



The Hague Centre
for Strategic Studies

The parallel front

An analysis of the military use of information in the first seven months of the war in Ukraine

Sofia Romansky, Lotje Boswinkel and Michel Rademaker

October 2022





The parallel front

An analysis of the military use of information in the first seven months of the war in Ukraine

Authors:

Sofia Romansky, Lotje Boswinkel and Michel Rademaker

Cover image credit:

Ukrposhta, Ukraine national postal operator

October 2022

The authors would like to thank Björn de Heer, Karel Berkhout, and Raffaele Minicozzi for their useful comments and suggestions. Evidently, the content of this paper is the sole responsibility of the authors.

This production has been written as part of the *project Platform Influencing Human Behaviour*, commissioned by the Royal Netherlands Army. The aim of this platform is to build and share knowledge on information-based behavioural influencing in the military context. Responsibility for the contents rests solely with the authors and does not constitute, nor should it be construed as, an endorsement by the Royal Netherlands Army.

© *The Hague* Centre for Strategic Studies. All rights reserved. No part of this report may be reproduced and/or published in any form by print, photo print, microfilm or any other means without prior written permission from HCSS. All images are subject to the licenses of their respective owners.

Table of Contents

Introduction	1
Behavioural influencing in the military context	3
Historical context	6
The Ukrainian context	6
The Russian context	7
Case studies	9
Influencing morale	9
Snake Island	11
The Ghost of Kyiv	14
Influencing military movement	16
Sinking of the Moskva	17
Explosions in Crimea	19
The Antonovskiy bridge	21
Spotlighting battle locations	23
Azovstal	24
Hero settlements	26
Conclusion	28
Bibliography	30

Introduction

Russia's invasion of Ukraine on 24 February 2022 stood out to global audiences, not least by marking the return of large-scale conventional warfare in Europe.¹ Recent months have made clear that the bloodier types of conflict fought with troops, tanks and artillery do not belong to the past. Yet, the war between Ukraine and Russia certainly does not take place solely in the physical realm. Rather, in modern high intensity warfare, an ongoing informational battle interacts with and affects the behaviour of people on the ground. By manipulating the flow and content of information, human cognition can be influenced to alter decision-making and, consequently, the outcomes of confrontations between warring parties.

This paper aims to disentangle the various information influencing tactics employed in the war in Ukraine. Specifically, it focuses on the ways in which Ukrainian and Russian physical forces have employed different levels of information manipulation for, primarily, tactical, but also operational, and strategic effects. This paper will not make judgements about the effectiveness of certain tactics, instead, it will focus on mapping what has already been observed. This paper realises the difficulty of grasping the meaning behind tactics; on the one hand, admitting that behavioural influencing tactics can be both intentional and emergent in nature, and on the other hand, facing the difficulty of accessing first-hand sources. While, undeniably, civilian involvement in the distribution of information has been present in the war, the scope of this paper is limited to information which has been manipulated within and had an impact on the military context. By focusing on specifically this interaction it will be possible to grasp how information reaches into the material domain, influencing both participating troop and ally military activity and support. As such, the sources for this research consist of (social) media posts by defence ministries and soldiers on the ground, as well as analyses from research institutions and reports from news agencies. Yet, this paper does acknowledge how behavioural influencing employed by the military spills over into the narratives employed by civilians, governments, NGOs and international organisations. In turn, these groups are also capable of employing their own forms of behavioural influencing which can be in line with or run counter to the military's tactics.

Although varying effects on military behaviour can be deduced from the influencing tactics employed thus far in the war in Ukraine, this paper analyses each case study through the lens of one of three main effects which have been commonly observed by participants in the war and experts abroad: influencing morale, influencing military movement, and spotlighting battle locations. Through the use of case studies, this paper describes the relation between information and the abovementioned effects, and how this has impacted the players involved in the conflict. While this paper acknowledges the inherently intertwined nature of the case studies and effects, by analysing the case studies through one specific lens, certain behavioural influencing processes can be better illuminated. The war has witnessed the exploitation, manipulation and distortion² of information primarily through the use of narratives, repetition of key phrases and symbols, emotional appeal, communication about facts, and obscured information to target different audiences and achieve mostly tactical, but also operational and strategic objectives.

1 Franz-Stefan Gady, "Putin Has Brought Conventional, Bloody Warfare Back to Europe," *Financial Times*, February 24, 2022.

2 Lotje Boswinkel et al., "Weapons of Mass Influence: Shaping Attitudes, Perceptions and Behaviours in Today's Information Warfare," HCSS, April 20, 2022, <https://hcss.nl/report/weapons-of-mass-influence-information-warfare/>.

By manipulating the flow and content of information, human cognition can be influenced to alter decision-making and, consequently, the outcomes of confrontations between warring parties

As the conflict continues, this analysis may provide the means to more systematically distinguish, understand, and anticipate different types of behavioural influencing tactics available in the modern context, in Ukraine as well as beyond. Additionally, this paper can serve as a point of reflection as to which behavioural influencing capabilities Western forces have to develop or prepare against.³

Table 1. Overview of case studies and tactics

Main Effect	Case Study	Cluster	Tactic	Elements
Influencing morale	Snake Island	Exploit	Emotional appeal	Tone-setting slogan “Russian Warship, go f*ck yourself”, humour
			Appeal to authority	Zelenskyy’s early posthumous recognition of ‘Heroes of Ukraine’
		Manipulate	Repeated exposure	Ubiquitous repetition of slogan in diverse contexts
		Distort	Narrative persuasion	Broader narrative of Ukrainian bravery since 2014
	The Ghost of Kyiv	Exploit	Emotional appeal	Defiance, symbolic representation of Ukrainian spirit
		Distort	Narrative persuasion	Reinforce impression of Ukrainian aerial superiority over capital
Disinformation			Release of inflated take-down numbers, confusion around identity and status of pilot	
Influencing military movement	Sinking of the Moskva	Exploit	Emotional appeal	Sinking of ‘Russian Warship’ from Snake Island, desired parallel to real Moskva
		Manipulate	Sequence manipulation	Russian skewed sequence of events and causes of sinking
		Distort	Narrative persuasion	Ukrainian claim of victory, Russian refusal to attribute success
	Explosions in Crimea	Manipulate	Sequence manipulation	Russian skewed sequence of events and causes of explosions, Ukrainian withholding of success claims
		Distort	Narrative persuasion	Russian refusal to attribute success
	The Antonovskiy bridge	Manipulate	Sequence manipulation	Level and timing of the Antonovskiy bridge’s destruction
		Distort	Narrative persuasion	Both sides claiming victory for respective purposes
			Repeated exposure	Repetition of claims of destruction or reparability
	Spotlighting battle locations	Azovstal	Exploit	Emotional appeal
Distort			Narrative persuasion	Strategic victory in capturing Mariupol and symbolic victory for Russia in defeat of Nazis and their supporters, symbolic Ukrainian resistance
Hero settlements		Exploit	Emotional appeal	Personification of settlements into heroes fighting alongside Ukrainians
		Manipulate	Repeated exposure	Repeatedly drawn attention to complicate covert manoeuvring and gain international support

³ For example, some connections have already been made to lessons learned in Ukraine and how that may apply to China's information warfare strategies. Koichiro Takagi, "The Future of China's Cognitive Warfare: Lessons from the War in Ukraine," War on the Rocks, July 22, 2022, <https://warontherocks.com/2022/07/the-future-of-chinas-cognitive-warfare-lessons-from-the-war-in-ukraine/>.

Behavioural influencing in the military context

The advancement of information technology and improved understandings of human cognition in the twenty-first century have increased the appeal of employing information-based capabilities to influence people's perceptions, attitudes, and behaviours

The use of information to influence the course of conflict is certainly not new. Yet, the advancement of information technology and improved understandings of human cognition in the twenty-first century have increased the appeal of employing information-based capabilities to influence people's perceptions, attitudes, and behaviours.⁴

In a military context, the flow of up-to-date information is indispensable for the command and control of successful operations. As such, many electronic and cyber warfare capabilities aim to disrupt the infrastructural ('hard') functioning of command and control technologies.⁵ Yet, some information operations can further be distinguished by the fact that they target the cognition of individuals by altering the usual flow of information in a way that produces a different response than what would have usually occurred. This kind of behavioural influencing will be the focus of this paper, rather than the above-mentioned disruptive capabilities, although they are also a part of the war in Ukraine.⁶

When thinking about a hybrid environment, where physical and informational battles occur parallel to each other, it is useful to conceptualise the environment in terms of three levels. The first level is the physical, which encompasses all actors involved on the ground. This is followed by the cognitive level, which denotes the ways in which said actors interpret information. Finally, there is the informational level, which focuses on the various means through which information is sent and received. Any information influencing tactics essentially interact between these three levels, and are targeted to specific informational, cognitive, and physical needs and capabilities.⁷

As such, information-based behavioural influencing targets the connected processes of actors' behaviour and decision-making based on their relation to reality. This involves knowledge from the fields of both human psychology and sociology as well as linguistic and literature studies. Behavioural influencing rests on the assumption that information conveyed through language, with specific choices of words and their sequencing, fundamentally affects the way in which people will interact with and interpret their surroundings. More 'literary' concepts like narrative, the overarching 'stories' which act as convenient frames of reference

4 Boswinkel et al., "Weapons of Mass Influence."

5 Boswinkel et al., 4.

6 For example, Russian cyber-attacks on Ukraine had intensified right before their eventual attack in February, with the aim to disrupt Ukraine's ability to coordinate a comprehensive response. Jakub Przetacznik, "Russia's War on Ukraine: Timeline of Cyber-Attacks," European Parliament, June 21, 2022, [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2022\)733549](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)733549).

7 US Army, "Joint Publication 3-13. Information Operations.," November 20, 2014, https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_13.pdf.

to help individuals interpret complex phenomena, hold a relatively central role in thinking about behavioural influencing.⁸

Based on this understanding, a previous HCSS report⁹ presents three main clusters of tactics which can be employed as means to a behavioural influencing end, those: exploiting reality, manipulating reality, or distorting reality. Tactics which exploit reality are built on what already exists in the physical, informational, and cognitive domains. These tactics are effective as humans make decisions by observing and reacting to the environment around them. The most notable examples within this cluster are the use of emotional appeal to evoke certain reactions, social contagion based on people's tendency to mirror each other's behaviour, and appeal to authority which legitimises certain claims based on societal trust in authorities. Meanwhile, tactics which manipulate reality present what is already there in a way that changes the response which would have usually occurred. Overall, tactics in this cluster include repeated exposure to information, manipulation of the sequence in which information is presented, microtargeting of information, and media agenda-setting. The final set of tactics, those which distort reality, create a new reality through the use of false information or by framing reality in such a way that it will be perceived differently. This can be done through the use of disinformation and/or narrative persuasion tactics respectively. The above tactics are often employed parallel to each other as part of a greater, both purposeful and gradually emergent, behavioural influencing strategy.¹⁰

As behavioural influencing is commonly thought to apply primarily to enemy targets or to act against the influencing attempts of adversaries, the aim generally consists of hampering an enemy decision-maker's ability to understand their context and to act cohesively. In NATO doctrine, information operations aim to "degrade, disrupt, deceive, destroy, or deny" the sufficient flow of information for enemies in the physical and cognitive realms.¹¹ Yet in a conflict it may be equally necessary to target one's own side as well, not just for command and control, but also to bolster the ability of allied troops to make decisions and continue fighting to the best of their abilities. As such, the information available to enemy actors to make evaluated decisions can be limited or made overly salient, forcing actors to be make wrongly informed decisions which could lead them to be either more cautious or excessively confident. Simultaneously, information can also be purposefully withheld or disseminated to give an edge to one's own forces, where a lack of complete information can serve to maintain the status-quo of confidence in their military performance. Information targeting can further extend to both domestic and enemy civilian audiences, as the morale of civilians supports the morale of troops.¹²

As the word 'tactic' would imply, writing on behavioural influencing mostly presumes a degree of intentionality behind the actions of militaries when they attempt to influence their informational environment.¹³ However, as will become especially evident from the forthcoming case studies, establishing the intentionality (the deliberateness with which something is done) and intention (the meaning behind an action) of certain tactics can prove problematic.

8 Simon Bushell et al., "Strategic Narratives in Climate Change: Towards a Unifying Narrative to Address the Action Gap on Climate Change," *Energy Research & Social Science* 28 (June 1, 2017): 39–49, <https://doi.org/10.1016/j.erss.2017.04.001>.

9 Boswinkel et al., "Weapons of Mass Influence."

10 Boswinkel et al., 8.

11 Peter B. M. J. Pijpers and P. a. L. Ducheine, "'If You Have a Hammer...' Reshaping the Armed Forces' Discourse on Information Maneuver," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, November 1, 2021), <https://doi.org/10.2139/ssrn.3954218>.

12 Takagi, "The Future of China's Cognitive Warfare."

13 Keir Giles, *Handbook of Russian Information Warfare*, 2015.

Tactics are often employed parallel to each other as part of a greater, both purposeful and gradually emergent, behavioural influencing strategy

First, looking at a conflict from the outside, it is difficult to determine both the 'intended' meaning of a certain tactic as well as where it originated from. This links to a second obstacle. New technologies, specifically broadband connections and social media, have enhanced the reach and speed of communication between individuals. Developments of new technologies have both pros and cons, but unequivocally add complexity to the information dimension of a hybrid environment. On the one hand, a message is more likely to easily reach more people. On the other hand, as social media permits individuals to add to and modify distinct pieces of information, it also becomes more likely that information will change as it spreads, which changes its impact.¹⁴ This means that something that could eventually come to be perceived as tactical, operational, or strategic behavioural influencing may have originated from an individual 'on the ground' who did not necessarily intend for their communication to become behavioural influencing. Instead, a kind of self-synchronisation may have allowed for certain ideas or language to gain momentum and come to be adopted as part of a greater narrative. This conflicts with conventional perceptions of behavioural influencing, where decisions about behavioural influencing by higher ups are purposefully imposed and executed in a 'top down' manner. Evidently, this raises questions about the effectiveness of and the extent to which behavioural influencing tactics can be controlled. This paper necessarily acknowledges that some of the tactics observed in Ukraine may entail combinations of intentional and 'emergent' actions.

