynamics, we further included diverse outlet types (D'Angelo, 2018). Newspapers sampled for each country are shown in Table 1. Accordingly, we sampled newspapers based on the criteria of reach and political perspective allowing for diverse samples as representative of national news discourses as possible, as done for example by Heidenreich et al. (2019). Alternative platforms, such as TV news, do not offer such clear political patterns (Esser et al., 2012).

To sample all relevant articles about refugees from the defined time-frame, we used the NexisUni database and applied issue-specific search terms. Boolean search strings *asyl** (*asylum seek**) and *refuge** and *migrant** and *immigrant** are standard keywords in the literature (Greussing & Boomgaarden, 2017; Heidenreich et al., 2019; Ramasubramanian & Miles, 2018). To focus on refugees only, the respective translations of *asyl**, *asylum seek** and *refuge** were used (see Table A3 of the Online Supplemental Materials).

To streamline the sample to articles relevant to the research question—those dealing with Syrian and Ukrainian refugees during, before, and after the respective crises in 2015 and 2022—we specified a time frame of January 1, 2014 until October 28, 2022, specific publication types, languages, and outlets, and included specifications *Ukrain** and *Syri**.

Table 1. Newspaper sample per country.

Country	Outlet	Leaning	Downloaded Sample	Final Sample
Germany	die taz ^c	Left Leaning	5.009	5.007
	Süddeutsche Zeitung ^c	Centre-Left	10.813	10.599
	DIE ZEIT ^d	Centre-Left	2.050	2.047
	Rheinische Post ^e	Right Leaning	9.692	8.417
	Die Welt ^f	Right Leaning	6.567	6.484
Total DE			34.131	32.554
Spain	El País ^{g, i, j}	Centre-Left	5.610	4.171
	Diario Cordoba ^h	Centre-Left	1.297	1.297
	El Periodico de Aragon ⁱ	Centre-Left	3.201	2.813
	El Diario Montañés	Centrist	1.630	1.630
	El Mundo ^{h, j}	Centre-Right	2.600	2.593
Total ES			15.595	13.604
United Kingdom	The Independent ^a	Left Leaning	14.258	13.862
	The Times ^a	Centre	10.376	8.914
	The Daily Telegraph ^a	Right Leaning	2.989	2.936
	The Sun ^a	Right Leaning	3.100	3.001
	The Daily Mail ^a	Right Leaning	5.843	5.732
Total UK			36.566	34.445
Switzerland	Tages-Anzeiger ^b	Centre-Left	1.567	1.576
	Tagblatt (regional versions) ^b	Centre-Right	3.574	1.023
	Appenzeller Zeitung ^b	Centre-Right	1.419	1.419
Total CH			6.560	4.018
Total Number of Documents			92.852	84.623

^aBaker et al. (2013), ^bVontobel (2009), ^cHanusch (2013), ^dKohler (2016), ^eWagner (2018), ^fPointner (2010), ^gSalgado and Nienstedt (2016), ^hReig (2011), ⁱBaumgartner and Chaqués Bonafont (2015), ^jDel Olmo Barbero and Parratt-Fernández (2011), ^kCheca Godoy (1989).

Data preparation and analyses

For the topic modeling, the sample was cleaned and prepared in R and python, including a tokenization and lemmatization of the data and the creation of a corpus and dictionary with the final sample consisting of $N = 84,623$ articles. The cleaning and preparation process is described in Appendix 3 of the Online Supplemental Materials.

The data analysis consisted of three steps. The first step comprised of inductively identifying topics from the whole corpus from 2014 to 2022. As a second step, we attached the topic clusters with meaningful labels to guarantee a valid identification and naming of frames. To do so, we combined the inductive topic identification of the unsupervised LDA model with a deductive, theoretically sound interpretation of outputs (Grimmer & Stewart, 2013; Jacobi et al., 2016). We used our corpus of data from 2014 to 2022 for these steps given that refugee framing patterns change over time, especially after crisis-peak-years (Greussing & Boomgaarden, 2017). The wider corpus for the topic identification facilitates a set of frames consisting not only of those dominant in the crisis peak years, but those dominant over a period of eight years. The inclusion of pre-crisis (for Ukraine and Syria) and post-crisis (for Syria) developments are two components that have been missing in refugee framing research (Heidenreich et al., 2019). Third, based on the first two steps, we analyzed the frame distributions in the coverage of Syrian refugees 2015 and Ukrainian refugees 2022 in the four countries. Thus, the corpora for the analysis—although part of it—were not identical to the data used for the frame identification. The process is described in detail in Appendix 3 of the Online Supplemental Materials.

