Detlef Briesen [ed.]

Armed Conflict and Environment
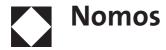
From World War II to Contemporary Asymmetric Warfare

Nomos

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Introduction. Armed Conflict and Environment –
War Impacts, Impacts of War, and Warscape

Detlef Briesen

This volume gathers contributions from a conference on War and Environment that took place at the University of Social Sciences and Humanities, National University of Vietnam, Hanoi, (USSH) in autumn 2014. The conference which was generously funded by the DFG (German Science Association) and supported by Prof Pham Quang Minh and Prof Hoang Anh Tuan of the USSH in a wonderful way brought together an international group of scientists. They discussed the connections between war and the environment using the example of the war that is internationally denominated the Vietnam War – in Vietnam itself, the war that lasted from the early 1960s to the mid-1970s is called the American War. The expertise gathered at this time with participants from Vietnam, Cambodia, Germany, the Netherlands, Norway, France, the USA, Japan and India seemed to suggest publishing an anthology on this topic.

While the Vietnam War was originally taken for the conference only as a (frightening) example of the connection between war and environment, it soon became clear that a historical classification was solely meaningful if the history of this interdependence was traced back at least for the entire 20th century. Only in this way was it is possible to understand the changes that took place during this period, for which the Vietnam War somehow is a culmination and a turning point at the same time. We will come back to this aspect later; first, we will deal with the two basic concepts of the conference, *war* and *environment*.

Looking for a definition, *war* is often understood as an organized type of violent conflict employing weapons and other agents of violent action, or *äußerste Gewalt* (utmost force) as Clausewitz put it, to impose the will of another party on one party. According to Clausewitz, a war does not begin with the attack but with the defence, i.e. the decision to resist the attempt to get one's own actions determined by others. According to Clausewitz' classical theory, war is an organized conflict which is fought out with considerable means of arms and violence. The aim of the participating collectives is to assert their interests. The resulting acts of violence

specifically attack the physical integrity of opposing individuals and thus lead to death and injury. In addition to damage to those actively involved in the war, damage also always occurs, which could be unintentional or intentional. Therefore, war also damages the infrastructure and livelihoods of the collectives. There is no uniformly accepted definition of war and its demarcation from other forms of armed conflict. Wars can, therefore, be classified into different basic types, whereby previous definitions often still concentrate on armed conflicts between two or more states. In addition, there are also guerrilla wars between a population and an enemy state army, civil wars, the struggle between different groups within a state, sometimes even beyond state borders, and wars of nationalities and independence. *Wars* are sometimes separated from *armed conflicts*, the latter are regarded as sporadic, rather accidental and non-strategic armed clashes between fighting parties. Since the end of the Soviet Union, so-called asymmetric wars, in which state-backed, conventionally highly superior military forces on the one hand, and opponents balancing their weakness with guerrilla techniques on the other, have multiplied. Examples of such a conflict are today's *war on terror* or the US drone war and the actions of Israel and Russia in the Middle East. These asymmetric wars, in particular, are now often semantically downgraded to police actions.

Despite intensive discussions, it was not possible to find a uniform definition under international law that restricts the concept of war. The Conference for the Reduction and Limitation of Armaments (1932–1934) therefore replaced the unspecific term *war* with the clearer *use of armed force*. The United Nations Charter banned not *war* but the *use or threat of force* in international relations in principle[1] and allowed it only as a sanction measure adopted by the Security Council or as an act of self-defence. The Geneva Conventions use the term *armed international conflicts* to be distinguished from other forms of violence, such as internal conflicts. What an international armed conflict is, however, is not defined by the Geneva Conventions. The same is true for other types of violence, as a result of this unclear terminology, it can be helpful to look at the history of armed conflict instead.

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1 "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations." Charter of the United Nations, Article 2, paragraph 4, in: http://www.un.org/en/sections/un-charter/chapter-i/index.html)

Historically, until Napoleonic times, the history of war fluctuated between the two poles of an agonal war and an unlimited war that primarily affected the population not directly involved in the fighting. Examples of this are the so-called Cabinet Wars of the 18th century and the Thirty Years' War. To what extent this subdivision could only have been fiction shall not be answered here, after all, it is important to emphasize that even this subdivision has only been applied to conflicts between states. Many uses of violence against actors declared *non-state* have therefore not been taken into account. Under international law at least, an important caesura occurred in the 19th century: its fundament was the continuing warfare in the 19th century and the increasing role of the modern armaments industry for war (visible in the Crimean War, the American Secession War and the German and German-French War). Since then, the first attempts were made to limit and regulate armed conflicts, which established themselves as modern international law. This resulted in a codified martial law or law of armed conflict. Its most important cornerstones were already laid before 1914:

- firstly, the Geneva Convention of 1864 primarily provided for the humane care of war victims;
- secondly, and the Hague Convention of 1907, which for the first time strictly separated civilians and combatants.

