Mobilizing Diasporas: Understanding Transnational Relief Efforts in the Age of Social Media

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Abstract

Social media have reconfigured the international relief landscape by creating discursive spaces for grassroots activism. In this study, I use semantic networks to systematically investigate the role of social media in mobilizing a new actor – diasporas – for providing humanitarian aid. I visualize the structure of conversations among Ukrainian diaspora communities to illuminate the social contexts for two sets of behaviors: political advocacy, the traditional pathway for diaspora engagement with their country of origin; and humanitarian relief, an emergent collective behavior in which grassroots actors supply aid to their homeland directly, bypassing institutional brokers such as international nonprofit organizations. Leveraging data from online discussions within ten diaspora communities on Facebook, I demonstrate how social media facilitate diasporic activism by reinforcing horizontal ties between benefactors and affected communities. This comparative case study contributes to a deeper understanding of diasporic involvement in relief in the age of social media.

1. Introduction

Social media have reconfigured the international relief landscape by creating discursive spaces for grassroots storytelling and activism to aid communities in crisis [1], [2]. When people get exposed to news reports and personal narratives of those affected by natural and anthropogenic disasters, they engage in a variety of pro-social behaviors: studies [2] have shown that such information makes them more likely to participate in humanitarian relief by donating money, volunteering, and otherwise supporting the affected communities. In the age of social media, many of these behaviors have been mediated by online platforms: sharing first-hand accounts from the sites of disaster on Facebook, soliciting aid or donations through crowdfunding, or volunteering to support emergency management operations by using hashtags on Twitter.

By mobilizing involvement in relief efforts, social media may also draw networked publics into relief operations [1]. This was the case with emergency managers in the United States, who created an online community with the explicit goal of becoming actively, albeit remotely, involved in emergency management response through social media [3]. This paper examines one such networked public - diaspora communities, who are 'distinctively local', yet nonetheless 'shaped by transnational and global dynamics' [4]. Research on diaspora involvement in humanitarian relief has been heavily centered on institutional brokers, such as international nonprofit organizations [5], [6]. Studies in social movements [6]-[8] have predominantly considered diaspora efforts in lobbying their host governments and international organizations. Aside from studies documenting remittances (monetary transfers by persons who work abroad back to their families) and exploring their effects on economic development of their country of origin [9], evidence on diasporas' direct involvement in humanitarian and/or military relief in their countries of origin remains scarce (see, for example, [10], [9]). To remedy this shortcoming, I use semantic networks to systematically investigate the ways in which diasporas are mobilized on social media to provide direct humanitarian aid to their country of origin. Leveraging data from online discussions within ten Ukrainian diaspora communities on Facebook, I ask: What is the nature of platformmediated involvement in relief efforts among Ukrainian diasporas?

To answer this question, I use semantic networks to explore the case of a transnational Ukrainian diaspora on Facebook. The Ukrainian case provides a rich empirical context for studying diaspora due to large Ukrainian populations living abroad. In addition to the large number of Ukrainians living in the neighboring countries of Russia and Poland, a sizable proportion of Ukrainians inhabit the North American continent, with an official estimate of 1.5 million living in Canada, and 1 million in the United States [11], [12]. Moreover, between 2014 and 2018 and beyond, Ukraine has been party to a military conflict, which contributed to a

humanitarian crisis within the communities surrounding the war zone in its eastern part.

Leveraging data from online discussions within the diaspora communities on Facebook to construct semantic networks, I aim to illuminate the social contexts underpinning transnational relief efforts in the ongoing military conflict in eastern Ukraine. In this comparative case study, I visualize the structure of discourse among ten Ukrainian diaspora communities in the United States and Canada to identify and analyze two sets of behaviors: political advocacy, the traditional pathway for diaspora engagement with their country of origin [5]; and humanitarian relief, an emergent collective behavior in which grassroots actors supply aid to their homeland directly, bypassing institutional brokers such as international nonprofit organizations

What makes this project unique is its scope – rather than studying one particular relief group in the context of a single event (e.g., hurricane Harvey), I present a systemic inquiry into the social contexts of diasporic mobilization in relief efforts. Addressing a gap in the field of diaspora studies, this case study contributes to a deeper understanding of technology-driven social transformations, in which social media create new, networked channels for direct diasporic involvement in relief efforts in their country of origin.

2. Diaspora as a networked public: a social movement perspective

Diaspora research to date has focused on the 'symbolic' roles diasporas play in framing political events in their homeland, and the role of remittances in post-conflict reconstruction and economic development [9]. If the country of origin is in a state of war, diasporas may engage in diplomacy, lobbying for their host country's support of the warring parties, or mobilize to promote international peace efforts [5], [7], [9]. A particularly illuminating study of Tamil diaspora [9] sheds light on the complexities of diasporic involvement in the time of crisis – people have different reasons to engage in 'homeland politics', and such engagement happens across diverse social contexts. Moreover, due to the ambiguity of post-conflict reconstruction as a concept (which elusively presupposes that the conflict is over and the reconstruction has begun, which is not always the case), diasporas may choose to sponsor communities in their homeland in a variety of ways: by sending remittances to family members, donating to charity organizations, or supporting local businesses operating in their homeland [9], [13].

