Framing to Make an Argument: The Case of the Genocide Hashtag in the Russia-Ukraine war

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Abstract

This study tackles hashtags as framing devices which shape public arguments and controversies in computer-mediated communication environments. It focuses on the use of the *genocide* hashtag on Twitter in the context of the Ukraine-Russia war. It proposes and showcases a methodology to surface how the semantic and discourse properties of the term genocide affect its framing properties as a hashtag which bears argumentative functions, directly or indirectly calling for action.

Keywords Hashtags · Argumentative framing · Ukraine-Russia war · Corpus analysis

1 Introduction

This study proposes a methodology to investigate the argumentative role played by hashtags as framing devices, taking the *genocide* hashtag on Twitter in the context of the Ukraine-Russia war as a case study.

Framing, the discursive foregrounding of certain aspects of an issue over others (Entman 1993), constitutes an evergreen research topic across communication and social sciences. In the era of digital media and the networked society, the social impact of frames is intensified: frames have the potential to prime decision-making processes at the individual and societal level, strengthening the force of certain arguments rather than others and making specific aspects of a topic salient (Kahneman and Tversky 1984). Digital platforms have brought to the fore new affordances, such as hashtags, that can be used to convey frames and arguments, as shown by phenomena such as *hashtag activism*: hashtags such as #bringbackourgirls have been used

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to bring media attention to injustices previously ignored (the abduction of 276 girls from a school in Nigeria in 2014), but they at the same time relegate to the background factors such as a complex socio-political environment (Dadas 2017), thus privileging the circulation of certain arguments rather than others. Some argumentation scholars have highlighted how frames play a strategic role at the content (selection/presentation of issues), structural (number and type of premises) and inferential (types of reasonings) levels (e.g. Greco Morasso, 2011; Fairclough and Madroane 2020). However, a systematic model for the analysis of the argumentative functions played by frames across digital media, the primary focus of this study, is still missing. Furthermore, while linguistic and argumentative functions of a handle of hashtags have been investigated, this study proposes a framework to disentangle how the different components of a hashtag (the 'hash', the lexical item, the syntactic position) contribute to the phenomenon of framing from an argumentative perspective. I have decided to focus on the Twitter platform since the character limit imposed on posts (280 characters) hinders the presence of articulated arguments, making it difficult for to detect at scale whether a tweet bears argumentative potential (Schaefer and Stede 2021).

The proposed framework of investigation of hashtags as devices for argumentative framing is showcased through the analysis of *#genocide* in the context of the ongoing Russia-Ukraine conflict following Russia's invasion of Ukraine in February 2022. The term *genocide* has assumed a strategic function since the very beginning of the conflict: Vladimir Putin, the president of Russia, has mentioned the presumed genocide against ethnic Russians in Donbas as an argument to justify the war (https://tinyurl.com/2srjcdd4); on the other side, Volodymyr Zelensky, president of Ukraine, has accused Moscow of attempted genocide (https://tinyurl.com/yckv68df) after the bloody siege of Mariupol, arguing for increasing and more substantial international interventions.

Although the legitimacy of framing current events as *genocide* still constitutes a matter of debate (https://tinyurl.com/4y9v3j23), the argumentative relevance of such framing devices is worth investigating due to its institutional underpinnings: to the *Convention on the Prevention and Punishment of the Crime of Genocide*, State Parties must take measures to prevent and to punish the crime of genocide once identified.

On these grounds, I propose to use hashtags as a privileged proxy to investigate framing patterns and their argumentative function in online debates on Twitter. Focusing on the *genocide* hashtag on Twitter as a case study, an analytic pipeline to answer the following research questions is presented: What are argumentative frames? What framing functions can be conveyed by hashtags? How do semantic and syntactic (e.g. position) features of hashtags influence their role as framing devices? First, the theoretical framework (hashtags as indicators of framing) concerning state-of-the-art literature is grounded (Sect. 2). To investigate the argumentative underpinnings of the *genocide* frame, drawing from the official definition provided by the UN Genocide Convention, presuppositions and entailments which constitute the semantic conditions activated by the *genocide* frame are identified (Sect. 3.1). Through the Twitter API, all tweets containing the term *genocide* as a hashtag in the 24/02/2022–07/03/2022 time span have been collected. The 100 most popular tweets (as a combination of likes and retweets) have been selected and annotated according

to three main analytic layers (Sect. 3.2) The results shed light on the role played by the genocide hashtag as an indicator of argumentative framing (Sect. 3.3).

2 Theoretical Framework: Hashtags as Indicators of Argumentative Framing

2.1 Argumentative Frames: A Fractured Paradigm

Starting from the 1970s the concept of frames has received attention from a plethora of disciplines including anthropology (Bateson 1972), psychology (Abelson 1975), sociology (Goffman 1974), linguistics (Fillmore 1975) and artificial intelligence (Minsky 1974). Scholars have referred to "frame" both as a verb and as a noun, stressing its function as a cognitive process or as a communication device. In communication sciences, Entman (1993: 52) distinguishes *framing*, the act of "select[ing] some aspects of a perceived reality and mak[ing] them more salient in a communicating text" from *frames*, the devices used to select and create salience, which are manifested by the "presence or absence of certain keywords, stock phrases, stereotyped images, sources of information". In relation to media discourse, framing is defined as "the way events and issues are organized and made sense of, especially by media, media professionals and their audiences" (Reese 2001:7). Besides framing, news media can also lead to re-framings, which consist in changing the original frames of interpretation (Putnam 2004), shifting from the particular to the general (Putnam 2004: 279) or from the concrete to the abstract. Turning to frames, the definitions provided across these various fields point out that they are guidelines or lenses to make sense of our experiences and create "structures of expectations" (Ross 1975). As noticed by Greco (2009), a major issue for the study of frames in communication is the proliferation of taxonomies (e.g. Shmueli and Ben-Gal 2003; De Vreese 2005) built through heuristics which are neither scalable nor exportable. A structured typology of frames is, instead, offered by linguistic *frame semantics* (Fillmore 2003). According to Fillmore, frames are formed by (set of) predicates that "index portions or aspects of some conceptual or action whole", leaving others implicit (2003: 282). The online database *Framenet* (https://framenet.icsi.berkeley.edu/fndrupal/) offers a complete lexical database of the English language through frames. Frame semantics offers a systematic way to anchor framing processes onto language use, offering a new way forward to scale up the identification of frames. However, it has so far been largely neglected in communication studies. Combining the semantic and communication sciences tradition, this study approaches frames drawing from the semantics of lexical units, and it considers framing as the process through which frames are at once constructed, through the selection of lexical units, and communicated, appearing in specific syntactic constructions and/or speech acts.