The latter also laid down a revolutionary sentence in Article 22: "The right of belligerents to adopt means of injuring the enemy is not unlimited."[2] The most important thing about this provision was the fact that it introduced a principle to limit warfare in international conflicts – and that this principle was increasingly ignored in the real warfare of the 20th century. If one looks at it from a European perspective, the Balkan Wars already ushered in an era of extreme violence, including the Colonial Wars and the wars in Asia, one can even understand the Hague Convention as a document of an epoch in which warfare increasingly began to evade control. Without a doubt, however, in the First World War the use of machine guns, tanks, airplanes, submarines, battleships, poisonous gas and the total war economy led to a new face of war. Field and naval battles claimed millions of lives and millions of people were seriously injured. However,

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2 See International Committee of the Red Cross: https://ihl-databases.icrc.org/ applic/ihl/ihl.nsf/Article.xsp?action=openDocument&documen-tId=56AA246EA8CFF07AC12563CD0051675A.

the wars on the various fronts waged between 1914 and 1918 were by no means the only acts of violence attributable to the collapse of the international order in 1914. What followed the peace treaties since 1919 was rather a continuation of violence at various levels: civil wars, revolutions, anti-colonial uprisings, mass murders, expulsions, wilfully produced famines and, last but not least, major international conflicts such as the Japanese-Chinese wars. There was, therefore, a gradual transition from World War I to World War II rather than a definitive period of peace in the 1920s and 1930s. Such an idea is apparently decisively determined by the propagandistic appropriation of history, as it was apparently pursued by the victorious powers of the Second World War in retrospect.

Like the first, this began as a conventional war, but quickly and unstoppably became a total war. State-controlled war economy, martial law, general conscription and propaganda battles on the home front involved the peoples completely in the fighting. The mobilisation of all national reserves for war purposes removed the distinction between civilians and combatants. Warfare, especially in Eastern Europe and East Asia, largely ignored the international law of armed conflict:

- by an ever-escalating bomb war, especially on targets in densely populated areas, which culminated in the Allied bomb attacks on Germany and Japan;
- by combining territorial conquest and mass killings of civilians on the Eastern Front and in China;
- by leaving to die millions of POWs;
- by the strategy of the *burnt earth* in the theatres of war in East Asia and Eastern Europe;
- by the atomic bombings of the USA on the Japanese cities Hiroshima and Nagasaki.

With the surrender of the Wehrmacht and the Japanese Empire in 1945, however, this history of violence by no means came to an end, despite the founding of the UN. Especially in the Korean War, it continued as a more or less direct confrontation of the superpowers of that time. It was only with the establishment of a Balance of Power, around the mid-1950s, that a new chapter in the war history of mankind began. Most of the wars that then took place until the collapse of the Soviet Union in 1991 were so-called proxy wars. A proxy war is a war in which two or more major powers do not engage in direct military conflict, but instead, conduct this military conflict in one or more third countries. The third countries thus act

quasi as representatives of the major powers that are often *only* involved in the background.

The proxy war is characterized by the fact that a conflict, civil war or war that usually already exists in third countries is exploited for the respective own purposes of the major powers involved and, if this is not yet the case, expanded into a military conflict. The primary goal of the major powers in the proxy war is to preserve or expand their respective spheres of interest at the expense of the other major powers. The warring parties in the third countries receive direct or indirect support with the aim of helping the respective warring party to victory. The support can be indirect through military aid, logistical, financial or other, or direct by military intervention. The sphere of interest of the supporting great power is expanded and strengthened by a victory of the respective war party. The main cause of a proxy war is generally the fact that the major powers involved do not want a direct military confrontation. Under the conditions of the Cold War and the nuclear weapons of the superpowers, this was a basic condition that ensured the survival of mankind. The level of violence and war destruction was even higher in some proxy wars (especially like Korea, if you consider this conflict as a proxy war and in Vietnam) than on the western and southern fronts of World War II; among other things due to the further development of weapons and because another aspect was added there, the complete destruction of the human and natural environment.

Characteristic of the period after 1987, the beginning of the disintegration of the Eastern Bloc, were initially major international military interventions, which were legitimized by decisions of the World Security Council and were considered supranational peace missions. In a second phase, they were replaced by unilaterally decided military actions, which NATO and finally the USA carried out alone with the respective *coalitions of the willing*. In the meantime, asymmetric wars have prevailed. An asymmetric war is a military conflict between parties that have very different orientations in terms of weaponry, organization, and strategy. Because asymmetric warfare differs from the familiar image of war, the term asymmetric conflict is also used. Officially, they are often portrayed by the hegemonic side as police actions.

