# Russian-Ukraine war and institutional use of memetic communication: methodological opportunities and challenges[*]

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The paper aims to explore the contents conveyed by internet memes (IM) in relation to the Russia-Ukraine conflict, analysing their ability to widely spread the message through forms of communication including irony, satire and denigration. The study, like any recent analysis on memes, faces the important epistemological and methodological challenges ranging from data collection to automatic or semi-automatic analysis techniques. The shift in the direction of our analysis in favor of less automated tools speaks volumes about the issues, especially epistemological ones, that underlie the analysis of memetic images in digital environments, and with digital methods. Indeed, once a dataset was collected using the CrowdTangle tool, the first limits immediately emerged: despite the specific function, the collection tool is unable to distinguish memes from images. Likewise, the use of supervised machine learning techniques to classify memetic content raises difficulties and doubts. The difficulty arises for the implementation of the image classification algorithm: a training set is required that contains all the metadata traditionally linked to the images and the chosen collection tool does not provide this information, nor are there any memetic databases available online useful for training a classification algorithm. Instead, doubts arise to classify memes according to the textual elements that compose it using a classic text classification algorithm: this procedure would have meant completely ignore the complexity of the communicative unit as a hybridization of image and text. The difficult of combining the objectives with the methodological implications of the study object encouraged to find alternative

approaches. It was decided to follow the IM from the one that achieved the highest engagement value using a digital ethnography procedure that combine techniques for observing the digital space around the study object in line with the digital methods perspective (Caliandro e Gandini, 2016). Particular attention was paid to the recommendations that the platform algorithm offered us every time we interacted with the meme of our interest, thus perfectly fitting into the "follow the algorithm" perspective (Airoldi, Beraldo e Gandini, 2016). Virtual mapping of these IMs has allowed to identify the propagators of these types of images more accurately and it was very interesting to discover that the greatest spreaders of IMs are public and institutional profiles. The close relationship between institutional communication and memetic communication is very important evidence from this study. However, it is not secondary to reflect on how the construction of this knowledge has depended heavily on a change of approach in itinere: the methodological paths for working on memes are still in their infancy, and this probably has encouraged the adoption of strategies based on the direct intervention of the researcher.

**Keywords**: Digital methods; meme; new institutional communication; Russian-Ukraine war.

## Introduction: memes in analysis and meme analysis

The term "meme" was coined in 1976 when Richard Dawkins used it to describe the cultural counterpart of biological genes. In the context of biology, the meme is considered to be any information that can be copied by imitation, replicated and transmitted. With the internet and web 2.0, memes have spread as highly engaging digital content for users, used to express themselves in ironic tones (Shifman, 2014). Therefore, there has been a shift from a naturalisation of the meme (biological meme) to its de-naturalisation (meme as a technical object, as stated by Rogers in the opening of this special issue). As digital artifacts created by users, the internet meme (IM) combine visual and textual elements and are characterized by virality and pervasiveness, achieved mainly thanks to the rise of social media platforms that have transformed their production into a widespread and highly visible routine (Shifman, 2013). It is precisely virality (understood as the transmission speed of the cultural message) that allows memes to maintain that relationship with the biology from which the term originates. According to Rogers (2019), it is possible to consider the virality of memes as a mystifying quality that can be linked to other "manipulative" techniques used in marketing: such as subliminal advertising and priming.

What Rogers means is that today the memetic element is studied as an engaging object of digital culture in an interdisciplinary way. In the field of media, it should be inserted in the broad framework of communication production and influence campaigns. The IMs provide a privileged point of view from which to observe a phenomenon as user generated content useful for commenting on political and social issues (Fauzi, Riansi & Kurniasih, 2020) for this reason the analysis of their production provides information on culture sharing of a community (Heylighen & Chielens, 2009) and on the practices of building one's own identity (DeCook, 2018); a sort of metalanguage that contains forms of symbolic representation recognizable by the community itself. Although they spread on a micro basis, the impact of memes is macro: they shape the mentalities, forms of behaviour and actions of social groups (Knobel & Lankshear, 2007).

Beyond the goliardic content, the literature available consider the use of memes as a vehicle for political participation and as a means of communicating a political position through the humorous and critical element (Ross & Rivers, 2019).

Observing memes from a communication-oriented perspective, it is possible to consider this digital object as the result of the power of platforms to de-legitimize and deconstruct mainstream information; there is not a single topic of public interest that, having arrived on platforms, it is not reprimanded, exalted, and exasperated with memes. Memes can be considered as the stylistic emblem of the immediate communication of social media: they incorporate the logic of operation and communication systems. As a device accessible to all for framing and commenting on contemporary events, it is not uncommon for memes to become a communicative device for public and institutional figures who effectively become a bottom-up political communication tool and an alternative form of participation in political debate (Mazzoleni e Bracciale, 2019). From this premise a first research question moves our interest *(RQ1):* what is the role of IMs in the Russian-Ukrainian conflict and what discourses do they convey considering that it is the first war in Europe to be conducted (also) through social media?