Framing has been recognized as relevant to argumentation[1]. According to van Eemeren (2010: 126) framing "amounts to create a context by verbal means in which

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[1] Argumentation is "a verbal and social activity of reason aimed at increasing (or decreasing) the acceptability of a controversial standpoint for the listener or reader, by putting forward a constellation of proposi-

what is put forward makes sense to the audience in a way that is in agreement with the speaker's or the writer's intentions", thus creating "social facts". Preliminary case studies in argumentative discourse have focused on those verbal means, highlighting that frames play a strategic role in the content (selection/presentation of issues), structural (number and type of premises), inferential (types of reasonings) and polyphonic aspects of argumentation. Drawing from the *Argumentum Model of Topics* (Rigotti and Greco 2019) framework, Greco (2009) points out that in dispute mediation and media discourse frames are used by the participants of a discussion to select material premises which allow to form the contextual background upon which issues are formed, make sense of them and evaluate them. Similarly, Fairclough and Madroane (2020) underline how frames make certain premises more salient and, thus, more persuasive than others. Through the analysis of a case of political communication, Bigi and Greco Morasso (2012) show that fillmorian frames, activated by keywords, privilege some types of reasoning over others (argument schemes). Going one step forward, Greco et al. (2018) examine how justified reframing leads to complex argumentation. However, a systematic and unified theoretical model for the analysis of the argumentative role played by frames is still missing.

2.2 Hashtags and Frames: Linguistic and Discursive Functions

Hashtags are metadata tags characterized by the presence of the '#' symbol. They have been devised with an indexing function to enable cross-referencing of content: as underlined by the Google designer Chris Messina in a blog post that launched the use of hashtags "Every time someone uses a *channel tag* to mark a status, not only do we know something specific about that status, but others can *eavesdrop* on the context of it and then join in the channel and contribute as well" (Messina, 2007, https://factoryjoe.com/2007/08/25/groups-for-twitter-or-a-proposal-for-twitter-tag-channels/). In other words, a hashtag's primary function is originally that of marking certain topics and making them available to relevant communities. The functional similarity to framing is straightforward: hashtags foreground a topic as highly relevant in an instance of communication, guiding the interpretation of the tweet's content. As remarked by Meraz and Papacharissi (2016) hashtags work as markers of networked framing: they constitute a way for users to self-curate the content on the platform tagging tweets with community-level semantic annotations. Hashtags, in fact, "organize instances of momentary connectedness into networks" (Rathnayake and Suthers 2017: 2) among users who may or not intend to create and interact within a community. In other words, hashtags, affordances of the Twitter platform, work as markers of frames: the '#' symbol followed by a term/phrase through the Twitter technological infrastructure is a tool to allow and catalyse collective activity.

The awareness of the relevance of hashtags for the understanding of framing has attracted attention from the scholarly community. Hemphill et al. (2013) show it is possible to accurately infer the political affiliation of members of the U.S. Congress from their use of hashtags, suggesting that they can work as framing markers. Xiong et al. (2019) have, for instance, investigated what frames emerge from hashtags used

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tions intended to justify or refute the standpoint" (van Eemeren et al. 2013: 5).

by SMOs participating in the #MeToo movement, while Priadana and Tahalea (2021) have leveraged hashtags as vehicles of message frames during the pandemic to identify networks of users on Instagram. However, hashtags do not necessarily express frames (e.g. a hashtag indicating the name of a conference simply states the presence of a venue), while the framing they convey is influenced by the linguistic features of the word(s) making up the hashtags. Focusing on semantics, for example, Small (2011) draws a distinction between *informing hashtags*, used to purely disseminate information, and *commentary* ones, which express the viewpoint of the author. Taking micro-celebrities on Twitter as a context, Page (2012) proposes to pay attention to the type of clause (declarative, imperative and question) surrounding the hashtags. The results show that the occurrence of different types of clauses correlates with interaction between peers vs. broadcast styles of communication. Drawing from Systemic Functional Linguistics, Zappavigna (2015: 5) sets out three main functions for hashtags, "an experiential function of enacting experience, an interpersonal function of negotiating relationships, and a textual function of organizing information".

Scott (2015) has delved into the pragmatic function of hashtags adopting a Relevance Theory perspective; she shows that hashtags can contribute (i) to the content of the proposition expressed, e.g., clarifying a referent (e.g. "She's done it! An amazing amazing effort. Please txt FIVE to 70510 #davina #windermere"); (ii) to drive higher-level explicatures relating, for example, to the speaker's attitude (e.g. "One week from today I can start throwing again. #finally"); (iii) to guide implicatures which make contextual assumptions accessible (e.g. "I feel like I am falling over on the inside. #winehangover").