Social media have become a prominent space for diasporic activism and mobilization processes [14]–[16]. Unlike states that have clear geographical

boundaries, diasporas are deterritorialized – these networks are mobilized around an identity or a cause that is not necessarily state- or territory-specific [6], [17]. A diaspora becomes a political actor *in situ*, through its activities, positionality within other networks, and interaction with local and international institutions [8], [17], [18].

Social media have led to the emergence of a new type of diasporic connectivity that transcends geographic constraints and affords multi-territorial engagement – a concept known as transglocalization [15]. This concept problematizes the traditional, "triadic" relationship among homeland, host land, and diaspora, positing that diaspora networks may become actors in local, national and transnational contexts. Transglocalization thus represents multi-territorial engagements that emerge from studying networked publics [19] and leave traces of their online behavior that may be accessed in the form of data [3]; from a methodological standpoint, online media, including social media, can be considered an empirical site of studying transnational diasporic behavior [15], [20]. In this study, I thus conceptualize diasporas as a networked public, mobilized around issues of local, global, and transnational importance.

Diaspora scholars call to analyze diasporic engagement not only by its type (political advocacy/humanitarian aid) or level (local/national/transnational), but also consider the social contexts in which this engagement is embedded [13]. Fischer posits that identifying specific narratives and discourses of engagement with the country of origin helps better understand the nature of diasporic activism. The author proposes a typology of mobilization that happens across three social contexts: the (extended) family sphere; the 'known community' sphere represented by trusted community organizations; and the imagined community sphere, represented by the nation or an ethnic community whom the activists share an affinity for as a social group [20].

3. Social media in humanitarian relief: from information sharing to action

Crisis events in the homeland are known to politicize and mobilize diasporas for transnational activism, turning them into geopolitical actors [6], [8]. This process produces a political community in the form of 'loosely organized and shifting networks of solidarity' [8], and social media platforms become channels for concern and care, allowing community members to express support and praise for those helping disaster-stricken communities [1]. Research also shows that, quite unlike traditional media, social media has the

capacity to transform information sharing into 'physical' acts of caring – thus translating social media engagement into a tangible effort of humanitarian relief [1].

Following a disaster, social media facilitates a range of important pro-social behaviors: circulating first-hand accounts of disaster, sharing articles and news, requesting help or donations, constructing narratives of concern and care for affected populations. Importantly, social media is unmatched when it comes to recognizing charitable efforts among community members, which, in turn, prompts new waves of donor contributions [1]. Studies outline three mediating factors that facilitate user involvement in relief campaigns: personal ties with the person(s) affected by a disaster (family/friends); patriotism toward a country/locality and its inhabitants (imagined community); and feelings of concern for disaster-affected populations ('known community') [1], [13]. In the next sections, I explore whether and how these factors manifest among the Ukrainian diaspora communities in order to better understand the contexts and the roles diasporas play in transnational relief efforts in the age of social media.

4. Digital diasporas and the military conflict in Ukraine

Ukrainian diaspora, broadly defined as networks of individuals who share a Ukrainian identity while living abroad, have been active participants in the events leading up to the military conflict in Ukraine. In 2013, during the Revolution of Dignity – a series of violent followed protests that then-President Yanukovych's government's refusal to sign the Association Agreement with the European Union [21] – these networks were central to collecting and broadcasting information about the events in Ukraine to Western audiences [22]. Much of this advocacy work has been done on Facebook - a leading social media platform used to mobilize Ukrainians, including those living abroad, around a shared cause of helping protesters in their plight against corruption and cronyism of the country's political elites, as well as the government-sanctioned human rights violations that took place during the protests [21]-[23]. Between November 2013 and February 2014, diaspora communities solidified around successful mobilization campaigns, including DigitalMaidan, the Razom for Ukraine initiative, and the InfoCenter, which became the first known transnational organization to coordinate the purchase and delivery of humanitarian aid to protesters in Kyiv [22].

In the spring of 2014, the Ukrainian government launched an 'Anti-Terrorist Operation' to counteract

occupation of Ukraine's eastern territories by the Russian-backed forces. In response to escalating military actions in the eastern regions of Ukraine, diaspora networks directed their efforts into urging their host country governments to support the provisions of the Budapest memorandum, an international agreement that provided security assurances to Ukraine in exchange for its non-nuclear status in 1994 [12]. When efforts proved unsuccessful, Ukrainian communities abroad shifted to large-scale advocacy campaigns, pushing the U.S. and Canadian government to impose sanctions on the Russian Federation and deliver military and humanitarian aid to Ukraine.

