

## Subscribe and Follow. Telegram and Responsive Archiving the War in Ukraine

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### Abstract

Being in the state of war — among many other things — means scrolling updates constantly. The hybrid nature of warfare developments is largely based on entanglements between events that you experience and mediated messages that you receive. Telegram has become an everyday go-to app for millions of Ukrainians since the full-scale invasion. The social media platform does not only reflect on current developments but also affects the warfare and wartime experiences directly. As captured and documented, it creates evidence of our recent experiences, covering all areas from the battlefield to the everyday routine across Ukraine on either side of the frontline and intertwining both physical and cyberspace. How do we capture, assess and make accessible such flows for future research, considering the legal and ethical complexity of documenting social media? With no definitive methodological answers but as an emergency effort, the Center for Urban History launched this archiving initiative to preserve the social media practices of the war in Ukraine. This essay is a self-reflection of a 5-month archiving initiative started as a civilian response to the full-scale Russian invasion of Ukraine.

**Keywords:** Telegram; war; Ukraine; social media; responsive archiving.

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*This essay is a self-reflection of a five-month archiving initiative that started as a civilian response to the full-scale Russian invasion of Ukraine.*

## 1 Responsive

The war started for me with a media message. Being based in Lviv, a city in Western Ukraine 50 kilometres from the Polish border, we do not hear the sounds of bombings daily. Neither did I hear it when I woke up on the morning of February 24. I read the news in the morning with a headline stating the beginning of the invasion. Then I opened a window and heard air raid sirens outside for the first time. I then prepared some extra bottles of water and an emergency backpack. And then I turned on the TV news. There was already unified broadcasting on leading TV channels showing the so-called news marathon. Several media companies keep working on it collaboratively by scheduling shifts for each newsroom.

Since then, Lviv has been hit several times, causing extensive transport and military infrastructure damage, with the heaviest strike in April killing seven civilians (Allam et al., 2022). Military casualties are not publicly reported. Compared to the scale of the war closer to the frontline, this is a relatively low intensity of war activities. Therefore, over the last five months, this war has been largely a media experience for me. We follow the news as much as anyone else who is relatively far from the frontline. At the same time, being close to the frontline does not necessarily give an understanding of the broader picture. We should adjust to the fact that professional media coverage and freedom of the press are considerably limited by wartime restrictions and serve as a means of informational resistance. We are also deeply integrated into the context of this war, regardless of geographical location. As much as military and civilian deaths or infrastructure destruction are considered, there are numerous other direct and indirect encounters with the war across the country: air raid sirens followed by rocket attacks, displacement and exhaustion, economic shortages, military mobilisation, curfew hours, ban for men from leaving the country, etc.

All this emphasizes the hybrid nature of current developments — an experience of war is based mainly on entanglements between events that you see in person and mediated messages that you receive.

So, being in a state of war — among many other things — means constantly scrolling updates. Communication flows are saturated with information and try to respond to the insatiable need for understanding what is going on. Being in a state of war also means a vital need to act in order to resist. The closer you are to the threat, either physically or emotionally, the more affected and mobilised you are. This way, we tried to avoid general panic. It helps to respond to the threat with a will of meaningful contribution. Being an academic institution with a profile in history and archiving, we understand the importance of preserving evidence of current events. Documenting the war is also a way of getting out of war, processing the shock of invasion and adjusting to the reality of resistance. As captured and documented, it creates evidence of our recent experiences — from committed war crimes to everyday routine in the face of war. At the intersection of those two dimensions, a Telegram emergency archiving was initiated by the Center for Urban History in Lviv, along with three other documenting initiatives of collecting visual material about the war, oral history interviews, as well as ego-documents in the form of diaries and dreams (War Documenting Projects, 2022).

We cannot distance ourselves as we remain within the moment. It makes our efforts less reflected and balanced. But it gives us a perspective to observe the context of current developments while living through them. Archiving the war from any other place wouldn't be the same.