Within the discourse and argumentative community, "hashtag activism" has become subject to scholarly attention: Mohammed's (2019) analysis of the anti-#MeToo manifesto, shows that hashtags contribute to virality and can express argumentative issues which cater to conflicting points of view. Drawing from a corpus-based analysis of tweets addressing fashion sustainability, Greco and de Cock (2021) point out that tweets sharing hashtags such as *#sustainablefashion* may designate polylogues, grouping participants with different stakes over the matter. The main function of the *#sustainablefashion* appears to be the original one of 'topic tag', mostly working as an argument that can be paraphrased as "because it is sustainable" or "because it advances sustainability" (Greco and de Cock 2021: 61). On fashion-related controversies, Karamalak and Cantoni (2021) describe how hashtags with specific linguistic features-- e.g. expressing a rhetorical question (#WhoMadeMy-Clothes) or phrases containing adjectives which summarize the main ideas of the campaign (#sustainablefashion, #slowfashion) -- function as rallying hashtags, inviting communities to enact social change. Touching upon the illocutionary force of hashtags in an argumentative analysis of tweets targeting the fashion retailer Primark, Greco (2023) shows that hashtags can express themselves standpoints (e.g. #BoycottBlackFriday) or subdiscussions on material starting points (#PrimarkCares?). For argumentation mining purposes, Bhatti, Ahmad and Park (2021) have collected a dataset of 24,100 tweets containing the hashtags #StandWithPP or #DefundPP. The hashtags have been considered as argumentative claims in the planned parenthood debate and a classifier has been built to detect tweets which provide arguments for

those standpoints. The results show that *hashtags*, when expressing policy propositions which work as standpoints, can facilitate argument mining.

To sum up, state-of-the-art studies show that hashtags' linguistic features are a predictor of their argumentative functions. Furthermore, hashtags can designate polylogical discussions, while not always indicating the main issue in a controversy. However, a distinction between the role played by a hashtag as a marker of frames and the semantic of the term/phrase which makes up the lexical material is not drawn. Furthermore, to our knowledge, no attention has been paid to determining what semantic elements enable hashtags to activate frames with argumentative implications. In this analysis, a tripartite terminological distinction is made distinguishing the presence of an '#' before the term 'genocide' as a framing device, the term itself as a potential frame, and its position in the clause and argumentative function as a matter of framing.

3 Case Study: *#genocide* & Ukraine-Russia War

On the 24th February 2022, in his televised address to Ukraine, Vladimir Putin explicitly accused Ukraine of having perpetrated genocide towards Russians in Donbas:

"The purpose of this operation is to protect people who, for eight years now, have been facing. humiliation and **genocide** perpetrated by the Kiev regime. To this end, we will seek. to demilitarise and denazify Ukraine, as well as bring to trial those who perpetrated numerous. bloody crimes against civilians, including against citizens of the Russian Federation". […] "As I said in my previous address, you cannot look without compassion at what is happening. there. It became impossible to tolerate it. We had to stop that atrocity, that *genocide*. of the millions of people who live there and who pinned their hopes on Russia, on all of us. It is their aspirations, the feelings and pain of these people that were the main motivating force. behind our decision to recognize the independence of the Donbass people's republics." (Full transcript available at: https://www.bloomberg.com/news/articles/2022-02-24/full-transcript-vladimir-putin-s-televised-address-to-russia-on-ukraine-feb-24)

More specifically, the presumed genocide of the people in Donbass is appealed to as an argument justifying a war that is presented as the sole means to stop such a genocide. In response to these accusations, Ukraine instituted proceedings against the Russian Federation and appealed to the Court, stating that "Russia has no lawful basis to take action in and against Ukraine for the purpose of preventing and punishing any purported genocide" (https://www.icj-cij.org/public/files/case-related/182/182-20220227-PRE-01-00-EN.pdf).

In the application, as well as in a series of public declarations a few days after Putin's speech, Volodymyr Zelensky accused, in turn, the Russian Federation of "planning acts of genocide in Ukraine", contending that Russia "is intentionally killing and inflicting serious injury on members of the Ukrainian nationality, the *actus reus* of genocide under Article II of the [Genocide] Convention". Without asserting the presence of genocide, Zelensky stresses the presence of symptoms of genocide which also suggests a broader plan. Focusing on intentionality is indeed strategic, as it lies at the very core of the distinctive traits indicative of a genocide taking

place. According to the Oxford English dictionary, the term 'genocide' is defined as "The **deliberate** and systematic killing or persecution of people from a particular group identified as having a shared ethnicity, nationality, etc., **with the intention** of partially or wholly destroying that group" (https://www.oed.com/dictionary/genocide_n?tab=meaning_and_use). The origin of the term boils down to 1944 when the New York lawyer Raphael Lemkin coined the term to designate Nazi's atrocities during World War 2. As specified by Keyes (2021: 168), existing terms such as "mass murder" or "slaughter" did not have enough scope to represent Hitler's intention to wipe out Jews. As a result, the birth of a new term was announced to its readers by the Sunday Times on the 21st October 1945 as follows: "The United Nations' indictment of the 24 Nazi leaders has brought a new word into the language—genocide. It occurs in Count 3, where it is stated that all the defendants 'conducted deliberate and systematic genocide—namely, the extermination of racial and national groups'". The term acquired a value in International Law since its very origin, functioning as an argument to justify indictment. The magnitude of a targeted massacre implied by the semantics of the term bears more argumentative force compared to neighbour terms. It was, then, affirmed as a crime under international law in 1946. As a follow up, with the adoption of the United Nations' Genocide Convention 1948, genocide is officially defined as follows:

"Genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

(a) Killing members of the group;
(b) Causing serious bodily or mental harm to members of the group;
(c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
(d) Imposing measures intended to prevent births within the group;
(e) Forcibly transferring children of the group to another group."

As explained by Philip Gourevitch in his editorial in the *New Yorker* (13th March 2022, https://www.newyorker.com/news/daily-comment/is-it-time-to-call-putins-war-in-ukraine-genocide), according to folk understanding, genocide is conceived as a mass slaughter with drastic demographic consequences on a an ethic group. However, any one of the five acts, even if it does not directly involve killing, is sufficient for a genocide to be established, provided that the perpetrator's intentionality is ascertained.