In Ukraine, all the above mentioned aspects of behavioural influencing have been observed to various effects in the physical military domain. The speed at which narratives spread, coupled with the complexity of the situation on the ground, have already made Ukraine a case study in hybrid warfare.

Pieces of information that could eventually come to be perceived as tactical, operational, or strategic behavioural influencing may have originated from an individual 'on the ground'

¹⁴ Denis McQuail and Mark Deuze, *McQuail's Media and Mass Communication Theory* (SAGE Publications, 2020).

Historical context

To better understand the case studies, as well as the impact of the tactics around them, it is first necessary to briefly review the historical context within which the current behavioural influencing is taking place. This necessity stems from the fact that although the present large-scale war started on 24 February 2022, many of the ideas and themes employed as part of behavioural influencing already existed and were nested within complex cultural and social frames of understanding.¹⁵

The Ukrainian context

The behavioural influencing witnessed in Ukraine from the beginning of Russia's invasion did not materialise in an instant. To grasp the tactics and themes found in Ukrainian behavioural influencing it is necessary to acknowledge how certain ideas and narratives have existed since the occupation of Crimea in 2014 and even earlier in Ukraine's history. The fact that these elements have already been readily seen in Ukraine, and were present in the minds of individuals, made Ukrainians more receptive to the behavioural influencing which emerged during the present war. The existing frames of reference and understanding have further allowed for emergent and self-synchronising behavioural influencing as individuals were cognisant of the values which could be highlighted in the context of war, and specifically, a war against Russia.

Throughout the war, Western onlookers have been impressed by the bravery, defiance and resoluteness of the Ukrainians, as well as by the way that Ukrainians came together as a people.¹⁶ Yet, the cultural self-image of Ukrainians has been intertwined with these values from before Ukraine's independence; and the struggle for independence is deeply ingrained in Ukraine's historical myths. In the nineteenth and twentieth centuries, revolutionaries fought for Ukraine's sovereignty, who in turn paid tribute to the Ukrainian Cossacks of the sixteenth and seventeenth centuries. The Cossacks were group of semi-nomadic people of different ethnic histories known for their proficiency in combat. Ukrainian scholars consider the Zaporizhian Cossacks as having constituted the first "purely Ukrainian society".¹⁷ This society differed from its neighbours in Eastern Europe for its focus on democracy, which allowed for a well-administered self-governance system, resisting the rule of the Polish-Lithuanian Commonwealth.¹⁸ After the seventeenth century, much of the Ukraine's territory (referred to as 'Little Russia') was annexed and assimilated into the Russian Empire, with the Cossacks being forced to disband. Throughout the Russian Empire, the idea of Ukrainians, Russians, and Belarussians as one peoples was omnipresent. And, although Ukrainian nationalists constituted only a small group, Ukrainian separatism was seen as a sufficient threat to warrant

¹⁵ This paper does not strive nor attempt to make an all-encompassing overview of the historical, cultural, and social contexts relevant to the war. Instead it reviews the most pertinent ideas and themes which can help enhance ones understanding of the behavioural influencing witnessed in the Ukraine war.

¹⁶ Manasi Gopalakrishnan and Louisa Schaefer, "War in Ukraine: How Do People Drum up Courage? | DW | 15.03.2022," DW.COM, March 15, 2022, <https://www.dw.com/en/war-in-ukraine-how-do-people-drum-up-courage/a-61076295>.

¹⁷ Tetyana Matychack, "Why Are Cossacks Key to Understanding the Ukrainian Nation?," March 13, 2019, <https://ukraineworld.org/articles/ukraine-explained/why-are-cossacks-key-understanding-ukrainian-nation>.

¹⁸ Matychack. Figures like Bohdan Khmelnytsky are still taken as epitomes of Ukrainian bravery and heroism.

a 'nationalising project', or, 'russification'.¹⁹ This included the banning of the Ukrainian language from schools, public spaces and printing.²⁰ After the fall of the Russian Empire, Ukraine declared independence in 1918, fighting for nearly all of its existence in an independence war until, in 1922, Ukraine and Russia founded the Soviet Union. Although the Soviet Union marked an end to the ban on Ukrainian, and even instituted a policy of 'Korenizatsiya', or 'indigenisation', Ukrainian intellectuals and nationalists were continuously persecuted. Even when Ukraine was allowed to develop more as an independent state under Yeltsin, there was still the presumption that Ukraine would remain close to Russia.²¹ This brief historical overview demonstrates how the imposition of Russian culture is not new to Ukraine, and has shaped Russia into the enemy of Ukrainian existence. Consequently, resistance and defiance to Russian domination have been incorporated into Ukrainian historical myths.

In more recent times, the Ukrainian Orange Revolution (2004-2005) and Euromaidan Revolution (2014, also known as the Revolution of Dignity) stand as testaments to Ukraine's continued pivot away from Russia and towards Europe. Western audiences frequently forget that since the annexation of Crimea and occupation of the Luhansk and Donetsk regions in eastern Ukraine, Ukrainians have already been engaged in a war with Russia. Key phrases, which emerged on a larger scale throughout the present war, have been actively employed for eight years to build morale on the frontlines. From 2014 onwards, the Ukrainian identity has been consolidated as one which strives for independence, democracy and European values, taking pride in bravery.²² As such, Ukraine's overarching narrative evolved into one proclaiming that it would no longer be caught in-between Europe and Russia, but would act decisively to determine its own future.²³

The Russian context

Before the start of the war, Russia was simultaneously 'priming' its population for the type of behavioural influencing witnessed since February 2022. Existing Russian narratives make reference to Russian history and culture. However, the Russian perspective also involves the construction of an existential threat, which underlies the need to wage war in Ukraine.

In the days before the 2022 invasion, Putin outlined the grievances which would come to justify the 'special military operation' Ukraine. On the one hand, Putin addressed states and alliances beyond Russia's sphere of influence, like NATO and the European Union, which were encroaching on Russia's security since the collapse of the Soviet Union. Putin's accusations that the West overstepped red lines with eastern expansionism were not new. Throughout the 2000s the EU has been accused of manipulating Russia's neighbours into having 'colour revolutions' and turning away from Russia in the process. Meanwhile, the security risks of NATO enlargement have featured in Russian leaders' speeches since the 1990s. Both the EU and NATO have been constructed as threats to Russian strategic interests, bringing Western

19 Mark Bassin, Sergey Glebov, and Marlene Laruelle, *Between Europe and Asia: The Origins, Theories, and Legacies of Russian Eurasianism* (University of Pittsburgh Press, 2015).

20 Jonathan Steele, *Eternal Russia: Yeltsin, Gorbachev, and the Mirage of Democracy* (Harvard University Press, 1994).

21 Jeffrey Mankoff, "Russia's War in Ukraine: Identity, History, and Conflict," April 22, 2022, <https://www.csis.org/analysis/russias-war-ukraine-identity-history-and-conflict>.

22 Mankoff.

23 John Biersack and Shannon O'Lear, "The Geopolitics of Russia's Annexation of Crimea: Narratives, Identity, Silences, and Energy," *Eurasian Geography and Economics* 55, no. 3 (May 4, 2014): 247–69, <https://doi.org/10.1080/15387216.2014.985241>.

Ukraine's
overarching
narrative evolved
into one proclaiming
that it would no
longer be caught
in-between Europe
and Russia, but
would act decisively
to determine its
own future

forces right up to Russia's borders. In the Russian narrative, by failing to acknowledge Russia's concerns, the West has forced Russia's hand in initiating an operation in Ukraine.²⁴

On the other hand, Putin spoke to states like Ukraine within Russia's 'Slavic' sphere addressing the "legitimacy of Ukrainian identity and statehood".²⁵ In the present and in the past, divisions between Russia and Ukraine (and Belarus) were presented as the result of deliberate, foreign or specifically Western, manipulation.²⁶ Such thinking can be traced back to the time of the Russian Empire which presented itself as the great unifier. Ukraine and Russia were seen as 'brotherly states', or simply one people that fundamentally shared a culture and a future. Putin's narrative since the start of 2022 alludes to aspirations of restoring the Russian Empire, not only socially and culturally, but also with respect to its geopolitical powers. By bringing Ukraine back under its control, Russia would be able to restore its influence over the 'heartland'; rich in natural resources and located in a strategic position. The significance of the Crimean peninsula in this should not be understated.²⁷ Since 2014, Russia has used Crimea to establish an effective area of control over the Black Sea using its Anti-Access/Area Denial (A2/AD) capabilities. Furthermore, Russian control over Ukraine would lend Russia more power over Europe, energetically, militarily, and economically. Yet, despite the evident benefits to Russia which conquering Ukraine would bring, Russia's special military operation was presented through the lens of benevolence, with only the 'best' intentions for Ukraine. The Ukrainians, specifically Russian-speakers, have been oppressed for too long by the fascist regime of Kyiv.

The Russian appeal to the fight against fascism and specifically Nazism in Ukraine has several relevant dimensions. First, the defeat of the Wehrmacht on Russian territory during the 'Great Patriotic War'²⁸ still plays a prominent role in Russian war myths, where the Red Army of the Soviet Union, now inherited by the Russian army, defeated the 'evil' of the world. Second, given the historical alliance of the Soviet Union with Western allies, it is implicitly presumed that any fight against Nazism would, to this day, be unquestionably embraced as a good cause. Finally, the historical perception of Ukrainians as Nazi sympathisers, for example due to collaboration of Ukrainian nationalist Stepan Bandera with Nazi Germany in Western Ukraine, justifies the sweeping label for all Ukrainians who support a Ukrainian 'state'. This explains why attention has been brought to the Azov Regiment of the Ukrainian military, which since its founding in 2014 has come to be associated with alt-right and neo-Nazi members.²⁹

Ultimately, the combination of all these elements led Russia to believe that the Ukrainians themselves would also see Russia's invasion as a liberation, welcoming their neighbours with open arms. When this was not the case, and unable to go back, the Russian narrative adapted to changing circumstances. On the one hand this was seen from the need to establish unifying symbols and morale among Russian civilians and the military, particularly noticeable in the use of the Letter Z. At the same time, Russia's priority became maintaining face and an impression of superiority in the eyes of the Russian public. This meant that no Ukrainian achievements over the Russians were not acknowledged until seven months into the war, when the Russian army was forced to retreat from the Kharkiv. Up until then, even significant losses which were impossible to cover up were presented as either deliberate or inconsequential for Russia's ultimate goal of the Ukrainian liberation.

24 John J. Mearsheimer, "Why the Ukraine Crisis Is the West's Fault," August 18, 2022, <https://www.foreignaffairs.com/articles/russia-fsu/2014-08-18/why-ukraine-crisis-west-s-fault>.

25 Mankoff, "Russia's War in Ukraine."

26 Mankoff.

27 Alexander Brotman, "Ukraine and the Shifting Geopolitics of the Heartland," *Geopolitical Monitor* (blog), September 21, 2022, <https://www.geopoliticalmonitor.com/ukraine-and-the-shifting-geopolitics-of-the-heartland/>.

28 The name used for the Second World War in modern Russia, stemming from the times of the USSR.

29 Frank Gardner, "Mariupol: Why Mariupol Is so Important to Russia's Plan," *BBC News*, March 21, 2022, sec. Europe, <https://www.bbc.com/news/world-europe-60825226>.

In the present and in the past, divisions between Russia and Ukraine (and Belarus) were presented as the result of deliberate, foreign or specifically Western, manipulation

Case studies

The following sections will describe seven case studies which illustrate how information influencing capabilities have 1) influenced the morale of troops, 2) influenced military movement, and 3) spotlighted key battle locations. While each of the selected case studies has elements of each of the three effects, this paper analyses the case studies through the lens of one 'main' effect which allowed for specific behavioural influencing tactics to be spotlighted. Each section starts with an introduction of the key relevant concepts before describing the various facts known about what had happened in a case study and the observed effects. Information about the cases was found through open-source research, relying primarily on posts from defence ministries and soldiers on the ground as well as expert analyses and reports from news outlets to piece together the timeline of events and the subsequent effects of information-based behavioural influencing which occurred around a particular case. At times it has been difficult to verify the legitimacy of the information in some of the sources, specifically news articles. Therefore, information in one source was always cross-referenced with other, international sources. Additionally, this paper acknowledges that all sources constitute a part of the overall information environment and must be perceived as such, as even the sources contribute to narratives and behavioural influencing. Ultimately, this research provides a general overview of the cases, with enough detail to describe the interactions between the physical, cognitive and informational domains of the hybrid environment.

Influencing morale

In the literature, morale is usually discussed in the context of high intensity warfare, with most analyses focusing on morale during the First and Second World Wars.³⁰ Morale is defined as, and equated to, combat motivation: the willingness of troops to continue fighting, especially in spite of how difficult or futile their situation may appear.³¹

There are four primary explanations for how morale emerges and is sustained in the course of industrialised conflict. The first theory follows that individuals fighting in a conflict develop loyalty to their immediate small circle out of psychological necessity and, therefore, mostly fight for the lives and bonds of their co-soldiers.³² This theory aligns primarily with the tactics of emotional appeal and social contagion, in which individuals' conscious and unconscious mirroring of each other's behaviours and empathy for each other can serve to reinforce and promote certain actions while strengthening bonds between people.³³ The second theory explains that morale emerges because of troops' absolute belief in the cause, or political ideology, for which they are fighting. This can be both a result of indoctrination through the manipulation and distortion of reality or as a result of genuine belief and appeal to authority, as troops are ultimately subordinates of the state which is perceived as a legitimate source of

30 This is because of the wide implementation of information campaigns during the conflicts by all sides involved, which allows to historical comparative analysis.

31 Hew Strachan, "Training, Morale and Modern War," *Journal of Contemporary History* 41, no. 2 (April 1, 2006): 214, <https://doi.org/10.1177/0022009406062054>.

