This year marks the hundredth anniversary of the first technological war that involved all the citizens of the warring nations in total warfare. This significant historical moment is generally marked by the name the First World War.

Let’s leave aside the conflicting histories of the war recently aired in the media, such as the different interpretations given by Max Hastings, Niall Ferguson, Christopher Clark, Michael Gove and Richard Evans, and look at how the photography and technology of war have emerged together over the past 100 years.

At the start of the conflict beginning 28 July 1914, and after several months of stalemate on the Western Front, both the Allied and German armies realised that this war would be fundamentally different from previous wars. It would not be a war of troops on horses moving quickly over land that would be over in a few months. This war would be about attrition and stagnation, with troops living, fighting and dying in trenches that crossed France and Belgium, and continued for four years.

Both the Allied and German governments also realised their war production could no longer meet the demands of military consumption for trench warfare. All their existing industrial production had to be aligned towards the war effort in producing munitions. War became mechanical – tanks, large howitzers and machine guns that would redefine warfare. Humans would now share the battlefield with machines or, more to the point, machines were embedded with humans on the battlefield.

Paul Virilio, the French military historian and theorist, has called this the “technical surprise”: war would now require the involvement of the whole population of the nation, regardless of whether or not they were in uniform. As conscription took the men off to war, women moved into the factories, became bus drivers and farm labourers. War was not confined to the battlefield; it became part of daily life. This was the beginning of the militarisation of civil society as the civilian population became integrated into the war effort.

No long-term war could continue without some form of approval from the nation’s citizens. Since the war would not be over in a few weeks, the morale of the nation, both on the home front and the battlefield, became paramount.

As new techniques of fighting were developed – such as the creeping barrage, developed partly to demoralise the opposing army – new forms of morale-building developed too.

The popular press became the place where the nation’s morale was maintained. Official photographers were appointed in

CAMERA AS WEAPON

What would Robert Capa have made of drone warfare and the amalgamation of cameras and weaponry? Smart bombs may have brought the lens closer to death and destruction but, says Paul Wombell, they’ve made the experience of war much more distant. The challenge for artists and photographers, he argues, is to resist the pull of the frontline and portray a truth that’s much closer to home...
1916 to join the Army and supply newspapers and magazines with photographs promoting the war effort. It was through the new photography magazines – The War Budget, The War Illustrated and War Pictorial (forerunners to magazines such as Picture Post, which came out 20 years later) – that the story of the war was told.

Photography was also being integrated into the war effort. “Industrialised warfare laid the ground for a logistics of military perception in which a supply of images would become the equivalent of an ammunition supply: the [latter] years of the 1914-18 war were compounded by a new weapons system of combat vehicle and camera,” wrote Virilio in his classic 1989 text War and Cinema: The Logistics of Perception.

Photography would take to the skies. Cameras attached to balloons, pigeons and aircraft were used for aerial reconnaissance to view the battlefield below. This was the first time the machine of vision was connected to the machine of flying. Seventy years later, during the first Gulf War (1990–91), the combat vehicle with camera became fully realised. Smart weapons – missiles with cameras, laser and infrared devices guided towards their targets by GPS navigation – combined the camera with the gun to create a new weapons system. This brought the camera closer to death and destruction, but not in the way that Robert Capa had in mind; quite the opposite, in fact. These smart weapons made the experience of war more distant.

Raymond Williams, the cultural critic, historian and novelist, was also concerned with the culture of distance. Writing for the London Review of Books in 1982, in his article titled Distance, he wrote about the early stage of the British invasion of the Falkland Islands, how the media was reporting the event, and in particular how television creates a sense of distance from war. “But it was the representation of a close-up war: physically distant on the Earth but physically close in the lens. What has been happening in the South Atlantic, up to the point where British troops went back on the islands, has been a war of technical distance: of buttons pressed and missiles fired from distances often beyond the range of normal vision; moreover, in many cases, of missiles programmed to direct themselves to their target.”

Williams highlights the changing depiction of contemporary warfare, in which the media gives the impression of bringing the war nearer but in fact does the opposite.

In Regarding the Pain of Others (2003), Susan Sontag comes to a similar conclusion: “Television, whose access to the scene is limited by government controls and self-censorship, serves up the war as images. The war itself is waged as much as possible at a distance, through bombing, whose targets can be chosen on the basis of instantly relayed information and visualising technology from continents away. The daily bombing operations in Afghanistan in late 2001 and early 2002 were directed from US Central Command in Tampa, Florida.”

Sontag’s aim is to solve the problem of this distance by bringing to life the photographic image of the suffering and tormented body that is generally located in some other part of the world. She asks, can the pain of others be shared across the photographic image of the dead?