Determining the presence of *genocide* and its actors constitutes a contentious issue since it scales up the conflict to State Parties of the Convention. The Convention establishes, in fact, on State Parties the obligation to take measures to prevent and to punish the crime of genocide, including by enacting relevant legislation and punishing perpetrators, "whether they are constitutionally responsible rulers, public officials or private individuals".

In other words, the truth value of the assertive proposition "Russia/Ukraine is perpetrating a genocide", which can be expressed by *#genocide*, has a direct impact on actions being undertaken, with practical implications which would not exist if the same actions were defined with another concept.

3.1 Semantic-Pragmatic Analysis of *Genocide*

The term *genocide* is listed in the *Framenet* database as a lexical unit that recalls the frame "killing" and is defined as "the deliberate killing of a very large number of people from a particular ethnic group or nation" (https://framenet.icsi.berkeley.edu/fndrupal/luIndex). Both the definition and associated frame well represent prototypical genocides such as the Holocaust, the extirpation of Native Americans and Indigenous peoples. This is not surprising since *Framenet* is based on annotations and analysis carried out by researchers who are not necessarily law experts. For this reason, the folk definition of the term does not typically emphasize the institutional consequences ratified by the United Nations. Instead, it focuses on the consequences in terms of human lives from an ethnic perspective, aligning with its etymological origin (from the ancient Greek γένος, 'race, kind' + the suffix -cide, meaning 'killing of'). However, since the term 'genocide' was first used in relation to the UN indictment of Nazi leaders, I have chosen to use the definition promulgated by the United Nations as our benchmark. This also allows to distinguish *genocide* from neighbour concepts such as *massacre* or *mass slaughter*, in line with the rationale behind the genesis of the term. In Pragmatics terms, the utterance "X is perpetrating a genocide" is a constative (Austin 1962) which triggers different pragmatic inferences depending on who is pronouncing it. The determination of genocide can ultimately be made only by the United Nations, in a manner akin to how a judge ultimately decides on guilt in a trial. Therefore, when an ordinary person asserts the presence of genocide, it allows for a pragmatic inference of the deontic type (e.g., "the genocide must be stopped"). This is because the concept of genocide is perceived as morally reprehensible and necessitates action to halt its consequences. Conversely, when the United Nations declares the presence of genocide, they perform a commissive type of speech act (e.g., "The member states of the UN commit to act to stop the genocide and punish its perpetrators"). This is because, according to the law, they are obligated to take action.

To unpack the meaning of *genocide* through a fine-grained semantic analysis, I adopt Congruity Theory (Rigotti and Rocci 2006; Rigotti et al. 2014; Tribastone and Greco 2018), a semantic-pragmatic approach that analyses predicates in terms of presuppositions and entailments. As explained by Rigotti et al. (2014: 261). "the presuppositions imposed by a predicate onto its argument places are conditions of meaningfulness (or, from another point of view, of ontological possibility) and concern both the situations in which the predicate is affirmed and those in which it is negated [.]. On the contrary, the semantic implications of the predicate disappear when the predicate is negated: in fact, the mode of being corresponding to the predicate, as it is negated, does not take place." As such, Congruity Theory offers the advantage of singling out what semantic features of a predicate are used to recall a scenario (presuppositions) and what features are, instead, employed to frame the scenario in a certain way (entailments). This distinction has argumentative implications since disagreement happens when the entailments of a predicate are not recognised or attacked, while presuppositions stand as shared common ground.

Drawing from Congruity Theory, the word *genocide* can be conceived as a predicate whose meaning depends on the identification of the presuppositions and the implications that it imposes over its argument places. The argument places required

for the predicate *genocide* to be in place are number-wise the same as the predicate *killing*, namely a human entity (x_1) which accomplishes harm at the expense of a victim-entity (x_2). However, other conditions are imposed on x_1 and x_2 and their relations, as visualized in Figure 1.

Presuppositions:

- x_1 is a person/group of people.
- x_2 is a group of people belonging to a national, ethnic, racial or religious group, different from x_1.
- $\times_1$ accomplishes any of the acts 1–5 on x_2.

Entailments:

The intention (final cause/motive) of x_1 is to destroy in whole or in part, the national, ethnical, racial or religious group of x_2.

1. Killing members of the group OR.
2. Causing serious bodily or mental harm to members of the group OR.
3. Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part OR.
4. Imposing measures intended to prevent births within the group OR.
5. Forcibly transferring children of the group to another group.

Figure 1 Presuppositions and entailments of the *genocide* frame.

The three presuppositions remain valid even when the predicate is negated, as in the fictional example "the mutilation of a wide number of Oompa Loompas by Willi Wonka's regime is not a genocide, but a mere massacre". Even if the mutilation is an instance of the second of the 5 acts listed by the Convention, and Oompa Loompas
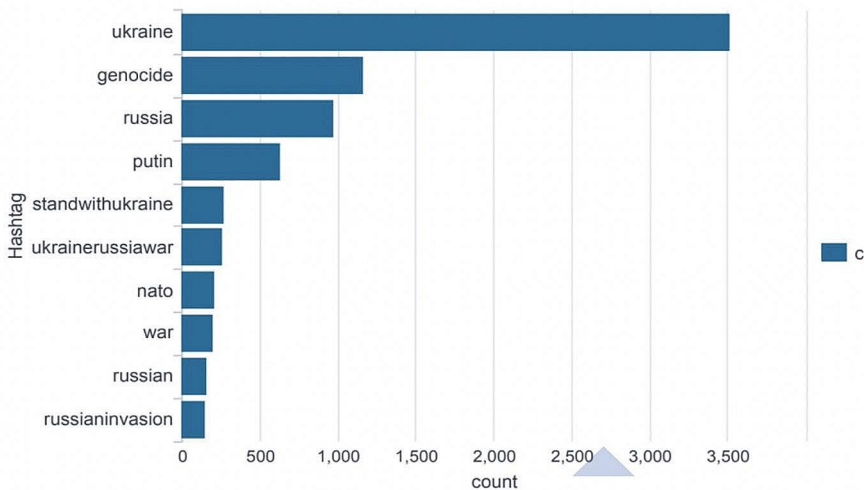

Fig. 1 Top hashtags in dataset of tweets about genocide in the Ukraine-Russia war

are ascribable to an ethnic group, what is missing is **intentionality**, which constitutes the core entailment of the predicate, having scope over the five conditions. It has to be noted that any of these conditions is sufficient though not all necessary for a genocide to be in place. More specifically, what is missing is that the destruction of such an ethnic group constitutes the actual motive (intention) for the accomplished criminal act. It has to be noted that it is enough for 1 of the 5 acts to be perpetrated intentionally for *genocide* to happen. The action of killing, which for instance is not included in acts 4 and 5, is thus not a necessary condition for *genocide* to take place.