The very state of being affected becomes the core of such documentation. Online data practices are intertwined with actual presence in the context. From this position, it was possible to notice how quickly Telegram became an everyday go-to app and start archiving it. Thus, we can promptly react to the changes and see how Telegram reflects on (or even affects) certain events or issues that are relevant to society. This way, we can contribute to the range of similar initiatives documenting the war in Ukraine (Hołownia et al., 2022). Along with other initiatives of self-documenting individual war-related experiences, such as “Dispatches from the Places of Imminence” (Matviyenko, 2022), “My War” (Ministry of Culture and Information Politics of Ukraine, 2022), “100<sup>th</sup> Day of Resistance to Russian Aggression: Facebook-reflections” (Skalskyi, 2022), “Ukraine War Archive” (DocudaysUA, 2022), “Civilian Harm in Ukraine” (Bellingcat Forensic Architecture, 2022), it constitutes a set of ego-documents representing a myriad of perspectives on complexity but also totality of this war.

## 2 Telegram

Telegram, a social media platform and the instant messaging app, was created by Pavel Durov, a Russian tech entrepreneur. He left Russia in 2014 after his previous project, VKontakte, was taken over by bodies related to the Russian government. Being in exile, Durov created Telegram as a private company based in the United Arab Emirates. The app could be considered quite liberal regarding terms of use and regulations, and it is arguably among the most encrypted and secured platforms. It is also much more difficult to block and can be used anonymously. In one of his statements in early March, Durov also endorsed its use in Ukraine, saying that user personal data is protected (Durov, 2022). However, trust in its secureness, privacy and freedom of expression is built rather on the cyber-libertarian rhetoric of Pavel Durov and his team than on the transparency and accountability of the platform itself (Marechal, 2018). This rhetoric situates Telegram as an alternative to regulatory practices and business models like on mainstream platforms Facebook or Twitter. There is a specific context for its use in some countries by those who were “de-platformed” from mainstream social media (Rogers, 2020). In the Netherlands, for instance, there is a context of conspiracy theories associated with Telegram (Peeters & Willaert, 2022). While in Ukraine, this context is much broader, covering a wide spectrum of discourses and data practices, especially from the beginning of the full-scale Russian invasion. In the first two months of the war, 76.6% of Ukrainians turned to social media for news, and Telegram was the most popular of them (65.7%) (OPORA, 2022). Other social media platforms like Facebook, Twitter, and TikTok are comparatively popular in Ukraine. It makes Telegram even more interesting because of its rapid usage growth. Its relative deregulation and well-developed toolbox for instant messaging, particularly crucial in the first days of the invasion, supported its broad use.

So, on February 24, I was among those following many Telegram chats and channels along with a TV news marathon in the background to fulfil this need for information. It had become clear that news media based in Kyiv could not be as instant and diverse in news coverage as Telegram channels across the country.

Even Russia’s airstrikes and missile launches are regularly accompanied by Telegram messages. Such messages are often disseminated to compete in speed with missiles. There is a local Telegram channel in Mykolaiv, a town in the country’s south<sup>1</sup>. Russian Armed Forces failed

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1. It is purposely refrained in the essay from citing the archived channel names and URLs as a precautionary measure for not revealing personal identities.

in taking the city, so the frontline more or less stabilised a couple of dozen kilometres south of it. It's been heavily bombarded since then. Most of the strikes are launched from the occupied Kherson, a city further to the south. The distance between Kherson and Mykolaiv is 60 kilometres. So, when rockets are seen over Kherson aiming at Mykolaiv, Kherson residents have some time to inform subscribers of the Mykolaiv channel about spotted rockets. Sometimes this information comes faster than an official air raid alert. An online map also shows real-time alerts over all Ukraine regions based on the Telegram feed (Karta povitryanykh tryvoh, 2022). Over the last five months, the map has become among the most popular websites in Ukraine (21<sup>st</sup> place as of June, according to SimilarWeb, 2022). You just keep it handy, bookmarked in your browser next to the weather forecasts website.

Telegram is also a platform for disseminating personal data under various circumstances. In the first week of the invasion, a specific category of channels started helping people to search for missing relatives. Such channels are used to intentionally make personal information about close ones public so as to get any information about them after they were missing. Another dimension of sharing personal data is a category of channels posting pictures of marauders looting shops and malls during the unstable moment of power vacuum during the fights over city control or shortly after its occupation. Perhaps, the most extreme dimension of this personal data dissemination is posting pictures of killed soldiers' remains along with data on their identity. This practice was especially intense by both sides in the first weeks of the invasion.