Validity check

To ensure the identified frames' validity, we performed an additional manual internal validity check with hired coders (Jacobi et al., 2016). Coders were taught the theoretical meaning and content of frames associated with the topics: For each frame derived from the LDA results, we introduced the coders into the frames' elements, based conceptually on Entman's (1993) original description of frame elements and on Matthes and Kohring's (2008) conceptualization of framing devices. We provided them with the list of terms associated with the topics and an explanation of how we interpreted them. This was followed by a training session, in which example articles were coded together. The coders were then assigned eight articles in a pretest and asked to code the most dominant frame in each. That is, although multiple frames could be present, only the one that dominated the overall narrative was to be coded. After two rounds, the

results showed complete agreement between coders and model. Therefore, they each were assigned 25 articles for the analysis ($n = 75$). The results validated the identified topics and frame names with an almost perfect agreement between coders and LDA model, Cohen's Kappa $\kappa = .89$ (McHugh, 2012). This comprehensive frame identification process allowed for the necessary, "extensive and problem-specific validation" (Grimmer & Stewart, 2013, p. 267) of the models' results to detect frames with topic modeling. In the manual validity tests, we also ensured the different contexts of refugee framing in the two periods: The 2015 period dealt with Syrian refugees, whereas the 2022 period dealt with Ukrainian refugees. Although we did not run this validity test on the full sample, this robustness check indicates that different periods offer contexts for the media discourse and framing of the two distinguished refugee groups.

Results

Deriving frames from the topic modelling

All frames identified in the theoretical conceptualization of refugee framing were confirmed based on the interpretation of the topic clusters, except benefit frames. Therefore, this frame was not considered further in the analysis. Beyond the conformation of the theory-driven typology, we identified six additional frames resulting in eleven frames in total, shown in Table 2. To structure the overview of the identified frames, we grouped them based on their content and evaluative perspective (i.e., in line with emphases on different frame elements) on refugees into four overarching categories *Fate*, *Threat*, *Context*, and *Value Frames*.

Fate frames

Fate frames emphasized collective or individual fates of refugees. Thereby, reasons for their flight (war frame), their plight on the run (refugee movement frame, suffering frame), or empathic perspectives (victimization frame, humanitarian frame) were covered. Problem interpretations emphasized that refugees suffer from the situation in their home-country or on the run, while the causal interpretation highlighted causes beyond their control. Morally, refugees are seen as victims, whereas host countries should protect them. As a treatment recommendation, it stated more should be done to protect refugees who fled their country in the face of severe threats. Within fate frames, we identified the following more specific frames.

Table 2. Frame categorization.

Type of Frame	Frame Name	Associated Terms	Frame Meaning
Fate	Victimization Frame	daughter, night, family, father, home, leave, return, small, baby, play	Emphasis on the refugees' plight, focus on families and them having to leave their homes
	War Frame	soldier, fight, conflict, military, attack, civilian, shelling, dead, displaced, invasion	Description of war, focus on the acts of war, military, and violence.
	Suffering Frame	body, fire, death, water, night, run, hospital, carry, neighbour, leave	Explicit emphases of the physical suffering of refugees in the wars, on the run and in the host countries
	Humanitarian Frame	volunteer, offer, community, accommodation, support, facility, teacher, aid, humanitarian, help	Emphasis on refugees' human right to be admitted and the humanitarianism of the hosts
	Refugee Movement Frame	camp, boat, journey, island, wait, mediterranean, cross, route, thousand, frontex	Descriptions of the process of flight and the refugees on the run, in camps, in transportation, and at borders
Threat	Security Threat Frame	court, crime, assault, terrorist, violence, policeman, suspected, security, muslim, arrested	Association of refugees with dangers and threats in terms of security, for example terrorism
	Economic Threat Frame	price, lose, business, economic, risk, gas, consequence, cost, pay, afford	Association of refugees with economic threats and economic consequences of the crises/wars in their home countries
Context	Popular Culture Frame	church, film, culture, music, art, celebrate, book, history, good deed, award	(Pop-)cultural adaptation of the topic refugees and flight. This includes art and culture by and about refugees
	Institutional Frame	BamF, protection, deportation, labour market, application, ban, law, preliminary, admitted, request	Bureaucratic, legal, and organisational challenges of refugees, labour market, education, legal (admission) questions
	Politicizing Refugees Frame	chancellor, election, union, summit, party, agreement, member, commission, vote, policy	Political processes and topics around refugees and flight, including elections, policies, and international cooperation
Value	Value Frame	society, believe, example, just, value, democracy, freedom, wrong, we, role	Self-reflection of moral duties, democratic values, and the role and responsibilities of society around the topic of refugees and flight

Victimization frames

The focus of victimization frames was on families and their plight, portraying a moral evaluation of refugees as victims relatively powerless and in need of help. Here, stories about refugees were personal, emphasizing human interest perspectives with a focus on refugees' and their families' destinies, indicated by terms such as "leave" and "daughter." Although refugees' plight was highlighted, they were not described as victims per se, but as episodic victims, given the emphasis on their distress during their flight only, illustrated by terms such as "camp" and "wait." By highlighting the personal narratives of refugees' flight, refugees were absolved of causal responsibility for their situation. The emphasis on distress and suffering evokes a moral evaluation of refugees that are threatened by harsh circumstances they face.