Typically, one of the warring parties involved is so superior in terms of weaponry and numbers that the other warring party cannot win militarily in open battles. In the long term, however, needle-sting losses and weariness caused by repeated minor attacks can lead to the withdrawal of the

superior party, also due to the overstretching of its forces. In most cases, the militarily superior party, usually the regular military of one state, acts on the territory of another or its own country and fights against a militant resistance or underground movement.

Let us now turn to the second term, the environment. This has a basically similar complexity as the term war, since the term environment can signify different meanings in the context of various discourses: in political-ecological debate, in the humanities, in system theory, in organizational theory, in science, and in biology in particular.

Since this anthology is a contribution to a novel debate on armed conflict and environment, a restrictive definition is not given below. Rather, the aim is to show the various options for dealing with the interdependencies between armed conflicts and *environments* on the time axis outlined above and at various levels. The relationship between war and the environment can be summarized in three models or systematizing questions.

1. *What are the effects of the human and natural environment on war, its course and the way war is fought?*

This is the longest of any discussion of the subject. The leading military theorists always have known that an entire war or single military operations do not take place in sandboxes, but in the field of battle. Since the Napoleonic Wars, the social conditions of war, Clausewitz called it *will*, have repeatedly being discussed, taking into account the influence of natural factors on warfare, terrain and geostrategic space for warfare in particular. A look at military theory of the 19th and 20th centuries still provides interesting insights into the role of the human and physical environment in warfare: Carl von Clausewitz, Alfred Thayer Mahan, Charles Edward Caldwell, and Mao Zedong, to name but the most important contributors. Today, this approach is often being expanded to ask how the change in natural environments has generated wars – we can consider the role El Nino on Mezzo-American civilizations, the Little Ice Age, or climate change.

2. *How are wars, their course and conduct, influenced by human and natural environments?*

Furthermore, there has long been a manifest complaint about the devastation of war, for example in Europe in relation to the Thirty Years' War. However, a more systematic approach to the consequences of the war did not emerge until much later. With a view to the destruction of the human environment, especially since the First World War, in relation to the natural environment, not before the 1950s, initially in the context of the debates on the consequences of the nuclear winter. The first historical war in which a specific combination of peace research and pacifism combined with modern scientific methods was the American War in Indochina and the resulting damage to human and natural environments deliberately caused by the USA. These approaches were then further elaborated in the analysis of the Second Gulf War. The result is a current state of research that has put the actions of the most warlike nation of the second half of the 20th century, the USA, at the centre of attention, particularly in the field of the destruction of nature.

3. *How can we understand war as a human-natural interaction system?*

This approach begins to prevail only in recent years and it is based on system theory and on adoptions of ecological concepts on war. The basic idea of an ecology of war puts Micah Muscolino very well. I quote from him:

> "Environmental factors mold the experience of war for soldiers and civilians alike, while war and militarization transform people's relationships with the environment in enduring ways."[3]

This means that, especially under the conditions of total war, complex war-landscapes emerge, which – compared to times of peace – are based on completely different relationships of mankind to the natural and man-made environment. Or vice versa: that natural and man-made environments predispose human behaviour in a different way than is the case in peacetime. The war, as Kurt Lewin had already recognized in 1917,

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3 Mucsolino, Micah S. (2015): The Ecology of War in China. Henan Province, the Yellow River, and Beyond, 1938–1950. Cambridge. 3.

changes people's view of their environments just as much as the war environments change people.[4]

   The contributions gathered here attempt to understand these three aspects of the relationship between armed conflict and the environment for the historical developments outlined above in the 20th century: from the total wars of the first half of the century to the Vietnam War as an example of the proxy war par excellence to today's asymmetric wars in Sri Lanka and India. Reading this will reveal an implicit division of tasks.

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I.
Until 1955

The War-Landscape of Stalingrad.
Destroyed and Destructive Environments in World War II

Detlef Briesen

1. Introduction: Warscape

This article uses an infamous example, the Battle of Stalingrad, one of the peaks of the Second World War in Europe, to make the idea of the war-landscape or *warscape* productive for the analysis of wars. This is done to show the connections between war and the environment in a broader sense, which includes both the environment lived and built by man and the natural environment. The Battle of Stalingrad was the most loss-making battle of the Second World War in Europe. Although estimates differ somewhat, it seems clear that the troops of the Axis powers – Germans, Italians, Romanians and Hungarians – together had to mourn about half a million dead and prisoners. About 150,000 German soldiers from 300,000 before the beginning of the battle died in the fighting or as a result of hunger or cold. With the end of the carnage, some 108,000 men fell into Soviet captivity, from which only 6,000 survivors returned to their home countries by 1956. The losses of the Red Army were similarly high; it also suffered about half a million deaths. About another 500,000 combatants were wounded or fell ill during the battle. In addition, numerous civilian deaths occurred on the Soviet side.

