Collective Action on Facebook and Telegram During the Russia–Ukraine War

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Abstract: Social media have been used for political bottom-up organizing and collective action since at least the Arab Spring protests. Social media provide unique affordances that reduce the costs of collective action facilitating anonymous communication and cooperation at a much larger scale than ever before. The Russian invasion of Ukraine provides multiple examples of social media use for collective action. In this conflict, social media platforms, most prominently Facebook and Telegram have been actively employed by Ukrainians as places for organisation, volunteering and gathering support from a variety of volunteers both inside the country and abroad. After nine months of the war, it can safely be said that volunteering has played a huge role in the resistance to Russian aggression. However, little is known about how collective action has been organised on social media during this conflict. This paper aims to advance knowledge on the subject by focusing on how different forms of collective action have been organized on two widely used platforms: Facebook and Telegram. Based on the qualitative analysis of the profiles engaged in the organisation of collective action on Facebook and Telegram we discuss common features and differences between activists on both platforms. Different approaches to the organisation of pages, groups, and channels (including user engagement, interaction, and reporting) are discussed. The theory of affordances is used as a theoretical lens in analysing how the design of Facebook and Telegram allow and constrain certain types of collective action. The paper aims to contribute to the understanding of online collective action and bottom-up organisation on Facebook and Telegram.

Keywords: Collective Action, Affordances, Facebook, Telegram, Russian-Ukrainian War, Fundraising

1. Introduction

Since the beginning of the full-scale Russian invasion of Ukraine on February 24, 2022, there has been a meteoric rise in volunteer efforts to counter the overwhelming force. Thousands of people joined territorial defence forces and self-organised various groups (from food supply to makeshift weapons production) to support the fighters (Ioanes, 2022). Concurrently with the rise of offline volunteer movements, the mobilisation has been also happening online, with online communities rallying to collect support for Ukraine forces and citizens. Online communities and volunteer organisations were already in place, established in the years following the start of Russian aggression in 2014. In fact, social media (SM) played a significant role in the protests leading to the toppling of the Yanukovych regime in 2014 (Ronzhyn, 2014; MacDuffee Metzger and Tucker, 2017). After that, many of the profiles on SM continued operating in the context of the Russia-Ukraine conflict in the east of Ukraine (Worschech, 2017). Nonetheless, the 24th of February marked an abrupt and dramatic increase in activity related to the profiles.

Come Back Alive Foundation[1], by far the largest army-focused charity organisation in Ukraine had its supporters' total pledge on Patreon increase in just one day from 100 thousand to more than 500 thousand US dollars before its account was suspended by Patreon. Come Back Alive's Facebook page gained 74.8 thousand new followers just in one day on February 25. A similar increase can be observed in other humanitarian-related or volunteer pages and groups. The increase in subscriber numbers is only dwarfed by the amount of money collected. Come Back Alive collection for the whole year of 2021 amounted to 21 million hryvnias (approx. € 700 000). Since February 2022, they were raising multiples of that amount weekly (from 1 454 million in the first week of war[2] to 92 million in the first week of November[3]). Moreover, many pages that had never organised fundraisers before (specifically, pages of celebrities) also collected substantial amounts of money for humanitarian and army purposes.

[1] https://www.comebackalive.charity/
[2] https://savelife.in.ua/report
[3] https://www.facebook.com/backandalive/posts/pfbid0Ppa8axF8huTzNyVJm5TmQ6MHphJqrXKyAwDX61hhPy969u8W2m1aLNPvGn77Z5hal

Overall, the volunteer activity and fundraising efforts have been unprecedented, making it an interesting case for SM researchers. In this early study, we aim to describe the activity on two social networks (Facebook and Telegram) related to the war effort and discuss it in the context of collective action and technological affordances.

The remainder of the paper is structured as follows: in the following section, we discuss two theoretical theories employed in the paper: collective action and affordances. In section 3 the methodological approach is presented. Sections 4 and 5 present the results of the analysis and discuss the implications of the findings. The paper ends with the conclusions section that summarizes the research findings.

2. Theoretical background

2.1 Collective action

The research on collective action (CA) was sparked by Mancur Olson's seminal work, in which he described how group action is different to individual action, as it requires agreement between individuals, each with their own interest in mind (Olson, 1965). Olson also made several observations regarding the success of CA: for example, that smaller and more homogenous groups tend to be more effective than larger groups. The main reason for that is lower decision-making costs, and lower cost of monitoring and communication (Olson, 1965). These observations held up well over the years until significant advantages in communication technology were made and the Internet proliferated widely (Bimber, 2017).