Meanwhile, between 2014 and 2018, over \$15 million dollars' worth of relief made its way from Canada to Ukraine via large-scale, transnational, private relief initiatives [10]. While the Ukrainian Canadian Congress lobbied the Canadian government to support the Ukrainian army through official channels, many diaspora communities were collecting donations to provide military and humanitarian aid directly to the Ukrainian battlefronts [10]. These advocacy efforts and private relief campaigns turn the Ukrainian diaspora into a prominent geopolitical actor in the Ukrainian crisis. Studies of the role of Ukrainian diaspora in the military conflict point to diaspora mobilization around two sets of behaviors: political advocacy through institutional intermediaries [12], [22], and providing direct humanitarian aid to crisis-affected communities in Ukraine, including soldiers and their families [10], [24]— [26]. Leveraging data from online discussions within the diaspora communities on Facebook, I shift to a systematic investigation of the discourses and narratives of Ukrainian diasporic engagement in their homeland.

5. Method

5.1. Data collection

As I have shown above, Facebook is frequently used among diaspora communities as a space to articulate and sustain an identity vis-a-vis a connection to their homeland [27]. Across diasporic contexts, it is pertinent to consider this platform when analyzing transnational mobilization around issues of local and global importance [15], [28]. During the studied period, Facebook was the single most popular social media platform across the two countries in this study: Canada, where 84% of adults have an account and almost 80% use the platform daily [29], and the United States, with 68% of adults on Facebook, of whom 74% use the platform daily [30]. Since 2014, the platform has also played an increasingly prominent role in Ukraine, where it has been used for facilitating protests [21], [23], and

organizing logistics to assist the Ukrainian army after the beginning of the military conflict [31]. For these reasons, I chose Facebook as the point of entry into the mediated interactions among the diasporic communities in question.

I started data collection by identifying a sample of posts from public groups on Facebook that satisfied the following inclusion criteria: the group members identified as Ukrainians living abroad, i.e. the group had the word 'Ukrainian' or 'Ukrainians' present in its name in either English, Ukrainian, or Russian. The name of the group could also contain the word 'diaspora', or indicate the boundaries of a geographic location with which the community was associated, e.g., "Ukrainians in LA". To identify the groups, I used a method known as associative query snowballing [32] on Facebook's search function, which yielded 111 public groups. Next, I selected the groups located in either Canada, or the United States, due to significant populations of Ukrainians living in these countries (42 groups). Then, I identified the groups that had over 100 members and produced over 100 posts, which provided a rich corpus of textual data for generating semantic networks (39 groups). Finally, I identified the communities that were consistently active throughout the duration of the Anti-Terrorist operation in Ukraine, which left 10 groups, five from each of Canada and the United States. Once the groups were identified, I used Netvizz [33] to collect historical posts and comments covering the studied period (2014-2018). Although all of the groups had a 'public' status, the group data have been de-identified, to protect privacy of its participants.

Table 1. Sample descriptives

Group Name	Members	Posts
Canada_1	4,498	4,486
Canada 2	529	1,161
Canada 3	5,917	4,530
Canada 4	4,886	9,700
Canada 5	8,679	19,026
U.S1	12,823	20,794
U.S2	2,229	3,736
U.S3	2,695	2,150
U.S4	5,893	5,095
U.S. 5	794	360

5.2. Semantic networks

Semantic network analysis offers a rich methodological toolkit to analyze human behavior online. This approach consists of using semantic networks – graphic representations of online discourse that allow researchers to extract meaning from large volumes of textual data. In semantic networks, nodes

represent the nouns found in the text corpus extracted from posts and comments within a given group over the studied period [34]. Nodes (terms) are linked through edges. Each edge has a weight (value) assigned to it indicating the frequency of co-occurrence of two terms in users' posts and comments. This networked approach to text mining allowed me to detect and map topics – clusters of terms that co-occur in a conversation [35], [36]. Given the large volume of online conversations within our sample (ranging from 360 to 50,491 unique posts per group), this method was helpful in understanding the topical composition of conversations within diaspora networks, as well as identify discussions of political advocacy and engagement in direct humanitarian aid.

Since the ten groups in the sample communicated in three languages (English, Ukrainian, and Russian), I used Google services to translate the text corpus into English language automatically. Next, I used VosViewer software [37] to create semantic networks of the topics discussed within the groups (Table 2).

Table 2. Semantic network descriptives

			Clusters
Group	Nodes	Edges	(by
Name			modularity)
Canada_1	1,225	60,839	8
Canada_2	507	23,356	5
Canada_3	1,456	129,948	6
Canada_4	2,839	307,335	7
Canada 5	3,850	461,891	8
U.S1	3,925	390,826	7
U.S2	1,220	77,139	5
U.S3	592	24,354	3
U.S. 4	1,607	114,194	5
U.S5	109	1,292	4

To visualize the text corpus, I imported it into VosViewer in English using binary counting, which allows for each term to only be counted once regardless of the number of times it appears in a certain post/comment. Next, I set the minimum number of occurrences of each term to three and the relevance criteria to 100%, so not to exclude important general terms that might indicate the topic of interest, such as 'Ukraine', 'war', and 'soldier' (see, for instance, Figure 1).