Along with a fairly broad representation of war-related topics and regions, the warfare itself is happening within Telegram as a platform. It is used by several volunteering groups that mobilised themselves to coordinate cyberattacks on Russian websites. Administrators define targets, and all participants simultaneously use dedicated software to impose DDoS attacks. Targets are usually related to official Kremlin websites, the ministry of defence, financial or logistics infrastructure, news media and online streaming platforms. These groups shared data leaks of Russian officials and the military. While available to the general public, their activity in Telegram is regularly deleted either entirely or in part. Some traces of their activities probably do not exist beyond our archival collection anymore.

On the third day of the invasion, Ukraine officials created a Telegram chatbot with a public call to upload data about Russian military positions or movements or collect information from people about any suspicious individuals or attempts of sabotage in the cities deep behind the frontline. In two weeks, on March 10, the Ministry of Digital Transformation unified all such initiatives under one infrastructure. It created a bot called *єБороз* (a rough translation reads "There is the enemy") allowing to send structured testimonies on the Russian military to the Ukrainian Armed Forces. There were even specific requests to report on certain types of vehicles like portable radio-electronic antennas securing the military connection or interfering connection for the enemy. This is like crowdsourcing intelligence — officials post photos of specific equipment and ask people to send details once they recognise something similar in their neighbourhood. Ukrainian officials were quite optimistic in their statements about the efficiency of the bot while not revealing many details. By June, 323,000 people had used this chatbot. They reported information about not only random military vehicles but also the equipment crucial for the Russian army in their offensive operation north of Kyiv (Fedorov, 2022). The opposite side of this crowdsourced intelligence is a ban on posting information on the Ukrainian military positions and armed forces movements. It is also forbidden to post any details on the results of Russian missile attacks before official statements. Any instant online evidence of the airstrike results, as explained, would allow the enemy to assess the aftermath and adjust further strikes accordingly. Another inherent part of the war developments in Telegram

is disinformation and propaganda campaigns. There are broad networks of channels and chats allowing the dissemination of false messages about current developments, questioning already confirmed facts or disseminating false information in the form of fake debunking (Lazaruk, 2022).

There are several trajectories for local Telegram channels once a city or town becomes occupied. In some cases, such local channels change their political leanings with multiple motivations — from political collaboration to safety reasons. Some administrators of channels evacuate to the territories controlled by Ukraine and keep updated about the local situation using personal contacts from the occupied territory. In other cases, Telegram channels just stop updates or lower their activity. One of such channels with no updates since May eventually ended up with a message saying:

The account of the user that owns this channel has been inactive for the last 1 month. If it remains inactive in the next 7 days, that account will self-destruct, and this channel may no longer have an owner.

There is no information about the fate of the channel's owner. But in this case, a channel and data become just orphaned. Some channels like this might be deleted or altered due to the safety measures under the occupation. Russian military often check messengers on people's phones. So, it might not be safe to keep it. It makes the ephemeral nature of social media channels even more tangible. So, we decided to collect what is publicly available, considering its preservation from deleting.

### 3 Archiving

The emergency archiving initiative started without previous experience or training in web or social media archiving. Only basic archiving principles were familiar to us from the colleagues at the Center who have been working on archiving more conventional sources like images, maps and motion pictures (Urban Media Archive, 2022). We have started Telegram archiving from scratch learning basic methodology and collecting advisory in the course of its development. Many issues become clear to us only in the process of making. So, now we are accompanied by numerous concerns about the structure of the archive, legal and ethical frameworks, technical issues and digital infrastructure for the data.

Telegram is not only the widespread social media platform in Ukraine. It is also technically easy to archive. The platform allows you to manually export the history of chats and channels to local storage. You can save most of the published data by default unless the administrator of a particular channel disables it. So, we export all text, voice messages, videos, photos, and files directly from channels and chats. We can choose a timeframe (we usually set it from February 24<sup>th</sup>) and the output format (there are HTML and JSON options). We try to save a complete flow of messages in HTML format. We are interested in the entire sequence of posts from a chats or channels, not in a selective part. There was also no practical knowledge of automating Telegram data scraping in a short period. Additionally, there was an intention to involve people seeking practical professional engagement in the face of war. A combination of those three aspects resulted in starting data collection manually.