Humanitarian frames

Humanitarian frames highlighted refugees' need for humanitarian support and hospitality provided in host countries, using terms such as "support" and "humanitarian." This frame thus forwarded a clear treatment recommendation as an emphasis on the need to act and change the situation of refugees. Both collective political solutions, indicated by terms like "facility," and ordinary peoples' individual voluntary efforts ("volunteer") were emphasized. Thereby, the focus was on refugees and on host countries' efforts. The need to act was also emphasized outside the realm of national institutions, given voluntary efforts to host refugees and to support them in their flight were salient.

War frames

War frames emphasized acts of war refugees face, focusing on military and armed conflicts, with terms like "soldier." Issue specific differences of wars were featured, with descriptive perspectives on Syrian refugees ("shelling"), and more compassionate emphases for Ukrainian refugees ("humanitarian"): The frame mostly emphasized the problematic and dangerous situation of refugees, without offering clear solutions and with less pronounced moral evaluations of the event. In the UK, two separate war frames—specifically for the wars in Syria and Ukraine—were identified. The Ukraine war frame stands as an exception to the missing moral evaluation, as it entailed a humanitarian perspective.

Suffering frames

The suffering frame emphasized physical suffering of refugees focusing on refugees—terms such as "death" and "body" emphasize severe consequences for refugees in wars and on the run. This implied compassion with refugees and strong evaluative and moral emphases, as consequences of fleeing are seen as severe struggles refugees are going through. Consequences are more salient than causes and treatments, as this frame clearly highlights inhumane suffering resulting from being a refugee.

Refugee movement frames

Finally, refugee movement frames portrayed refugees as a large, fleeing crowd, indicated by referring to large groups of refugees with words like "thousand." Thereby, situations on the run, for example in camps in the Mediterranean or in transportation, were emphasized with terms like "camp" and "journey." This frame focused mostly on describing the scope of the problem, whereas the causes, moral interpretation, and treatments of the flows of refugees deserved less attention.

Threat frames

Threat frames emphasized purported connections of refugees with security or economic threats, and thus proposed refugees as such were dangerous. They were negative and dismissive. We separate threat frames across economic and security threats but did not identify cultural threat frames; however, these are reflected in a cultural perspective within security threat frames. The problem interpretation emphasized that refugees are inherently dangerous for host countries, while the causal interpretation highlighted the refugees themselves as responsible for threats, due to their purported greed, extremism, or culture. Morally, refugees are seen as perpetrators, undeserving of humanitarian aid. As a treatment recommendation, different perspectives, including criminal charges against refugees are outlined.

Economic threat frames

With economic threat frames, costs and financial issues associated with refugees and their supply were emphasized using terms such as “cost” and “risk.” Beyond the costs associated with refugees, also general costs related to the wars in Ukraine and Syria were highlighted e.g., “gas” and “price.” As risks and threats are directly associated with those arriving, refugees possessed causal responsibility. The emphasis on negative outcomes evoked moral evaluations of refugees as cost-intensive crowds.

Security threat frames

Security threat frames emphasized refugees as sources of terrorism and crime, indicated by words like “assault” and “terrorist.” A cultural perspective was reflected as a cultural differentiation: “Muslim” and “Syrian” were words associated with security threats. The frame was thus closely related to Syrian refugees. As in economic threat frames, the causal interpretation was clear: Refugees themselves were held responsible for security threats in host countries, whereby their cultural background was an alleged part of the cause. The moral evaluation of refugees is clearly negative, whilst the solution did not lie with them, but in charging them legally.

Value frames

Value frames were a distinct category, where the respective host country’s responsibilities were central in a self-reflection process. The emphasis lied on morality and normativity with a focus on host countries’ democratic values and their role as a society in relation to refugees, indicated by terms such as “society,” “freedom,” and “just.” They were positive toward refugees, while focus and agency were on the host countries’ side. The problem interpretation emphasized a moral wrongdoing of the host countries. The causal

interpretation underlined host countries' responsibility and a lack of support for refugees. Morally, refugees were seen as deserving receivers of aid by the host countries, based on democratic values and morality. As treatment recommendation, policies, societal responsibility, and conversations about the issue were emphasized.

Context frames

In contrast to the earlier three categories of frames, not all four of Entman's (1993) parts of frames were present in context frames. Context frames offer a backdrop for how refugees are portrayed, without explicitly problematizing them, offering a causal interpretation, moral evaluation, and/or treatment recommendation. The implicitness of the interpretation of refugees within context frames has implications for their interpretation as emphasis frames. However, as they offer a framework for the interpretation of refugees, we regard them as part of the framing process. In context frames, refugees were discussed in relation to legal, political, or cultural contexts. Thereby, focus shifted from refugees themselves toward societal contexts, in which refugees were subjects of discussion. These frames can be positive or negative toward refugees and their admission. In context frames, rather than emphasizing a specific problem, refugees were discussed in different contexts: the problem interpretation regards refugees as an issue in diverse contexts, ranging from legal to political arenas. Here, the causal interpretation was implicit with contexts defining some but not very clear causal interpretations. Although no general inferences about context frames as a category can be made, it is important to note that some of these aspects are present in each of the frames. Nonetheless, it remains to be discussed, whether these actually portray frames, or, instead, building blocks of frames: offering interpretational patterns, that is "structural dimensions of frames that can be measured: syntax, script, theme, and rhetoric" (Matthes & Kohring, 2008, p. 220).