When at least one of the entailments of genocide is satisfied, the term triggers an appeal to patriotism or identity involving both parties x_1 and x_2. On one side, the group identified as the victim of genocide enters a defensive mode in response to an existential threat. On the other side, the group accused of perpetrating genocide often reacts with hostility towards the community that takes measures against their actions. This frequently includes denying that their actions constitute genocide and accusing the opposing party of attempting to attack their identity. In other words, *#genocide* implies that the rhetorical technique of *flag-waving*, which consists of playing on strong national feeling to justify an action, identified as one of the 18 most common propaganda techniques (Martino et al. 2022), is at stake. This situation intensifies the polarization of opinions regarding the conflict, as the inherent presuppositions of the term 'genocide; establish the presence of two parties with distinct roles: victim and perpetrator. Furthermore, the focus on the intentionality of the criminal act, a key component of genocide, compels the public to determine who is at fault.

3.2 Data and Method

I have collected a dataset of tweets taking "genocide" AND "Ukraine" as filtering keywords for the time span 24/02/2022–02/03/2022, without any constraints on users' geolocation or identity. I, in fact, wanted to provide a snapshot of the ongoing debate about the issue among Twitter's users. The overall number of retrieved tweets was 23,567. I then extracted hashtag frequencies to make top hashtags emerge:

Not surprisingly, the two keywords constitute the most frequent hashtags.

Out of the 1043 tweets containing the hashtag #genocide, I randomly selected 100 tweets to carry out a multilayer qualitative analysis.

As to analytic layers, the following have been considered:

- Position: *intra clause*, when #genocide is part of the clause (regardless of its grammatical function); *out of clause*, when the hashtag is in isolation either before (*pre-out*) or after (*post-out*) the tweet.
- Discourse function: #genocide constitutes or is part of a clause that has a descriptive or an argumentative function. For the latter case, I have distinguished when intra clause #genocide is part of a proposition working as standpoint or as an argument and when out of clause #genocide expresses a standpoint or an argument. The positioning within the clause, coupled with the potential argumentative function, is intended to illuminate preferential associations between syntactic and discourse features. Our hypothesis aims to test if the semantics of the term qualify it as an effective argumentative indicator, and if its position further influences its

role as an indicator of standpoint or argument. The occurrences where #genocide bears an argumentative function have been further annotated as to the argument scheme, the reasoning connected the argument to the standpoint, according to the taxonomy proposed by Author et al. (2016).

The identification of argument schemes at place is carried out using the *Argumentum Model of Topics* (Rigotti and Greco 2019). In a nutshell, the AMT is a framework for the analysis of the inferences activated when making an argument. Different from other approaches (e.g. Walton et al. 2008), it conceives of an inference as the combination of material and procedural premises. The procedural premise consists in the *maxim*, an abstract rule of reasoning deriving from a *locus* (*or topos*), that is a generic type of relation, such as *causality*, *analogy* or *authority* between the expressed argument and the standpoints. The material premises, instead, include the *datum*, i.e., a piece of textually expressed factual information, and the *endoxon*, i.e., a proposition referring to beliefs, principles and values that are shared within the relevant communicative context (Figure 2).

3.3 Results

From the analysis, it turns out that, in our sample, #genocide always has an argumentative function, with a prevalence for the expression of standpoints (67%) over arguments (33%). The hashtag does not express itself or appear in a descriptive sentence. This is not surprising, as it is the prerogative of the United Nations to decide whether genocide is occurring. In the case of the Ukraine-Russia war, allegations of genocide were under discussion when the collected tweets were published (An Independent International Commission of Inquiry on Ukraine to investigate violations of human rights and international humanitarian law was created on March 4, 2022). As a result, the presence or absence of genocide became a controversial issue among the public, with arguments for and against. Even when presented as a factual
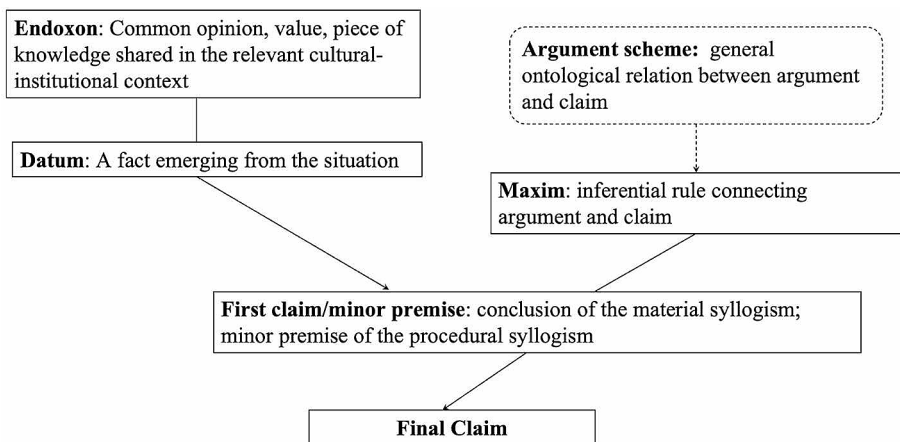

Fig. 2 *the Argumentum Model of Topics* in a nutshell

premise, the mention of genocide serves as an argument to persuade member states to take action, rather than merely reporting on current states of affairs. Otherwise, the advocated actions would have already been taking place. This lack of argumentative neutrality suggests that #genocide works as an indicator of argumentative framing. The argumentative component appears to be related to the position occupied by the hashtags: (Figure 3)

The hashtag, when used to express an argument, is never found outside the clause preceding the tweet. Specifically, when #genocide is placed after the main content, it functions as an argument only if it reiterates and emphasizes a previous mention of 'genocide' within the tweet's text:

3.3.1 Example 1

TRUMP CALLS PUTIN GENOCIDE \"savvy\" and \"genius\" Since no REPUBLI-CAN has called him out we should assume they agree. #Ukraine #Genocide https://t.co/y11Qhc5b3F".