There is a core group of five people collecting data. Involved archivists have backgrounds in history, journalism, and media studies. They are not the staff of the Center for Urban History. Archivists originate from regions that were largely affected by the war. Hometowns of people

from this group were either occupied or heavily bombed. Now they are based in different towns in Ukraine and other countries. Due to security reasons, we do not reveal their further identity here.

We decided to structure our workflow in four stages: harvesting, processing collected data, setting access protocols and infrastructure, research and interpretation.

As channels disappear and the nature of social media messages is quite fragile — especially in circumstances of war — we keep collecting data as one of the priority tasks for five months now. It quickly became apparent that simply exporting is not enough — it has to be structured into an archival setting with a specific structure and metadata in order to be available in a meaningful way in the future. The number of the archived channels started to multiply — we have reached 4 TB for around 1000 channels and chats as of the end of July 2022. This process is accompanied by doing quality analysis, which a few times resulted in re-harvesting data. For instance, it became clear that some channels have integrated internal chats. These chats enable a valuable opportunity for capturing broader discussion among users, especially in a local context. Therefore, we decided to repeat data export for such channels along with internal chats.

Each channel or chat is considered an archival entity and is registered in the index of entities. For each entity, we prepare a description and metadata — id, original title, URL, post frequency, number of followers, type of audience, original bio and archival description, keywords, creation date, and sensitiveness of the content.

We grouped all channels according to a certain category forming collections. Tentatively, there are such collections as:

1. Official and News Channels
2. Infrastructure
3. Digital Marketing and Media
4. Volunteer Chats
5. IT Community/ Information and Cyber Attacks
6. Databases and Indexes
7. Personal Blogs / War Diaries / Artistic Reflections
8. Military / Political Blogs
9. OSINT / Analytics
10. Humour
11. Urban and Local (structured according to administrative regions)
12. Border Crossings
13. Occupied Territories
14. Russian Propaganda and Fakes
15. Russian Bordering Regions
16. Belarus
17. Economy
18. Agriculture
19. Food Bloggers
20. War and Gender
21. Culture
22. Medical and Psychological Assistance
23. Military Mobilisation
24. Ecology, Animal Rescue
25. Various (temporarily uncategorised)

The scope for the archived content was curated and prioritised considering such conditions as:

- Relevance to the war developments in Ukraine
- Everyday routine practices or local agenda less visible in the official or mainstream media
- Regional and social diversity
- Risk of disappearance
- Telegram-based data and communication practices affecting the war developments
- Publicly available content

We also react to the ongoing developments and the posted content to shift our focus. We stopped archiving some channels due to their irrelevance or lack of original content, and some are being archived with less priority. The main emphasis, for now, is urban chats allowing us to see the agenda locally and also go beyond an understanding of war as battlefield developments report or official military statements only.

At the same time, capturing data does not serve for ongoing news coverage or reporting about the war. With this initiative, we are trying to secure historical evidence of the Russian invasion of Ukraine. It means we would like to think about the effort with a 50-100 years horizon in mind. It has a special meaning for social media channels. It is not the scarcity of sources but its abundance and unstable nature that makes social media archiving a critical curatorial and provenance practice for future knowledge production. Converting these social media feeds into collections along with a source code of a Telegram app itself means giving them provenance to be used onward as archival sources about the war once it is possible to talk about the war in the past tense.

We realise the potential gap between the context of how data was produced and the archival setting that we try to establish around the data we collect. In order to make this gap articulated, we also prepare archival notes and diaries about the archiving process in order to document all the issues we are going through and the decisions we make to resolve them. Eventually, we plan to conduct interviews with each archivist. This would allow us to make a summary report on the context of this documentation.

There are ethical and legal complications we need to resolve at the stage of setting access. Social media archiving is a platform-dependent practice, which puts one's archiving decisions in relation to the platform and users' agency. At the same time, platform policies are often definitive of what and how could be archived. Telegram's privacy policy is still relatively liberal in defining a boundary between public and private data. In most cases, exporting content from chats and channels is available for anyone by default (Telegram, 2018). It requires archivists to set more comprehensive definitions of public and private to capture, store and set archival access. Our approach was formed by the notions of safety for both archivists and users, consent/take-down policy for users and restricted moderated access for researchers. So below are some of our hypothetical thoughts on those issues so far.