Institutional frames

Institutional frames emphasized bureaucratic, organizational, and legal struggles around refugees, indicated by terms such as "law" and "ban," including legal perspectives of their integration into education and labor markets and admission into host countries generally ("labor market" and "admission"). Thereby, the legal status of refugees was emphasized using terms like "deportation." A problem definition was present in two forms: first, refugees' presence in host countries, and second refugees' own legal struggles. Accordingly, no clear moral evaluation or causal interpretation was inferable, whereas treatment recommendations ranged from admissions to bans.

Politicizing refugees frames

The politicizing refugees frame portrayed refugees as political issues in different contexts, ranging from elections to international policies, indicated by terms such as “election” and “agreement.” Through politization, the emphasis was on political actors rather than refugees, seen in the terms “chancellor” and “commission.” Problem definitions regarded refugees as political tasks. By focusing on political agreements without clear contextual tendencies toward admitting or banning refugees as a treatment recommendation, neither causal interpretation nor moral evaluation were present.

Popular culture frames

Popular culture frames emphasized representation of refugees in books, films, and other cultural products and events about/by refugees, such as “book” and “event.” This positive frame (“good deed”) showed refugees and flight were adapted within popular culture, seen through terms such as “culture” and “celebrate.” They were relevant in political or legal framing and represented in different parts of society. No clear problem definition, causal interpretation or treatment recommendation were present. The moral evaluation however was, with strong emphases on refugees as individual agents rather than mere victims or perpetrators.

Framing Syrian versus Ukrainian refugees

To analyze differences in the framing of Syrian and Ukrainian refugees, the framing in the crises’ peak years 2015 and 2022 was compared for the whole sample and for each country separately. For this, we focused on the frames’ aggregated dominance, that is, the space that was devoted to them within individual stories across the samples.

Differences between the framing of Syrian and Ukrainian refugees are large. Ukrainian refugees were majorly portrayed through fate frames emphasizing individual plight, for example the humanitarian frame, as shown in [Table 3](#) and [Figure 1](#). The focus of Syrian refugees’ framing was largely on context frames, but fate frames were also apparent, although with a collective instead of individual perspective on refugees, indicated by an emphasis on the collective refugee movement and war frames. Syrian refugees were rather framed as security, Ukrainian refugees as economic threats. To test the statistical relationship between the presence of all frames for Ukrainian vs. Syrian refugees across all countries, a Chi-square test of independence was performed.¹ The differences of the presence of frames are statistically significant, $\chi^2 (88455) = 6446.84, p < .001$.

¹To reduce the probability of Type 1 errors, we refrained from running independent χ^2 -Tests per category.

Table 3. Dominant frame categories for refugees from Ukraine and Syria.

Context	Ukrainian Refugees	Syrian Refugees
Across all countries	Fate Frames	Context Frames Collectivizing Fate Frames
Germany	Fate Frames	Context Frames Fate Frames
Spain	Fate Frames Security Threat Frames	Context Frames Collectivizing Fate Frames Economic Threat Frames
UK	Fate Frames Economic Threats Frames	Context Frames Collectivizing Fate Frames Security Threats Frames
Switzerland	Fate Frames	Threat Frames Context Frames

Categories: Summarization of the results across and in the four countries.

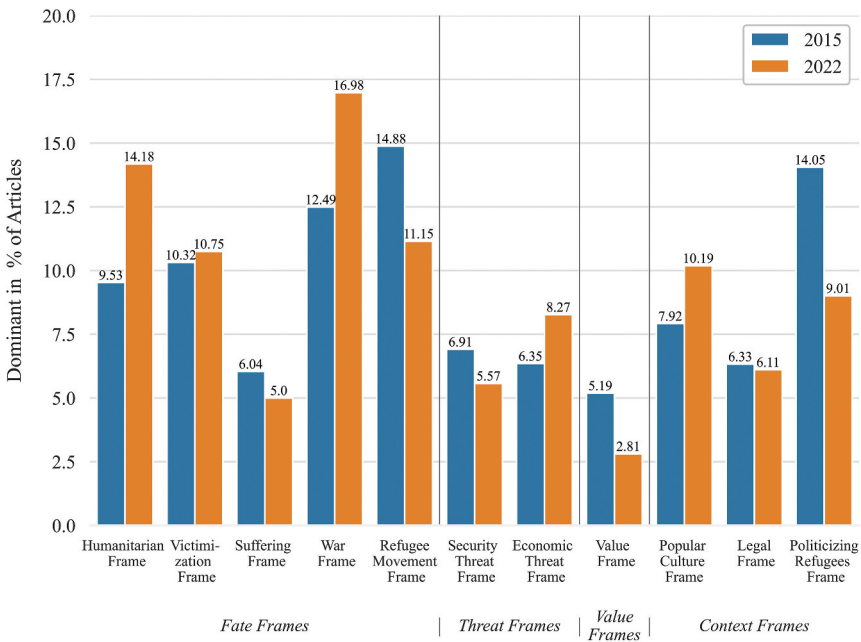


Figure 1. Dominance of frames in the whole sample in 2015 and 2022.