Although the scientific community seems to agree on the theoretical definition of the IM and on the identification of its characteristics (such as the multimodal nature, the practices of imitation and those of viral circulation in digital spaces) there are still too few studies that question how to deal with it the empirical study of IMs (Giorgi, 2022). The analysis of IMs poses important methodological challenges ranging from data collection to the epistemological approach, up to analysis techniques.

A first important issue concerns the relationship between the meme and its digital environment. The digital environments confer and favour memes a particular materiality and therefore co-construct the object; a meme provided by a software generator has a different technicality from one collected on social media. Then, in a meme digital research Rogers suggests that in their study, these objects cannot be separated from the software environments that they identify as their containers. For this reason, memes should not be considered as a single digital object, but as a collection to be identified and collected in relation to one's digital environment.

One of the risks of digital research is the rapid obsolescence of data: when the researcher collects data on a completely digital phenomenon in rapid transformation, he exposes himself to the risk of having an already obsolete dataset at the end of his analysis. This risk tends to guide the researcher's choice towards the collection of large data sets to be processed through data-driven epistemological approaches and automatic (or semi-automatic) analysis techniques, with the aim of identifying empirically relevant constants of the phenomenon. However, digital objects are not all the same and not all are suitable for quantification and automation. The first methodological problem to be faced with a digital object such as IMs is the collection of the unit of analysis; what differentiates an IM from any image is not only the presence of the text, but in general the message conveyed by the image. The conveyed message is given by the set of all its components (visual, textual and content) which together make an image a memetic object. The innovative strength of

memetic objects is given by the possibility of enclosing in small pieces of information the cultural component and social norms shared by an online community that cooperates in the shared construction of the meaning of that content. It is the sharing of meaning by the online community that makes the diffusion of the object very fast. After the closure of the API, currently large-scale automatized data collection from platforms is only possible through services offered by the proprietary platforms themselves, one of these is CrowdTangle which has recently implemented the IM collection function. So, facing with this tool, another question arises from our work *(RQ2):* what results are possible through this type of data collection considering that the tool must independently and automatically distinguish the IM object from the traditional image object? For the same reason and in connection to the issue: is it possible to classify the IM through automatic or semi-automatic analysis techniques?

The conducted analysis tries to answer these research questions from a Digital Methods perspective: following the digital object and its message in relation to the role it assumes on a specific digital contest and following the medium and its evolution making allowances for the distinct ways in which the platform generates data (Rogers, 2013). Following this path, as we will see below, the research questions will undergo such variations that the objectives of this study will be completely transformed, leading us to focus our attention on the use of IMs in a particular form of communication, namely the institutional one *(RQ3).* Let's try to go through the different steps and understand what reasoning has led us to this variation.

## War of the memes or the memetics of war?

The war in Ukraine following the Russian invasion has represented a new global shock after the Covid-19 pandemic. The conflict has gained international relevance from the beginning for two reasons. First, for the first time since the Second World War, a sovereign country in the heart of Europe was invaded by another nation. Secondly, the involvement of Russia as a nuclear-armed country which is causing much concern among the international community. As for the Covid-19 pandemic, this conflict is taking the form of a 'total social fact' (Gofman, 1998) also from a communicative point of view because it is a constant topic trend on social media. This is creating the best conditions for a wide diffusion of IMs (IM) on the emergency, and, above all, it draws attention once again to the cross-cutting use of memes with respect to its nature (ironic, sarcastic and satirical). The use of a potentially 'desecrating' tool to explain a dramatic phenomenon is certainly not new, just consider the wide virality of IMs on the health emergency (Basch, Meleo-Erwin, Fera, Jaime & Basch, 2021; Bracciale, 2020). However, the relationship between IMs and war is very interesting because of the type of communication in which it is embedded. For the first time, public and institutional profiles have used memetic language in the propaganda communication of war. This raises two little-expected phenomena: on the one hand, a communicative artefact usually used to make people laugh is used to communicate a tragic event; on the other, an institutional source uses an anti-conventional communicative strategy. The use of IMs on the war in Ukraine could therefore be a key moment in understanding the transition of

political and institutional communication towards new languages. On the other hand, experimentation with memetic language has been taking place in mainstream political contexts for some years now.