The main standpoint of tweet 1) is that Republicans agree with Trump's endorsement of the genocide perpetrated by Russians. The declaration made by Trump (that "'Putin genocide's \"savvy\" and \"genius\") is presented as a factual premise, which, linked with the premise "no republican has called him out" allows the author of the tweet to infer consensus on the matter across the party.

In all other cases, when *out of clause*, *#genocide* constitutes a standpoint in the form of an existential declarative clause which can be spelt out as "there is genocide happening".
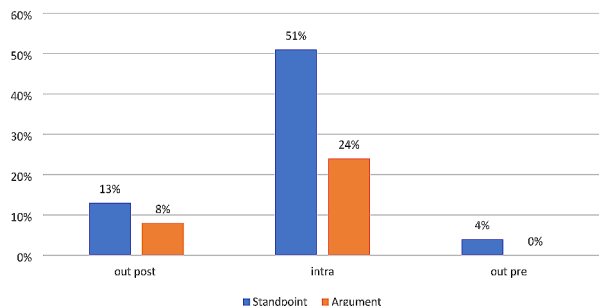
In these cases, the content of the tweet provides arguments showing that the entailments of the *genocide* frame are true. The reasoning in place is an argument scheme from definition where the semantic definition of what counts as genocide constitutes common ground knowledge (*Endoxon*):

3.3.2 Example 2

"Russian troops open fire at and throw grenades at CIVILIAN PROTESTORS in Energodar on the right side of the screen a civilian's leg is blown off by a grenade.

Putin stands on the corpses civilians to lecture us about nazis in #Ukraine #genocide https://t.co/Vz6owjyNpV (Figure 4).

Fig. 3 Distribution of *#genocide* with respect to argumentative function

Endoxon: intentionally killing members of a group and causing serious bodily or mental harm to their members are definitional traits of a genocide happening

Argument scheme: from definition

Datum:
Russian troops open fire at and throw grenades at CIVILIAN PROTESTORS in Energodar intentionally killing civilians and Putin accuses them of being Nazis while walking on their corpses

Maxim: if the definitional traits for a situation to be classified as y are present then the situation is an y

First conclusion: traits for the situation in Ukraine to classify as genocide are present

Final Conclusion
Russia is perpetrating a genocide against Ukraine

Fig. 4 Reconstruction of argument scheme from definition used in tweets to assert the presence of genocide

In Example 2, the significance of the intentionality trait in establishing a genocide is underscored. This is achieved through a deliberate contrast between a sentence depicting scenes of an ongoing massacre and another portraying Putin as 'walking on corpses'. This contrast implies his awareness and condescension toward the unfolding events. The paradox of Putin making accusations about the Nazification of Ukraine suggests a parallel with one of the most prototypical genocides in history, the holocaust. Stylistically, the use of capital letters in CIVILIAN PROTESTORS stresses the fact that a standard war-like scenario between troops is ruled out.

When functioning as a standpoint inferred through a definitional argument scheme, the hashtag *#genocide* activates a call for action, in view of the obligation to prevent and punish genocide (Articles I & 2) according to the *Genocide Convention* ratified by United Nations (see Sect. 2). Once acknowledged, the standpoint expressing that a genocide is happening (e.g. "Russia is perpetrating a genocide against Ukraine") can become a factual premise (Datum) in a pragmatic reasoning (locus from goal to action) where the goal is that of preventing or punishing *genocide* with all possible means: (Figure 5)

When in this syntactic (*post-out* clause) and argumentative (standpoint) position, the *#genocide* hashtag triggers the presence of a *standing standpoint*, defined as follows:

"The standpoint is standing just as in a standing declaration (Searle 1995): it takes effect only once a certain context is in place. If argument (x) has become publicly associated with standpoint (y), advancing (x) triggers the attribution of standpoint (y)
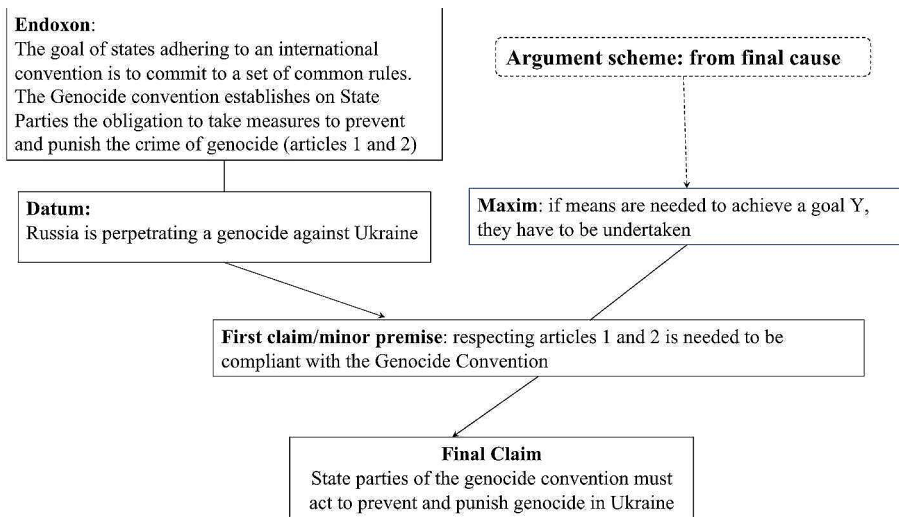
Fig. 5 Reconstruction of argument scheme from final cause used in tweets to derive a standing standpoint

to the arguer who has. advanced (x) as long as there is no evidence to the opposite" (Mohammed 2019: 318).