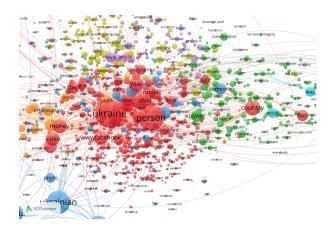


Figure 1. Semantic network for Canada_3, showing a prominent cluster of the discussion around the war in Ukraine (VosViewer). Modularity = 0.24; 1,456 nodes and 129,948 edges.

These particular settings provided a sufficient level of granularity to identify the topics that were discussed within the groups in the sample. As a final step, I imported the semantic networks into Gephi [38] and used a measure of modularity [39] to partition the semantic networks into clusters of highly interconnected nodes, each cluster indicating a topic. (Table 3). Analysis of semantic networks from each group will illuminate the topical structure of discourses among Ukrainian diasporas.

Table 3. Semantic network parameters.

		Average	
Group	Average	weighted	Modularity
Name	degree	degree	(fast greedy)
Canada_1	99.33	141.51	0.15
Canada_2	46.07	66.78	0.17
Canada_3	89.25	141.65	0.24
Canada_4	108.25	166.05	0.13
Canada_5	119.97	199.81	0.18
U.S1	99.57	159.08	0.16
U.S2	63.23	90.58	0.17
U.S3	41.39	56.82	0.25
U.S4	71.06	134.33	0.29
U.S. 5	11.85	16.58	0.24

5.3. "Mattering maps"

Theorizing diaspora formations in contemporary platform-mediated contexts led to the emergence of new methodological approaches that combine computational and ethnographic methods to fully capture the dynamic nature of a diaspora community [see, for instance, [15],

[20], [28]. In order to contextualize the semantic networks mapping the discussions within each group, scholars borrow from ethnographic research to create 'mattering maps' [28], [40] – discursive constructs that have the affective potential to move people to action. Experiencing semantic networks through VosViewer's user interface allowed me to observe clusters of highly interconnected terms. Starting from terms with the highest degree centrality, I then described each cluster, finding messages with indicated terms in the dataset to validate the topic. A potential limitation of this approach is that, due to a low modularity coefficient, the clusters are not well-defined and likely overlap – which, however, did not present itself as an obstacle to qualitative analysis, as shown on Figure 2.

Figure 2 provides an example of a semantic network with low modularity, in which clusters are not well defined and frequently overlap (U.S._1). Figures 3 and 4 illustrates a network with a comparatively higher modularity score – showing topics of political advocacy and humanitarian relief.

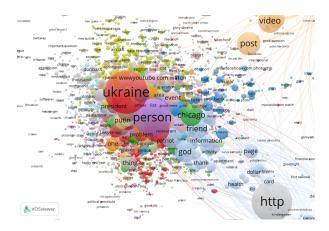


Figure 2. Semantic network for U.S._1, showing multiple overlapping topics within a large corpus of mediated discourse (VosViewer). Modularity = 0.16; 3,925 nodes and 390,826 edges.

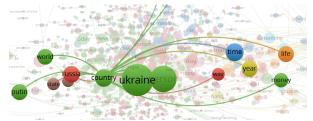


Figure 3. Fragment of a semantic network for U.S._4, showing interconnected terms related to political advocacy (VosViewer). Modularity = 0.29; 1,607 nodes and 114,194 edges.

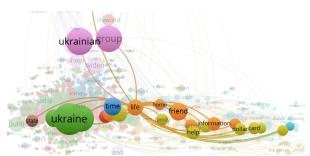


Figure 4. Fragment of a semantic network for U.S._4, showing interconnected terms related to humanitarian relief (VosViewer). Modularity = 0.29; 1,607 nodes and 114,194 edges.

6. Findings

In this study, I identified and systematically analyzed two sets of platform-mediated narratives among diaspora networks: transnational political advocacy for the homeland, and efforts to deliver humanitarian relief straight to conflict-affected communities in the homeland. Mapping the discourse within ten public groups on Facebook, I was able to find evidence of discussion around both behaviors within the clusters of terms. Although somewhat low modularity scores point to a possible overlap of topics discussed among diaspora groups, I was able to qualitatively discern instances of discourse related to each of the two behaviors studied (Table 4).

Table 4. Clusters of topics representing political advocacy and humanitarian aid, % of terms in a semantic network for each group.