This is not surprising because IM is a very powerful tool in communication dissemination and is therefore a key instrument for the dissemination of topics perceived as 'central' by the public or specific social groups. For example, only five years ago it was already surprising that political language adopted IM as a communicative medium.[1]

In recent years, however, politics has emerged as one of the most interested fields in the use of IMs (Giampietro e Bracciale 2019). The communicative value of memes has not only been fundamental to social movements, but has also led political parties, leaders and institutions to integrate them into their strategies. The power of IMs to summarise an idea, situation or expression has led to their widespread use in the political context. Memes can condense a complex political fact into a short, powerful and effective box that engages people (Re, 2014). Memes are the 'narrative pillar' of this new way of communicating from and about politics (Mazzoleni e Bracciale 2022). The humorous aspect of IMs also makes them an effective tool: on the other hand, humour is a key component of many IMs, which helps them gain virality among online audiences (Milner, 2018; Shifman, 2013). The political influence of online communication and IMs entered the national and global consciousness first with Barack Obama's political campaign and later with the 2016 US general election won by Donald Trump.

Obama was subsequently coined as 'the first meme President' (Beckwith, 2012). His team took great care in launching all kinds of messages, including graphic ones, to be converted into IMs. Images such as the Situation Room capturing the moment Obama and his team follow the operation that killed Bin Laden are examples of the strategic use of these images. These are contents that, even if they have a known sender, play with the phenomenon of non-attribution typical of IMs (Davison, 2012) to promote dissemination and appropriation by web users. In the case of Trump, the 2016 election campaign was mainly won thanks to the dissemination of IMs by his communication team that enhanced the figure of the candidate and debased that of the opponent (Moody-Ramirez & Church, 2019). On this special issue Rogers speaks of a "meme campaign" in reference to the digital campaign conducted in 2016 to influence the US presidential election: during this campaign, the virality and influence of memes was teste. Another key episode of how IM culture is spreading among prominent political figures is the one involving British Prime Minister Cameron. When announcing an institutional meeting, he made an explicit reference to an IM he had been the victim of in the previous months.[2] Starting from these early experiences of politics with this new language may be the key to interpreting the communicative style of this new war scenario. It is no coincidence that this innovative way of making propaganda through IMs is very similar to the printed propaganda during the years of the world wars. These were, as

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[1] The allusion is to an episode of Italian minister Luigi Di Maio using a meme to explain the job figure of the 'navigator' (Luigi di Maio's official Facebook page (fb.com/LuigiDiMaio), 5 December 2018, bit.ly/DiMaioMeme2018)

[2] The meme in question mocked a photo of Cameron posing while talking on the phone with US President Obama.

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they are today, images aimed at discrediting the enemy also through irony (Welch, 2013). Under these premises, the article aims to explore the content conveyed by IMs and the connections they create in relation to the Russian-Ukraine conflict, analysing their ability to spread the message and positions, opinions and attitudes widely through communicative forms between ironic, satire and denigration.

## An analytical proposal to analyze meme communication.

At an early stage in the development of our analysis we point to analyse the spread of IMs on Facebook related to the first two month of the war in Ukraine to develop a methodological discourse around uses and outcomes that can be pursued through data from new services offered by the same proprietary platforms in the analysis of memetic communication. The analysis of IMs raises important methodological challenges starting from the distinction between IMs and other visual content, to data collection, from epistemological approach to analysis techniques.

So, we collect a dataset from Facebook through the CrowdTangle platform. The query to the CrowdTangle tool was made by following the hashtags related to the phenomenon under investigation, such as: #ukraine #russianinvasion #ukrainewar. However, a series of doubts on the process arise: is it all IMs that CrowdTangle identifies as such? Where does the concept of IM begin and end? What differentiates an IM from any image is not only the presence of the text, but the message conveyed by the image as a set of all its components that together make the image object an IM. Excluding a single element from the memetic object will alter the object itself.

According to Crowdtangle guidelines if the keywords we are looking for appear within an image or as text of a post that contains an image, the subject should appear in the results. But the question is still not satisfied, how does meme search work? Meta apps make content accessible to the blind as an altText on the image. Crowdtangle relies on Facebook's optical character recognition (OCR) technology to identify text in images. But OCR may not pick up all the text in every image.

Making a first observation of the dataset returned by CrowdTangle and its new IM collection function, we immediately realized that the dataset contained a significant number of cases that could not be considered IMs in the theoretical sense, instead they were mere images. This translates into a distortion between the types of IMs sampled and those disseminated online, thus risking obtaining partial results (Giorgi, 2022). Such a distortion would certainly have undermined the quality of the results.