Further, we were interested whether Syrian refugees were likely to be framed as security threats and whether victimization and humanitarian frames were prevalent for both groups, as postulated in H1. Across the four countries, security threat frames were significantly more prevalent in the framing of Syrian than of Ukrainian refugees. Victimization frames occurred frequently in the coverage in both years alike, as seen in Table A4 of the Online Supplemental Materials. Only humanitarian frames deviated from the hypothesis: They were more prevalent in 2022 than 2015. To test

for the significance of the differences in the presence of humanitarian, victimization, and security threat frames between the two refugee groups across all four countries, we ran a Chi-square test of independence specifically for these three frames. The observed differences in their frequency were statistically significant in the expected direction, $\chi^2 (14244) = 152.76, p < .001$. Thus, in line with H1, the findings indicate security threats as more dominant for the framing of Syrian refugees and empathic frames as prevalent for both groups, however more so for Ukrainian refugees. Table 4 shows the dominance of frames in 2015 and 2022.

Framing differences between Ukrainian and Syrian refugees across countries

Due to the exploratory nature of this study and the thematical focus on (inductively) identifying media emphasis frames about Syrian and Ukrainian refugees from a diverse sample, we only devote limited attention to between-country differences. Further, the countries included are all part of the same Western journalism culture, with rather small differences in the traditions, routines, and values across the included nations. Our findings suggest that Ukrainian Refugees were portrayed through fate frames in all countries. Only occasionally they were portrayed as economic (UK), and security threats (Spain). Syrian refugees, in contrast, were predominantly portrayed through context and threat frames and to a lesser extend through fate frames. Only in Germany, they were framed dominantly through humanitarian frames.² This confirms existing literature suggesting that refugees from MENA countries are framed in more negative terms than Western refugees that are closer to the (journalistic) culture of the host country. For more detailed between-country differences see Figures A1–A4

Table 4. Dominance of Frames in 2015 and 2022*.

Dominant Frame	2015		2022	
	<i>n</i>	% of 2015 sample	<i>n</i>	% of whole sample
Victimization Frame	1616	10.3	2512	10.7
Humanitarian Frame	1492	9.5	3314	14.2
Security Threat Frame	1081	6.9	1302	5.6

* $\chi^2 (14244) = 152.76, p < .001$

²As for the whole sample, we ran Chi-square tests of independence for each country separately to test the whether Ukrainian and Syrian refugees are statistically significant in Germany ($\chi^2 (32553) = 4269.92, p < .001$), Spain ($\chi^2 (13603) = 3347.42, p < .001$), the UK ($\chi^2 (38279) = 7549.06, p < .001$) and Switzerland ($\chi^2 (4017) = 1084.57, p < .001$).

in Appendix 4 of the Online Supplemental Materials. The Appendix also breaks down the distribution of frames within each country.

Discussion

Although extant literature provided insights into the framing of Syrian refugees since 2015, little is known about the framing of Ukrainian refugees—a group differing from previous refugees as they flee within Europe and are predominantly Christian (De Coninck, 2022). As public perceptions connected to this group may be substantially different across Europe (Aalberg et al., 2017), we analyzed the framing of different refugee groups across mainstream media in different countries.

In addition to confirming existing refugee frames of extant research (Greussing & Boomgaarden, 2017), this study revealed frames that were not identified in the literature before. The identification of popular culture frames shows refugees are discussed in diverse societal contexts, and not only passively regarded as victims or perpetrators. Moreover, the identification of value frames is remarkable and particularly relevant for refugee framing research because they portray an issue-specific variation in refugee framing unobserved before: In 2015, the presence of value frames in Germany and Switzerland indicates morality emphasis framing during the peak of a flight movement. The arrival of refugees led the media to evaluate the respective host country's own role and responsibilities in a migration debate.