	Political	Humanitarian
Group Name	advocacy, %	aid, %
Canada_1	25.96	11.84
Canada 2	31.16	35.9
Canada_3	51.99	20.74
Canada 4	29.59	1.9
Canada 5	42.3	31.7
U.S1	25.81	43.7
U.S2	22.38	42.3
U.S3	25.34	54.36
U.S. 4	10.33	18.54
U.S. 5	-	22.94

As seen from Table 4, the structure of discourse among Canadian groups differs from the groups based in the United States: Canadian Ukrainians appear to have more elaborate discussions of Ukrainian politics in comparison to humanitarian aid, whereas humanitarian aid has a richer and more diverse discursive representation among the American Ukrainians. The size of the clusters may not be used to assess the volume

of the conversation around a particular topic – rather, it points to the depth of a topic discussed and the diverse social contexts in which each topic appears in conversations within the groups. Applying the analytical framework suggested by Fischer [20] to qualitatively analyze individual messages from the clusters, I find discrepancies in how the Canadian Ukrainians and the American Ukrainians engaged in 'homeland politics'. In the Canadian groups, political advocacy happened across all three social spheres: among family and friends; between group members and trusted community organizations; and directed at the imagined community sphere, represented by the nation. Yet, discussions around humanitarian aid happened in an explicit social context of a 'known community', represented by trusted people and organizations. At the same time, American Ukrainians were predominantly discussing Ukrainian national politics, yet showed engagement in various types of direct humanitarian aid: from helping individual soldiers and orphans, to working with trusted community organizations in the United States, as well as in Ukraine, raising funds for a variety of social causes.

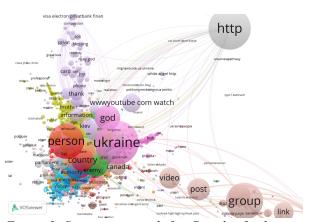


Figure 5. Semantic network for Canada._5, showing multiple overlapping topics of local significance within a large corpus of mediated discourse (VosViewer). Modularity = 0.18, 3,850 nodes and 461,891 edges.

While diasporic conversations are traditionally focused on social integration within the host country [15], I did not find evidence of such discussions taking place across all groups – two Canadian groups from the sample (Canada_3 and Canada_4) were discussing political, cultural, and socioeconomic issues in an explicitly national context. Overall, discussions around social integration in a host country may happen on a local, as well as on a national level: some topics lend themselves to a national lens (e.g., immigration) while topics like employment and education are usually tied to smaller locales (Figure 5). To illustrate this, Table 5 contains a detailed description of each of the 8

modularity clusters, identified in the semantic network for Canada 1.

Table 5. Clusters of topics in Canada 1.

cluster	%	Topic	Terms
1	3.02	Local	"book", "copy",
		services	"exposure",
		and	"demand", "charge"
		interests	
2	25.96	Political	"consulate",
		advocacy	"income",
			"document",
			"Russia", "war",
			"petition",
			"propaganda",
			"sanctions"
3	1.55	Education	"admission
			coordinator",
			"grant", "foreign
			student", "private
		- 1	college"
4	5.31	Employ-	"candidate",
		ment	"knowledge",
			"profession",
			"maternity leave",
	0.06	Ŧ .	"free course"
5	9.06	Immigra-	"resident", "status", "letter", "citizen",
		tion	"letter", "citizen",
			"representative",
			"requirement",
	14.04	TT 141	"age", "flag"
6	14.04	Healthcare	"doctor",
			"hospital",
			"parent",
			"medicine", "condition",
			condition,
7	11.84	Humani	"insurance"
7	11.84	Humani-	"insurance" "person",
7	11.84	Humani- tarian aid	"insurance" "person", "assistance",
7	11.84		"insurance" "person", "assistance", "clothing", "child",
7	11.84		"insurance" "person", "assistance", "clothing", "child", "integrity",
7	11.84		"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village",
		tarian aid	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine"
7 8	11.84	tarian aid	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine" "Toronto", "event",
		tarian aid Local cultural	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine" "Toronto", "event", "information",
		tarian aid	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine" "Toronto", "event", "information", "place", "ticket",
		tarian aid Local cultural	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine" "Toronto", "event", "information", "place", "ticket", "business", "news",
		tarian aid Local cultural	"insurance" "person", "assistance", "clothing", "child", "integrity", "region", "village", "Eastern Ukraine" "Toronto", "event", "information", "place", "ticket",

Unlike predominantly local conversations around integration (culture, employment, housing, education, parenting, healthcare), discussions around political

advocacy happen on a transnational level, but through the genre of personal narrative. Below are a few translated quotes to illustrate the ways in which participants expressed their political views:

- And on the political level, Ukraine's interim authorities have tied their own hands by branding the Donbass militias and their civilian supporters as Russian-backed terrorists, thereby ruling out the possibility of negotiation." I think the best way to call them is indeed "Russian-backed terrorists". I never saw anyone with anti-aircraft guns or tanks on the Maidan. (excerpt, Canada 1).
- 2. I just want to remind everyone that we are not fighting with the Russians as a nation, but rather with a country leading an aggressive policy...My emotions are overflowing...It turns out, living in Canada, my umbilical cord with Ukraine has not been cut. This invasion hurts as if a joint has been ripped from my body without anesthesia" (Canada 2).

Some messages were encouraging group members to participate in local political protests: 'Join Arts Against Aggression on Saturday in protesting [...], a supporter of Putin's war in Eastern Ukraine. Spread the word and invite your friends!' (U.S._2), which spans the boundaries between local and translocal activism happening in the private sphere among family and friends.