It is possible to argue that in the study of IMs, the collection technique does not determine the agenda of meme research but has a strong impact on the type of research and the results obtainable, as explained by Rogers in the opening of this special issue.

Indeed, beyond the indications provided by Crowdtangle, we don't know exactly how the system works, we can only see it from its data input and output characteristics. These

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features make the service one of the algorithmic black boxes that the user cannot access to see and understand how it works.

Therefore, we decided to follow the IMs on the Russian-Ukrainian conflict starting from the one that achieved the highest engagement value and that caused the most uproar in the online community. Starting from one case, we immediately noticed a first peculiarity: the choice to study IMs on Facebook derives from the desire to test the data collection of the CrowdTangle tool but also from the fact that Facebook is considered a "meme machine" (Rogers, 2019), that is the platform on which most memetic contents circulate. Online content has modules that can be considered platform-specific or at least, there are emerging content genres associated with specific platforms (ibidem); in this case, however, the IMs of our interest were shared on the Twitter platform. Furthermore, many of these IMs did not have hashtags through which we could have made a new collection by querying the Twitter API, so we started following the study object by observing the digital scenario around the IM and paying particular attention to the recommendations that the platform algorithm offered every time we interacted with the IM of interest, hence perfectly fitting into the "follow the algorithm" perspective (Airoldi et. al., 2016). We have thus manually collected our IMs of interest.

Next, we tried to implement a process of supervised machine learning techniques to classify memetic content. To automatically or semi-automatically classify the content of the IMs, two methods were deployed: the first was to rely on a classification algorithm which, given a set of training data, could autonomously classify other images never seen before.

There are two ways to classify instant messages in a supervised way: work on visual content or work on textual content. Implementing a machine learning model that considers both text and visual features poses many challenges (Smitha, Sendhilkumar, & Mahalaksmi, 2018). While the text extracted from the image can be analysed with classic text analysis techniques and classified using supervised algorithms such as Naive Bayes, for the classification of images using visual elements it is necessary to have data (or extract them ex post using other software) which contain information about shape, appearance, edge orientation, pixels, colour gradients and spatial arrangement of images (Bosch, Zisserman, & Munoz, 2007). To the difficulty of finding this information must be added the complexity of building a model which would have allowed us to extract only the IMs from our data.

Since this is not our research objective an attempt has been made to classify IMs according to the textual elements that compose it using a classic text classification algorithm based on Naive Bayes.

At this point, the previous question arises again: is it possible to analyse a memetic content through only one of the elements that compose it (in this case only the text) if what makes an image an IM is the combination of its elements in its specific socio-cultural environment? Furthermore: can satire, national culture, the history and memory of countries and wars past and present be caged in a predefined classification algorithm? The answer is no: investigating the intertextual dimension of IMs represents a difficult task for automatic or semi-automatic analysis techniques. An exclusive automatic and data-driven approach (unless one wishes to investigate the diffusion of memetic waves) is not the best way to investigate the deep communicative elements conveyed by these digital objects, especially

regarding a particular theme which is the one being investigated here. This strongly encourages experimentation with new ways of producing knowledge in environments and about digital objects. Not all digital objects are suitable for quantification and automation. In fact, the nature of IMs, their structure and specific components have prompted the adoption of not only a new methodological path, based on ethnographic observation, but also a new overall look at the research, changing its aims and finding new keys to analysis and new interpretative implications.

The relevance of the strategy adopted made it possible to deepen the analysis of the IMs, classifying them according to categories anchored in the reference theories, without sacrificing the scalability of the data. To do this, it was useful to have a data collection tool that is anchored in the theoretical definition of IMs and thus has the sensitivity to identify and differentiate them from any other digital content similar to them.

## An alternative proposal: is it a digital turn also in institutional communication?

After ascertaining the limitations and problems of continuing with automated extraction and analysis of the memetic content disseminated about the war in Ukraine, our research question and the analytical procedures we adopted necessarily changed. Our interest was led towards a different object of analysis. We no longer adopted the IMs as an object to be followed in the network because it was clear to us that it was an analytical transition. It is no longer the 'meme' object itself that is of interest because of its intrinsic communicative connotation and the new communicative format it relaunches (Giorgi, 2022), but rather the elevation of the memetic communicative style assumed as the instrument of a form of communication that has been far from adopting such pervasive and extensively used forms in the wider mass of social, ephemeral and light communications (Van Dijck & Poell, 2013). This is the institutional communication on the Twitter social profile of the Ukrainian's government institutions in the aftermath of the Russian invasion.