With this set of identified frames, the present study contributes to the methodological debate about the applicability of topic modeling for framing analyses (Grimmer & Stewart, 2013). Our findings show considerable overlap of the identified patterns with known frames. Given their theoretical equivalence with previously identified frames, and their approximation of the introduced definition of emphasis frames, the different threat and fate frames can be interpreted as emphasis frames. This applies to the new value frame too. However, some found patterns do not fulfil the criteria of emphasis frames: Context frames do not suggest a pattern of interpretation but highlight different aspects of refugees within the same context and are thus rather situated in the intermediary area between content and frame analysis. They could be interpreted as building blocks of frames based on frame elements (Matthes & Kohring, 2008), describing contexts where perspectives on refugees are emphasized, without containing all elements of a frame but providing gateways for interpretation. Generally, however, most patterns found match the emphasis frame definition, underlining the applicability of topic modeling for framing analysis. Simultaneously, automated approaches should always be validated and contrasted with interpretative and manual checks as they “require extensive and problem-specific validation” (Grimmer & Stewart, 2013, p. 276). In addition to the

thorough frame identification process, the results were therefore confirmed in an internal validity check by coders manually analyzing articles based on criteria outlined by Jacobi et al. (2016). The combination of topic modeling with the validation of results allowed for confirming identified patterns corresponding closely to frames. Additionally, the identified building blocks of frames contain valuable information for framing research, for example to identify further, previously unidentified frames. Topic modeling can therefore serve as a valuable tool for refugee framing research.

Turning toward differences in the framing of Syrian and Ukrainian refugees, consistent trends in the distribution of frame categories across all four countries were observed, with respective individual frames differing slightly between countries. This mainly concerns the distribution of humanitarian and threat frames: while humanitarian perceptions were prevalent for Ukrainian refugees in all countries, Syrian refugees were framed as such to a considerable degree only in Germany. Moreover, humanitarian frames were not identified in the UK. One possible reason for that could be Germany's positive initial reception of Syrian refugees and their liberal asylum policies in 2015 and the UK's restrictive approach. Further, Ukrainian refugees were frequently framed through security threat frames in Spain. The reasons for this are not clear and would require a qualitative analysis of articles.

Overall, our findings align with extant research indicating that more positive sentiments and humanitarian frames can be assigned with irregular groups of refugees "closer to home" (Ford, 2011). Our findings also support that African and Middle Eastern refugee groups with a Muslim background are more likely framed as threats than Eastern and Central European groups with a Christian background (Bleich, Stonebraker, et al., 2015)—at least in the context of the Western democracies studied. We can potentially explain this as a resonance between values and political climate in host countries and refugees' background: The European countries studied in this paper are closer to Ukrainian refugees in terms of culture, whereas the right-wing populist cultivation of anti-immigration sentiments across Europe (Aalberg et al., 2017) can explain the negative portrayal of Syrians. Overall, the argument of cultural proximity and public sentiments influencing journalism cultures and thereby refugee framing thus seems to hold here (also see Cooper et al., 2021). In that sense, a country's political and social context, including prevalent discourses surrounding different migrant groups, may be important in divergent framing of refugee groups. Refugee frames, then, may reflect wider trends in political discourse and public opinion.

In conclusion, this study is one of the first comparing the framing of refugee groups differing in religious, cultural, and national background, among other categories. One explanation for the observed differences, especially for the high share of security threat frames for Syrian refugees,

is their religious and national background, and thus consequently Islamophobic sentiments. These dynamics are alarming given the impact of media frames on public opinion and attitudes toward refugees and the effects of such debates on refugees themselves (Eberl et al., 2018; Lecheler et al., 2015; Liu, 2023). Hence, as media offer citizens a suggested interpretation of refugees through framing, they may reinforce existing anti-immigration and right-wing populist views. Such an emphasis may fuel the success of right-wing populist parties and polarize society across White versus non-White refugees seen as undesired. Accordingly, Hameleers (2019) found that blaming refugees for criminality can activate (negative) stereotypes among parts of the population with congruent preexisting attitudes. Even more so, support for policies to deal with immigration and refugees may eventually be influenced through media frames around refugees, which may however benefit refugees that are framed as similar to the native people.

Given the influence of media framing of refugees, evaluating journalists' reasons for their reporting would provide further insight into how Islamophobic resentments are expressed about Syrian refugees, perhaps unwittingly. More awareness among journalists is needed for the divergent treatment of refugee groups, and the consequences this may have on public images toward societal groups. Training may be offered to demonstrate the importance of fair and equal representations, and the harm that may be caused by (unintentionally) focusing on security threats associated with refugees. Hence, journalists may be just as susceptible to biases and internalized discrimination as other people, and a heightened awareness of this bias may contribute to more fair and inclusive reporting. Beyond this micro-level perspective, country-specific as well as outlet-specific differences in journalistic routines likely explain journalists' choices for their reporting about refugees. Especially news cultures differing between countries (D'Angelo, 2018), and newsroom dynamics differing within countries on dimension including medium type and political leaning (Brugman et al., 2023), may explain framing differences. Given the macro-level perspective of this study, and the complexity of newsroom dynamics and news cultures, future studies on the reasons for framing patterns between both refugee groups and between countries from a journalistic perspective are needed. Qualitative interview studies may especially be suited for the exploration of journalistic perspectives and role perceptions on covering refugee groups.

