Download. Geolocate. Fire and Forget: the smartphone at war

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This paper will form the basis for a future academic article connected to my co-authored book [Radical War](.).

War is everywhere I go. I cannot seem to escape it. I'm using my favourite music streaming service in the hope of getting away from it and the protests about [Joe Rogan](.) have already been supplanted by the notice [Help Ukraine; Stop the War](.). War is in the palm of my hand, and I can't put it down. The whole of my life is locked into the mobile connected ecosystem that is my smartphone and the war has me gripped.

Anthropologists tell us that the smartphone is [now the place where we live](.). But for some time now, it has also been the place where we watch people die. The fusion of social media and war has been a feature of life since [YouTube launched in 2005](.). Islamic State (IS) pioneered the use of social media in its propaganda wars of the mid-2010s. Now their remnants fight over their legacies and hope to keep the idea of IS alive by posting old videos online and [inventing new emojis](.), haunting us with future possible worlds.

But the war in Ukraine is on another level entirely. The difference now is that we are witnessing a conventional war in Europe, where [everyone](.) is connected to a mobile telecoms grid and where [61% of Ukrainians have smartphones](.). This is, then, the most connected war we have ever experienced. And everyone now has a space for their own hot take, from those who want war to reflect enduring Clausewitzian truths to cyberpunks [3D printing tail fins](.) for drone munitions that will take out Russian heavy armour. The Ukraine war is in the palm of our hands, both immediate and new, 20th century and familiar.

But even still, trying to understand how the war is unfolding has proven to be something of a challenge. Who would have expected the Russian offensive to have stalled? Was that a sign that they were losing? Or, as the former Finnish head of military intelligence claimed, that the Russians had prepared for an occupation of Ukraine rather than to fight the Ukrainian Army? The world knows how America fights its wars: precision strike, Special Forces, shock and awe. But no one knew what a Russian conventional war might look like. Was this hybrid warfare, involving deception and cyberwar, or just warfare?

At first, history appeared to offer us a way to orientate ourselves to what was going on, offering a shorthand for interpreting the initial events. During the first seven days of the war an online narrative emerged that seemed to explain it all: the war in Ukraine was the 21st century equivalent of the Winter War, fought between the Soviet Union and Finland in 1939. Putin was Stalin. Ukraine was Finland. The Russians were poorly led, poorly trained and were perfectly happy raping and killing civilians, looting and attacking local shops. The Russians were an immoral rabble intent on wanton destruction, lashing out in frustration at the failure of their initial attacks.

Certainly, Ukrainians have heroically fought off the Russian Army. But by looking at social media feeds, just by themselves, it is impossible for us to tell what is happening beyond the echo chambers that these create. We see relentless images of drone strikes and burning vehicles. We see pictures of tanks being wheeled away by plucky Ukrainian tractor drivers. Following the bombing of a hospital in Mariupol we are now increasingly seeing pictures of destroyed buildings, distraught civilians and refugees.

But the abiding image of the war, as seen from the UK, has been the column of vehicles stuck three abreast, over 27km long on a highway somewhere north of Kyiv. Hours of debate have been expended on what this column implied and yet no one wondered why it wasn't being attacked. This was an ideal target for Ukrainian forces. Unfortunately they did not have the means to attack it. Instead we focused on what the column said about Russia's planning and logistics and not what it told us about the lack of Ukrainian military capability.

During the first few weeks, what we rarely saw were images of firefights. This isn't the British Army in Afghanistan. Headcam footage has so far been limited. Clearly Ukrainian soldiers have smartphones, but it's only now that the front appears to have stabilised that we have begun to see infantry engaged in combat. Images of the dead are restricted to those of the invading Russians or Ukrainian civilians. Mainstream Media (MSM) fills in the gaps, broadcasting from key locations in Kyiv, mostly before things turn kinetic.

What we rarely see are images of Russian military action. Russia, in contrast, has banned its army from using smartphones for fear of leaking information to organisations like Bellingcat. Russian soldiers purportedly had their smartphones confiscated before the invasion began. The result is something of a phase shift in online sources. Before it all started, Open Source Intelligence (OSINT) analysts tracked the patterns of movement with webcam footage, freight scheduling and other online services. They could see the military build-up with commercial satellite imagery. Corroborating these sources with TikTok videos, it became possible to validate findings and tell us something of the state of Russia's build up. Were the Russians interested in maintaining operation security? Hiding the massing of 190,000 troops on the borders of Ukraine was not possible. But what could be done about it before Russian intentions became clear?