The Internet offered unique advantages for the organisation of CA: drastically reduced communication costs, wider reach, mitigating or eliminating the disadvantages of the larger group in Olson's model (Lupia and Sin, 2003). Web 2.0 and SM are even more conducive to large-scale organizing: by making contacting people and disseminating information about the cause easier. There are numerous examples of Internet-based CA both political and non-political in their nature (Bimber, Flanagin and Stohl, 2005; Dolata and Schrape, 2016), with SM, in particular, playing a significant role in protest action and self-organized activism over the recent decade (Lee, 2015; Ruijgrok, 2017; Besta et al., 2019).

While some authors (Bimber, Flanagin and Stohl, 2005) suggest that the Internet changed some of the conditions in which CA is organised (i.e., lowered communication costs) and led to changes in some aspects of Olson's CA, others (Bennett and Segerberg, 2012) suggest that the Internet and online interaction allow talking about a different logic altogether: the connective action, which in contrast to CA, is not associated with high levels of organisational resources and formation of collective identities.

In our case, the ultimate goal of wartime online activism in Ukraine is offline action: the conversion of donations made mostly through the Internet into food, humanitarian items, weapons, and vehicles. The CA is organised by groups (formal and informal) that share a common goal (helping Ukraine) and are manifested through the profiles on SM. In the paper we discuss specific SM profiles, however, the groups behind the profile may have distinct representations both online (on different platforms) or offline (as formal charity organisations), which we must consider discussing the topic.

2.2 Technology affordances

The concept of affordance was coined by Gibson (1977, p. 75) who defined it as a "unique combination of qualities that specifies what the object affords us". The concept was applied to different fields, most notably product design (Norman, 1988) and subsequently to communication (Hutchby, 2001) as a way to describe how technologies enable and constrain specific actions of the users. Applied to SM, affordances can be defined as "perceived actual or imagined properties of the technological products, emerging through the relation of technological, social and contextual, that enable and constrain specific uses of the platforms" (Ronzhyn, Cardenal and Batlle Rubio, 2022, p. 14). Such properties can be general: persistence, anonymity or visibility (Treem and Leonardi, 2013; Evans et al., 2017) or specific: content association, feedback directness and audience transparency affordances related to self-presentation on SM (Devito, Birnholtz and Hancock, 2017). Affordances provide a useful theoretical lens for studying SM as they acknowledge the complex interplay between the users and the system, rather than focusing solely on the system function (Nagy and Neff, 2015). There have been case studies of particular movements aimed at describing the SM affordances related to CA: Sæbø et al. (2020) and Harindranath et al. (2015) each identified nine affordances supporting CA; Vaast et al. (2017) distinguished between individualized, collective, shared and connective affordances of SM; Zheng and Yu (2016) outlined two

general SM affordances for CA: agenda setting and framing. The drawbacks of these studies are that (1) they tend to conflate affordances with the actualisation of affordances (see for example Evans et al. (2017) for discussion on that) and (2) they treat SM as a monolith phenomenon, failing to recognize the differences between SM platforms. Comparative research or research examining a specific platform is relatively scarce: Valenzuela et al. (2018) showed that when organising protest action, Facebook is used for communication with strong ties, while Twitter is used to influence weak ties; Ahuja et al. (2018) found that affordances of a SM platform can predict the success of CA, depending on its objectives. Papers discussing Telegram and CA are rare and explore mostly its use in political protests: e.g., Hong Kong 2019 protests (Urman, Chun-ting Ho and Katze, 2020), Belarus 2020 protests (Wijermars and Lokot, 2022).

In this study, we avoid talking about SM in general and instead use affordances as a way to show the differences between Facebook and Telegram concerning the organisation of CA and show how the platforms afford (and constrain) the organisation and realisation of specific types of CA in the wartime.

2. Methodology

The two SM platforms discussed in the paper are Facebook and Telegram. Facebook is by far the most popular social network in Ukraine with 61% of Internet users using the platform (only 7% use Twitter) (Statista, 2021). Simultaneously, Telegram has been enjoying a rapid rise in popularity before the war: 20% share in 2021 (Statista, 2021), and subsequently gained even more users afterwards (Allyn, 2022; Detector Media, 2022).