In our case, *x* ("there is a genocide happening") is institutionally associated with the standpoint "state parties of the genocide convention must act to prevent genocide in Ukraine". This implied call for action is signalled by the presence of a deontic moral verb (*must*) in the original text of the convention. The standing standpoint expressed in the tweet may not always be advanced intentionally by the author, who might overlook the institutional consequences and focus more on moral condemnation. Nevertheless, this standpoint can still be attributed to the tweet's author by others, consistent with the full definition of the concept, especially in the absence of evidence to the contrary.

#Genocide tends to be attested as a standpoint also when *intra-clause*. Differently from when *out of clause*, however, it can be part of standpoints which do not necessarily state the presence of genocide. While the bare hashtag *#genocide* is inherently assertive, it can be inserted in sentences expressing the modality of possibility, or even in rhetorical questions which assert the lack therein:

3.3.3 Example 3

""And see ICC Prosecutor Khan Statement 2/25: "my Office may exercise its jurisdiction over and investigate any act of #genocide crime against humanity or war crime committed within the territory of Ukraine since 20 February 2014 onwards." https://t.co/lgL4Tv6VWY"".

3.3.4 Example 4

""I had not thought of the war in #ukraine this way but a #genocide is now a real possibility in the long run. At least it is one way Putin and Russia could react to feeling betrayed by Ukraine and the world. To dehumanize what they will think is a manipulated population."

3.3.5 Example 5

"As much as I sympathise with #Ukraine, what is with the drama and frankly the lies, that what is going on is a #genocide? This is not a word to be used lightly and barely anyone has been killed so far. If #Putin wanted to commit genocide you'd have known all about it. Esp deaths".

In Example 3, Prosecutor Khan's commitment to investigate the presence of acts of genocide crime implies an underlying indirect interrogative clause of the type "I will investigate whether genocide or not is at stake". The hypothetical presence of genocide is explicitly determined in 4) as high-ranked among possible worlds. Regardless of the likelihood, in such contexts #*genocide* is part of a standpoint that casts the presence of *genocide* as the target of controversy and the argumentative issue. The fact that the term is a hashtag signposts the magnitude of the issue, catering for an audience interested in the matter. In example 5, the user is indirectly stating that Russia is not committing genocide against Ukraine. The main counterargument towards the presence of *genocide* is the lack in the number of recorded deaths. Even though the intention is to show that the semantic entailments for a *genocide* to be in place are not satisfied, the argumentation is inherently defeasible since the act of killing is not a necessary condition for genocide to happen (see Sect. 3).

When #*genocide* is positioned *intra-clause* as part of a sentence functioning as an argument, the standpoint expresses in the majority of occurrences, a call for action, which, differently from *standing standpoints*, is textually explicit. It is for example the case in Example 5, where a user is addressing the Minister for Foreign Affairs, European Affairs and Foreign Trade Sophie Wilmes, and the Ukraine Minister of Foreign Affairs (Dmytro Kuleba), to advocate for prompt action:

3.3.6 Example 6

"@Sophie_Wilmes @DmytroKuleba Deputy Prime Minister - not only to ensure readiness. hand over weapons, enable Ukraine to defend itself. there is #genocide. time to act firmly and immediately."

In such cases, the argument scheme at stake is from final cause:

The semantic entailments recalled by #*genocide* form a strong motivation for means to be provided to stop its happening (end), as visualized in Figure 6. In other words, the illocutionary force of the utterance "a genocide is happening" intensifies the argumentative strength of the conclusion which is drawn.

In a handful of cases in our sample (6), #*genocide* is used in comparative contexts to mark that each instance of genocide is equally worth being fought regardless of the context:
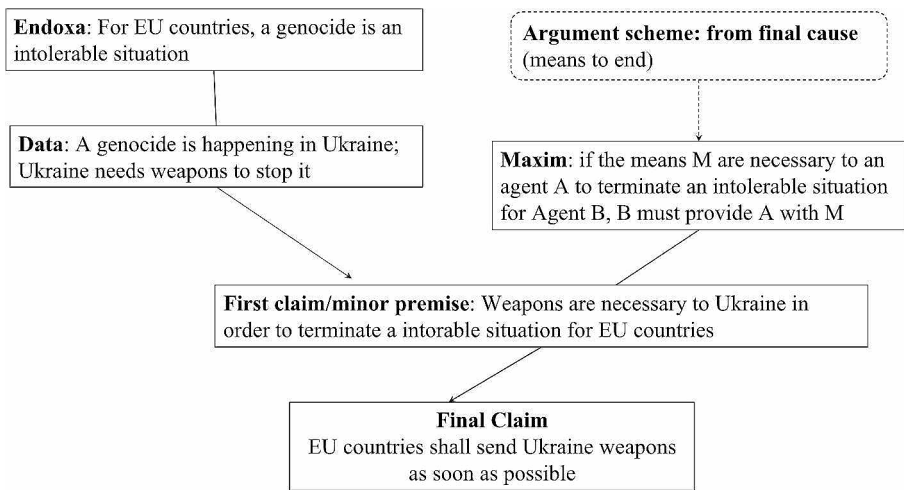
Fig. 6 Reconstruction of argument scheme from final cause used in tweets where *#genocide* is part of an argument

3.3.7 Example 7

"'International Community has Moral Obligation to Act Now': Indian Diaspora Groups Hold Summit on Preventing #Genocide. A reminder that it's not only in #Ukraine where are taking place @cjwerleman @BylineTimes https://t.co/eI44f91bTl ".