Finally, we want to mention methodological and content-wise limitations. Due to limited accessibility to newspapers from other countries, MENA and Eastern European countries were not included. Replicating this study with other countries and different media types in different settings and time frames would be valuable for a more comprehensive picture. Neighboring countries

to Ukraine hosting relatively large numbers of refugees, such as Poland, Estonia, and Slovakia, are especially relevant. Arguably, although the migrant group may be similar to the host countries, the more direct experience with Ukrainians and their influence on the resources of the host countries may reveal important framing dynamics that we cannot cover in this study. Further, we analyzed news articles of different formats and modalities (on- and offline, comments, reports) likely influencing framing. We suggest further research on the influence of these differences. Also, media discourses about migration and refugees develop over time with issue salience altering the use of issue-specific and generic frames (Eberl et al., 2018). Centrally, as Greussing and Boomgaarden (2017) emphasized, once the climax of media attention toward a crisis is reached, media framing offers a diverse set of frames. Once the peak of a crisis is over, however, media coverage turns toward a “frame crystallisation and [...] a limited number of frames” (p. 1753). Accordingly, the field would benefit from frame identification and analysis through topic modeling from data on Ukraine extending 2022, and thus to analyze the development of the framing of both refugee groups over the whole cycle.

This paper contributes to the literature by providing a comprehensive list of frames incorporating different streams of refugee framing research with newly identified issue-specific frames. It facilitated the analysis of the framing of Syrian and Ukrainian refugees in this study and can serve as a basis for the analysis of refugee framing from and in different contexts and with multiple methodological approaches.

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Data availability statement

The datasets and the code are available via OSF here: <https://osf.io/6bm7e/>. Please contact the corresponding author in case of any questions.

Open scholarship



This article has earned the Center for Open Science badges for Open Data and Open Materials through Open Practices Disclosure. The data and materials are openly accessible at <https://osf.io/6bm7e/>

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Appendix. Frame distribution

Table A1. Presence of frames across countries.

Frame Name	DE	ES	UK	CH
Security Threat Frame	x	x	x	x
Economic Threat Frame	x	x	x	x
Victimization Frame	x	x	x	x
Humanitarian Frame	x	x		x
Institutional Frame	x		x	x
Benefit Frame				
War Frame	x	x	x	x
Politicizing Refugees	x	x	x	x
Refugee Movement Frame	x	x	x	x
Popular Culture Frame	x	x	x	
Suffering Frame		x	x	
Value Frame	x			x

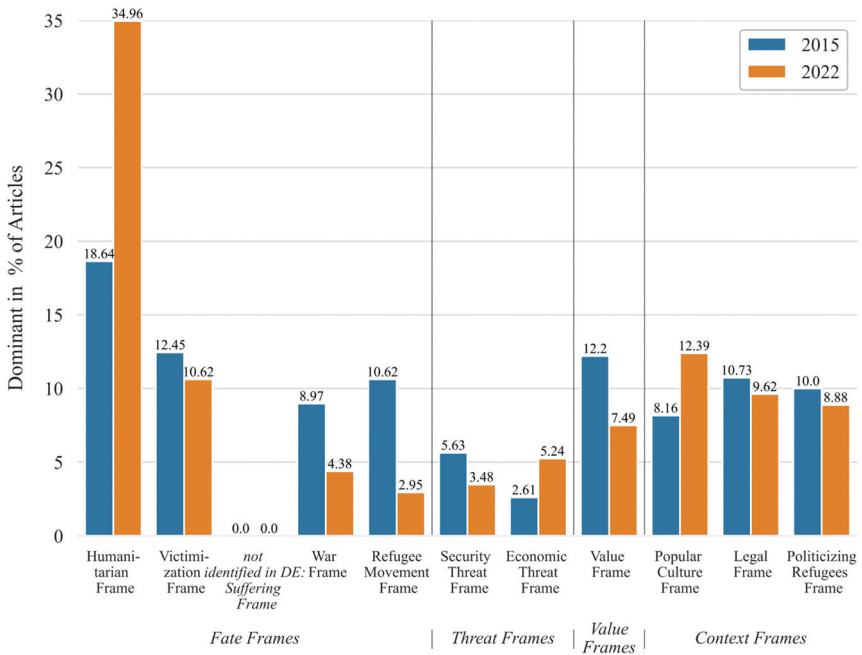


Figure A1. Dominance of frames in German Newspapers in 2015 and 2022.