32 Strachan, 211.

33 Boswinkel et al., "Weapons of Mass Influence," 14.

In a state of ‘total war’, almost any element of culture can be transformed into a conduit for morale: slogans, art and visuals, music, symbols and icons

information.³⁴ The third theory speculates that threat of punishment or ostracization pushes soldiers to keep fighting. This theory is also based on appeal to authority, as superiors can issue legitimate threats. Finally, it is possible that training of troops is what best prepares them for war.³⁵ Although debate continues as to which theory best explains troop morale during war, all recognise that morale is indispensable for an actor to reach its strategic objectives, especially in protracted and brutal combat. As such, not only can a side focus on boosting the morale of its own troops through behavioural influencing, but also on degrading the morale of the enemy as an effective wartime strategy.

Furthermore, according to the outlined theories, morale is based in some facet of ‘culture’, be it of a small group, state, or profession. Cultures act as collection of values and practices which are shared between individuals.³⁶ In a state of ‘total war’, almost any element of culture can be transformed into a conduit for morale: slogans, art and visuals, music, symbols and icons. Whether exploiting, manipulating, or distorting reality, these vehicles can serve to direct the emotions of troops towards an objective, in most cases, victory. The more comprehensive these conduits, as well as the tactics that they are combined with, the more likely that troops will keep fighting. As such, the creation of morale is likely a key result of behavioural influencing strategies and narratives which emerge during conflicts.³⁷

Table 2. Tactics: influencing morale

Main Effect	Case Study	Cluster	Tactic	Elements	Explanation
Influencing morale	Snake Island	Exploit	Emotional appeal	Tone-setting slogan “Russian Warship, go f*ck yourself”, humour	Created rallying cry as conduit for emotions, humour representing defiance in the face of a powerful enemy
			Appeal to authority	Zelensky’s early posthumous recognition of ‘Heroes of Ukraine’	Created official recognition of symbolic martyrs and role models
		Manipulate	Repeated exposure	Ubiquitous repetition of slogan in diverse contexts	Increased saliency of a slogan strengthened its emotional power
		Distort	Narrative persuasion	Broader narrative of Ukrainian bravery since 2014	Integrated existing themes and symbols
	The Ghost of Kyiv	Exploit	Emotional appeal	Defiance, symbolic representation of Ukrainian spirit	(re)Defined Ukrainian attitude towards the war
		Distort	Narrative persuasion	Reinforce impression of Ukrainian aerial superiority over capital	Created ‘proof’ which supported people’s hope, belief in and desire for Ukrainian victory
			Disinformation	Release of inflated take-down numbers, confusion around identity and status of pilot	

34 Boswinkel et al., 17.
35 Strachan, “Training, Morale and Modern War,” 215.
36 Melissa Gregg and Gregory J. Seigworth, *The Affect Theory Reader* (Duke University Press, 2010), 162.
37 Gregg and Seigworth, 170.



© State Border Guard Service of Ukraine,
Facebook, 7 July 2022

Both the phrase “go f*ck yourself” and the corresponding attitude of the Snake Island border guards acquired a symbolic and tone-setting quality for the conflict, serving to boost the morale of the Armed Forces of Ukraine

Snake Island

On 24 February 2022, the Russian warship, the Moskva, approached Snake Island in the North-Western part of the Black Sea with an order to surrender. The thirteen border guards on the island refused to lay down their arms, instead telling the warship to “go f*ck yourself”. It was initially reported by President Zelenskyy that Snake Island was subsequently struck, leading to the death of all on the island and the island’s capture.³⁸ Zelenskyy soon awarded the ‘defenders of Snake Island’ the posthumous titles of ‘Hero of Ukraine’.³⁹ The story was instantly picked up by international media and widely publicised. However, two days later, the State Border Guard Service of Ukraine reported that they had reason to believe that the border guards were still alive in Russian captivity.⁴⁰ This turned out to be true, when on March 24th the individuals from Snake Island were returned to Ukraine in the first full-fledge prisoner of war exchange with Russia.⁴¹

The Snake Island incident can be said to be the first ‘viral’ story from the Ukraine-Russia war. Despite the quickly amended facts, both the phrase “go f*ck yourself” and the corresponding attitude of the Snake Island border guards acquired a symbolic and tone-setting quality for the conflict, serving to boost the morale of the Armed Forces of Ukraine. This was primarily because of the presence of parallel influencing tactics: appeal to authority, emotional appeal, repeated exposure, and narrative persuasion.

38 Zoya Sheftalovich, “Go Fuck Yourself,’ Ukrainian Soldiers on Snake Island Tell Russian Ship before Being Killed,” POLITICO, February 25, 2022, <https://www.politico.eu/article/go-fuck-yourself-ukraine-soldiers-snake-island-russia-war-ship-killed/>.

39 BBC, “Snake Island: Ukraine Says Soldiers Killed after Refusing to Surrender,” BBC News, February 25, 2022, sec. Europe, <https://www.bbc.com/news/world-europe-60522454>.

40 The Guardian, “Go Fuck Yourself,’ Ukrainian Soldiers on Snake Island Tell Russian Ship,” *The Guardian*, February 25, 2022, sec. World news, <https://www.theguardian.com/world/video/2022/feb/25/go-fuck-yourself-ukrainian-soldiers-snake-island-russian-ship-before-being-killed-audio>.

41 “Prisoner Exchange: 29 Servicemen Captured by Russians Return to Ukraine,” LB.ua, March 24, 2022, https://en.lb.ua/news/2022/03/24/11821_prisoner_exchange_29_servicemen.html.

Zelenskyy's initial declaration that all thirteen border guards on the island had perished gave the original 'story' a foundation of appeal to authority, despite the information being unverified and soon debunked.⁴² The two-day delay in information about the status of the border guards was enough time to solidify the narrative that the Snake Island heroes were martyrs for their act of defiance. As the most often repeated version story, this also meant that when the aforementioned prisoner exchange did occur, Western media did not as readily report on this information.⁴³

Meanwhile, the phrase "Russian warship, go f*ck yourself" was adopted in a variety of settings and made incredibly salient because of repetition. It was written on posters and chanted at anti-Russian invasion protests worldwide. Simultaneously, it became a rallying cry among the ranks of the Ukrainian army, as frequently recorded on social media like TikTok⁴⁴ and Reddit.⁴⁵ Historically, key phrases in battles have served to coordinate the attitudes and actions of troops, as well as channel emotions as a means of raising morale.⁴⁶ For example, some phrases reminded the fighters of their strength, with the cry of Clan Cameron in the Scottish Highlands sounding "Sons of the Hounds Come Here and Get Flesh!"⁴⁷ Other phrases taunted the enemy as a way of resistance with one of the earliest examples coming from the Second Persian invasion of Greece when King Leonidas responded "Come and get them" to the Persian order to give up their arms.⁴⁸

With a tone-setting phrase acquired so early in the conflict, Ukrainian soldiers had a way to express their attitude towards the war: they were confident in their defiance against a powerful rival and would maintain an unbreakable will. In some ways this is a reflection of Ukrainian attitudes since Russia's occupation of Eastern Ukraine in 2014.⁴⁹ This narrative framing adds to the emotional appeal of the phrase, as it is easier to have sympathy for a 'David' in a 'David and Goliath' confrontation. The specific phrasing of the line also adds a dimension of humour by using an expletive, something that can be readily perceived as immature and unserious.⁵⁰ The phrase demeans and dismisses the threat of the enemy, almost as if simply telling them to 'f*ck off' or 'go to hell' is enough to defend against any kind of weaponry. This humorous aspect of the phrase and the overall mocking relationship directed at Russia has been explicitly acknowledged by the Ukrainian Ministry of Defence, making the phrase an officially sanctioned and supported strategic information influence tactic. For example, on 28 March 2022, the official Twitter account of the Ukrainian Ministry of Defence shared a picture of a burning Russian landing ship, Saratov, with the

42 In some accounts also said to be soldiers. William Plowright, "Russian Warship, Go F**k Yourself – A Short History of Wartime Taunts," March 25, 2022, <https://smallwarsjournal.com/jrnl/art/russian-warship-go-fk-yourself-short-history-wartime-taunts>.

43 Paul Antonopoulos, "Fake News Exposed: 'Russian Warship, Go F*** Yourself' And The 'Ghost Of Kyiv,'" March 1, 2022, <https://greekcitytimes.com/2022/03/01/fake-news-ghost-of-kyiv/>.

44 The war in Ukraine is often referred to 'The TikTok War' or 'the most online war' because of the use of social media like TikTok and the involvement of Generation Z. While civilian involvement is not the focus of this paper, it is still a reinforcing element of the military's behavioural influencing tactics. Kyle Chayka, "Ukraine Becomes the World's 'First TikTok War,'" *The New Yorker*, March 3, 2022, <https://www.newyorker.com/culture/infinite-scroll/watching-the-worlds-first-tiktok-war>.

45 u/Weary_Conversation43, "Ukrainian Soldiers Firing Artillery and Shouting 'Russian Warship Go Fuck Yourself' : Ukraine," accessed July 26, 2022, https://www.reddit.com/r/ukraine/comments/u4823l/ukrainian_soldiers_firing_artillery_and_shouting/.

46 Keith Yellin, "Battle Exhortation," December 2, 2011, <http://uscpress.com/book-post/Battle-Exhortation>.

47 The Newsroom, "The Battle Cries of the Highland Clans," *The Scotsman*, February 17, 2016, <https://www.scotsman.com/whats-on/arts-and-entertainment/battle-cries-highland-clans-1482723>.

48 With this one bearing a direct parallel to the Ukrainian phrase. Plowright, "Russian Warship, Go F**k Yourself – A Short History of Wartime Taunts."

49 Morgan Meaker, "How Ukraine Is Winning the Propaganda War," *Wired*, June 13, 2022, <https://www.wired.com/story/ukraine-propaganda-war/>. Also visible in the worldwide 'Be Brave Like Ukraine' media campaign.

50 Plowright, "Russian Warship, Go F**k Yourself – A Short History of Wartime Taunts."

The phrase demeans the enemy, almost as if simply telling them to 'f*ck off' or 'go to hell' is enough to defend against any kind of weaponry

caption “Russian Warship, Go F*ck Yourself in Berdyansk”.⁵¹ The Ukrainian postal service also released a limited-edition stamp, displaying a soldier flipping off the Moskva on Snake Island, the sales of which were in turn used to gather funds for the Armed Forces of Ukraine.

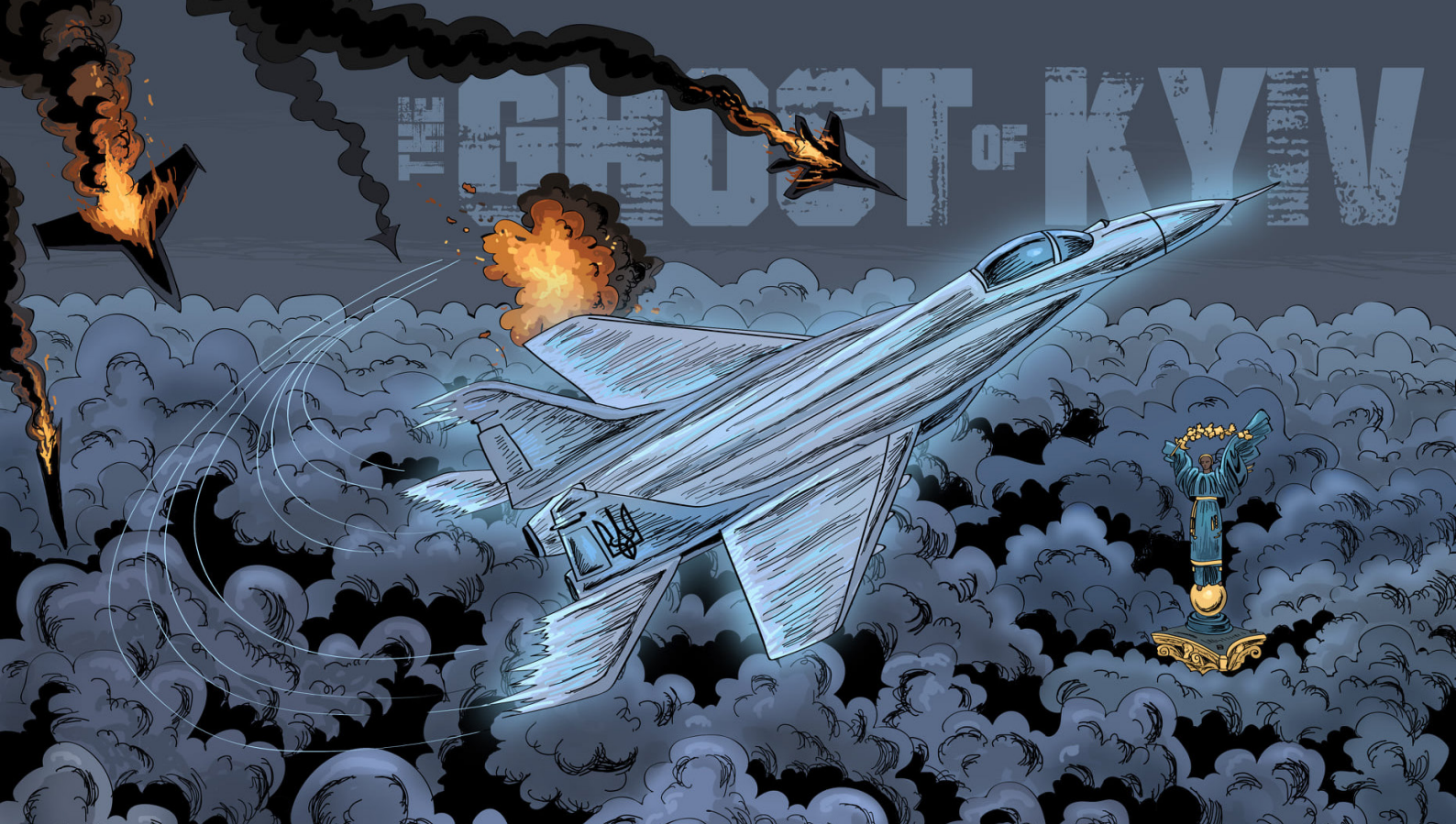
The use of “go f*ck yourself” further transcended Ukrainian circles, being used to defy Russia by international actors as well. For example, towards the end of February, a Georgian oil tanker captain’s assistant told a Russian ship to “go f*ck yourself” after the ship requested to refuel. The speaker for the Russian ship requested to “leave politics out of it,” as their “fuel is running out” to which the Georgian crewmember responded with “Glory to Ukraine, Glory to the Heroes”⁵², another set of Ukrainian call-and-response slogans which have been popularized in Ukraine since Russia’s 2014 occupation.