In Western liberal democracies with regular elections, where large sections of the public oppose war, governments are desperate to avoid harrowing images of dead soldiers or innocent men, women and
children being killed as a result of military blunders. Just think of the Israeli-Palestinian conflict, where children are constantly killed and injured in Gaza and the West Bank, and the problems this is causing for Israel in the media. This dilemma will only be resolved by moving humans away from the battlefield.

The photograph titled The Situation Room, taken by Pete Souza at 4.06pm on 01 May 2011, epitomises contemporary warfare. The Commander-in-Chief, President Barack Obama, is seen with his National Security team in the White House watching a live video feed from a drone flying above Operation Neptune Spear undertaken by US Navy Seals. This operational raid led to the killing of Osama bin Laden. Although photographs were taken of the dead body of bin Laden at the time of the raid, they have never been released. The photographer is not in the conventional idea of where the battlefield is located; neither are the participants as they watch the operation in Washington some 7600 miles away from the action in Pakistan.

This is a window on the future of warfare, with the emphasis on using small groups of specialised troops to conduct precise missions and using sophisticated technology to replace humans. This year’s Ministry of Defence report, Global Strategic Trends – Out to 2045, outlines the role that robots will play over the next 30 years. “Robots, or ‘unmanned systems’ – machines capable of carrying out complex tasks without directly involving a human operator – are likely to be as ubiquitous in 2045 as computers are today... The increased capability of robots is likely to change the face of warfare, with the possibility that some countries may replace potentially large numbers of soldiers, sailors and airmen with robots by 2045.”

In the not too distant future, robots, not humans, will conduct war. This raises ethical questions: how will a robot make its own decisions in combat? Some US universities, funded by the US Navy, are already developing software for war machines to act ethically and morally by designing a set of algorithms to control their actions in battle. These fully autonomous, lethal robots will have a moral agency to decide right from wrong, and have their own intelligence to decide if a weapon should destroy another robot or human.

This might sound far-fetched and too much like science fiction, but cameras have been making ethical decisions on behalf of humans for many years. What is a good photograph? For most humans, the image needs to be in focus and have good colour saturation, and the majority of us leave the camera to make these decisions. We already have many fully automated cameras, such as CCTV, Google Earth and photo booths. With developments such as facial recognition, data collection and heat sensors, cameras are becoming more autonomous. The calculations for making an image are now a set of algorithms built into the camera body. With cameras attached to missiles and drones, photojournalists will be machines – and in many respects they have been since the first Gulf war.

The very act of taking photographs is part and parcel of the changing relationship between humans and technology. This is the ‘technical surprise’ for photography that humans are not needed on the battlefield, partly because in the West we do not want to see other humans dying.

What space is left for human action? At the moment it might be playing with machine imagery, looking at the implications of distance in the media, and realising that war is not something far away, but much closer to home.

Here, I suggest some of the photographers and artists who have, in their work, engaged with the question of distance in warfare. For some time, Trevor Paglen has been photographing military bases in remote locations. With the use of high-powered telescopes, Paglen creates blurry, out-of-focus images of military landscapes and images of small, unrecognisable flying objects that are only just determinable in the sky. These photographs give the impression of distance, but they are more about psychological distance and what is hidden nearer home. We have learned to place war somewhere else, but these photographs are of the so-called ‘black world’, the test and training ranges in the Nevada desert. They are photographs taken in America’s own backyard, and Paglen has brought the Afghanistan war back home.

In a feature on Paglen in The New Yorker entitled Prying Eyes (2012), the artist talks to the writer Jonah Weiner about his project that involves photographing anonymous suburban offices in Long Island connected to the rendition of terrorism suspects. “‘Here’s the thing that’s weird about this shit,’ Paglen said, after we returned to the car. ‘We are on a totally ordinary street – totally whatever. We couldn’t be doing something more boring. And yet, you know, I get a bit jittery. What is that? It was uncanny to see the black world and the white world integrated so seamlessly. For me, it’s way weirder.
1 An Australian official photographer, believed to be Captain G H Wilkins (later Sir Hubert Wilkins, the polar explorer), and his assistant set up a camera and tripod on a tank near Ronnsoy on the Western Front. Made by Australian official photographer, 05 October 1918. Part of the Australian First World War Official Exchange Collection, held at Imperial War Museum. Image © Imperial War Museum

2 Vice President Joe Biden and President Barack Obama, along with members of the National Security team, receive an update on the mission against Osama bin Laden in the Situation Room of the White House on 01 May 2011. A classified document seen in this photograph has been obscured. Image © Pete Souza / White House