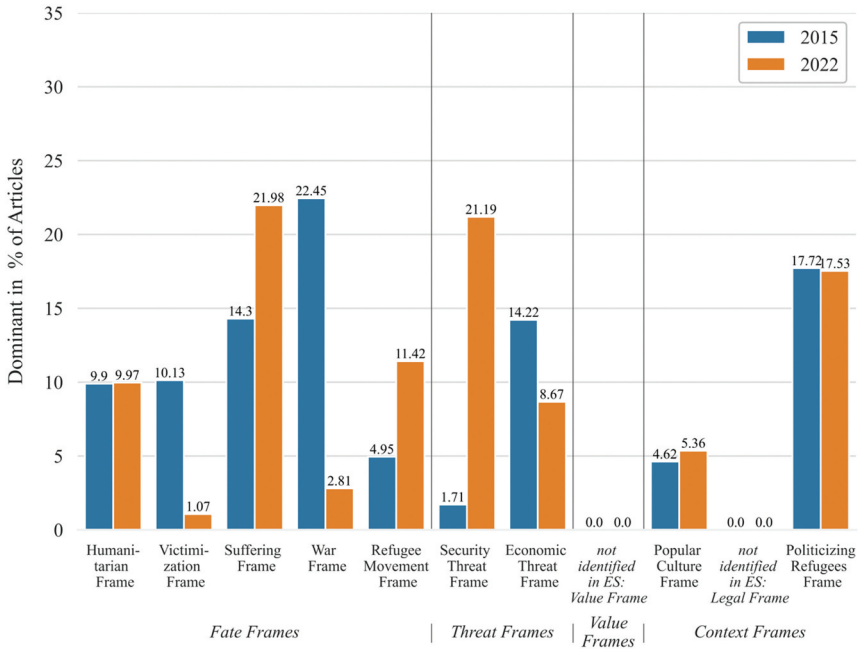


Figure A2. Dominance of frames in Spanish Newspapers in 2015 and 2022.

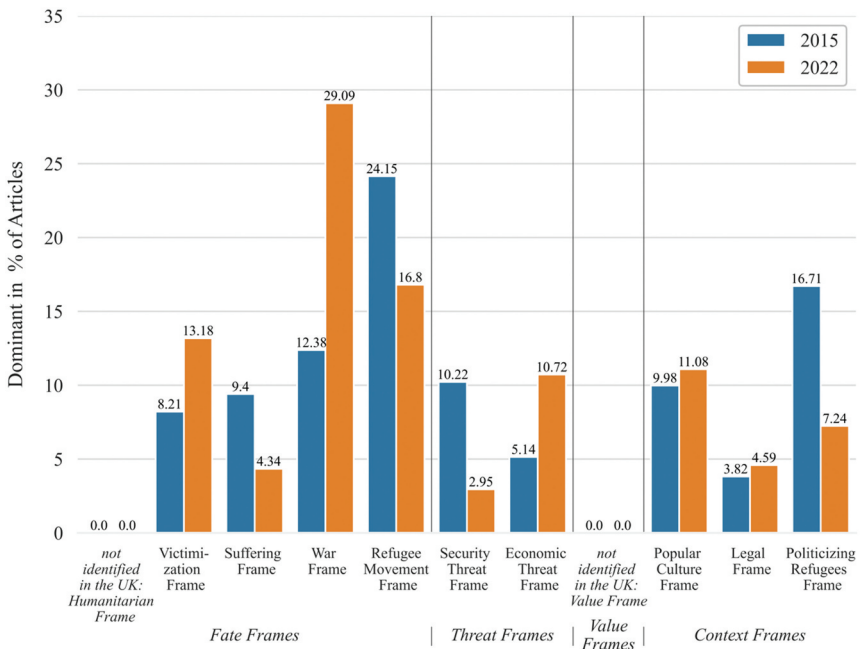


Figure A3. Dominance of Frames in British Newspapers in 2015 and 2022.

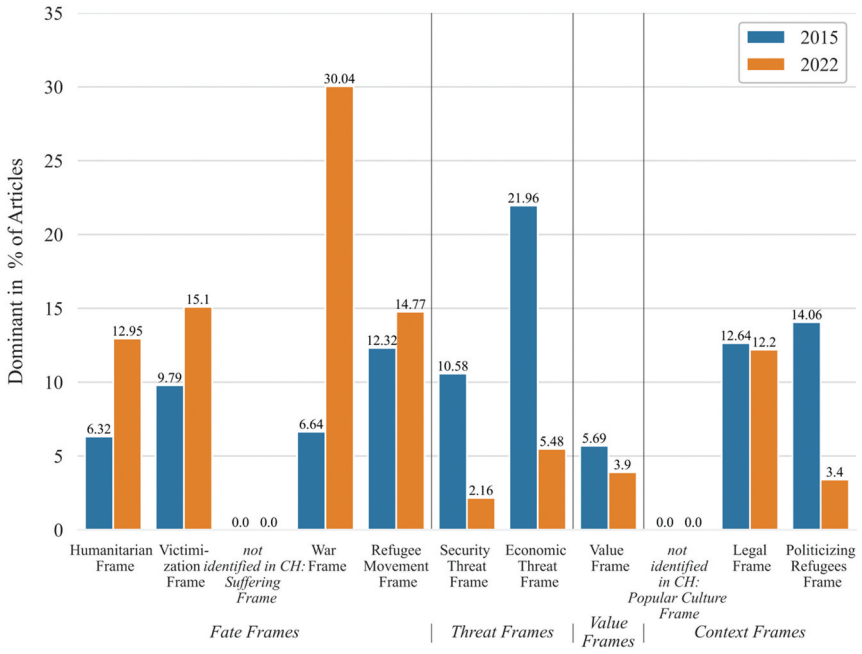


Figure A4. Dominance of Frames in Swiss Newspapers in 2015 and 2022.