In this study, we adopt a qualitative approach to the analysis of profiles organizing CA on the two platforms. For Facebook, we aimed to include all popular public profiles (pages and groups with at least 10 000 followers), actively engaged in CA. The profiles were found through keyword search and by following references in the posts of already identified pages. As the number of such profiles is low and they are quite visible, it is likely that we were able to find all the profiles fitting our inclusion criteria. Facebook in contrast to Twitter does not provide open access to information about user connections and user posts in personal profiles, thus making social network analysis impossible and limiting quantitative analysis generally. In our case, however, we were more interested in how the profiles managed the affordances of Facebook and how they built up their communication, rather than in the audience of the profiles.

Table 1: Facebook and Telegram profiles analysed

Facebook profiles	Followers	Telegram channels	Subscribers
Come Back Alive	3,5 M	IT ARMY of Ukraine	210 687
Serhiy Zhadan[4]	162 362	Babchenko	92 410
Razom for Ukraine	48 803	DDoS po Krayini separiv	48 038
Fond Serhiya Prytuly	36 422	Kiberpalyanitsya	7 985
Hospitallers Paramedics	32 820	INCOURSE#911	6 027
Dorje Batuu	27 431		
Pidtrymai Armiyu Ukrayiny	11 987		
Andriy Lyubka	11 442		
Armiya SOS [group]	33 467		

We have analysed 9 Facebook profiles (eight pages and one group) (listed in Table 1), focused on fundraising for the army and/or humanitarian purposes in Ukraine and having at least 10 thousand followers. CrowdTangle[5] tool was used to collect the information from the profiles and extract posted content, together with additional quantitative information like the number of reactions, comments, and shares, reported alongside the qualitative findings. The timespan is the nine-month period from 23/02/2022 (one day before the war) to 23/11/2022.

[4] Transliteration is used for some of the pages with Ukrainian names.

[5] https://www.crowdtangle.com/

Profile statistics and trends were collected in November 2022, thus any posts deleted by that point are not included in the dataset.

Speaking of limitations, CrowdTangle (and Facebook more generally) does not allow automated access to posts published by the profiles of individuals, who do not have a checkmark of "an official page". Some volunteers chose to forgo this status and still have a personal profile while publishing to tens of thousands of followers. Authors saw at least four such high-profile individuals with 10–50 thousand followers, who engage in fundraising and collecting support for Ukrainians. These profiles were not included in our analysis; however, they are important contributors to the volunteer movement.

Additionally, we investigated several Telegram profiles (listed in Table 1) that engage in the organisation of CA with at least 5 thousand followers. There is no equivalent Telegram tool for the analysis, so the telegram channels were found using snowball sampling, where new channels were identified through the analysis of the content of the channels in the sample. Such a sampling method allows us to make no claim for the comprehensiveness of the analysis (Parker, Scott and Geddes, 2020) but enables to see the variety of channels working within the topic. One of the researchers joined each of the analysed channels, read and used it for several weeks, which allowed him to develop a qualitative assessment of the functions and organisation of the channel.

3. Findings

3.1 Facebook: large-scale fundraising

Fundraising is by far the most common action organised on SM at the time of war, all of the analysed profiles engaged in fundraising on Facebook. Most profiles already existed before the war started. In our sample, only one profile (*Fond Serhiya Prytuly*) was created after February 24. Charity organisations existed because there was ongoing warfare in the east of Ukraine, while celebrity profiles existed as a means for authors to get in touch with their audience. Still, all profiles grew their audience more rapidly after the start of the war. Most profiles achieved their most substantial growth in the first week of the war (23/02 – 02/03), the mean increase in followers is 2.71%, with the highest increase of 8.78%. Several observations can be made based on the analysis of the data regarding the use of Facebook functions and the content created by the profiles.

