*He's a real Nowhere Man/Sitting in his Nowhere Land/Making all his nowhere plans for nobody/Doesn't have a point of view/Knows not where he's going to/Isn't he a bit like you and me?/Nowhere Man, please listen/You don't know what you're missing/Nowhere Man, the world is at your command/He's as blind as he can be/Just sees what he wants to see/Nowhere Man, can you see me at all?/*

*Nowhere Man*, John Lennon 1965

Until 1989, the long-term future did not exist and had not existed since the end of the 1950s. After the end of the Cold War, a sudden rise in debates about the future state of Europe and the World took place. On the one extreme, Kantian prospects for a variety of integration policies flourished (Habermas 1992; Held 1995); and with the 200 years festivities of his *Zum ewigen Frieden*, a whole range of theoretical models of thought about future possibilities appeared in political theories (Kant 1795/1977; Höffe 1995; Rawls 1999). On the other side of the spectre, US military planning had a bath in extremely well-financed investments in a so-called Revolution in Military Affairs, thereby establishing neo-conservative dreams of a unipolar 21$^{st}$ century where the idea of a *Pax Americana* reigned without resistance, without friction and with even more almighty power than the power invested in the Cold War. To some observers, like Robert Kagan, these extremely opposed visions offered the possibility to revitalise an opposition between idealist liberalism and military realism. Long lists of publications gave intellectual and strategic punch to the almighty dreams and when the US High Court elected the younger Bush as president, the dreams of linear technologically advanced strategy gained supreme political authority (Kagan 2002; Vickers & Martinage 2004).

Today, when the disasters of the neo-conservative Middle East campaigns are well known, especially with the still, at the moment in 2014, un-constrained terrorist Caliphate Islamic State in a far riskier position than al Qaeda ever was, it is amazing to go some years back and check the risk analyses. Warnings dominated strategic discussions and had done so for

long (Mack 1975; Lind et al 1989; Shapiro 1999; Echevarria 1996; Tibi 2001a; 2001b). "The strong will lose" according to the more comprehensive strategic thought (Record 2005). Irregular warfare, asymmetric strategies and so-called 4th Generation Warfare can overstretch a superpower (Lind 2004; 2005; Hammes 2006; Thornton 2007). In his well-known magisterial work, *The Rise and Fall of Great Powers* (1988), Paul Kennedy had already warned against such possibilities.

Future prospects come and go, and ideas of almost eternally stable future orders, optimism and pessimism appear and disappear with the same speed as fashions in Paris. The Grand Narratives are certainly not as dead as Jean-François Lyotard observed in *La condition postmoderne* in 1979; but there are many of them, and the narrative of *the* Globalisation is probably the strongest and steadiest. Gone are the days when we could easily operate with distinctions between domestic and foreign policy subjects to international politics and international relations. Rob Walker challenges the classic focus with a conception of "politics of the world" (Walker 2010). I am more concerned how such politics are inherent in the social world, i.e. the social systems with which we live. What does it mean to live with military organisation systems and be subject to existing systems of war?

War is about insecurity and risk. Hence, the analysis of future wars could, for some observers, be the strive for finding eternal wisdom, silver bullets or subscribing to myths of genius, perfect planning, technical systems (drones), and the right decision at the right moment. Colin Gray rightly warns against such fixed ideas (Gray 2009b). With Niklas Luhmann's system theory, I do not subscribe to the sociological popular theory of risk that defines risk as an unpleasant future (Beck 1997; Vedby 2006). Beck's notion of a worldwide risk society ("Weltrisikogesellschaft") can, however, be useful as an overall concept of risky system observations. Yet, we should observe that our observations are from the present moment, which is the risk we run that cannot be escaped. But I will not enter a first-order analysis of what substantially could be unpleasant in an unknown future. War systems are too much about innovation, change and transformation to cling to substantial predictions. Hence, per definition, it is a risky business to observe the state of the world in terms of future wars. This invites to methodological reflections that still may use classical observations to observe the future.

In order to analyse the future, I will first analyse the problem of future risks as a problem. Then, in the next section, I point towards some forgotten heritage from the past that still lives for the future to come: the traumas from past wars. Theoretically too, we have a heritage from the past, namely the still vivid strategical lessons from Carl von Clausewitz and Sun Tzu as well as strategies of asymmetric war, which I analyse in the third section. In the fourth

section, I apply Luhmann's theory of differentiated risk systems. The military systems will continue to respond to asymmetric threats and the risk is this form of inadequacy. Hacker wars, drones and private military companies will develop, but increasing numbers of refugees, for whatever reason, will create disasters that cannot find adequate military solutions.