The decision to migrate to Twitter first took place following the most viral meme object but was later confirmed and solidified by the new research objective. Twitter plays a fundamental role in the conflict as a privileged channel for official communications regarding the progress of the conflict both by Ukraine and the NATO alliance, and by Russia and its supporters. In addition, the first phase of investigation of this study undertaken by performing automatic content extractions following specific and given hashtags made clear another limitation of this procedure related to the very nature of the 'hashtag' object. The non-neutrality of this object (Rogers, 2009) and its constant association with ideologies, ideals, and positions, unbalance the possibility of retrieving content on all sides involved and end up giving more weight and relevance to one side rather than the other (Punziano, De Falco e Trezza, 2022).

This change of perspective became useful after clarifying the limit of extraction from Crowdtangle, not only for the form of the content following the query tool (Punziano,

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Marrazzo e Acampa, 2021), which returns not only IMs but any form of image, but also after noting that besides the proliferation of IMs on Facebook or Instagram what is puzzling is the point where communication centred on these objects has branched out to institutional profiles outside these platforms and identified on Twitter. In order to achieve this awareness, after the supervised extraction and classification attempt, we realised that no content classification of this kind of material can stand up unless a preliminary analysis of dissemination flows is undertaken. This operation, in our case, took place by following the IMs identified on the Net in full respect of the digital methods perspective (Caliandro e Gandini, 2016).

The method chosen to follow these IMs was to observe them using a digital ethnography (Murthy, 2008) procedure that combined techniques for observing the digital space around the IMs and web scraping techniques once those contexts within which the IMs takes on revolutionary meanings had been reached. The first IMs we decided to follow were those that, extracted with the same analysis procedure, reached impressive forms of engagement and showed clear and decisive pervasiveness. Posted shortly after the Russian invasion by Ukraine's official profile, formally classified as a government organisation, it shows a giant Adolf Hitler reaching down to a little Vladimir Putin and stroking his face in appreciation and encouragement, as a teacher would do with his pupil or a parent with their child. The picture populated millions of likes, thousands of comments, but what is impressive is the number of shares with retweets or on external sources (fig. 1).

*Fig. 1 – The first IM followed in our analysis.*



*Source: Ukraine/Україна @Ukraine Twitter profile on 20 April 2022.*

What is happening in this context of war that is now also being waged via social media? To answer this question, we proceeded by analysing textual and visual posts that this profile, Ukraine/Україна @Ukraine, has produced since 24 February, the day the invasion began up to two months of conflict. Following the same logic of following the object of our interest, we moved from *following the IM* to *following the profile*, and from *following this specific profile*

to *following all the other institutional profiles* that are suggested by the fact of having viewed this specific profile or that are mentioned in @Ukraine profile as official and trustworthy sources. The profiles that have been included among our suggestions or signalled by the @Ukraine page are: @MFA_Ukraine, Ministry of Foreign Affairs; @APUkraine, Office of the President of Ukraine; @GeneralStaffUA, Official report of the General Staff of the Armed Forces of Ukraine; Defence of Ukraine @DefenceU, Ministry of Defense of Ukraine; Kyiv. The City of Courage @Kyiv city government. The systematic observation of these six institutional and trustworthy profiles led us collecting posts from each profile, gathering memetic or non-memetic images that problematised the issue of war, jointly organising a classification system of the communicative, symbolic, and argumentative elements as analytical framework.

Two of the pages observed, although institutional and recognised governmental profiles, depart from the canons of classic institutional communication (Bentivegna & Boccia Artieri, 2019) by giving a new communicative twist to the stylistic features adopted by the latter and are: Ukraine/Україна and Kyiv. The City of Courage. As the drama of the conflict mounts, these two Twitter profiles, instead of adopting the language of reporting of the events, decide to focus their language on the emotional component, constructing charged and dense messages. Closer to the propaganda style, these profiles use slogans (*There is no politics for children, there is only good and evil. And good must always prevail. For the sake of our kids and their future, Ukraine will surely prevail*; *Stop #RussianAggression*; *Welcome to the City of Courage, the epicenter of the struggle for freedom and democracy. Ukrainian or not, make your voice heard and fight the Russian aggression! #StandWithUkraine*; *We call on foreign nationals willing to fight together with us to join our International Legion*; *Even in times of grave danger, when Ukrainians hide in Kyiv underground from Russian missiles, we maintain humanity and faith in a better tomorrow. We will win and build a prosperous and democratic future #StandWithUkraine*; *The spirit of times. Today, every Ukrainian regardless of gender, ethnicity, religion, or political views is the defender of independence and European values #StandWithUkraine* - see fig. 2), calls to action (humanitarian, arms or political aid such as *Demand your governments to act now. Together, we can and must stop Putin #StandWithUkraine #CloseTheSky*; *Give us the tools. #ArmUkraineNow!*; *#BoycottRussia*; *Demand your governments to act now and cut Russian Sberbank from SWIFT. #BanSberbankFromSWIFT*; *Support the Ukrainian Army and economy. Let's #StopRussianAggression*), celebrities' endorsement (see fig. 4 with Stephen King among the others), and more than dramatic images with a satirical tone, adopting IMs (fig. 3) as the central element of their communication, alongside infographics with the numbers of the war or with useful advice to combat misinformation (fig. 5) at a crucial time in which an unprecedented conflict is taking place. And again, parallels with the Second World War are not lacking, starting with the first IM we presented and completing with posts such as: *During the Holocaust, Nazis murdered more than 100,000 Jews in Babyn Yar. Nowadays, barbaric Russia is again murdering innocent people at the very same place.*