Recent studies show that this gigantic massacre and the appalling treatment of prisoners of war and civilians by both sides cannot be attributed solely to the will of two ruthless dictators, Hitler and Stalin who fought a prestige duel on the Volga. Their unconditional will to win a war beyond all international conventions, which the German side had triggered, may explain the carnage in parts. The battle was actually fought over a strategic line of communication, the Volga, which was to prove decisive for the further course of the war. But above all, it should be borne in mind that the acts of violence took place against a background of continued lack of

peace in an area that Timothy Snyder rightly described as *bloodlands*.[1] This was a consequence of the First World War. In large parts of Central, Central-Eastern and Eastern Europe, the war and the subsequent peace treaties had broken up the old European empires and inspired dreams of new national greatness. The dynastic idea – Romanov, Habsburg, and Hohenzollern – was replaced by the fragile concept of popular sovereignty. Since then, millions of people have been prepared to obey orders, fight, die or commit the most heinous crimes in the name of the nation. In the interwar period, in Europe between 1919 and 1939, states were often arbitrarily defined and hundreds of thousands of people were murdered or displaced.

In the former Russian Empire, the Soviet Union in particular, violence and even genocide continued with millions of deaths already prior to 1941. Keywords must suffice here: revolutions, civil war, famines, Holodomor, forced collectivization and mass deportations. This per se non-peaceful world was invaded by other violent actors, the troops of Nazi Germany and its allies. Terrible events that took place under German rule in Central-Eastern and Eastern Europe are all too well known, especially the Shoah, to a lesser extent the mass killings of Poles, Belarusians, Ukrainians and other peoples of the European East.

In short, the Eastern Front of the Second World War was in an area of the world that had been anything but peaceful even before the German invasion in 1941. This fact played a decisive role for all the key actors in this conflict and for their personnel, soldiers, mass murderers and war mongers too. It also determined the formation of a terrible, unique war landscape, the Eastern Front, which we are trying to approach here with the term *warscape*.

The term is derived from considerations that Kurt Lewin, one of the founders of Gestalt and social psychology, had developed from his own war experiences, among other things.[2] These considerations are based on the fact that there is a connection between a war and the natural and cultural landscape in which the war is fought. It is not only about objective conditions, but also about the combatants' ideas about and perceptions of the natural and cultural landscape in which a war takes place. As a result,

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1 Snyder, Timothy (2010): Bloodlands. Europa zwischen Hitler und Stalin. München. 23ff.
2 Lewin, Kurt (1917): Kriegslandschaft. In: Zeitschrift für angewandte Psychologie 12, 440–447.

there are many connections between the landscape and the way in which war is waged, which could be described as a specific entity, war-landscape. War-landscapes or warscapes are areas marked by violence and insecurity. It is, therefore, to be expected that the Eastern Front was not only because of Hitler's and Stalin's murderous intentions a much more terrible theatre of war than the Western and Mediterranean fronts. The structures of violence that ruled Eastern Central and Eastern Europe before 1941 also contributed to the extreme inhumanity of the fighting, with which the German side, in particular is by no means exculpated for its mass murders.

A specific warscape depends on many factors, for example, terrain, climate, buildings and other components of human-influenced environments. The term *environment* is therefore not only understood here in terms of environmental protection. Other environments also influence warscape, including of course the military itself and its development during a long war. This story of the rise of the Red Army and the decline of the Wehrmacht belongs to one of the best described areas of historiography about the Second World War. The following, mostly excellent works of art also provide indirect or direct information about the changes in the war-landscape: Beevor (2014), Beevor (2010), Craig (1973), Glantz/House (2017), Keegan (2004), Merridale (2006), Overy (2000), Overy (2012), and Ulrich (2005).[3]

Warscapes also have an iconic function, especially after the end of a war; Stalingrad is a particularly remarkable example of this. As early as the 1950s, Stalingrad became a symbol of West Germany's concern with the horrors and crimes on the Eastern Front.[4] This was conducted under moral, at first predominantly even religious auspices, which at the same time refers to the turn to the Christian roots of German culture that took place after the Second World War, resulting in numerous films, novels, factual reports and first editions of military mail.[5] These historic sources also contain numerous testimonies to the changes in the war-landscape that happened especially in the last weeks of the Battle of Stalingrad.

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3 The detailed bibliographical references can be found in the literature list below.

4 See e.g. Förster, Jürgen (ed.) (1992): Stalingrad. Ereignis, Wirkung, Symbol. München. Kumpfmüller, Michael (1995): Die Schlacht von Stalingrad. Metamorphosen eines deutschen Mythos. München. Wette, Wolfram/Ueberschär Gerd R. (eds.) (1993): Stalingrad. Mythos und Wirklichkeit einer Schlacht. Frankfurt.