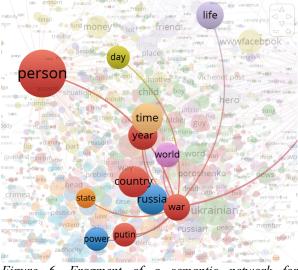


Figure 6. Fragment of a semantic network for Canada._5, mapping terms for political advocacy within a large corpus of mediated discourse (VosViewer). Modularity = 0.15, 3,850 nodes and 461,891 edges

Involvement in humanitarian relief was prominent among all 10 groups in the sample. In many instances, it was initiated by the members from affected communities, trusted organizations, or members who had personal connections among affected communities, which helped foster trust among the networked publics:

- 1. I immigrated from Ukraine not so long ago I guarantee there's a 100% chance this aid will reach the children it is shipped directly to the orphanage. I have personal experience doing this. (Canada 1).
- 2. S.O.S. !!! Help needed for a volunteer organization!!! Dear friends-Ukrainians! I am a volunteer, one of the founders of the [...] movement, and an official representative of the [...] charity fund...the war is not over, attacks continue, soldiers are stationed at the forefront, but with insufficient ammunition ... starving and freezing...today, our fund needs a vehicle to deliver goods and food to the front...Accounts numbers for financial assistance ..." (Canada 2).
- 3. Urgent need of warm clothing: sweaters, jackets, warm pants, hats, gloves, socks, underwear, T-shirts, winter sleeping bags, winter boots. Toothpaste and toothbrushes. Coffee, tea, cigarettes, dried fruit and candy, chocolate cookies, condensed milk, soaps and children's drawings. Things are not as good as they say. It's very cold out there, and no warm clothes. Soon to be shipped to the ATO zone. Sending in the 20th of December. Many thanks to those who helped. We hope for your support. Please repost" (Canada 4).
- 4. Check out the Group "Toy Drive for kids of fallen Ukrainian heroes" There is always a need for volunteers. You can choose a family and send the package direct to them" (U.S._2).
- 5. "Hear the People !!!, Please help, it's just the inhabitants of the earth who have become hostages of this undeclared war. Countrymen and countrywomen! There is high need for supplies from stationery to clothes and shoes, bedding, sweets and fruits, baby food, detergents, household chemical goods, diapers, personal hygiene products for both boys and girls, office equipment, household appliances, paints, drinking water, toys, school supplies. If any of you have the slightest wish to take part just join! Our address [...]" (U.S. 5).

Whether or not the diaspora group members knew the members who posted these messages personally, I conclude that feelings of concern for affected populations were the strongest driver of relief, despite this act being highly political. Because of transglocalization. the engagement around humanitarian relief can also be considered an expression of patriotism, which again presents a multi-territorial engagement. spanning the local/transnational boundaries. Figure 7 helps illustrate this multi-territorial engagement: this fragment was taken from the same corpus as above (Canada 5), and shares a few terms with the discourse on political advocacy, with a visible effort to collect monetary donations to benefit persons and community organizations from Ukraine.

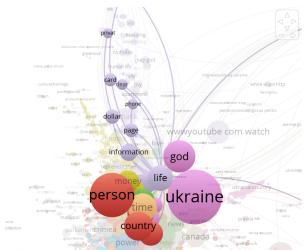


Figure 7. Fragment of a semantic network for Canada._5, mapping terms for humanitarian relief within a large corpus of mediated discourse (VosViewer). Modularity = 0.15, 3,850 nodes and 461,891 edges

7. Discussion and Future Work

Fragmentation and overlap of topics, discovered in the platform-mediated discourses within groups, point to the transglocal nature of online engagement among Ukrainians. As Kok and Rogers [15] explain, transglocalization encompasses a particular multiterritorial arrangement, which allows for local networks to act simultaneously with and exist along national and transnational ones. As demonstrated by the semantic networks, some issues span territorial boundaries of local/national/ transnational, which explains why the topics were not clearly separated within the studied groups.

Moreover, the findings point to the fact that the boundaries between mediating variables that drive relief (personal ties, patriotism, and concern for affected populations [1]) are in fact more blurred. Due to *transglocalization*, these drivers might overlap despite

their conceptually distinct territorial nature: while patriotism is a national-level phenomenon (e.g., 'let's not let Ukraine lose in this war'), concern for affected populations may manifest itself on the national, transnational, as well as local level through networked publics comprised of diaspora group members.

Importantly, the contexts of diasporic engagement in humanitarian relief differed across the two samples. As I find in the qualitative analysis of messages represented by the clusters in semantic networks, Canadian diasporas engaged in direct humanitarian relief vis-à-vis trusted people and community organizations. American Ukrainians demonstrated broader contexts engagement in humanitarian relief: from helping individual soldiers and orphans, to working with trusted community organizations in the United States, as well as in Ukraine, and raising funds for a variety of social causes. These findings are consistent with Fischer's study of Afghan diasporas, whose members demonstrated a strong preference for supporting extended family members and working with people and organizations with whom they have personal ties [20]. As the findings of this study show, social media facilitate diasporic activism by reinforcing horizontal ties between diaspora members and affected communities, enabling grassroots actors to supply military and humanitarian relief to their homeland directly, bypassing institutional brokers such as international nonprofit organizations.