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Fig. 2 – Slogan and emotional involvement.



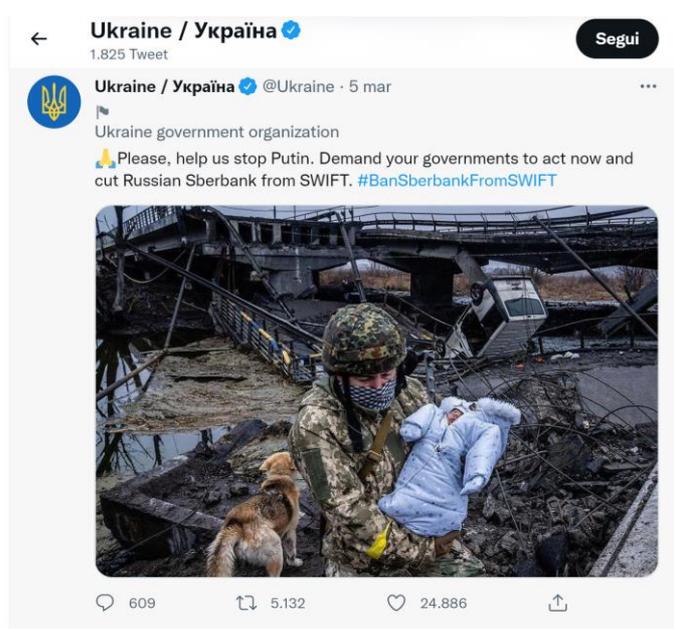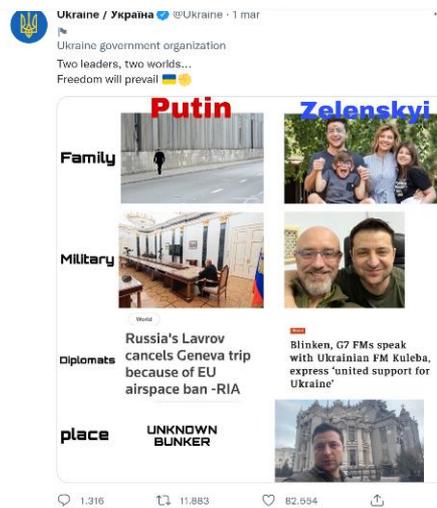Fig. 3 – Memetic communication.



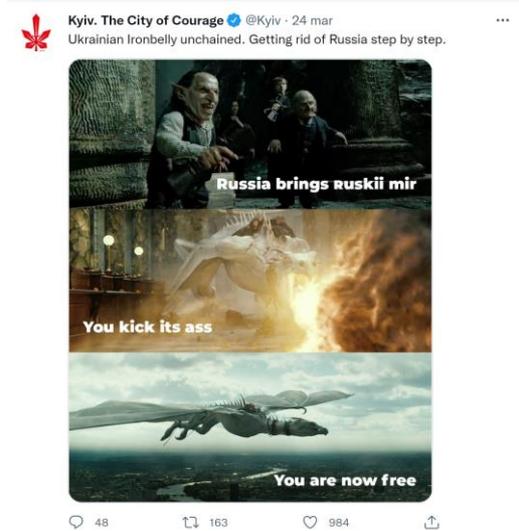Gabriella Punziano, Domenico Trezza, Suania Acampa

Fig. 4 – Celebrities' endorsement.