5 See e.g. Kluge, Alexander (1964): Schlachtbeschreibung. Frankfurt.

In particular, attempts were made to reconstruct the perception of simple German soldiers. For this purpose, collections and analyzes of military mail, which are now available in increasing numbers, are suitable. They show – so the general picture – the attitude change of most soldiers: Initially, there was obviously a mixture of hubris, feeling the need to defend the homeland, duty and skepticism. Depending on the location and the experience of the war, military mail expressed increasing doubts, fears, longings, and desperation.[6] Even the original sense of superiority to the Eastern Europeans, or even the affirmation of the racist propaganda spread by the Nazi regime, was being replaced by personal opinions about individuals.[7] This process has been so often described by the German side that it is not depicted here. On the other hand, editions of Russian experience reports beyond hero worship, which continued even after 1991, have so far been rather rare. Much has been edited and published with German help.[8]

It is important to emphasize that there was not a single warscape Stalingrad. Perception, action and suffering of the war took place on various levels. These are therefore reconstructed at four levels: that of the politico-military leadership of the war, that of the operational leadership and that of those involved in the struggle. Finally, a fourth war-landscape is presented, which was museumized after the end of the Second World War. In short, the article tries to answer an important question that John Keegan asked: What could the individual even see in battle?[9] In this way, it is to be prevented that the retrospective interpretation, which always characterizes the historical analysis, becomes too important here.

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6 For example see, Wiesen, Bertold (ed.) (1991): Es grüßt Euch alle, Bertold. Von Koblenz nach Stalingrad. Die Feldpostbriefe des Pioniers Bertold Paulus aus Kastel. Nonnweiler. Birnbaum, Christoph (2012): Es ist wie ein Wunder, dass ich noch lebe. Feldpostbriefe aus Stalingrad, 1942–43. Königswinter.
7 Kipp, Michaela (2014): Grossreinemachen im Osten. Feindbilder in deutschen Feldpostbriefen im Zweiten Weltkrieg. Frankfurt.
8 See e.g. Ebert, Jens Ebert (ed.) (2018): Junge deutsche und sowjetische Soldaten in Stalingrad. Briefe, Dokumente und Darstellungen. Göttingen. Hellbeck, Jochen (2012): Die Stalingrad–Protokolle. Sowjetische Augenzeugen berichten aus der Schlacht. Frankfurt.
9 Keegan, John (1978): Das Antlitz des Krieges. Düsseldorf. 147ff.

2. The Global Warscape

Let us first take the perspective of the leaders of the Second World War, Hitler, Stalin, Churchill, and Roosevelt. Certainly the big perspective was their agenda. It can be reconstructed in the following way.

Wars, civil wars, anti-colonial rebellions, revolutions, famines, massacres and revolts continued to take place in the 1920s and 30s. Anything else would be right but to call this epoch a time of peace between two world wars. The First World War had finally destroyed the post-Napoleonic peace order. Immediately after the end of the Great War, the still most powerful loser of the First World War, the German Empire, was subject to considerable control by the victorious powers of Great Britain and France. However, this dominance was already lost by the end of the 1920s, which was due to a plethora of factors: the conflicting interests between the Great Powers, the beginning collapse of the colonial empires, the extreme economic vicissitudes, etc. had led in Europe and Asia to the final disintegration of an international order, which the victorious powers had aimed at building up during the Paris Peace Conferences since 1918. One result of this was the rise of the Hitler's Empire in Europe and the Japanese Empire in Asia, which in turn had enabled the German attack on the Soviet Union in the summer of 1941. The German goal was to restore under racist conditions the empire in the European East which it had gained for a few months in the peace treaty of Brest-Litovsk already.

But Nazi Germany's military operations had not achieved the intended goals in the war against the Soviet Union until the spring of 1942. The Blitzkrieg got stuck in mud, snow and ice, and in particular, the Wehrmacht failed to capture the strategically important Moscow. Therefore, a new offensive was planned for the summer of 1942, which at the same time changed the overall objectives of German operations. The German OKW, and especially Hitler himself, believed that the Soviet Union had been largely defeated and wanted to put it to death in a *second blitzkrieg*. By a major offensive in eastern Ukraine, the Soviet Union was to lose decisive agricultural and industrial resources, especially as the offensive had an even more ambitious goal: the Soviet Union was to be cut off from the supply from the Cape oil fields, the areas were eventually even to be conquered by the Wehrmacht. Caspian oil was central to motorized Soviet warfare; but until the attack in the summer of 1941, Germany had also obtained most of its oil from there. Since the war in the East took much longer and was much more internecine than planned, central resources for

German warfare began to be scarce. This was due to the cut off of Central Europe from the world market and the low availability there, in particular, due to the insufficient production of crude oil.