Overall, two clear groups of profiles can be defined in terms of the number of user interactions. The first group are organisations (*Come Back Alive, Razom, Hospitallers, Pidtrymai Armiyu Ukrayiny, Armiya SOS*), they have a weekly interaction rate well below one percent (mean = 0.8%), meaning that less than 1 percent of followers interact with at least one post (react, share, comment) during an average week. The second group are individual profiles of celebrities that have a far larger percentage of followers who interact with their posts, 4.16% on average, with one profile (*Dorje Batuu*) achieving a 7.98% interaction rate. *Fond Serhiya Prytuly* although officially a fund has an interaction profile more similar to celebrity (4.37%), due to its initially low number of followers and also a clear celebrity at the head of the fund (whose name it bears).
"Like" is the most popular reaction (70.6% of all interactions), followed by "love" (8%) and "care" (6.7%) reactions. All other reactions rarely cross the one percent mark, except for the "sad" reaction for *Come Back Alive's* (5.6%) and *Hospitallers* (2.6%) posts. These posts are usually the reports about the killed volunteers or army men, which also attract "angry" reactions, although to a lesser degree (0.4 and 0.7% respectively).
Content-wise there is a clear predominance of visual content. Most posts in all the profiles contain images (post type "photo" on Facebook). Photos on average however were not the most popular posts. Posts containing videos attracted more attention from users. For 6 out of 8 profiles that used videos, video posts had more interactions than photo posts. For two of the three celebrities (who are all writers), statuses also garnered more interactions than photos.
Facebook tagging is successfully used by some profiles (*Razom, Armiya SOS*) as a promotion strategy. Tagging other popular pages contributed to the popularity of posts and allowed the profiles to attract new followers.
Regarding the content of the posts published by the profiles, three observations can be made:

1. Posts related to war were more popular. *Razom*, a US-based fund, the only page not based in Ukraine did not publish as many posts directly set in Ukraine and received fewer interactions. The most popular posts on the page were related to the happenings in Ukraine (e.g., results of the use of the fund's money in the field).
2. In general, in their calls for donating and in reporting, profiles tend to focus on people. Posted photos most frequently depicted people: even in reports when the acquired equipment is shown, people are

photographed posing near it. Similarly, there are posts depicting the day-to-day life of celebrities or organisations' workers.

3. Accountability and transparency crucial in fundraising initiatives are realised through regular reports on the use of raised money. Profiles clearly state the purpose of the fundraising and recipients of help. In the case of fundraising for a specific item, the required sum is also indicated. Reports are posted regularly to show where the raised money is going (*Come Back Alive* posts weekly reports, *Hospitallers* upon delivery of each batch of equipment, *Serhiy Zhadan* posts after each event). In case of a large goal, interim reports are posted to raise awareness and attract more donors. In their format, reports are formal for organisations (extreme example: *Come Back Alive* with very detailed weekly reports) and much more casual for celebrities (*Serhiy Zhadan, Dorje Batuu*).

3.2 Telegram: cyberwarfare

Telegram has two types of profiles: channels and chats. Channels are similar to Facebook pages: the owner posts messages, while the followers may have the ability to comment on the messages; while in chats everyone can post messages in the same feed. Chats are a popular function of Telegram and often channels use chats for additional discussion and support. In contrast to Facebook, which is primarily used for fundraising and resource gathering, Telegram serves a different purpose. Because of the most prominent affordances that Telegram provides (anonymity and lack of central moderation/ censorship), it was chosen as a venue for any action that is illegal, legally grey or otherwise not permitted on Facebook.

Telegram groups are used for cyberwarfare: coordinating and organising cyberattacks on Russian websites and services. Most of these groups are aimed at helping people participate in large-scale DDoS (distributed denial-of-service) attacks: explaining how to install the software on their personal computer or server and providing technical support if any problems or questions arise. There are several groups with the same purpose (many with fewer than 5 thousand followers so outside our sample), created likely to minimise damage in case of an external threat (i.e., group overtake or deletion). These groups largely follow the same general theme; however, they do offer different software and aim at different targets at any given time. Some groups also involve their members in software development through GitHub, thus offering a different way of participating in the cyberwar.

As Willet (2022) notes, the war revealed key weaknesses in Russian cyber capabilities, stemming from a lack of private-sector support. The most common type of attack remains DDoS; it requires the least technical expertise from its agents and aims at exhausting the target's resources by flooding the website with errant traffic. It is worth noting that Russia also actively uses DDoS attacks on Ukraine services and its allies (the Estonian parliament and newspapers are some examples of the targets) (Willett, 2022). Still, by itself, DDoS is a relatively short-lived attack, which leads only to temporary disruption of services (which however may be costly for the targeted organisation).