In such occurrences, the argument scheme in place is an analogical one, where states of affairs symptomatic of a *genocide* happening across locations are put sideways as belonging to the same category. The establishment of an analogy creates the grounds for advocating for the same actions from the international community in both scenarios: Figure 7

These instances again stress the illocutionary force of the *genocide* frame which warrants action regardless of the participants involved.

4 Conclusion

This study has addressed the role played by hashtags as indicators of argumentative framing in social media communications. On one side, the nature of hashtags as indexing means to navigate the proliferation of information makes them privileged candidates to express framing functions by design. On the other, frames achieve a high societal impact when they acquire an argumentative function, priming/guiding decision-making processes. Focusing on the hashtag *#genocide* on Twitter, I show that hashtags, working as framing devices, can constitute proxies for advancing
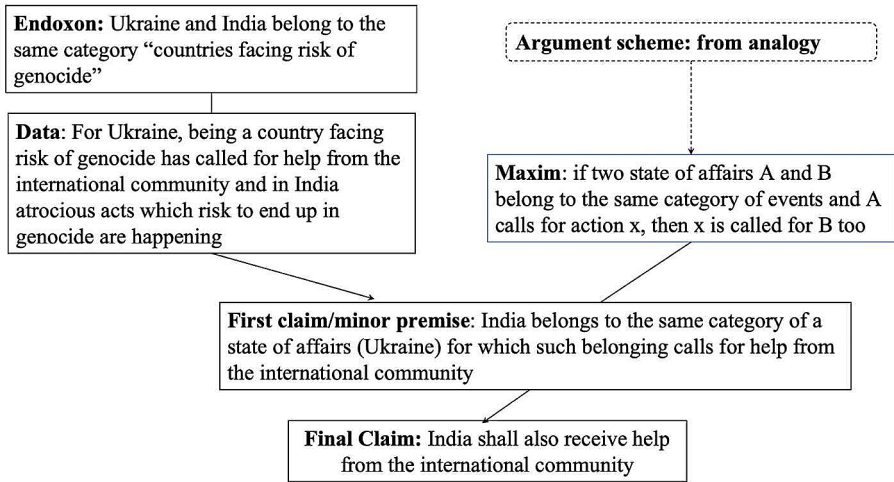
Endoxon: Ukraine and India belong to the same category "countries facing risk of genocide"	**Argument scheme: from analogy**
Data: For Ukraine, being a country facing risk of genocide has called for help from the international community and in India atrocious acts which risk to end up in genocide are happening	**Maxim**: if two state of affairs A and B belong to the same category of events and A calls for action x, then x is called for B too

First claim/minor premise: India belongs to the same category of a state of affairs (Ukraine) for which such belonging calls for help from the international community

Final Claim: India shall also receive help from the international community

Fig. 7 Reconstruction of argument scheme from analogy in comparative contexts

standpoints and arguments depending on the semantic and pragmatic features of the term that is marked by the hash.

I propose a methodological pipeline consisting of (i) a semantic analysis of the lexical item making up the hashtag using Congruity Theory (ii) an analysis of the argumentative value of the hashtag in its context of occurrence, focusing on its position in the clause, the argumentative component it is part of (standpoint/argument) and the argument schemes it is involved in. The analysis of (i) not only allows to mapping semantic and pragmatic features onto framing functions, but it offers fine-grained evaluative means to identify whether a predicate can be attributed to a situation or not. The cross-observation of the layers in (ii) allows an understanding of whether a hashtag is an indicator of argumentative framing (as a standpoint/argument) and whether it invites the presence of certain argument schemes over others. Such schemes, in turn, shed light on how pragmatic effects such as polarization are constructed through language sparse on social media.

Zooming onto our case study, out of the 23,567 tweets containing the keywords "genocide" & "Ukraine" published during the first week of the conflict, *#genocide* constitutes the second top hashtag (1043 occurrences), in line with the function of hashtags to express aboutness. The multi-level semantic and discursive analysis carried out over the 100 most popular tweets with hashtag *genocide* further reveals that:

- *#genocide* works as an argumentative frame due to its semantic presuppositions and entailments, unless the presence of genocide has been officially declared by the UN, thus becoming an unassailable fact in legal terms. In the latter case, the declaration entails the performance of a commissive speech act on the part of the member states. In the former case, the attribution of the predicate "genocide" to a situation bears an illocutionary force that attributes argumentative strength to a textually implicit or explicit call for action.
- its position in the clause constrains its argumentative functions: *#genocide* tends,

for instance, to work as a standpoint, especially when positioned *out of clause.*

- when a standpoint, *#genocide* expresses the existential clause "there is genocide happening", with the content of the tweet working as an argument asserting, through a definitional argument scheme, that the semantic entailments for a genocide to be happening are fulfilled. Such a standpoint activates in turn a standing standpoint in which a call for action is performed.
- when an argument, *#genocide* is compatible with both arguments schemes from means to end and from analogy, supporting in both cases a practical ("call for action") standpoint of the deontic type (e.g. "You should send weapons to Ukraine", "You need to intervene", etc.).

To sum up, this study contributes to the state of the art in the analysis of the argumentative functions of hashtags, still in its infancy, in two main ways: it offers a methodology to systematically analyse the argumentative framing imposed by hashtags based on semantic and discursive properties; it shows that hashtags can shape public discourse around controversial issues, inducing specific types of pragmatic reasoning and fuelling social phenomena such as polarization. A thorough understanding of hashtags' argumentative properties is paramount in the Networked Society to be aware, as social media users, of the rhetorical implications of their use, and to predict/ analyse controversies, their paths of negotiations or radicalization as well as their power to create communities. I plan to investigate through social network analysis what kind of communities engage in the use of hashtags such as *genocide* to achieve complementary evidence to our hypothesis. I furthermore plan to scale up the analysis to ascertain whether certain trends (e.g., position in the clause entailing an argumentative function) are statistically significant and could thus, be used computationally for argument mining purposes.

Declarations

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