Then as the war started, people turned to social media to find out what was going on. Instead of observing what was happening they re-posted it. In the process they told the Russians what CCTV cameras and websites were revealing of the battlefield, giving away sources that were subsequently taken offline. Without realising it, the battlefield was momentarily transparent and then rendered opaque. Now that Russia is restricting access to Western social media, it has become even harder to see war from the perspective of the ordinary Russian soldier.

We know that the Russians are making use of insecure Ukrainian cell phone networks alongside their secure military communications. At the same time, despite the Russian Army's ban on smartphones, soldiers will always find ways to break the rules. If that is the case then where is all their smartphone footage being uploaded? Even if soldiers are holding it on their local devices, eventually it will leak. But if it gets online, can we be sure that social media platforms themselves might not just restrict our capacity to access it, just by dint of their publication policies? Won't this just edit the narrative of the war even before Russians have had a chance to offer their perspective? And of course, if this material is deleted, then how might we interpret the effectiveness of the war crimes tribunals now being established in the West?

The war appears right in front of us. We think we know it. But it has been pre-mediated by processes and technologies that we still barely understand. The IT Army of Ukraine Telegram channel was set up just two days before the war. Now the war is all over Telegram. Images aren't just being directly posted to mainstream social media but are coming up from the battlefield in a way that separates those who post material from those who analyse it. But we need to remember that these images aren't of equal value.

Images of shot down aircraft bolster moral and emerge on to mainstream social media faster than images of destroyed tanks. Some images take even longer to get published as Ukrainians work to recover important equipment from the battlefield. Twitter implies that the war is being fought real time while you are online. Was the CCTV camera at Zaporizhzhya Nuclear plant livestreaming the battle a deliberate signal of the impending apocalypse or because someone forgot to take it down? Whatever the truth, discussions with OSINT analysts reveal that Twitter is behind events, sometimes by up to 60 hours.

The Syrian Civil War reminds us that digital imagery leaks out, and yet we are not seeing smartphone footage of combat. Given the high level of connectivity, the implication is that smartphone footage exists but that the images we are seeing are being filtered by a sophisticated information operation. Its outlines can be spotted by paying close attention to the types of footage that finds its way online. This implies

considerable prior organisation, preparing the Ukrainian public to avoid posting images, perhaps working with Western cyber commands to algorithmically filter material or applying similar electronic warfare technologies to those used by the Russians to suppress smartphone transmissions. No doubt the Ukrainians fear that these images will reveal their tactics, techniques and procedures. Alternatively, maybe they hold this material back so they can identify ways to counter Russian tactics. Whatever the case, the reality that we see is out of kilter with what is actually happening at the front.

The result is a series of swirling, confusing cycles of news feed. MSM is on all the time but works according to various editorial constraints. People recording events on their smartphone have the capacity to produce, publish and consume media all from the same device in real time. Posts stream endlessly through our social media feed, but out of sequence with the events they claim to portray. The abundance of information has collapsed our sense of time, something reinforced by platforms like TikTok where swiping quickly leads to temporal dislocation. We use historical references to try to make sense out of the moment, and layered into it all are images designed to distract, distort and emotionally overwhelm us according to our personalised timelines and algorithmic preferences.

Cutting through the temporal complexity of the keyboard warrior, the smartphone has also been embraced as a sensor. Civilians become part of the kill chain. Targeting information is now being exchanged online. Successful kills have been celebrated via Telegram. Chatbots have been established, helping Ukrainians share target coordinates. Identifying targets doesn't involve complex military systems: it all works from civilian information infrastructures. Raising your smartphone turns you from harmless bystander to participant.

The result is the collapse of the distinction between civilian and military, where everyone participates whether they are at home making tea or on the frontlines defending the 20th century international system.

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Some may see these apps as just gimmicks, distracting us from the real war. If Russia's invasion turns to occupation, however, the smartphone will surely become a vector for Ukrainian resistance.

This is the first conventional war fought in the age of the smartphone, but the immediacy of the social media feed is often illusory. Instead, what gets amplified mirrors our own preferences that we have already revealed to these tech platforms. We need to remember that our feeds have already been pre-mediated by the technologies that make them possible, reflecting our social and cultural values, our hopes and fears. By self-selecting what we see, we quickly create misleading feedback loops that blind us to Putin's way of war. These lock us into taking positions that lead to further division, polarising society and leading us to scapegoat billionaires as well as ordinary Russians living in Britain. Othering the enemy is a common and useful way to drive cohesion into military formations. Too much of this and the debate sparks accusations of racism.

We are beginning to realise that Putin's way of war is brutal and abhorrent. We cannot shy from this but we need to be careful not to misrepresent it through the prisms of the smartphone, reading it purely from a Western perspective. Our inability to look at the world through Russian eyes could lead us to more dangerous places.