*Fig. 5 – Infographic to fight disinformation and to spread connoted hashtags.*



What has been described so far clarifies that, beyond the difference in scale, whether we are talking about a national page or one of the local city government, the communicative code of institutional communication is undergoing a major change during this war. Consequently, there has been a shift from impersonal communication, based on numbers,

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rational, inward-looking and directed to citizens, towards an informal communication, based on the emotional component, irrational, aimed at the broader involvement, of external and distant people even those who are not directly witnessing the local events but still open a window on them through a digital portal (in all respects similar to the liminary objects encountered in the first analyses of digital dark tourism during the first Covid-19's lockdown, (Addeo, Punziano e Padricelli, 2021). This last modality is closer to a real memetic communication than to the institutional communication *tout cout*. The openness and search for support, the different target at which these pages are aimed, is underlined even more by the basic linguistic choice that sees most of the content conveyed on these pages written in English. These characteristics further bring out the fact that this is a narrative built for outsiders from whom support is sought, emotional involvement and an empathy that passes more easily through slogans, touching images, celebrity endorsement and incisive communications between the satirical and the evidence of the paradox that sees the small Ukraine at the mercy of the giant Russia.

A completely opposite choice, but, as we shall see, tending towards the adoption of divergent communicative elements such as those shown so far, is made by the other four observed institutional pages. @GenerlaStuffUA, @MFA_Ukraine, @APUkraine, @DefenceU use the local language, they do not aim at foreign involvement but at sensitising their own people to Russian barbarism. The numbers of the conflict (fig. 7), the daily reports on the events, the messages of the president and other politicians or military heads, the shocking videos, the chilling images (fig. 8), are all elements that populate these pages, maintaining the typical stylistic features of the institutional communication that was created with the aim of informing the citizen. And yet, it often seems as if the citizen is being sold heroes, memorable acts, and proposals for collective action, and, where these emerge, memetic communication once again becomes central (fig. 6). Candles in honour of victims, medals to celebrate fallen soldiers and combatants, scenes of war life that become ordinary everyday living, stories of heroes in the field, in shelters, in hospitals, become the narratives spread by these pages with greater emphasis and transport, stories of courage self-celebrated and hailed by the whole world. And again, targets of the war shot down among prominent military figures, planes or foiled actions, the tale of a Ukraine of infinite character is what these pages aim to shout out to the people and to all those who want to know, to be aware, to be in it. @MFA_Ukraine is the only profile that use English, but in terms of content, methods and stylistic features it is typical of institutional communication posting content inciting "Glory to Ukraine" and #StopRussianAgression. There is a peculiar and generalised self-celebration of the president whose courage and strength are a guide for the country, so much so that he shows much more institutionalism on the page of his press office @APUkraine, which paradoxically is the only one not affected by the memetic tendency. This, unlike the other pages, is the one in which the figure of a leader is built up in great detail.

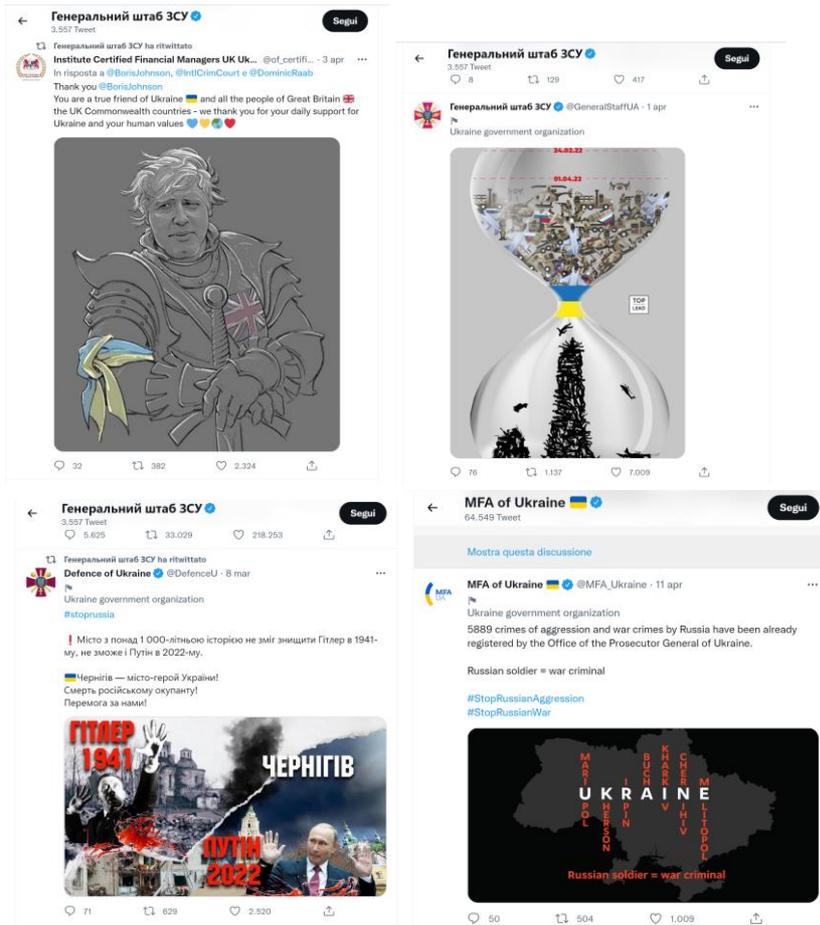*Fig. 6 – Memetic communication.*



*Fig. 7 – War objectives.*



*Fig. 8 – Infographic on war figure and misinformation detection.*

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Fig. 9 – Chilling images.