The Snake Island border guards and their now iconic phrase have had the overall effect of unifying and rallying the supporters of Ukraine and defining the attitude towards the war and the enemy; defiant despite the odds. Furthermore, the case shows how despite information being updated relatively quickly, an initial interpretation of an event based on repeated appeals to authority and emotions can immediately become the dominant narrative, even without the intention to deliberately fabricate information.

An initial interpretation of an event based on repeated appeals to authority and emotions can immediately become the dominant narrative, even without the intention to deliberately fabricate information.

51 Michael Starr, “In ‘Ukrainian Military Oscars,’ Ukraine Promotes Army and Mocks Russia - The Jerusalem Post,” The Jerusalem Post, March 30, 2022, <https://www.jpost.com/international/article-702617>.

52 Sophia Ankel, “The Captain of an Oil Tanker Refused to Refuel a Russian Ship to Protest Ukraine’s Invasion. The Crew Is ‘very Proud,’ His Wife Says.,” Business Insider, March 2, 2022, <https://www.businessinsider.com/oil-tanker-georgia-captain-refused-refuel-russian-ship-protest-ukraine-2022-3>.



© The Ghost of Kyiv, by illustrator Andriy Dankovych, [Wikimedia Commons](#)

The Ghost of Kyiv

Aside from the Snake Island incident, one of the first stories to catch the attention of international audiences was that of the Ghost of Kyiv. The story emerged within the first days of Russia's attack, as multiple Ukrainian news outlets and official Ukrainian government Twitter accounts reported that a Ukrainian fighter pilot had been dominating the skies above Kyiv, becoming the 'nightmare'⁵³ of Russians. Initially, it was said that within the first 30 hours of Russia's invasion, an ace pilot had shot down six enemy planes.⁵⁴ The Ukrainian Ministry of Defence pushed the story by sharing a tweet about how to identify the MiG-29 aircraft, which the pilot was supposedly flying.⁵⁵ By March, the number of downed Russian planes had grown to significantly more, with some sources citing 14⁵⁶ while others reported 40 or even 49.⁵⁷ In response to the information, Twitter and other social media saw a wave of tribute art appear, illustrating the (often acknowledged) mystery and power surrounding the Ukrainian hero.⁵⁸

Yet, parallel to this, doubts emerged about the authenticity of the story. One video that was frequently shared alongside information about the pilot was uncovered to be a video created with Digital Combat Simulator, a video game. The author of the original video post came forward to share that what he created was merely a tribute to the Ghost of Kyiv. The story became further convoluted when various accounts emerged that the pilot behind the now-legend had died in combat in mid-March. At that point, the supposed identity of the pilot

⁵³ Hence the speculated origin of the nickname 'Ghost of Kyiv'.

⁵⁴ With the last known ace pilot flying in World War II.

⁵⁵ Thomas Newdick, "The 'Ghost of Kyiv' Is The Mythical Hero Ukraine Needs Right Now," *The Drive*, February 25, 2022, <https://www.thedrive.com/the-war-zone/44453/the-ghost-of-kyiv-is-the-mythical-hero-ukraine-needs-right-now>.

⁵⁶ Outlook, "Who Is The 'Ghost Of Kyiv', The 'Hero' Boosting Ukraine's Morale Amid Crisis?," <https://www.outlookindia.com/>, March 1, 2022, <https://www.outlookindia.com/international/ghost-of-kyiv-ukraine-war-news-184610>.

⁵⁷ KyivPost [@KyivPost], "The 'Ghost' Plane of Kyiv Has Destroyed 49 Russian Planes. <https://t.co/BXiJEA-b8C1>," Tweet, *Twitter*, March 10, 2022, <https://twitter.com/KyivPost/status/1501924542259814407>.

⁵⁸ Daniel Miller, "Who Is the 'Ghost of Kyiv'? Tale of Ukrainian Fighter Pilot Trends on Social Media," *Text.Article*, FOX TV Digital Team (FOX 11 Los Angeles, February 25, 2022), <https://www.foxla.com/news/ghost-of-kyiv-tale-of-ukrainian-fighter-pilot-trends-social-media>.

was also revealed to be Stepan Tarabalka.⁵⁹ Former Ukrainian president, Petro Poroshenko, had also shared a picture on his Twitter account of the pilot, which was found to actually be a picture taken three years prior.⁶⁰

By the end of April, the Ukrainian Air Force admitted that the Ghost of Kyiv was a myth “created by Ukrainians”.⁶¹ Tarabalka was a real pilot who was downed on 13 March, however, he was not necessarily the Ghost of Kyiv. Rather, the Ukrainian Air Force shared that the Ghost of Kyiv “embodies the collective spirit of the highly qualified pilots of the Tactical Aviation Brigade”, defending Kyiv.⁶² This conclusion of the story reveals that several key influencing tactics were at play: narrative persuasion, disinformation, and emotional appeal.

Despite the reveal that the Ghost of Kyiv did not actually exist, Ukrainian social media users and soldiers continued to circulate posts about the legend, frequently with the caption “I want to believe”.⁶³ This represents the effect of the Ghost of Kyiv, despite there being little factual about the story, the narrative persuasion and disinformation had successfully targeted people’s ability to discern between reality and fiction. On the one hand, it served to reinforce the impression that Ukrainian forces have maintained aerial superiority throughout the war, as both Ukrainian and Western observers have noted that Russian forces have seemingly failed to show.⁶⁴ On the other hand, like with the emotional appeal of the story of Snake Island, the Ghost of Kyiv came to represent an image of what all Ukrainian fighters were aspiring towards: defiance in the face of the enemy.

As the story entered the international stage it also served to capture the attention of onlookers. Although some mocked the Ghost of Kyiv, interpreting it as a sign of the hopelessness of Ukraine’s situation if they had to turn to ‘lies’ to support morale, others wanted to believe in the Ghost based on their support for Ukraine.⁶⁵ Regardless, either reaction to the myth only brought more attention to it and, subsequently, more attention to what was going on in Ukraine.

The two above stories, both Snake Island and the Ghost of Kyiv, show that regardless of how ‘true’ a story is, the effect that it can have on the morale of individuals is no less real. At times people can wilfully ignore the truth to hold onto something that gives them hope and reduces feelings of helplessness in a new and frightening context.⁶⁶ Yet, experts have also observed that as the war has progressed, Ukraine’s overall information campaign has started to focus less on sweeping ‘myths’ and rather on the courageous acts of everyday Ukrainians. This was assumed to be partly because of the backlash that Ukraine received to its credibility, as the promulgated myths made it seem as if Ukraine was willing to ‘lie’ its way through the war, turning a blind eye to the reality of the situation and the losses that it was incurring.⁶⁷ It remains difficult to ascertain to what extent information was deliberately fabricated or if unverified information simply got out of control on social media. However, it is key to recognise the importance of stories and narratives as part of hybrid warfare.

59 “Harsh Blow for Ukraine, ‘Ghost of Kyiv’ Reported Dead,” MARCA, April 30, 2022, <https://www.marca.com/en/lifestyle/world-news/2022/04/30/626d4c1d268e3e9e608b45ae.html>.

60 The Associated Press, “Ukraine Admits ‘Ghost of Kyiv’ Fighter Pilot, Hailed for Feats against Russian Forces, Is a Myth,” CBC, May 2, 2022, <https://www.cbc.ca/news/world/ukraine-ghost-of-kyiv-myth-1.6437895>.

61 The Associated Press.

62 The Associated Press.

63 Newdick, “The ‘Ghost of Kyiv’ Is The Mythical Hero Ukraine Needs Right Now.”

64 Seth G. Jones, “Russia’s Ill-Fated Invasion of Ukraine: Lessons in Modern Warfare,” Center for Strategic and International Studies, June 1, 2022, <https://www.csis.org/analysis/russias-ill-fated-invasion-ukraine-lessons-modern-warfare>.

65 Thomas Novelty, “Ukraine’s Fighter Ace ‘Ghost of Kyiv’ May Be a Myth, But It’s Lethal as War Morale,” Military.com, March 2, 2022, <https://www.military.com/daily-news/2022/03/02/ukraines-fighter-ace-ghost-of-kyiv-may-be-myth-its-lethal-war-morale.html>.

66 Outlook, “Who Is The ‘Ghost Of Kyiv’, The ‘Hero’ Boosting Ukraine’s Morale Amid Crisis?”

67 Meaker, “How Ukraine Is Winning the Propaganda War.”

Despite the reveal that the Ghost of Kyiv did not actually exist, Ukrainian social media users and soldiers continued to circulate posts about the legend, frequently with the caption “I want to believe”

Influencing military movement

The availability of information to actors inherently affects decision-making. More information may improve decision-making, yet too much information can actually hamper decision-making because of humans' limited capacities for information-intake.⁶⁸ This primarily involves tactics which manipulate reality through repeated exposure, sequence manipulation, microtargeting and media agenda-setting. Therefore, in high intensity warfare, centralised command and control aims to primarily convey information that is of utmost relevance to physical forces, allowing them to effectively navigate their terrain and respond to circumstances on the ground.⁶⁹ At the same time, it remains key that enemies do not gain access to this information, as it could provide them with a tactical and operational advantage.⁷⁰

Yet, above the level of direct communication and its contents, which occurs for command and control, lies the strategic narrative level of the hybrid environment. A narrative frames the overarching story of a conflict and its participants in favourable terms. While narratives primarily emerge on a state level, they will (almost inevitably) target a wider range of audiences. As such, enemies are also likely to witness each other's narratives and be forced to respond to said narratives, whether in attempts to refute or counter them.⁷¹ Consequently, narratives add a set of factors which must be accounted for in the decision-making process of troops. The intangible power of narrative and the importance of preserving non-material values like face, pride, and legitimacy put additional pressure on the physical realm.

Table 3. Tactics: influencing military movement

Main Effect	Case Study	Cluster	Tactic	Elements	Explanation
Influencing military movement	Sinking of the Moskva	Exploit	Emotional appeal	Sinking of 'Russian Warship' from Snake Island, desired parallel to real Moskva	Emotions emerging from 'justice' being served to offender
		Manipulate	Sequence manipulation	Russian skewed sequence of events and causes of sinking	'Saving face' by not attributing success to enemy, taking opportunity to claim symbolic and physical victory over enemy
		Distort	Narrative persuasion	Ukrainian claim of victory, Russian refusal to attribute success	
	Explosions in Crimea	Manipulate	Sequence manipulation	Russian skewed sequence of events and causes of explosions, Ukrainian withholding of success claims	Not claiming victory to maintain secrecy and threat, 'saving face' by not attributing success to enemy
		Distort	Narrative persuasion	Russian refusal to attribute success	
	The Antonovskiy bridge	Manipulate	Sequence manipulation	Level and timing of the Antonovskiy bridge's destruction	Forcing the enemy to expend additional resources to act with more care while creating persistent sense of threat
		Distort	Narrative persuasion	Both sides claiming victory for respective purposes	
			Repeated exposure	Repetition of claims of destruction or reparability	

68 McQuail and Deuze, *McQuail's Media and Mass Communication Theory*.

69 Milan N. Vego, "Operational Command and Control in the Information Age" (National Defense Univ Washington DC Inst for National Strategic Studies, January 1, 2004), 100, <https://apps.dtic.mil/sti/citations/ADA524597>.

70 An example of the danger of this from the war in Ukraine was the USA's pre-emptive declassification of Russian invasion plans, which gave Russia a disadvantage at the start of its invasion. Takagi, "The Future of China's Cognitive Warfare."

71 Alister Miskimmon and Ben Loughlin, "Great Power Politics and Strategic Narratives of War," in *Strategic Narratives, Public Opinion and War* (Routledge, 2015).



© Limited edition of Ukrainian postage stamp
"Russian warship... DONE". Snake Island post-
mark. Ukrposhta, Ukraine national postal operator

From the Russian perspective, attribution would constitute Ukraine as a more significant threat to Russia's Black Sea Fleet, while jeopardising the legitimacy of Russian threats of impenetrable air defence

Sinking of the Moskva

On 13 April 2022, Ukrainian officials reported that the flagship of the Russian Black Sea fleet, the Moskva, was hit by two Ukrainian-made Neptune anti-ship missiles while it was off the coast of Odessa.⁷² Within a few hours, Russian officials conveyed that a fire had broken out in the ammunition room, causing an explosion which damaged the ship. A day later the Russian Ministry of Defence announced that the Moskva sank in a storm while it was being towed to the shore for repairs.⁷³

Since the Moskva's sinking, a battle played out between competing Ukrainian and Russian narratives, as well as the ways that each side attempted to manipulate reality in their favour. From the Russian side, all explanations for the sinking of the Moskva have focused on conveying why the Moskva did not sink from Ukrainian missiles, changing the sequence of events as well as reasons for why things occurred. From the Russian perspective, attribution would constitute Ukraine as a more significant threat to Russia's Black Sea Fleet, while jeopardising the legitimacy of Russian threats of impenetrable air defence. Meanwhile, Ukraine's narrative immediately claimed the victory, to bolster perceptions of its own capabilities and embrace the symbolic win. As a flagship bearing the name of Russia's capitol city, the sinking of the Moskva marked a parallel to what Ukrainian soldiers hoped for: that the real Moscow would 'sink' as well.⁷⁴ Furthermore, as the Moskva was the ship involved in the infamous Snake Island incident, Ukrainians celebrated the sinking as the fulfilment of the order for the warship to 'go f*ck yourself', adding a further dimension of emotional appeal.