This study contributes to a deeper understanding of diasporic mobilization by way of mapping discursive constructs that took place across platform-mediated communities in three languages. Grounding the findings in bottom-level original-text observations helped ensure the internal validity of this methodology: given that the extracted terms were used in aggregate to produce semantic networks, automatic translation was suitable for this task. Yet, I would recommend that scholars exercise caution when using this method on textual data in other languages or on other platforms (e.g., Twitter, where the length of the messages is shorter).

Future work will examine how Ukrainian diaspora communities in other countries used social media, and will cross-validate the findings with the interview data. Next steps will include interviewing the administrators of the diaspora groups from the sample, to better understand diasporic involvement in relief efforts in their homeland.

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9. References

- [1] S. Boulianne, J. Minaker, and T. J. Haney, "Does compassion go viral? Social media, caring, and the Fort McMurray wildfire," *Information*, *Communication & Society*, vol. 21, no. 5, pp. 697– 711, May 2018.
- [2] D. Murthy, "New media and natural disasters," *Information, Communication & Society*, vol. 16, no. 7, pp. 1176–1192, Sep. 2013.
- [3] L. Palen, S. Vieweg, S. B. Liu, and A. L. Hughes, "Crisis in a Networked World: Features of Computer-Mediated Communication in the April 16, 2007, Virginia Tech Event," *Social Science Computer Review*, vol. 27, no. 4, pp. 467–480, Nov. 2009.
- [4] K. Leurs, "Young connected migrants and nonnormative European family life: exploring affective human rightclaims of young e-diasporas," *International Journal of E-Politics*, vol. 7, pp. 15–34, Sep. 2016.
- [5] J. M. Brinkerhoff, *Diasporas and Development : Exploring the Potential*. Boulder, CO: Lynne Rienner Publishers, 2008.
- [6] Hess Monika and Korf Benedikt, "Tamil diaspora and the political spaces of second-generation activism in Switzerland," *Global Networks*, vol. 14, no. 4, pp. 419–437, Sep. 2014.
- [7] L. Berkowitz and L. M. Mügge, "Transnational Diaspora Lobbying: Europeanization and the Kurdish Question," *Journal of Intercultural Studies*, vol. 35, no. 1, pp. 74–90, Jan. 2014.
- [8] F. Ragazzi, "Diaspora: The Politics of Its Meanings," Int Polit Sociol, vol. 6, no. 1, pp. 107–111, Mar. 2012.
- [9] C. Orjuela, "Distant warriors, distant peace workers? Multiple diaspora roles in Sri Lanka's violent conflict," *Global Networks*, vol. 8, no. 4, pp. 436–452, Oct. 2008.
- [10] M. MacKinnon, "Bypassing official channels, Canada's Ukrainian diaspora finances and fights a war against Russia," 26-Feb-2015.
- [11] K. Hudyma, "Ukrainian language in Canada: From prosperity to extinction?," Working Papers of the Linguistics Circle, vol. 21, no. 1, pp. 181–189, Nov. 2011.
- [12] О. Sukhobokova, "Українська діаспора як чинник підтримки України США і Канадою в умовах Російської агресії у 2014 р. (Ukrainian diaspora as a factor of supporting Ukraine by the USA and Canada under Russian aggression in 2014).," *Історикополітичні студії*, vol. 1, pp. 69–75, 2015.
- [13] C. Fischer, "Reframing transnational engagement: a relational analysis of Afghan diasporic groups," *Global Networks*, vol. 18, no. 3, pp. 399–417, Jul. 2018.