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Pervasive and centred, the communication of these pages hinted at sediments of contamination that press on with the passage of time and become a new style and new communicative cipher of the Ukrainian conflict. The IM as a single element, replicable and transmissible by imitation from one individual to another or from one instrument of communication and expression to another, becomes that viral content capable of monopolising the attention of users on the web, whether internal or external to the area of conflict. The IM becomes a mode of expression by those affected and a mode of circulation of gory information in a light-hearted manner. The IM, playing with impact on the cultural sphere and collective imagination, becomes a connective element (De Kerckhove, 2001) that today can be considered as the most effective way to spread a message and involve the public. They become an element of identification, like a flag.

## Conclusion: Institutional communication digital turn and the meme logic as new frontier of expression

The starting purpose of this contribution has been to explore IMs on the Russian-Ukraine conflict in order to analyse content, sources and themes which somehow helped to delimit the memetic typologies salient in the reporting of the war. As is well known, the distinction between doing research through the web (and its applications) and doing research on the web now has very blurred boundaries (Amaturo & Punziano, 2017; Rogers 2013). In this study this emerges very clearly. Substantive curiosities on the role of IMs in the Russian-Ukrainian conflict could not ignore the complexity of the communicative unit as a hybridisation of image and text (Shifman, 2013).

Indeed, IMs are new communicative codes that have been under the magnifying glass of researchers for only a few years (Bentivegna & Boccia Artieri, 2019; Milner, 2018). Analytical approaches, tools and applications oriented towards working with IMs are therefore still at an experimental stage and do not offer many possibilities for communication analysts to get involved (Giorgi, 2022). The research questions we put forward in fact prefigured a path of construction and analysis of the data oriented towards a quantitative and automated approach and still anchored to traditional textual analysis techniques. The difficulties of combining the objectives with the methodological repercussions of our object of study encouraged us to find alternative approaches and to get to the heart of the matter. This meant 'following the algorithm' (Airoldi et al., 2016) insofar as the most viral war IMs were taken into account and thus those presumably considered to be the most communicatively effective. The virtual mapping of these IMs, following a common approach to digital ethnography, allowed us to identify the propagators of these types of images more accurately. It was very interesting for the purposes of our exploratory curiosity to find out that the biggest spreaders of IMs were public and institutional profiles (mainly Ukrainian governmental bodies). This communication strategy opens a lot of room for reflection, especially on two points. The first is the use of propaganda-oriented IMs, a well-known mode of communication in times of war. All the IMs drawn were intended to discredit the Russian

offensive and "call to arms" the Ukrainian (and other) population. The second point is the ongoing experimentation by institutional actors with a new language and new linguistic codes. Is this a change of communicative paradigm or a phenomenon limited to the exceptionality of the war and thus to the propensity of the IM to spread propaganda content? These are two valid hypotheses that should be checked by widening the focus to other actors outside the Ukrainian institutional universe. However, it cannot be ruled out that all this is acting as a precursor to a renewal of institutional languages more oriented towards smarter, more comprehensible, and viral forms of communication such as IMs.

What emerges from the analysis are certainly the important roles played by the digital platform. The first role is that of battlefield: it seems the Russia-Ukraine war is destined to be not only the first war in Europe documented in real time on social media, but also the first one fought by social media through all the communication languages that are typical of the platform environment, IM included. It is what Mezza (2022) calls "Net-war", a real hybrid war, waged with Twitter blows that shifts the battlefield and makes social media the place, the tool, and the logistics of war. The second role is that of real-time narrator making the social media an enormous archive to tell the story of the conflict, a real historical source in which new digital objects are added to the traditional textual objects and use new and different languages. This renewal of languages, as we tested in this paper, also required a "renewal" of the analytical approach to producing knowledge through digital data, in this case memes. Indeed, the view based on analysing digital data in a supervised and automated manner, traditionally related to big data on the Web, did not match the particular nature of the memetic object. This encouraged us to experiment with an alternative view, more oriented toward the depth of the data (the image), as opposed to its extent. We observed how this change of direction in the analytical process also had repercussions on the purpose of the study, leading us to investigate not only the virality of war memes, but also the specific sources and characteristics of the very popular memes.

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