Telegram groups provide regular reports of the DDoS successes, however, no information about the number of active attackers is provided. Still, the number of a group's active users is available in Telegram: in the case of the DDoS groups, the average percentage is 30.4% (309 to 5 690 in absolute numbers).

There is only one fundraising Telegram profile, whose numbers in terms of self-reported amounts of money collected rival the top Facebook profiles. Babchenko, a former journalist, is a popular figure who has been repeatedly banned by Facebook and therefore moved to Telegram, where he maintains an active account (93 thousand subscribers as of the end of November). The reported amount of money collected is comparable with top celebrity profiles on Facebook. In terms of content, the channel is less restrained and more radical in terms of language, both in posts and in the comments. Otherwise, the calls for action and reports are very similar to those published on Facebook with detailed reporting and reliance on photos as evidence for the use of funds.

4. Discussion: affordances supporting collective action

From the point of view of affordances theory, Facebook and Telegram offer different affordances to their users. Platforms' affordances allow and constrain users' behaviours. These behaviours in terms of CA are described in the previous section, while in this section we explain, based on our analysis of the profiles, how they are linked to the affordances of the two platforms. Following four affordances can be identified from the literature: visibility, persistence, editability, and association (Treem and Leonardi, 2013); these are high-level affordances

which can be present on a particular platform to a greater or lesser degree (Ronzhyn, Cardenal and Batlle Rubio, 2022).

Through its affordances of *visibility* and *persistence***,** Facebook offers significant benefits for organisations doing fundraising: allowing more transparency and accountability, and improving the organisational image and perception of the organisation by the donors (Di Lauro, Tursunbayeva and Antonelli, 2019). All the charity organisations in our sample take advantage of this by posting regular reports including both the amounts received and items bought and given out. Regular reports also provide feedback about the participation of others in the campaign and thus serve the purpose of attracting more donors (Margetts *et al.*, 2011) aided by users sharing the reports. The *persistence* of the content posted on Facebook allows potential donors easily check the history of the profile and establish its trustworthiness. The affordance of *association* is actualised in two ways: firstly, through the tagging function: when pages tag other pages and by that confirm their legitimacy and increase visibility; and secondly by visualising the follower counts and shares, showing the breadth of support for a profile.

The biggest difference between Facebook and Telegram affordance-wise is the much more anonymous nature of Telegram (*anonymity* as a specific realisation of *visibility* affordance (Hollenbaugh, 2021)). This difference is not so much functional as the difference in expectations of the platform and its users, and in the philosophy of the platform itself (Wijermars and Lokot, 2022): the contextual difference shaping the affordance of Telegram. As Telegram uses a much more lax moderation approach and some parts of it are not externally moderated at all (private groups), channels tend to be much more permissive when it comes to questionable content (hate speech, graphic content) as channel and group moderators decide what is acceptable. This leads to the moderators being able to organise the discussion the way they like in terms of (in-)civility (Urman and Katz, 2022) and to orchestrate legally grey or illegal CA. Telegram's *association* affordance helps create networks of channels and chats linked with one another, while *editability* affordance manifested through an open API of Telegram, allows the creation of customised and complex experiences for the groups' followers. The presence of these affordances on Telegram is what made many users and activists in Ukraine choose Telegram over the much more popular Facebook.

5. Conclusions

The analysis conducted in the paper contributes to a better understanding of the biggest Facebook profiles engaged in CA at the time of war as well the use of Telegram for CA. As it often happens during disasters (Okada, Ishida and Yamauchi, 2017), the start of the war greatly increased online activism in Ukraine. The two most widely used platforms, Facebook and Telegram are used by different actors and for different purposes. Facebook is used by charity organisations and celebrities who through the platform's affordances of visibility and association establish their legitimacy and promote fundraising. Telegram on the other hand is used for organising cyberwarfare, including illicit actions. Taking advantage of the anonymity affordance, Telegram profiles coordinate CA, which would be not possible on more visible platforms like Facebook or Twitter.

The paper opens several avenues for future research. Subsequent papers can investigate the content of the messages shared and their correlation with CA success. Telegram CA analysis can also be strengthened by discussing a larger sample of channels, including those with lower number of more tightly cooperative participants, which are difficult to find using a snowballing method employed in this paper. Finally, cross-platform comparison can be developed, going beyond the two platforms discussed here.

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