The German summer offensive received the name *Fall Blau* (Case Blue) and reached its operational goals very quickly: One reason was that the Soviet defensive potential was initially insufficient because the Stavka had expected a German offensive on Moscow. By the summer of 1942, about 50 percent of the Red Army had been concentrated there. Therefore, the result of the three attack phases from late June to November 1942 was initially very impressive from a German point of view: until the onset of winter, the Wehrmacht had conquered large parts of the area between the Black and Caspian Seas. First oilfields were under German control, the western bank of the Don River had been won as a defensive line. The German troops also managed to reach the Volga River at Stalingrad, thus occupying a strategically important place in large parts. However, again the Germans had failed to defeat the Red Army decisively.

Looking at the German orders prior to the beginning of *Fall Blau* an important aspect is missing, which should prove crucial for the entire course of the Second World War and the perspectives of Stalin, Churchill and Roosevelt: the battle was central to keeping open the Persian Corridor. This aspect has long been overlooked, especially in German scholarly literature: either because the global context of the battle was unknown to the authors or because the OKW, on which actions the historiography was essentially based, had also no knowledge about the real relevance of the battle for the Allied side.

The latter, however, is rather unlikely, because since 1925, with the seizure of power by Reza Shah an intensive collaboration between the German Reich and Persia had begun. It was especially at the expense of Great Britain, which had agreed with Russia on a joint, informal control of Iran before the First World War. After the Great War, in particular, Britain controlled Iran's oil production in the Persian Gulf and operated the then world's largest refinery at Abadan. This presence was threatened by the German *development aid* for Persia and the phased cooperation with the USSR, first and foremost by the largest project, which had been tackled with German aid: the construction of a Trans-Iranian Railway from the Caspian Sea to the Persian Gulf. However, the further expansion of the Trans-Iranian Railway came to a standstill with the outbreak of the war between Germany and Great Britain in September 1939.

In the following it becomes more apparent, in which global war land-scape of great powers, political and natural geography and central re-sources the Battle of Stalingrad was integrated. Despite the fact that the Persian government had already declared its neutrality with the outbreak of the war in 1939, Persia was increasingly involved in the fight to control the Middle East that broke out between Hitler's Germany and the British Empire after the collapse of France in 1940.

The tensions continued to increase with the German attack on the Sovi-et Union. Already two weeks after the assault, in early July 1941, the British Government ordered its military to plan an attack on Iran support-ed by the Soviet Union. But immediately after the German invasion, the Soviet Union had no resources for such an operation and officially de-clared that it would see no threat to relief supplies from Britain and the US via the Trans-Iranian route. This changed abruptly as it became clear how vulnerable other supply routes were: Turkey prohibited the transport of military goods through Dardanelles and Bosporus, the northern route to Murmansk and Arkhangelsk proved extremely endangered by German at-tacks. The long supply routes from the USA to the Russian Pacific coast could be stopped at any time by Japanese interventions.

Therefore, on July 23, 1941, the British and Soviet governments agreed to occupy Iran. A joint operation plan for it was already created until Au-gust 7, 1941. The aim of the joint *Operation Countenance* was to secure the Iranian oil fields and at the same time build up a secure supply line through Iran. It would allow military supplies to be transported by ship from the United States through the Suez Canal to ports on the Persian Gulf. From there, the supplies could then be transported by rail and road to the Caspian Sea, and finally by boat across the Caspian Sea and the Volga to the interior of Russia, to the industrial areas and to the fronts. On Au-gust 25, 1941, British and Russian soldiers invaded Iran, which among other things led to the abdication of the former Persian emperor in favour of his son Mohammed Reza. The Allies assured him of full national sovereignty after the end of the war. In return, the Allies were granted full control over all transport and communications links such as railways, roads, airports, ports, pipelines, telephone networks and radio. Thus, the transport route from the Persian Gulf through Iran to the Caspian Sea and then on ships to Astrakhan was open.

The aid deliveries on the Trans-Iranian route started quickly, especially as the US was soon directly involved in their organization in Iran. Already on September 27, 1941, an American military mission began work in Iran.

American technicians and specialists built and ensured safe traffic through the Persian Corridor to ensure massive military material support for Soviet troops. The Americans improved the Iranian infrastructure by constructing port facilities, roads and assembly halls for aircrafts and trucks.

In October 1942, the American troops took over the primary responsibility in Iran. The US *Persian Gulf Command (P.G.C.)* replaced the British troops and began with the beginning of the Battle at Stalingrad the delivery of many millions of tons of material directly to the fighting Soviet forces through Iran, weapons, planes, food, clothing, and medicines. The supplies were crucial for the Battle at Stalingrad but even intensified with the final end of the fighting on the Volga in the late winter of 1943. Therefore, Stalingrad was a victory of the Allies, which went far beyond the narrower operational objectives: The transport route across the Volga was free-fought; the Persian corridor proved to be crucial for the subsequent military operations of the Soviet Union in 1943 and 1944 and therefore for the entire Second World War.