⁷² Digital Forensic Research Lab, "Russian War Report: Competing Narratives about the Sinking of Russia's Moskva Warship," *Atlantic Council* (blog), April 15, 2022, <https://www.atlanticcouncil.org/blogs/new-atlanticist/russian-war-report-competing-narratives-about-the-sinking-of-russias-moskva-warship/>.

⁷³ Jenny Hill, "Russian Warship: Moskva Sinks in Black Sea," *BBC News*, April 15, 2022, sec. Europe, <https://www.bbc.com/news/world-europe-61114843>.

⁷⁴ The Federal, "Big Blow to Putin as Russian Warship Moskva Sinks in Black Sea," *The Federal*, April 15, 2022, <https://thefederal.com/international/big-blow-to-putin-as-russian-warship-moskva-sinks-in-black-sea/>.

Regardless of why the Moskva sank, analysts generally agree that the loss has put a dent in the Russian Black Sea fleet's operational capabilities

Regardless of why the Moskva sank, analysts generally agree that the loss has put a dent in the Russian Black Sea fleet's operational capabilities. Materially, Russia has lost a defensive cornerstone of its Black Sea blockade and it would require significant costs⁷⁵ and time to fill the space left by it. In terms of credibility, both the Ukrainian and Russian narratives reflect negatively on Russia: either a vulnerability was revealed in Russia's air reconnaissance and defence capabilities, or its navy equipment has been in such disrepair that random fires could start.⁷⁶

However, experts have claimed that the loss is unlikely to change the course of the war.⁷⁷ Instead, the loss of the Moskva and the ensuing narrative battle influenced the operational and tactical behaviour of Russia in the Black Sea. First, immediately after the Moskva was reportedly struck by the Neptune missiles, all other Russian ships moved further away from the Ukrainian shore.⁷⁸ If Russia fully followed its own narrative, this would not be necessary, however, under the likely pressure of the Ukrainian narrative, this became a precaution. Second, flagships of fleets are often extensively integrated in command-and-control structures. Without the Moskva, an amphibious attack on the Ukrainian port city of Odessa becomes less feasible.⁷⁹ Additionally, after the sinking of the Moskva, Russia ramped up its efforts to install better radar systems on Snake Island, indicating the gap left by the Moskva. By July, Ukraine regained control of Snake Island after Russia's withdraw, further weakening Russia's blockade.⁸⁰ Third, Russia's deterrence capabilities in the area have been reduced.⁸¹ This is significant as in a global context Russia's blockade has already contributed to food shortages as Ukraine is a key exporter of grain worldwide.⁸² It has been noted that the Moskva's absence has made movement in the Black Sea for ships more feasible. Finally, it is likely that Russia will have to re-evaluate its delivery patterns for the other ships in its Black Sea fleet. As such, despite the narratives that have been spread by Russia, the information from the Ukrainian side has still impacted the movements of the Russian military.

This case study reveals how the presentation of one event can have both manoeuvring and morale effects for both sides. Overall, the sinking of the Moskva has been a public embarrassment for Russia and likely a cause for recalculations of its abilities in the Black Sea, despite Russia's attempts to promote its own narrative. Regardless, the Russian government has remained more willing to blame faulty equipment rather than give any attribution to Ukraine.

75 Furkan Akar, "Analysis of The Sunken Russian Cruiser Moskva, Its Implications for Russia and Lessons for the World Navies | Beyond the Horizon ISSG," April 28, 2022, <https://behorizon.org/analysis-of-the-sunken-russian-cruiser-moskva-and-its-implications-for-russia-and-the-world-navies/>. An estimated \$750 million.

76 Phil McCausland and Andrew Jones, "Massive Blow for Russian Credibility: Sunk Warship Is a Symbolic, Tactical Win for Ukraine," NBC News, April 14, 2022, <https://www.nbcnews.com/news/world/massive-blow-russian-credibility-explosions-warship-win-ukraine-expert-rcna24376>.

77 Ellen Mitchell, "Sinking of Russian Warship Offers Ukraine a Morale — and Maybe Strategic — Boost," Text, *The Hill* (blog), April 16, 2022, <https://thehill.com/policy/defense/3270399-sinking-of-russian-warship-offers-ukraine-a-morale-and-maybe-strategic-boost/>.

78 Reuters, "How Big a Loss to Russia Is the Sinking of the Moskva Missile Cruiser?," *Reuters*, April 15, 2022, sec. Europe, <https://www.reuters.com/world/europe/how-big-loss-russia-is-sinking-moskva-missile-cruiser-2022-04-15/>.

79 Riya Baibhawi, "As Russian Warship Moskva Sinks, Here's How It May Impact Russia's Invasion of Ukraine," *Republic World*, April 16, 2022, <https://www.republicworld.com/world-news/russia-ukraine-crisis/as-ww-ii-era-warship-moskva-sinks-heres-how-it-may-impact-russias-invasion-of-ukraine-articleshow.html>.

80 Euronews, "Ukraine to Regain Control of Snake Island after Russians Withdraw," June 30, 2022, <https://www.euronews.com/2022/06/30/ukraine-to-regain-control-of-snake-island-after-russians-withdraw>.

81 Tayfun Ozberk, "Are Rainy Days in Store for Russia's Black Sea Fleet Following the Sinking of the Moskva?," *Defence Procurement International*, April 19, 2022, <https://www.defenceprocurementinternational.com/features/sea/what-is-the-impact-of-losing-the-moskva-for-russias-black-sea-fleet>.

82 Julian Borger, "Russian Navy Ordered to Lay Mines at Ukraine's Black Sea Ports, Says US," *The Guardian*, June 23, 2022, sec. World news, <https://www.theguardian.com/world/2022/jun/23/russian-navy-ordered-to-lay-mines-at-ukraines-black-sea-ports-says-us>.



© Council of ministers of Crimea,
[Wikimedia Commons](#)

Explosions in Crimea

On 9 August 2022, several explosions occurred at the Saky airbase on the western coast of Russian occupied Crimea. Since 2014, the base has been operationally important for Russia as it housed a significant number of jets of the Black Sea Fleet. In the course of Russia's invasion of Ukraine's mainland, these planes reinforced Russia's southern offensive and occupation.⁸³ Following the explosions, satellite images revealed that at least eight aircraft (more than half of the Black Sea Fleet's naval aviation combat jets) and parts of the base had been destroyed.⁸⁴ A week later, on 16 August, two more explosions occurred in Crimea, one at an ammunition depot in Maiske in north-eastern Crimea and one at an airbase in Gvardeyskoe in central Crimea.⁸⁵ Later in the week, further explosions took place in Crimea near the Belbek military airport. This series of explosions is significant, as they mark the first damage to Crimea since the start of the war in February.

Due to both the strategic and symbolic importance of Crimea for Ukraine and Russia, the narrative battle which has played out around the explosions has been of note. Similar to their narrative around the Moskva, Russian officials initially explained that the explosions at the Saky airbase occurred due to the recklessness of workers who failed to follow proper safety protocols. With this, Russia once more employed the tactic of sequence manipulation to alter the perceived sequence of events and their causes. Regarding the later explosions, Russian officials commented that they suspected sabotage, yet did not immediately specify the party they believed to be responsible, though the blame did eventually shift to Ukrainian partisans.⁸⁶

⁸³ Julian Hayda, "Who Was behind the Explosions in Crimea? Ukraine and Russia Aren't Saying," *NPR*, August 13, 2022, sec. Ukraine invasion — explained, <https://www.npr.org/2022/08/12/1116994504/russia-ukraine-crimea-air-base-explosions>.

⁸⁴ Michael Holden, "Half of Russia's Black Sea Fleet's Combat Jets out of Operation, Western Official Says," *Reuters*, August 19, 2022, sec. Europe, <https://www.reuters.com/world/europe/half-russias-black-sea-fleets-combat-jets-out-operation-western-official-2022-08-19/>.

⁸⁵ Vasco Cotovio and Tara John, "Ukraine Admits It Was behind Three Explosions in Crimea. Here's What We Know," *CNN*, accessed August 23, 2022, <https://www.cnn.com/2022/08/17/europe/crimea-explosions-russia-ukraine-intl/index.html>.

⁸⁶ Paul Kirby, "Ukraine War: Russia Blames Sabotage for New Crimea Blasts," *BBC News*, August 16, 2022, sec. Europe, <https://www.bbc.com/news/world-europe-62560041>.

As such, Russia remains more willing to sacrifice the perceived efficiency of their own troops rather than attribute military successes to Ukraine, to maintain the narrative of superiority over Ukraine.

Meanwhile, unlike the case of the Moskva, several days after the explosions Ukraine still had not officially claimed responsibility for attacks, despite international observers suspecting that this was the case.⁸⁷ The Ukrainian advisor to the president's office, Mykhailo Podoliak, had claimed that "This is only the beginning"⁸⁸, implying that Ukraine had more attacks in store for the peninsula and a couple weeks later a report circulated that a Ukrainian official anonymously admitted that Ukraine was responsible for the explosions.⁸⁹ Still, much uncertainty remains about the exact nature of the attacks. Yet, this lack of clarity may be in Ukraine's favour, helping explain the choice to not immediately claim the attacks. As stated by Zelenskyy himself regarding the explosions, "The fewer concrete details you give, the better it will be for the implementation of our defence plans."⁹⁰ Regardless of the extent to which Ukraine may have been responsible for the explosions, the purposeful non-divulging of information limits the amount of preparation that Russia can make to counter future similar occurrences. As such, Russian movements and expenditure of resources will have to be more cautious, as Crimea has now become a target. This is reinforced by the fact that there is no public knowledge of Ukraine possessing a weapon which would be able to hit more than 200 kilometres behind the front line, where the Saky airbase is located. Experts speculate that Ukraine may have received and employed the US ATACMS system, used an unnamed Ukrainian-made system, used a drone attack, or collaborated with a sabotage group.⁹¹ The last option is quite likely as progressively more resistance movements have been cropping up in Crimea, while Ukrainian officials have hinted at an elite military unit which has been acting behind the front line.⁹² Meanwhile, Ukrainians themselves have taken the opportunity to further mock and demean the enemy, whose willingness to profess their own incompetence is seen as rife with comedic irony.⁹³

According to Western experts, the attack on the Saky airbase has significantly degraded the Black Sea Fleet's aerial capabilities, which would lead to recalculations of future manoeuvring. In the context of Ukraine's southern offensive, the push through the Kherson region back towards Crimea also seemingly becomes more feasible, while the Black Sea Fleet's ability to launch an amphibian attack on Odessa is even less likely now.⁹⁴

87 Hayda, "Who Was behind the Explosions in Crimea?"

88 Although later Podoliak went back on his statement and claimed that Ukraine had nothing to do with the attacks. "Подоліак щодо вибухів: Крим – перлина Чорного моря, а не військова база для терористів," Слово і Діло, accessed August 23, 2022, <https://www.slovoidilo.ua/2022/08/09/novyna/polityka/podolyak-shhodo-vybuchiv-krym-perlyna-chornoho-morya-a-ne-vijskova-baza-terorystiv>.

89 Cotovio and John, "Ukraine Admits It Was behind Three Explosions in Crimea. Here's What We Know."

90 Hayda, "Who Was behind the Explosions in Crimea?"

91 Yuri Zoria, "What Weapon Ukraine Might Have Used to Hit Airfield in Crimea," Euromaidan Press, August 10, 2022, <https://euromaidanpress.com/2022/08/10/what-weapon-ukraine-might-have-used-to-hit-airfield-in-crimea/>.

92 RFE/RL's Ukrainian Service, "Explosions Reported In Ukraine's Russian-Occupied Crimea Region," RadioFreeEurope/RadioLiberty, August 19, 2022, <https://www.rferl.org/a/ukraine-crimea-explosions-russia-invasion-belbek/31995369.html>.

93 Isabel Coles and Ann Simmons, "Ukraine Mocks Russia After Explosions at Crimean Air Base," *Wall Street Journal*, August 10, 2022, sec. World, <https://www.wsj.com/articles/ukraine-mocks-russia-after-explosions-at-crimean-air-base-11660123645>.

94 Holden, "Half of Russia's Black Sea Fleet's Combat Jets out of Operation, Western Official Says."

Several days after the explosions Ukraine still had not officially claimed responsibility for attacks, despite international observers suspecting that this was the case



© The bridge in Kherson city aerial view,
[Shutterstock](#)

Ukrainian media circles generally lauded the precision of their systems, as well as the detrimental blow that any successful strike on the bridge would have on Russia's operational capabilities

The Antonovskiy bridge

Throughout the summer of 2022, much of the Ukrainian and Russian military efforts focused on the southern offensive, primarily in the Ukrainian Kherson region. As confrontations appeared to come to a stalemate in July and August, both sides began to direct their attention to ever-more specific aspects of the front line, to both encourage their own troops to continue the advance and to discourage the enemy from advancing further. At the centre of this narrative confrontation, and a bottleneck in the physical domain, became the Antonovskiy bridge.

The bridge stretches over the Dnipro river, connecting the city of Kherson on the western bank to Oleshky on the eastern bank. From the start of the war, the bridge became of strategic importance to both Ukrainian and Russian forces. For Ukraine, control of the bridge would create access deeper into the Kherson region for a southern offensive. Meanwhile for Russia, the bridge started to serve as a lifeline for troop support in the north-western direction of the Kherson region after Russia gained control of the bridge on 26 February. As the Russians continued to push northward, international experts recognised it as key vulnerability for Russia, as its destruction would mean that Russian troops in Kherson would be effectively cut off from the other bank, aside from two smaller local bridges.⁹⁵ As such, both from the Ukrainian and Russian sides, competing narratives emerged as to the state of disrepair that the bridge was in and the timing of its destruction.

For the Ukrainian side, presenting a specific sequence of events served two primary purposes. On the one hand, threats of attacks and actual attacks would discourage Russians from using the bridge as actively, and would force the enemy to spend additional time and resources on alternatives. On the other hand, claiming the destruction of the bridge would encourage their own forces to continue pushing forward. With the arrival of American HIMARS rockets to Ukrainian troops, Ukrainians began to target the bridge.