3 Images from Fifty-One Military Outposts, 2010. 45th Operations Group, Ascension Auxiliary Airfield, Ascension Island (7°58'12"S 14°23'32"W); 407th Air Expeditionary Group, Camp Adder, Nasiriyah, Iraq (30°56'13"N 46°5'27"E); Naval Support Activity, Manama, Bahrain (26°12'21"N 50°36'40"E); Prime Base Engineer Emergency Force, Camp Justice, Diego Garcia (7°20'S 72°25'E). Images © Mishka Henner

4 #NotABugSplat, a giant installation that targets predator drone operators sitting thousands of miles away who refer to kills as bug splats. It is the creation of an artist collective in Pakistan and the US, including the French artist JR, and was launched with the support of Reprieve/Foundation for Fundamental Rights. This image is downloadable free from website #NotABugSplat (for peaceful purposes only).
than the stuff that’s in the desert.”

Edmund Clark’s Control Order House (2013) has the same quality. Somewhere in the UK, in a suburban house, a man suspected of involvement with terrorist-related activity had been placed under a Control Order and detention in an unremarkable house. Clark’s use of a point-and-shoot camera emphasises the everyday appearance of domestic living, with curtains, wallpaper, carpets, lighting shapes and even a cat taking on a different dimension. Everything becomes a sign of the global war on terror.

**Aerial photography**

During the Cold War, aerial photography played an important role in defining the limits and boundaries of military and political power. During the Cuban Missile Crisis in 1962, the US used the U-2 reconnaissance aircraft to fly over Cuba to find visual proof that the Soviet Union was placing nuclear missiles on the island. Aerial photographs from these flights were circulated to the media as evidence of how the Soviet Union was undermining the existing strategic balance of power between the two nations.

Many of the meetings on the crisis took place in the newly opened Situation Room in the White House, which had opened the year before, in 1961, in response to the failed invasion of Cuba at the Bay of Pigs. Over a period of 50 years, military planning and command went from aerial photography to live video feed; however, both image schemes are looking down on the world below.

Mishka Henner has used freely available aerial imagery from satellite systems such as Google Earth for many of his projects. For 51 US Military Outposts (2013), he used information available from official US military and veterans’ websites and forums, domestic and foreign news articles, and official and leaked government documents and reports to picture US military bases around the world. These bases are part of the semi-secret locations that mark the present power of the US military. Henner’s intention was to depict this world from a military perspective, a world of pure strategy and logistics that controls space from above and below.

The project #NotABugSplat, involving the artist JR and Reprieve/Foundation for Fundamental Rights, intervenes into this space of being surveyed from above, looking back at who might be watching you. In military slang, drone operators often refer to kills as ‘bug splats’, since viewing the body through a grainy video image gives the sense of an insect being crushed. The aim of the project was to raise awareness of the civilian casualties killed in drone strikes.

A large black-and-white portrait of a young child who is said to have lost four members of her family was installed in a field outside a village in the northwest border region of Pakistan, recently targeted by drone attacks. Drone operators would now be confronted with this image, rather than anonymous ‘bug-like’ dots on their camera screen, hopefully persuading them to think twice.

In the excellent book The Great War and Modern Memory (1975), Paul Fussell writes about the inadequacy of English literature at the start of the 20th century to describe the horrors of trench warfare. It was only later, in the 1930s, that writers found the language that could translate the experience of the Somme and Passchendaele in any meaningful way. Have we come to the same moment at the beginning of the 21st century in describing and representing warfare?

The First World War has left a profound legacy on British culture and life. The pub closing in the afternoon to stop munitions workers idling away their time over beer, D notices to stop the press reporting on news stories that might undermine the state, the use of wristwatches in the trenches to co-ordinate creeping barrages, the use of paper banknotes to save the use of metals, and photographic illustrated magazines to keep morale high. They all impinge on our lives today, 100 years later at the beginning of the 21st century, with restrictions on entertainment, censorship, the control of time and space, limitations on the use of valuable materials, and the important role of imagery in creating artificial distance between what is called the battlefront and the home front.

The ‘technical surprise’ fundamentally changes warfare, and it also fundamentally changes photography. What are the consequences of humans moving away from the battlefield, both as soldiers and photographers leaving warfare to machines to create a kind of digital battlefield for robots? We should consider these changes. Even on a simplistic level and leaving aside who might judge the images, should World Press Photo consider starting a category in its annual competition for machine-made images? On a more profound level, the photographers and artists mentioned in this piece (and there are others) raise questions about the shifting relationship between cameras, photography and humans at war.