3. The Regional Warscape: the City and its Nature

But the Battle of Stalingrad was also part of a gigantic military operation planned by men like Erich von Manstein, Friedrich Paulus, Hermann Hoth, Vasily Chuikov, Aleksandr Vasilevsky, and on the Soviet side, especially by Georgy Zhukov. What was their perspective?

Stalingrad bore the name of the Russian dictator, and lies on the Volga, a river that has a tremendous national significance in Russia. So maybe the battle there had significant symbolic meaning for the warring parties. More important, however, was Stalingrad's role for Soviet and German warfare. Let's take a closer look at its geographical location and economic and logistic function.

The city is located about 1,000 km southeast of Moscow on the western bank of the Volga, about 400 km north of the mouth of the river into the Caspian Sea. After the effective climate classification, a system dating back to Vladimir Peter Köppen (1846–1940), the city lies in the cold continental climate zone, with cold winters, but also with hot summers and sufficient rainfall throughout the year. Thus, the city is neither lying, as it is sometimes claimed in the Russian steppe, nor are the winters really Siberian cold (on average only -10 degrees in January and February, although there may be temperature extremes below -30 degrees). In 1942,

the city stretched over a width of up to 10 km over 60 km along the western banks of the Volga River. The western banks of the Volga are dominated by hills (the Mamayev Kurgan in particular) and numerous erosion gorges (Balkas) which the Germans called Suchaja-Metschetka-, Banny-, Todes- (Death), Lange- (Long) and Tiefe (Deep) Schlucht (gorge), while the eastern shore belongs to the lowlands of the Volga River delta already. Although the height differences are not large, the city literally watches over the river from its steep western shoreline before it flows into the Caspian basin which was one of the reasons for the foundation of a fortress and later a city there. More additional geographical factors are to be added: The Volga reaches a few km south of Stalingrad the westernmost point of its lower reaches and then turns sharply to the southeast. At about the same latitude, the Don reaches its eastern point; it is less than 100 km from Stalingrad to Kalach-on-Don.

Therefore, the area around Stalingrad was an important trade route since ancient times due to its geographical location on the isthmus between the Volga and Don Rivers. As a result of the military expansion of the Russian Empire, and especially after the conquest of the Crimea and the Kuban area in 1783, Stalingrad (Tsaritsyn) lost its strategic importance and gradually developed into a commercial and economic centre. Above all, the construction of the railway line to Kalach-on-Don in 1862 and to Gryazi in 1872 led to an economic boom and made Tsaritsyn a hub of oil supply and transport links from the Caspian Sea to the Black Sea and from the Caucasus to central Russia. As a result, large-scale industry settled here, including metal and wood processing companies, petroleum refineries for crude oil from Baku, several mills, and tanneries.

The industrial capacity of the city was considerably expanded in the context of Stalin's planned economy in the 1930s. The state-controlled industrialization of the Soviet Union at that time aimed primarily at the creation of an arms industry or industries that could easily be converted from the production of capital goods to military equipment. In the northern part of the city, along the Volga River, there were three huge industrial enterprises: the gigantic tractor plant *Felix Dzerzhinsky*, the gun factory *Barricades* and the metal factory *Red October*. The latter produced until the summer of 1942 about ten percent of all Soviet steel and supplied in particular the aircraft and tank production sites, but also produced rocket launchers. Incidentally, the construction of the tractor factory began in 1926, with the help of the US-company Ford. Four years later, the first tractor from local production rolled off the assembly line of the Stalingrad

tractor plant. Until the war, 300,000 tractors were delivered, especially large tractors of the type of CT3-3, which was also the platform for the T-34 tank. *Felix Dzerzhinsky* was converted entirely to weapons production even before 1941 and became the biggest producer of dreaded T-34 tanks in Soviet Union.

The Mamayev Kurgan separated the industrial heart of the city from its more urban infrastructure south of it. It included other industrial plants, an electricity plant, the central station, grain silos, meat and bread factory, cold storage, brewery, more or less drab cottages, apartment blocks and party buildings, but also the department store *Krasnaja Univermag*, schools, parks and wide avenues. Remaining images of the city convey until shortly before the start of the German bombing raids the impression of a thriving, modern industrial city with theatres, colleges and companies: the parks of the alleged green city invited the residents to linger, and photos show lovers and those seeking relaxation in the parks, and vibrant life on the streets and squares of the city. The war in the far west seemed far away to the city's inhabitants, although within a few years one of the Soviet Union's most important armament centres had been conjured up in Stalingrad.

Was this all just propaganda or fake memory? Probably yes, because in fact the allegedly stony built city at the banks of a mighty river rather consisted of several sometimes huge industrial complexes in the middle of a belt of countless wooden houses and barracks. The latter stretched along the western bank of the Volga and mingled with numerous larger and smaller industrial complexes.