⁹⁵ Andrew Heavens and Catherine Evans, "Key Bridge in Kherson Region 'badly Damaged' by Ukraine Shelling," *Reuters*, July 20, 2022, sec. Europe, <https://www.reuters.com/world/europe/bridge-kherson-region-badly-damaged-by-ukraine-shelling-tass-2022-07-20/>.

First, on 19 July the bridge was damaged, and struck again on 20 July. The Ukrainian side reported that the bridge was unusable, as the Russian forces closed traffic on the bridge and focused on its repairs.⁹⁶ Ukraine continued to fire at the bridge on 26 July, and again in the coming weeks multiple reports would emerge that the bridge was destroyed and unusable.⁹⁷ Yet, the bridge remained standing. Until late August, this kind of information sequencing continued, where after every repeated strike, Ukraine deemed the bridge unusable due to excessive disrepair.⁹⁸ Responses in Ukrainian media circles generally lauded the precision of their systems, as well as the detrimental blow that any successful strike on the bridge would have on Russia's operational capabilities. Experts have speculated that the manoeuvring of Ukrainian forces could lead to a mousetrap being created on the western bank. As of writing this paper, the Antonovskiy bridge structure remains intact, but it is unclear to what extent it is damaged or how easily it can, if at all, be repaired.⁹⁹

Yet, the repeated attacks on the bridge have influenced Russian movements around the area, and necessitated that Russia responds to the Ukrainian narratives about the state of the bridge. When the bridge was first attacked in mid-July, the Russian news agency TASS had stated that the bridge might collapse if a renewed strike were to occur, prompting Russia to restrict the bridge's use.¹⁰⁰ While the bridge was being repaired, Russia began the construction of parallel pontoon bridges and the initiation of a ferry crossing. During the subsequent attacks, more of Russian reporting focused not on how many successful Ukrainian strikes on the bridge occurred but rather how many missiles had been intercepted by Russian air defence systems. As consistently as the Ukrainians stated that the bridge was destroyed or unusable, Russia repeated that the damage that the bridge incurred could and would be repaired.¹⁰¹ This aligned with Russia's overall narrative concerning Ukraine, in which giving any credit or attribution to success is deemed unacceptable. It appears that Russia is willing to continue to expend resources on the repair of the Antonovskiy bridge, as well as the construction of relatively cheaper pontoon bridges. This may ensure that Russia will not have to significantly change its transportation routes, despite Ukrainian threats. Simultaneously, the consistent presence of Russia in the area may necessitate that Ukraine continues to focus its resources on the area, even if it is for the destruction of the more easily replaceable pontoon bridges.¹⁰²

Although it is not completely clear how this narrative battle will play out, the resources that each side has expended to convince and distract each other of respective successes or failures demonstrates how informational influencing necessarily interacts with military movements in the physical domain. In the coming months other key bridges, especially the Kerch strait bridge connecting Crimea to Russia, are likely to be constructed as the focal points for further physical and narrative battles.

96 Jonathan Rose, "Ukraine Says It Has Taken out Vital Bridge in Kherson Region," Mail Online, August 13, 2022, <https://www.dailymail.co.uk/news/article-11108779/Ukraine-says-taken-vital-bridge-Kherson-region.html>.

97 Nika Alekseyeva, "Russian War Report: Russia Minimizes Ukrainian Damage of Strategic Bridge in Kherson," *Atlantic Council* (blog), July 29, 2022, <https://www.atlanticcouncil.org/blogs/new-atlanticist/russian-war-report-russia-minimizes-damage-kherson-bridge/>.

98 Aila Slisco, "Ukraine Reports Strike of Key Antonovsky Bridge in Kherson: 'Final Chord,'" *Newsweek*, August 30, 2022, <https://www.msn.com/en-us/news/world/ukraine-reports-strike-of-key-antonovsky-bridge-in-kherson-final-chord/ar-AA11ii9H>.

99 Slisco.

100 Heavens and Evans, "Key Bridge in Kherson Region 'badly Damaged' by Ukraine Shelling."

101 Alekseyeva, "Russian War Report."

102 Marcus Parekh, Josh White, and Berny Torre, "Ukraine War: Russian Ferry Hit as Ukraine Bombards Key Supply Bridge in Kherson," *The Telegraph*, August 30, 2022, <https://www.telegraph.co.uk/world-news/2022/08/30/ukraine-news-russia-war-live-kherson-offensive-latest-updates/>.

In the coming months other key bridges, especially the Kerch strait bridge connecting Crimea to Russia, are likely to be constructed as the focal points for further physical and narrative battles

By personifying land in times of conflict it is possible to create another ‘ally’ in an otherwise incredibly difficult situation, with the same emotional weight and perceptions attached to it as if it were another individual

Spotlighting battle locations

In war time, a key part of a strategic narrative and tactics for boosting morale often also includes emphasising the symbolic significance of certain events, people, or locations. Through repetition and emotional appeal, certain elements of a narrative can come to represent key ideas and make it easier to trigger associations between attitudes and behaviours. Specifically, locations are of note as symbols as they constitute the foundation of the physical level of the hybrid environment.

By placing certain locations in the spotlight through repeated exposure and emotional appeal, various effects can be achieved. First, as already mentioned above, the strategic narratives of actors within a conflict often transcend the physical boundaries of the conflict. With this comes attention from the international sphere. However, as foreign audiences often lack knowledge about the details of the conflict at hand, narrative persuasion can serve to productively direct attention to where it is most needed. For example, through repetition a certain location in need of help can become salient¹⁰³ in the minds of international audiences, and thus increase pressure for action or assistance, as it becomes no longer possible to claim ignorance. Alternatively, locations can be personified for a morale boosting effect. Personification is the rhetorical device through which humanised behaviour is superimposed on inanimate objects or concepts.¹⁰⁴ By personifying land in times of conflict it is possible to create another ‘ally’ in an otherwise incredibly difficult situation, with the same emotional weight and perceptions attached to it as if it were another individual.

Table 4. Tactics: spotlighting battle locations

Main Effect	Case Study	Cluster	Tactic	Elements	Explanation
Spotlighting battle locations	Azovstal	Exploit	Emotional appeal	Drawing international attention to trapped civilians and soldiers	Using wounded soldiers, civilians and children to gain sympathy which translates into action for support
		Distort	Narrative persuasion	Strategic victory in capturing Mariupol and symbolic victory for Russia in defeat of Nazis and their supporters, symbolic Ukrainian resistance	Integrating victory into broader narrative of justification of offensive to maintain consistency
	Hero settlements	Exploit	Emotional appeal	Personification of settlements into heroes fighting alongside Ukrainians	Reinforcement of imagery of unbeatable Ukrainian spirit
		Manipulate	Repeated exposure	Repeatedly drawn attention to complicate covert manoeuvring and gain international support	Repetition as a means of increasing saliency

103 McQuail and Deuze, *McQuail’s Media and Mass Communication Theory*.

104 Walter S. Melion and Bart Ramakers, *Personification: An Introduction* (Brill, 2016), https://doi.org/10.1163/9789004310438_002.



© Airstrikes on Mariupol in the area of the Azovstal plant, [Wikimedia Commons](#)

Azovstal

By the start of May, almost the entirety of the Southern port city of Mariupol was occupied by Russian forces, except for the Azovstal steel plant which was housing hundreds of soldiers and civilians in its above and underground corridors. From the start of the war, Mariupol has been as strategic target for Russia for several reasons. First, through the capture of Mariupol, Russia would be able to create a land corridor between the already occupied Eastern regions of Luhansk and Donetsk and Crimea, connecting the Eastern and Southern fronts and marking a significant geographic gain. Second, as a port city crucial for Ukrainian agricultural and raw material exports, the capture of Mariupol would effectively give Russia control over a significant part of Ukraine's economy. And third, Russia could capitalise on a symbolic victory, as Mariupol was home to the, now infamous, Ukrainian militia unit known as the Azov Regiment. Although not all soldiers in the regiment have such ties and the regiment itself is a small component of the Armed Forces of Ukraine, Russian news agencies and government spokespeople have used this to label all 'defenders of Mariupol' as Nazi sympathizers or Nazis themselves. As such, the taking of Mariupol was presented as the key priority for the denazification of Ukraine and part of Putin's greater strategic narrative and rationale behind his special military operation.¹⁰⁵¹⁰⁶ As Ukrainian troops fell back towards Azovstal, Russians knew that losing Mariupol would weaken Ukrainians, both strategically and in terms of their morale. And so, Russian attention was turned towards Mariupol, with Vladimir Putin declaring success of the operation in Mariupol before Azovstal was fully captured.¹⁰⁷ Putin also ordered for Azovstal to be completely sealed off, so that "not even a fly comes through", employing a siege tactic rather than bombardment and offering a unilateral ceasefire for humanitarian evacuation, which Ukraine declined.¹⁰⁸

¹⁰⁵ Gardner, "Mariupol."

¹⁰⁶ Kelsie Iorio, "Russia Has Demanded Ukraine Surrender Mariupol. Why Is the City so Important?," *ABC News*, March 22, 2022, <https://www.abc.net.au/news/2022-03-22/mariupol-russia-ukraine-invasion-economic-geographic-importance/100928728>.

¹⁰⁷ Nadine El-Bawab and Christine Theodorou, "Situation in Azovstal Steel Plant 'desperate,' Ukraine Says," *ABC News*, April 21, 2022, <https://abcnews.go.com/International/russians-calling-ukrainians-lay-arms-civilians-sheltering/story?id=84188159>.

¹⁰⁸ Rachel Treisman, "Russia Says Civilians Can Leave the Mariupol Steel Plant, but Ukraine Disagrees," *NPR*, April 25, 2022, sec. Europe, <https://www.npr.org/2022/04/25/1094606299/ukraine-russia-mariupol-corridor>.

Given the situation, the Ukrainian narrative also turned towards Mariupol, and specifically Azovstal. Based on the repetition of the theme of defiance, members of the Azov Regiment and other Ukrainian brigades within Azovstal began publishing videos stating that they were going to stay there until the very last soldiers. Ukrainians knew what the loss of Mariupol would mean for them, and so all efforts were put into a strong (as steel) 'last-stand', as operationally it was no longer feasible to push-back against the Russians. With the bravery of the 'defenders of Azovstal' on display, Ukrainians were further inspired to perceive the soldiers trapped in the steel plant as the standard of behaviour. Common slogans which appeared throughout the war like 'Be Brave Like Ukraine' were also adjusted to state 'Be Brave Like Azovstal'.¹⁰⁹

But, as the situation grew more dire for civilians within the tunnels under Azovstal, the tries for attention had to transcend Ukraine. Several attempts to negotiate green corridors for evacuation with Russia were unsuccessful.¹¹⁰ Soldiers in the steel plant began posting videos of children, elderly, and injured individuals with the plea 'Save (Help) Azovstal'. These posts started trending, drawing significant attention to a location which otherwise would not have known by many outside of Ukraine. This turned out to be effective, as international pressure mounted to resolve the situation in Mariupol. Ultimately, the increased presence and facilitation of the United Nations and the Red Cross permitted for green corridors to be established to evacuate all civilians by 7 May, but the injured soldiers remained.¹¹¹ The videos from the Azovstal soldiers continued, with international Google Search results for Azovstal peaking at the Final of the Eurovision Song Contest on 14 May, when the victors of the competition, Ukrainian band Kalush Orchestra, asked Europe to "Save Mariupol, Save Ukraine and Help Azovstal".¹¹²

Russian soldiers took the opportunity to bring attention to their own narrative again at the peak of European attention. After 14 May, images appeared on Russian Telegram channels of Russian soldiers who had written 'Help for Azovstal' and 'Kalush, as you requested' on bombs.¹¹³ And a few days later the Ukrainian Ministry of Defence called on the fighters to stop resisting. The remaining soldiers were taken to Russian controlled territory and been part of prisoner war exchanges since. Although military analysts comment that the capture of Azovstal did not change the course of the war, it represents a significant battle for attention and symbolic value.¹¹⁴

The Azovstal case study demonstrates how both sides of the Ukraine war have used information channels and influencing to draw attention to a key strategic location, for their respective reasons. Additionally, it represents the importance of Western and ally attention to the events, as key objectives can only be achieved with external support.

109 <https://www.nurphoto.com/en/gallery/403964/masonry>

110 El-Bawab and Theodorou, "Situation in Azovstal Steel Plant 'desperate,' Ukraine Says."

111 Laura Bicker, "Ukraine War: Civilians Now out of Azovstal Plant in Mariupol," *BBC News*, May 7, 2022, sec. Europe, <https://www.bbc.com/news/world-europe-61362557>.

112 Giannis Argyriou, "Kalush Orchestra: 'Save Mariupol, Save Ukraine and Help Azovstal,'" *Eurovision Fun*, May 14, 2022, <https://eurovisionfun.com/en/2022/05/kalush-orchestra-save-mariupol-save-ukraine-and-help-azovstal/>.

113 Megan Hinton, "Russia Writes Chilling Messages on Bombs Set for Mariupol after Eurovision Plea for Help," *LBC*, May 15, 2022, <https://www.lbc.co.uk/news/russia-chilling-messages-bombs-mariupol-eurovision/>.

114 Todd Prince, "Russia's Capture Of Azovstal: Symbolic Success, 'Pyrrhic' Victory?," *RadioFreeEurope/RadioLiberty*, May 18, 2022, <https://www.rferl.org/a/31157751.html>.

Ukrainians knew what the loss of Mariupol would mean for them, and so all efforts were put into a strong (as steel) 'last-stand', as operationally it was no longer feasible to push-back against the Russians



CHORN BAIVKA

© Chornobaivka Settlement, suburb of Kherson, symbol, Shutterstock

Hero settlements

Azovstal in Mariupol was not the only location which gained significant attention throughout the course of the war, while being of little note to international audiences before the war. Across Ukraine, Ukrainians spotlighted several towns and villages which were dubbed 'hero settlements'. This was because these key locations were where turning-point battles took place, and mostly, where Russians suffered significant losses. By immortalising these places as hero settlements, Ukrainians were able to not only better inform various audiences on the progression of the war, but also more effectively accrue both symbolic and material support.