## I. Two distinctions: epistemological and temporal

If the aim is to look into the future, we should consider two distinctions. One is about knowledge, another about temporality. First of all, we shall be aware of the distinction ontology/epistemology. We can make some substantial predictions about demography, climate change and even, probably, the rise of China; but a less risky haven is to take a look at future epistemologies: We should hesitate to state *what* we will observe in two generations from now; rather, we should observe *how* we will probably observe.

What will be our systems of observation? This question shall not be considered too big in all its dimensions. We cannot observe how all systems will observe, but only some *forms of observations* in some of the social systems (Luhmann 1986; 1991; 1993). What does that mean, and how can we do that? In this article, I shall only consider forms of war and warfare. How do we probably observe war in the future?

One of the best among the many books and articles on future warfare is probably Colin Gray's *Another Bloody Century* (2005a). He establishes a well-founded overview of 12 grand narratives of future warfare: The rise and fall of total war; the obsolescence of major interstate war; 'old wars' and 'new wars' or Fourth Generation irregular wars; new security agendas; geopolitical transformations (China, India, Russia); revolutions in military affairs (RMA), technology as strategy; expanding spatial geography of war; terrorism; weapons of mass destruction; decline of war; and then finally the, according to Colin Gray, most interesting narrative: Our past as our future. Albeit Gray's statement was forwarded a decade ago; I, still, held it worthwhile to test its validity as a prospect for the future to come.

I do agree that without historical analysis, our observations of future wars are lost in dreams. Kantian analyses of future networks of trans- and post-national institutions and norms might therefore carry on more realism than (often) poorly financed technological dreams about military revolutions. After all, Kant's military prospects of a realist peace and Carl von

Clausewitz' Kantian methodology about the form of war are also strongly linked. While peace-semantic stays as an amazingly continuous affair, codes of war and warfare undergo transformations over and over in evolutions and revolutions (Janssen 1979a; 1979b; Harste 2004; 2011; Knox & Murray 2001).

Nevertheless, a number of continuous forms do exist too, for instance in the rather popular, but not always politically recognized, so-called "social cohesion" and corporate spirit among soldiers (Picq 1880/2005; Hansson 2007; King 2007; Harste 2014). Of course, the presence of crusading communication codes in politics, religion and war is another aspect (Roux 2007; Tibi 2001a; 2001b). In the future, we will probably still use Clausewitz, and even the far older Sun Tzu, to analyse war.

Before entering that part of the present analysis, I want to clarify the second distinction as a distinction between the present and the absent. Temporal analysis is an advanced well-known discipline since St. Augustine and, although not overly complex, it is often neglected in social theory. However, the Bielefeld connection between Reinhart Koselleck and Niklas Luhmann has done much to reappraise it (Koselleck 2000; Luhmann 1980; 1990a; 1997: 997 – 1016). Especially, in order to redescribe Clausewitz' analysis in more recent terms, I have applied Luhmann's analysis of systems to a historical and evolutionary theory of the functional system of war as distinct from military organisation systems and used it to establish a theory of risky systems (Harste 2003; 2004; 2009b; 2011, 2014).Today we can observe risk structures and temporal bindings inherent to codes and practices of different social systems as law, finance, war, research, politics, mass media etc. They do not operate with identical temporal structures, and we may risk that their temporal bindings are indeed very different (Luhmann 1991). However, for an initial reappraisal of Colin Gray's point, we should begin the analysis by targeting another set of somewhat more concrete problems.

First, it is well-known that future wars are often planned with past wars in mind. The US army anno 2001 would no doubt be able to win a conventional war against Wehrmacht anno 1941, it might even have built its military organisation and visions in order to do so (Vandergriff 2001; Huntington 1957; Creveld 2007; 2008). Quite late during the Iraq War, US strategists, after a lot of criticism, began to learn from the Vietnam War (Metz 2007; Record 2004; Record & Terill 2004).

Second, history has always been rewritten and will continue to do so in the future to come (Prost & Winter 2004). In a future reaching beyond the present synchronisation of our history into a common story, our past will be transformed to such forms that the medium of history will no longer be the same simple recognisable fact. Gottfried Leibniz proposed that the

present "is pregnant with the future and loaded with the past" (cited from Cassirer 1932/1998: 38). Our past will be our future. This wisdom is not abstract metaphysics, but loaded with concrete details that have overwhelmed us beyond our comprehension.