How did the Volga look like? Shortly before the German attack, Victor Nekrasov describes the Volga as a river

> "with greasy, petroleum-pearly waves, reminiscent of an industrial landscape. Here everything is full of serious activity. Here are rafts and barges, sooty, greyish cutters whose steel hawsers strike in the water (...) And now these broad, gleaming waters, completely covered with rafts and full of cranes and long, boring sheds, seem more like an industrial enterprise. And yet it is the Volga. You can lie face down for hours and watch the rafts swim down the river, like the naphta puddles shimmering in all colors. And further on, his comrade Igor says after a bath in the Volga: (...) and in general, this is not a river but rather a naphtha container."[10]

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10 Nekrassow, Viktor (1948): In den Schützengräben von Stalingrad (In the Trenches of Stalingrad). Berlin. 78–79. In the text quoted as Victor Nekrasov, all translations by the author.

The wooden town of Stalingrad was already largely destroyed on August 23 in a day attack by the VIII Air Corps, better set on fire. Through this smouldering debris, the 6th Army moved forward to the Volga River until November 1942.[11] The wooden construction of most of the buildings also explains why the German bombing raids claimed so many civilian deaths and that the street fighting that started in late August was more likely to involve factories and public buildings rather than rows of houses.

More considerations contradict an idyllic picture of pre-war Stalingrad. As a modern industrial city and a highly significant armaments centre, the city must have been subjected to particularly keen surveillance by the NKVD – more about these prerequisites of Russian warfare below. Moreover, Stalin's policy of collectivization and industrialization hardly paid any attention to the central needs of man and nature. It is known from the general literature, for example, how restrictive the living conditions in the housing blocks of the Stalin era were, how poor the diet and how poor the health care. So far, it has hardly been sufficiently documented what damage to human health and the natural environment caused the forced industrialization of Stalingrad, especially by the large mining and armament factories, before they were destroyed by the German bombing raids and during the street fighting. Photos occasionally show smoking chimneys and wooden landing stages, which were used to handle critical goods such as manganese ores and especially oil. But mud and environmental damage were not photographed. In general, pollution was still described with topoi, which interpreted industrial contamination as a sign of industrial wear and tear, bustle and economic prosperity:

> "When the pleasure boats approached the beautiful white city on the Volga (...) they also saw the smoke that rose above the three industrial giants to the sky: the tractor factory, the Red October, the Barricades. Through the blackened factory windows you could see the glowing steel pouring sparks into the pans, and you could hear a heavy roar that sounded like the surf of the sea."[12]

4. The Creation of a Local Warscape

Let us now take a look at the tactical level of warscape. After the late summer of 1942, the pre-war city of Stalingrad could only be transfigured into

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11 Keegan (2004), 33.
12 Grossmann (1946), 41.

an idyll because everything that came afterwards was even by far worse. Nonetheless, even before the Wehrmacht's direct attack, the city with its terrible living and environmental conditions was part of a regional warscape that played a significant role in the overall context of the global war. It determined the actions of those who actually had to fight and die in the war. This aspect becomes more evident when one looks more closely at the events in the first stages of the Battle of Stalingrad. The first German bombers had already attacked Stalingrad in October 1941; since the second half of July 1942 there were air raids almost daily on the city. Nekrasov describes the consequences of one of these first attacks:

> "The southern part of the city is on fire, an ammunition car has also been hit, and the shells are still exploding. A woman's head was torn off. She has just left the cinema. The show just ended (...) Biting smoke that crawls in the throat, creeps out of the houses, spreads on the streets. Under the feet crumbles glass. Bricks, concrete pieces, tables, upturned cabinets. People rush, rush, bustle (...) The smoke spreads over the whole city, covering the sky, biting the eyes and scratching the throat. Long yellow tongues of fire break out of the windows, licking the walls of the corner house."[13]

As early as the beginning of this month, district officials were preparing for a major evacuation of the city, especially for industrial production plants and their employees. First, the leaders of the Stalingrad military district were evacuated with their families to the hinterland; until mid-August they were followed by another 8,000 people from the urban upper class. According to NKVD reports, these evacuations led to considerable unrest among the population of the city, especially as in the same period the order of the People's Commissar for Defence of the USSR of July 28, 1942, Number 227 was issued (Not a step back!). The order made surrender punishable by death, ordered the establishment of firing squads behind attacking troops, and the establishment of penal companies. Since then, all able-bodied city residents, who did not already work for the armaments industry, were conscripted for entrenchment work. Persons could only be evacuated for war purposes: until the devastating air raids on August 23, these included around 50,000 injured Red Army soldiers and their medical staff as well as all children from the municipal orphanages. Despite the ever more threatening situation, the communist leadership pretended that the city could never be taken by the Germans. Even preparations for the new

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13 Nekrassow (1948), 81–82.