The stories of the hero settlements followed similar lines to the abovementioned narratives of defiance and bravery, where it was almost as if the land itself was fighting alongside the Ukrainians and with their spirit. For example, the Russian-held Chornobaivka in the Southern Kherson region became known as a graveyard for Russian equipment or the closest thing on Earth for Russian hell, as Ukrainians reported mass Russian losses around the town. In one instance, it was said that 30 Russian helicopters were downed. The continuous failure of Russian troops to advance beyond Chornobaivka, which was claimed by experts to grant Russian a tactical advantage for movement towards Mykolaiv, has added to the town's legendary status.¹¹⁵ Similarly, towns like Popasna and Izyum were acclaimed for their resistance. By bringing attention to these, otherwise mostly small, settlements Ukraine made it more difficult for Russia to covertly move around, as efforts could be better targeted. The tactical value of attention and saliency therefore lay in putting pressure on every battle in these locations to be treated as more significant. Both for the Ukrainians and Russians this meant giving their all, which in turn had the effect that Ukrainians were better equipped to hold off an attack while the Russian were forced to expend more of their resources in one place. In

¹¹⁵ Катя Капустіна, "Легендарне село Чорнобаївка: хронологія знищення росіян та інші цікаві факти," Zemliak, March 25, 2022, <https://zemliak.com/gromada/2189-selo-chornobajivka-yak-fenomen-viyni-rosi-ji-z-ukrajinyu>.

In the reconquering of the Kharkiv region, the reclaiming of cities like Izyum added to the impression of not only a physical but symbolically important victory

the reconquering of the Kharkiv region, the reclaiming of cities like Izyum added to the impression of not only a physical but symbolically important victory. And, by sharing geotagged photos immediately after retaking these cities, Ukrainians ensured that there would be no doubt about their success.

Other Ukrainian cities also received an official status of hero city, under the decree of President Zelenskyy. This included the cities of Bucha and Irpin in the Kyiv region.¹¹⁶ As some of the first cities which were accessed after Russia withdrew from the Kyiv region, Bucha and Irpin gained international attention due to the significant evidence of Russian war crimes which were left behind. By focusing on the heroics of the locations themselves, in line with the rhetoric of the bravery of Ukraine, Ukraine was able to draw more international attention to what had taken place. And, for Ukrainians themselves, occupied hero cities have remained bastions of partisan resistance. In turn, more pressure was put on international organisations to document the crimes which occurred.

By continuously naming and personifying key locations throughout the war, Ukraine was able to use attention to influence the behaviour of both Russian troops and international audiences, gaining the support that was needed to resist.

By continuously naming and personifying key locations throughout the war, Ukraine was able to use attention to influence the behaviour of both Russian troops and international audiences, gaining the support that was needed to resist

¹¹⁶ "Hero City of Ukraine," in *Wikipedia*, July 17, 2022, https://en.wikipedia.org/w/index.php?title=Hero_City_of_Ukraine&oldid=1098748724.

Conclusion

The observations made during the war in Ukraine so far provide Western actors with several key take-aways and points of reflection. First, it has unequivocally emphasised that high intensity warfare in the modern context will be interwound with behavioural influencing. This has especially been intensified by the prevalence of social media, which increased the speed at which any information can spread and change. As such, it is difficult to imagine a modern war which would occur outside of a hybrid environment. Second, given the nature of social media and modern modes of communication it may take some time before the 'truth' about what happened in given confrontations or events comes to the surface. Even with a deliberate choice of tactics that do not distort reality, certain aspects of reality may still end up altered. And, even when the truth comes out, a 'false' narrative that developed will likely still have power to influence the decisions and beliefs of actors on the ground. Third, parallel narratives of warring parties are likely to emerge during a conflict and will change alongside each other in ways which reflect the development of confrontations. Looking at these narratives could prove crucial to understanding the conflict and even predicting outcomes, as well as the state of the physical, cognitive, and informational domains of the parties involved.

From these conclusions, several policy recommendations can also be drawn:

- There is a need to develop frameworks for understanding and disentangling the complexity of interacting effects of behavioural influencing tactics in the hybrid context. Although the cases for this analysis were presented through the lens of primarily one effect, many of them have interacted and reinforced each other in the course of the war. This paper has, as such, only made separations to make the study of behavioural influencing tactics more approachable while still acknowledging their complexity. Government decision-making about behavioural influencing will benefit most from frameworks that are able to reflect the interactions between the physical, cognitive, and informational domains, being comprehensive yet still simple and approachable enough.
- Western governments must consider the information that they release in light of the observation that both true and false narratives can have desired and undesired impacts on behaviour. Due to the current nature of information technology, 'false' or distorted narratives may emerge and be interpreted as true even without the explicit intention of deception. Meanwhile, true narratives may not be perceived as such and may be actively countered even by the audiences that they are intended for. Finally, some narratives may emerge without any intention from 'the top', rather being drawn from experiences on the ground. This understanding also requires a nuanced grasp on the nature of human psychology, especially in contexts with high amounts of uncertainty and fear, like high intensity conflict. In such instances, people may choose to believe in 'stories', 'myths', or false narratives as it grants them a source of security. Consequently, when engaging with information influencing tactics, the responsible bodies must be confident that at least part of the desired effect, whatever it may be, will be achieved by reaching the correct targets while accounting and preparing for any unintended consequences as well. Furthermore, trainings on how to navigate the online domain should be instated as part of general military training and preparation to improve the overall state of nation's information-based capabilities.¹¹⁷

¹¹⁷ A similar policy-related conclusion was drawn during an HCSS expert session. Lotje Boswinkel, Michel Rademaker, and Sofia Romansky, "Information-Based Behavioural Influencing in the Military Context: Mapping Current Expert Thinking," HCSS, accessed September 2, 2022, <https://hcss.nl/report/information-behavioural-influencing-expert-thinking/>.

There is a need to develop frameworks for understanding and disentangling the complexity of interacting effects of behavioural influencing tactics in the hybrid context

Specifically concerning the war in Ukraine, more attention should be paid to the interacting narratives of Ukraine and Russia, and how their developments impacted or predicted developments on the ground

- Specifically concerning the war in Ukraine, more attention should be paid to the interacting narratives of Ukraine and Russia, and how their developments impacted or predicted developments on the ground. This war is an opportunity to create a comprehensive archive of information on behavioural influencing that can be mapped and analysed for insights into how the conflict evolved. These insights can also aid in shared understandings of future modern wars. Additionally, as the war appears to be entering a stalemate and foreign interest in the war is waning, it will be interesting to observe how Ukraine and Russia continue to try to motivate engagement and attention, both from their own and outside constituencies. Finally, paying close attention to the use of information and the specific tactics employed during this conflict may also provide insight into what life could be like after the war. Even if the abovementioned tactics have primarily been employed in a military context, the symbols and stories they have created have and will likely keep having an impact beyond it.

As the war in Ukraine continues, more narratives will develop to not only influence morale, influence the movement and behaviour of troops, and spotlight key battle locations to gain international support, but also for other effects not mentioned in this paper.

Experts claim that the war in Ukraine marks a new chapter in history, politically, militarily, and socially as the first war of such a scale on the European continent in recent history. Therefore, it is crucial that lessons, such as those drawn from the use of behavioural influencing, are learnt as the conflict continues, instead of in hindsight. As a result, states may be better equipped to respond to challenges that are yet to come, and, hopefully, assist in expediting an end to the war.

Bibliography

- Akar, Furkan. "Analysis of The Sunken Russian Cruiser Moskva, Its Implications for Russia and Lessons for the World Navies | Beyond the Horizon ISSG," April 28, 2022. <https://behorizon.org/analysis-of-the-sunken-russian-cruiser-moskva-and-its-implications-for-russia-and-the-world-navies/>.
- Aleksejeva, Nika. "Russian War Report: Russia Minimizes Ukrainian Damage of Strategic Bridge in Kherson." *Atlantic Council* (blog), July 29, 2022. <https://www.atlanticcouncil.org/blogs/new-atlanticist/russian-war-report-russia-minimizes-damage-kherson-bridge/>.
- Ankel, Sophia. "The Captain of an Oil Tanker Refused to Refuel a Russian Ship to Protest Ukraine's Invasion. The Crew Is 'very Proud,' His Wife Says." *Business Insider*, March 2, 2022. <https://www.businessinsider.com/oil-tanker-georgia-captain-refused-refuel-russian-ship-protest-ukraine-2022-3>.
- Antonopoulos, Paul. "Fake News Exposed: 'Russian Warship, Go F*** Yourself' And The 'Ghost Of Kyiv,'" March 1, 2022. <https://greekcitytimes.com/2022/03/01/fake-news-ghost-of-kyiv/>.
- Argyriou, Giannis. "Kalush Orchestra: 'Save Mariupol, Save Ukraine and Help Azovstal.'" *Eurovision Fun*, May 14, 2022. <https://eurovisionfun.com/en/2022/05/kalush-orchestra-save-mariupol-save-ukraine-and-help-azovstal/>.
- Baibhawi, Riya. "As Russian Warship Moskva Sinks, Here's How It May Impact Russia's Invasion of Ukraine." *Republic World*, April 16, 2022. <https://www.republicworld.com/world-news/russia-ukraine-crisis/as-ww-ii-era-warship-moskva-sinks-heres-how-it-may-impact-russias-invasion-of-ukraine-articleshow.html>.
- Bassin, Mark, Sergey Glebov, and Marlene Laruelle. *Between Europe and Asia: The Origins, Theories, and Legacies of Russian Eurasianism*. University of Pittsburgh Press, 2015.
- BBC. "Snake Island: Ukraine Says Soldiers Killed after Refusing to Surrender." *BBC News*, February 25, 2022, sec. Europe. <https://www.bbc.com/news/world-europe-60522454>.
- Bicker, Laura. "Ukraine War: Civilians Now out of Azovstal Plant in Mariupol." *BBC News*, May 7, 2022, sec. Europe. <https://www.bbc.com/news/world-europe-61362557>.
- Biersack, John, and Shannon O'Lear. "The Geopolitics of Russia's Annexation of Crimea: Narratives, Identity, Silences, and Energy." *Eurasian Geography and Economics* 55, no. 3 (May 4, 2014): 247–69. <https://doi.org/10.1080/15387216.2014.985241>.
- Borger, Julian. "Russian Navy Ordered to Lay Mines at Ukraine's Black Sea Ports, Says US." *The Guardian*, June 23, 2022, sec. World news. <https://www.theguardian.com/world/2022/jun/23/russian-navy-ordered-to-lay-mines-at-ukraines-black-sea-ports-says-us>.
- Boswinkel, Lotje, Neill Bo Finlayson, John Michaelis, and Michel Rademaker. "Weapons of Mass Influence: Shaping Attitudes, Perceptions and Behaviours in Today's Information Warfare." *HCSS*, April 20, 2022. <https://hcss.nl/report/weapons-of-mass-influence-information-warfare/>.
- Boswinkel, Lotje, Michel Rademaker, and Sofia Romansky. "Information-Based Behavioural Influencing in the Military Context: Mapping Current Expert Thinking." *HCSS*. Accessed September 2, 2022. <https://hcss.nl/report/information-behavioural-influencing-expert-thinking/>.
- Brotman, Alexander. "Ukraine and the Shifting Geopolitics of the Heartland." *Geopolitical Monitor* (blog), September 21, 2022. <https://www.geopoliticalmonitor.com/ukraine-and-the-shifting-geopolitics-of-the-heartland/>.

- Bushell, Simon, Géraldine Satre Buisson, Mark Workman, and Thomas Colley. "Strategic Narratives in Climate Change: Towards a Unifying Narrative to Address the Action Gap on Climate Change." *Energy Research & Social Science* 28 (June 1, 2017): 39–49. <https://doi.org/10.1016/j.erss.2017.04.001>.
- Chayka, Kyle. "Ukraine Becomes the World's 'First TikTok War.'" *The New Yorker*, March 3, 2022. <https://www.newyorker.com/culture/infinite-scroll/watching-the-worlds-first-tiktok-war>.
- Coles, Isabel, and Ann Simmons. "Ukraine Mocks Russia After Explosions at Crimean Air Base." *Wall Street Journal*, August 10, 2022, sec. World. <https://www.wsj.com/articles/ukraine-mocks-russia-after-explosions-at-crimean-air-base-11660123645>.
- Cotovio, Vasco, and Tara John. "Ukraine Admits It Was behind Three Explosions in Crimea. Here's What We Know." CNN. Accessed August 23, 2022. <https://www.cnn.com/2022/08/17/europe/crimea-explosions-russia-ukraine-intl/index.html>.
- Digital Forensic Research Lab. "Russian War Report: Competing Narratives about the Sinking of Russia's Moskva Warship." *Atlantic Council* (blog), April 15, 2022. <https://www.atlanticcouncil.org/blogs/new-atlanticist/russian-war-report-competing-narratives-about-the-sinking-of-russias-moskva-warship/>.
- El-Bawab, Nadine, and Christine Theodorou. "Situation in Azovstal Steel Plant 'desperate,' Ukraine Says." ABC News, April 21, 2022. <https://abcnews.go.com/International/russians-calling-ukrainians-lay-arms-civilians-sheltering/story?id=84188159>.
- Euronews. "Ukraine to Regain Control of Snake Island after Russians Withdraw," June 30, 2022. <https://www.euronews.com/2022/06/30/ukraine-to-regain-control-of-snake-island-after-russians-withdraw>.
- Gady, Franz-Stefan. "Putin Has Brought Conventional, Bloody Warfare Back to Europe." *Financial Times*, February 24, 2022.
- Gardner, Frank. "Mariupol: Why Mariupol Is so Important to Russia's Plan." *BBC News*, March 21, 2022, sec. Europe. <https://www.bbc.com/news/world-europe-60825226>.
- Giles, Keir. *Handbook of Russian Information Warfare*, 2015.
- Gopalakrishnan, Manasi, and Louisa Schaefer. "War in Ukraine: How Do People Drum up Courage? | DW | 15.03.2022." DW.COM, March 15, 2022. <https://www.dw.com/en/war-in-ukraine-how-do-people-drum-up-courage/a-61076295>.
- Gregg, Melissa, and Gregory J. Seigworth. *The Affect Theory Reader*. Duke University Press, 2010.
- MARCA. "Harsh Blow for Ukraine, 'Ghost of Kyiv' Reported Dead," April 30, 2022. <https://www.marca.com/en/lifestyle/world-news/2022/04/30/626d4c1d268e3e9e608b45ae.html>.
- Hayda, Julian. "Who Was behind the Explosions in Crimea? Ukraine and Russia Aren't Saying." *NPR*, August 13, 2022, sec. Ukraine invasion — explained. <https://www.npr.org/2022/08/12/1116994504/russia-ukraine-crimea-air-base-explosions>.
- Heavens, Andrew, and Catherine Evans. "Key Bridge in Kherson Region 'badly Damaged' by Ukraine Shelling." *Reuters*, July 20, 2022, sec. Europe. <https://www.reuters.com/world/europe/bridge-kherson-region-badly-damaged-by-ukraine-shelling-tass-2022-07-20/>.
- "Hero City of Ukraine." In *Wikipedia*, July 17, 2022. https://en.wikipedia.org/w/index.php?title=Hero_City_of_Ukraine&oldid=1098748724.
- Hill, Jenny. "Russian Warship: Moskva Sinks in Black Sea." *BBC News*, April 15, 2022, sec. Europe. <https://www.bbc.com/news/world-europe-61114843>.
- Hinton, Megan. "Russia Writes Chilling Messages on Bombs Set for Mariupol after Eurovision Plea for Help." LBC, May 15, 2022. <https://www.lbc.co.uk/news/russia-chilling-messages-bombs-mariupol-eurovision/>.