- [14] W. Chen, "Abandoned not: media sociology as a networked transfield," *Information, Communication & Society*, vol. 21, no. 5, pp. 647–660, May 2018.
- [15] S. Kok and R. Rogers, "Rethinking migration in the digital age: transglocalization and the Somali diaspora," *Global Networks*, vol. 17, no. 1, pp. 23–46, May 2016.
- [16] M. Sökefeld, "Mobilizing in transnational space: a social movement approach to the formation of diaspora," *Global Networks*, vol. 6, no. 3, pp. 265– 284, Jul. 2006.
- [17] M. Koinova, "Autonomy and Positionality in Diaspora Politics," *International Political Sociology*, vol. 6, no. 1, pp. 99–103, 2012.
- [18] F. B. Adamson, "Constructing the Diaspora: Diaspora Identity Politics and Transnational Social Movements," in *Politics from afar*, T. Lyons and P. G. Mandaville, Eds. New York: Columbia University Press, 2012, pp. 25–42.
- [19] danah boyd, "Social network sites as networked publics: Affordances, dynamics, and implications.," in A Networked Self: Identity, Community, and Culture on Social Network Sites, Z. Papacharissi, Ed. Routledge, 2010, pp. 39–58.
- [20] P. Kumar, "Rerouting the Narrative: Mapping the Online Identity Politics of the Tamil and Palestinian Diaspora," *Social Media + Society*, vol. 4, no. 1, p. 2056305118764429, Jan. 2018.
- [21] A. Gruzd and K. Tsyganova, "Information Wars and Online Activism During the 2013/2014 Crisis in Ukraine: Examining the Social Structures of Pro- and Anti-Maidan Groups: The Social Structures of Proand Anti-Maidan Groups," *Policy & Internet*, vol. 7, no. 2, pp. 121–158, Jun. 2015.
- [22] S. Krasynska, "Digital Civil Society: Euromaidan, the Ukrainian Diaspora, and Social Media," in *Ukraine's Euromaidan: analyses of a civil revolution*, D. R. Marples and F. V. Mills, Eds. Stuttgard: Ibidem-Verlag, 2015, pp. 177–198.
- [23] O. Onuch, "EuroMaidan Protests in Ukraine: Social Media Versus Social Networks," *Problems of Post-Communism*, vol. 62, no. 4, pp. 217–235, Jul. 2015.
- [24] K. Kholodov, "American Citizen Danylko Asked for Money for his Birthday: the Child Donated \$1,600 for the Anti-Terrorist Operation," *Obozrevatel*, 2015. [Online]. Available: http://ukr.obozrevatel.com/life/people/40376amerikanets-danilko-prosiv-groshi-na-dennarodzhennya-ditina-vidday-1600-na-ato.html.
- [25] L. Tomkiw, "Ukraine Military Update: Soldiers Eat Rotten Food, Forced To Buy Equipment As Poor Conditions Still Visible On The Front Lines," *International Business Times (IBT.)*, 28-Oct-2015. [Online]. Available: http://www.ibtimes.com/ukraine-military-update-soldiers-eat-rotten-food-forced-buy-equipment-poor-conditions-2160306.
- [26] C. Recknagel and M. Sharipzhan, "Volunteers Try To Get Supplies To Ukraine's Forces," RadioFreeEurope/RadioLiberty, 06-Jun-2014. [Online]. Available: https://www.rferl.org/a/ukraine-

- army-equipment-donations/25413169.html. [Accessed: 30-May-2017].
- [27] R. Nuermaimaiti, "Identity construction online: the use of Facebook by the Uyghur diaspora," 2014.
- [28] D. Alinejad, L. Candidatu, M. Mevsimler, C. Minchilli, S. Ponzanesi, and F. N. V. D. Vlist, "Diaspora and mapping methodologies: tracing transnational digital connections with 'mattering maps," *Global Networks*, vol. 0, no. 0, 2018.
- [29] A. Gruzd, J. Jacobson, P. Mai, and E. Dubois, "The State of Social Media in Canada 2017," Feb. 2018.
- [30] A. Smith, Monica, and erson, "Social Media Use in 2018," Pew Research Center: Internet, Science & Tech, 01-Mar-2018.
- [31] O. Boichak, "Battlefront Volunteers: Mapping and Deconstructing Civilian Resilience Networks in Ukraine," in *Proceedings of the 8th International Conference on Social Media & Society*, New York, NY, USA, 2017, pp. 3:1–3:10.
- [32] R. Rogers, "List Making. Associative Query-snowballing Technique.," 2006. [Online]. Available: http://www.govcom.org/DigitalMethods/DMI%20List making%20and%20associative%20query%20snowbal ling.pdf.
- [33] B. Rieder, Studying Facebook via data extraction: the Netvizz application. New YorkACM9781450318891, 2013.
- [34] C. Haythornthwaite and A. Gruzd, "A Noun Phrase Analysis Tool for Mining Online Community Conversations," in *Communities and Technologies*, London: Springer, 2007, pp. 67–86.
- [35] G. J. Kang et al., "Semantic network analysis of vaccine sentiment in online social media," Vaccine, vol. 35, no. 29, pp. 3621–3638, Jun. 2017.
- [36] S. Lee, J. H. Kim, and D. Rosen, "A Semantic Network and Categorical Content Analysis of Internet and Online Media Research," *The Open Communication Journal*, vol. 3, no. 1, Dec. 2009.
- [37] N. J. van Eck and L. Waltman, "Text mining and visualization using VOSviewer," arXiv:1109.2058 [cs], Sep. 2011.
- [38] M. Bastian, S. Heymann, and M. Jacomy, "Gephi: An Open Source Software for Exploring and Manipulating Networks," in *Proceedings of the Third International ICWSM Conference* (2009), pp. 361– 362.
- [39] M. Girvan and M. E. J. Newman, "Community structure in social and biological networks," *PNAS*, vol. 99, no. 12, pp. 7821–7826, Jun. 2002.
- [40] L. Grossberg, "Affect's future: rediscovering the virtual in the actual," in *The Affect Theory Reader*, Unknown edition., M. Gregg and G. J. Seigworth, Eds. Durham, NC: Duke University Press Books, 2010, pp. 309–338.