First of all, privacy and personally identifiable information are the matter that we must always keep in mind while working on this archive. We do not collect any personal data from user accounts. Neither do we collect private chats from hyperlocal groups (like friends, neighbours or work chats), which nonetheless have a lot of relevance when it comes to historical sources. We collect only public channels and groups accessible for anyone to join and follow. Users still systematically or occasionally reveal various pieces of personal information, like names, and phone numbers, in those chats and channels. Given the circumstances of war, photos of dead bodies, human remains, and evidence of atrocities and destruction are omnipresent in the chats

we archive. Safety and personal data protection were the issues behind our decision not to share any collected materials until a certain archival access protocol and terms of use are developed. Everything we collect is publicly accessible either way. But from the moment it is stored on our servers, we are held accountable for its potential use by third parties. We want to avoid any possible use of this archive to get personally identifiable information from our dataset. We would like to identify any content depicting scenes of violence, atrocities, war crimes, and human or animal remains. At the same time, we think of developing a protocol of access to the archive for researchers as a priority audience, outlining terms of use and consent not to reveal personal information. General access to the archive will be nuanced depending on the topic and type of the content and moderated upon registration and declaring the aim for a request. It will be available for interested actors upon registration, after declaring the aim for a request and signing the consent on legal and ethical terms of use. Setting these protocols is still a task to be done for this project. Before respective infrastructure is developed, archived materials are stored on the institutional servers of the Center for Urban History with yet no remote access.

Another dimension of this archiving initiative is a relation with the authors of the produced and then archived content. While consent or formal agreement with the authors is not technically possible in social media archiving, we still find it important to inform users about the existence of such an initiative. We would like to reach out to administrators who run corresponding channels and groups so that, to the best possible extent, inform them and group members about our initiative, its aim, the format of access and its potential use. We are also thinking of stating the open-ended possibility for an individual or potential copyright holder to opt out of the archive data they published or personally affecting them.

#### 4 Conclusion

In the context of war, the emergency Telegram archiving started with an approach of “archive first, ask questions later” (Ogden, 2021). The situation was and still is too uncertain and rapidly changing to have the opportunity to set well-defined scope and methodology. It remains in the process of making. Nevertheless, responsive archiving allowed us to notice Telegram channels and chats as potentially valuable evidence for the history of this war and start preserving it. We see it as important to set a historical archive of sources about the war from below, local and everyday practices.

Telegram channels and chats became an integral part of the warfare (air raid sirens, open-source and crowdsourcing intelligence, lists of casualties and missing people, Russian disinformation networks to justify airstrikes on civilian objects). Also, they facilitated emergency communication in local horizontal networks (evacuation from occupied territories, checkpoints and border crossings, mobilisation notices, petrol availability, rocket launches, and apartment house chats). While still missing a broader understanding of what is happening on the front-line, because of the wartime restrictions and overwhelming propaganda campaigns, we can notice some specific insights not visible externally. So, we cannot probably see the war through Telegram, but it is possible to explore how Telegram became part of it. Nonetheless, there is a need for a closer analytical look at what kind of data Telegram provides and how to process it automatically.

The process of emergency archiving also deals with the transience of data in social media. Among those collected, some channels changed their political narrative and became pro-Russian under the occupation, some channels became orphaned, and some were deleted due to security reasons.



As far as platform specificity is concerned, Telegram gained its widespread popularity in Ukraine due to its liberal terms of use, which is, on the one hand, an opportunity for archiving but also causes legal and methodological challenges.

This case study is another opportunity to comprehend social media archiving practices beyond larger mainstream platforms and address the issues related to privacy, copyright and platform terms of use while creating historical archives for crisis events.

All the above-mentioned issues would require further methodological and legal consultancy, technical expertise and digital infrastructure that we cannot maintain ourselves due to the limited capacity of our institution. This means that we will be seeking further forms of cooperation with those interested in working on the archive. Any request for potential individual or institutional cooperation on the archived holdings could be addressed to its coordinator Taras Nazaruk. Further updates to the archiving process we continue publishing on a preliminary page of the project<sup>2</sup>.

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