- Holden, Michael. "Half of Russia's Black Sea Fleet's Combat Jets out of Operation, Western Official Says." *Reuters*, August 19, 2022, sec. Europe. <https://www.reuters.com/world/europe/half-russias-black-sea-fleets-combat-jets-out-operation-western-official-2022-08-19/>.
- Iorio, Kelsie. "Russia Has Demanded Ukraine Surrender Mariupol. Why Is the City so Important?" *ABC News*, March 22, 2022. <https://www.abc.net.au/news/2022-03-22/mariupol-russia-ukraine-invasion-economic-geographic-importance/100928728>.
- Jones, Seth G. "Russia's Ill-Fated Invasion of Ukraine: Lessons in Modern Warfare." Center for Strategic and International Studies, June 1, 2022. <https://www.csis.org/analysis/russias-ill-fated-invasion-ukraine-lessons-modern-warfare>.
- Kirby, Paul. "Ukraine War: Russia Blames Sabotage for New Crimea Blasts." *BBC News*, August 16, 2022, sec. Europe. <https://www.bbc.com/news/world-europe-62560041>.
- KyivPost [@KyivPost]. "The 'Ghost' Plane of Kyiv Has Destroyed 49 Russian Planes. <https://t.co/BXiJEAb8C1>." Tweet. *Twitter*, March 10, 2022. <https://twitter.com/KyivPost/status/1501924542259814407>.
- Mankoff, Jeffrey. "Russia's War in Ukraine: Identity, History, and Conflict," April 22, 2022. <https://www.csis.org/analysis/russias-war-ukraine-identity-history-and-conflict>.
- Matychack, Tetyana. "Why Are Cossacks Key to Understanding the Ukrainian Nation?," March 13, 2019. <https://ukraineworld.org/articles/ukraine-explained/why-are-cossacks-key-understanding-ukrainian-nation>.
- McCausland, Phil, and Andrew Jones. "'Massive Blow for Russian Credibility': Sunk Warship Is a Symbolic, Tactical Win for Ukraine." *NBC News*, April 14, 2022. <https://www.nbcnews.com/news/world/massive-blow-russian-credibility-explosions-warship-win-ukraine-expert-rcna24376>.
- McQuail, Denis, and Mark Deuze. *McQuail's Media and Mass Communication Theory*. SAGE Publications, 2020.
- Meaker, Morgan. "How Ukraine Is Winning the Propaganda War." *Wired*, June 13, 2022. <https://www.wired.com/story/ukraine-propaganda-war/>.
- Mearsheimer, John J. "Why the Ukraine Crisis Is the West's Fault," August 18, 2022. <https://www.foreignaffairs.com/articles/russia-fsu/2014-08-18/why-ukraine-crisis-west-s-fault>.
- Melion, Walter S., and Bart Ramakers. *Personification: An Introduction*. Brill, 2016. https://doi.org/10.1163/9789004310438_002.
- Miller, Daniel. "Who Is the 'Ghost of Kyiv'? Tale of Ukrainian Fighter Pilot Trends on Social Media." Text. Article. FOX TV Digital Team. FOX 11 Los Angeles, February 25, 2022. <https://www.foxla.com/news/ghost-of-kyiv-tale-of-ukrainian-fighter-pilot-trends-social-media>.
- Miskimmon, Alister, and Ben Loughlin. "Great Power Politics and Strategic Narratives of War." In *Strategic Narratives, Public Opinion and War*. Routledge, 2015.
- Mitchell, Ellen. "Sinking of Russian Warship Offers Ukraine a Morale — and Maybe Strategic — Boost." Text. *The Hill* (blog), April 16, 2022. <https://thehill.com/policy/defense/3270399-sinking-of-russian-warship-offers-ukraine-a-morale-and-maybe-strategic-boost/>.
- Newdick, Thomas. "The 'Ghost of Kyiv' Is The Mythical Hero Ukraine Needs Right Now." *The Drive*, February 25, 2022. <https://www.thedrive.com/the-war-zone/44453/the-ghost-of-kyiv-is-the-mythical-hero-ukraine-needs-right-now>.
- Novelly, Thomas. "Ukraine's Fighter Ace 'Ghost of Kyiv' May Be a Myth, But It's Lethal as War Morale." *Military.com*, March 2, 2022. <https://www.military.com/daily-news/2022/03/02/ukraines-fighter-ace-ghost-of-kyiv-may-be-myth-its-lethal-war-morale.html>.

- Outlook. "Who Is The 'Ghost Of Kyiv', The 'Hero' Boosting Ukraine's Morale Amid Crisis?" <https://www.outlookindia.com/>, March 1, 2022. <https://www.outlookindia.com/international/ghost-of-kyiv-ukraine-war-news-184610>.
- Ozberk, Tayfun. "Are Rainy Days in Store for Russia's Black Sea Fleet Following the Sinking of the Moskva?" Defence Procurement International, April 19, 2022. <https://www.defenceprocurementinternational.com/features/sea/what-is-the-impact-of-losing-the-moskva-for-russias-black-sea-fleet>.
- Parekh, Marcus, Josh White, and Berny Torre. "Ukraine War: Russian Ferry Hit as Ukraine Bombards Key Supply Bridge in Kherson." *The Telegraph*, August 30, 2022. <https://www.telegraph.co.uk/world-news/2022/08/30/ukraine-news-russia-war-live-kherson-offensive-latest-updates/>.
- Pijpers, Peter B. M. J., and P. a. L. Ducheine. "'If You Have a Hammer...' Reshaping the Armed Forces' Discourse on Information Maneuver." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, November 1, 2021. <https://doi.org/10.2139/ssrn.3954218>.
- Plowright, William. "Russian Warship, Go F**k Yourself – A Short History of Wartime Taunts," March 25, 2022. <https://smallwarsjournal.com/jrnl/art/russian-warship-go-fk-yourself-short-history-wartime-taunts>.
- Prince, Todd. "Russia's Capture Of Azovstal: Symbolic Success, 'Pyrrhic' Victory?" RadioFreeEurope/RadioLiberty, May 18, 2022. <https://www.rferl.org/a/31157751.html>.
- LB.ua. "Prisoner Exchange: 29 Servicemen Captured by Russians Return to Ukraine," March 24, 2022. https://en.lb.ua/news/2022/03/24/11821_prisoner_exchange_29_servicemen.html.
- Przetacznik, Jakub. "Russia's War on Ukraine: Timeline of Cyber-Attacks." European Parliament, June 21, 2022. [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2022\)733549](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)733549).
- Reuters. "How Big a Loss to Russia Is the Sinking of the Moskva Missile Cruiser?" *Reuters*, April 15, 2022, sec. Europe. <https://www.reuters.com/world/europe/how-big-loss-russia-is-sinking-moskva-missile-cruiser-2022-04-15/>.
- RFE/RL's Ukrainian Service. "Explosions Reported In Ukraine's Russian-Occupied Crimea Region." RadioFreeEurope/RadioLiberty, August 19, 2022. <https://www.rferl.org/a/ukraine-crimea-explosions-russia-invasion-belbek/31995369.html>.
- Rose, Jonathan. "Ukraine Says It Has Taken out Vital Bridge in Kherson Region." Mail Online, August 13, 2022. <https://www.dailymail.co.uk/news/article-11108779/Ukraine-says-taken-vital-bridge-Kherson-region.html>.
- Sheftalovich, Zoya. "'Go Fuck Yourself,' Ukrainian Soldiers on Snake Island Tell Russian Ship before Being Killed." POLITICO, February 25, 2022. <https://www.politico.eu/article/go-fuck-yourself-ukraine-soldiers-snake-island-russia-war-ship-killed/>.
- Slisco, Aila. "Ukraine Reports Strike of Key Antonovsky Bridge in Kherson: 'Final Chord.'" *Newsweek*, August 30, 2022. <https://www.msn.com/en-us/news/world/ukraine-reports-strike-of-key-antonovsky-bridge-in-kherson-final-chord/ar-AA11ii9H>.
- Starr, Michael. "In 'Ukrainian Military Oscars,' Ukraine Promotes Army and Mocks Russia - The Jerusalem Post." The Jerusalem Post, March 30, 2022. <https://www.jpost.com/international/article-702617>.
- Steele, Jonathan. *Eternal Russia: Yeltsin, Gorbachev, and the Mirage of Democracy*. Harvard University Press, 1994.
- Strachan, Hew. "Training, Morale and Modern War." *Journal of Contemporary History* 41, no. 2 (April 1, 2006): 211–27. <https://doi.org/10.1177/0022009406062054>.
- Takagi, Koichiro. "The Future of China's Cognitive Warfare: Lessons from the War in Ukraine." War on the Rocks, July 22, 2022. <https://warontherocks.com/2022/07/the-future-of-chinas-cognitive-warfare-lessons-from-the-war-in-ukraine/>.

The Associated Press. "Ukraine Admits 'Ghost of Kyiv' Fighter Pilot, Hailed for Feats against Russian Forces, Is a Myth." CBC, May 2, 2022. <https://www.cbc.ca/news/world/ukraine-ghost-of-kyiv-myth-1.6437895>.

The Federal. "Big Blow to Putin as Russian Warship Moskva Sinks in Black Sea." The Federal, April 15, 2022. <https://thefederal.com/international/big-blow-to-putin-as-russian-warship-moskva-sinks-in-black-sea/>.

The Guardian. "'Go Fuck Yourself', Ukrainian Soldiers on Snake Island Tell Russian Ship." *The Guardian*, February 25, 2022, sec. World news. <https://www.theguardian.com/world/video/2022/feb/25/go-fuck-yourself-ukrainian-soldiers-snake-island-russian-ship-before-being-killed-audio>.

The Newsroom. "The Battle Cries of the Highland Clans." The Scotsman, February 17, 2016. <https://www.scotsman.com/whats-on/arts-and-entertainment/battle-cries-highland-clans-1482723>.

Treisman, Rachel. "Russia Says Civilians Can Leave the Mariupol Steel Plant, but Ukraine Disagrees." *NPR*, April 25, 2022, sec. Europe. <https://www.npr.org/2022/04/25/1094606299/ukraine-russia-mariupol-corridor>.

US Army. "Joint Publication 3-13. Information Operations.," November 20, 2014. https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_13.pdf.

u/Weary_Conversation43. "Ukrainian Soldiers Firing Artillery and Shouting 'Russian Warship Go Fuck Yourself'. : Ukraine." Accessed July 26, 2022. https://www.reddit.com/r/ukraine/comments/u4823l/ukrainian_soldiers_firing_artillery_and_shouting/.

Vego, Milan N. "Operational Command and Control in the Information Age." National Defense Univ Washington DC Inst for National Strategic Studies, January 1, 2004. <https://apps.dtic.mil/sti/citations/ADA524597>.

Yellin, Keith. "Battle Exhortation," December 2, 2011. <http://uscpress.com/book-post/Battle-Exhortation>.

Zoria, Yuri. "What Weapon Ukraine Might Have Used to Hit Airfield in Crimea." Euromaidan Press, August 10, 2022. <https://euromaidanpress.com/2022/08/10/what-weapon-ukraine-might-have-used-to-hit-airfield-in-crimea/>.

Капустіна, Катя. "Легендарне село Чорнобаївка: хронологія знищення росіян та інші цікаві факти." *Zemliak*, March 25, 2022. <https://zemliak.com/gromada/2189-selo-chornobajivka-yak-fenomen-viyni-rosiji-z-ukrajinoju>.

Слово і Діло. "Подольак щодо вибухів: Крим – перлина Чорного моря, а не військова база для терористів." Accessed August 23, 2022. <https://www.slovoidilo.ua/2022/08/09/novyna/polityka/podolyak-shhodo-vybuxiv-krym-perlyna-chornoho-morya-a-ne-vijskova-baza-terorystiv>.



The Hague Centre
for Strategic Studies

HCSS

Lange Voorhout 1
2514 EA Hague

Follow us on social media:

@hcssnl

The Hague Centre for Strategic Studies

Email: info@hcss.nl

Website: www.hcss.nl