## II. The future of the Hundred Years War

That the future will be different from the past has been a promise since the Romans restructured the past as the (re-)birth of Christ in blood and flesh as Jesus, an event that coincided with the heyday of a stabilised Roman celebration of the emperor. Christ also sacrificed his temporal body in order to offer mankind "a difference that gives a difference" (Luhmann 2008: 240).

The sacrificed past is not able to recognise itself, even not as a fact, i.e. as recognised statistics. The body counts of the Three Quarter Century War from 1914 to 1989 are simply beyond a scale that any Hollywood storytelling can represent. The continuation in the Hundred Year's War, 1914 – 2014 has not established and constituted a penetrating rupture to the dramatic narratives of suffering. During the Three Quarter Century War, three world wars and a "Zwischenkrigszeit" each considered as "wars that could end all wars" including the last one, the Cold War, that had it been warm would probably have succeeded on the worst scale possible. This history is very different from the stories we were acquainted with in schools, in politics, mass media and in the historical records of the past, not only because it ended differently and faster than what we thought for a long time. And once more, in the future, it will be very different, just an example, the stories of body counts in the Second World War. Today, in Ukraine, we are witnesses to demonstrations with an amazing mixture of generations, many seem to have roots in the conflicts of their parents and grandparents. However, the conflicts in Ukraine may be part of a much larger heritage of traumatic conflicts we, in the West, should be extremely aware about. It could easily become a disaster if we ignore the heritage of conflicts embedded into experiences of Russia, Ukraine and Belorussia, the three countries which suffered more than any other during their "Thirty Years War" from 1914 – 1945. The problem with the heritage of war experiences is that people get traumatized; traumatized people, in Ukraine, in Russia, or in Palestine, Iraq and Syria may develop desires for revenge. Sometimes they do not have much to lose.

I take the narrative about the Second World War. Hitherto we all know about one story,

somewhat comfortable and also somewhat disturbing, in fact shocking to the degree that is has been difficult to "write poems" (Adorno 1966). Fact finding is a macabre story. The Cold War probably began with false stories about Soviet losses. Officially, of internal as well as external reasons, The Soviet would offer a false idealisation of itself as a strong power able to sustain its gains in Eastern Europe and also deserve them. A power second to US power, who counted losses of 407.300 dead. From an official six and a half million, the number quickly rose to plus nine million. However, at the 20th Party Congress in 1956, Nikita Khrushchev could shock the world with an amazing 20 million body count (Ellenstein 1978). Then, in 1990, Gorbachev – in his speech on the occasion of the forty-fifth anniversary of victory – gave a figure of 26.6 million (Bellamy 2007: 9). Shortly after, in a book on the removal of secret classifications, it was disclosed that Soviet Armed Forces lost 8.668.400 servicemen (Sokolov 2009: 448; Second World War Almanac 2005). The rest were civilians.

Something is very flawed in those analyses, apart from the last number being unbelievably accurate. German generals counted their losses far more accurately than the Red Army, though they could not reckon survivors from the prison of war camps (POWs). The Wehrmacht counted at least 4 million dead, later estimates count 5.3 millions though the added estimates are unclear. Total losses, including Austria, number between 6.3 and 7.8 million. However, careful descriptions of battle dead often describe German/Soviet dead ratios at around 1/10 (Frankson & Zetterling 2003). And about 55-65 percent of (surviving) women born 1905–1915 were widows. In his magisterial description of the Soviet Russian "Great Patriotic War", English historian Chris Bellamy exposed these flaws in a somewhat simple way. On the one hand, he accurately exposed the body counts officially recognised in 1993; on the other, he described demographic accounts. Demographers calculate the 'global loss' of population, including couples who never met and babies not born, to be 48 million, i.e., far above the 26-27 million figure. During the last couple of decades, research and archives have opened up. In autumn 2009, Russian historian Boris Sokolov published a study based on five different entries. First he points to the danger of over- and underestimation for political and normative reasons as well as according to double counts: A Pole, Soviet citizen, soldier, partisan, then soldier again, perhaps Jew, could be counted lost on several occasions. However, all his different entries arrive at the level of 24-27.5 million military servicemen; probably 26.3-26.9 million though a variance of up to 5 million is possible. More convincing is his use of very different calculation methods. I) The Red Army did not register its troops before December 1941 and did not use medallions before that time; however, many soldiers and officers did not use them since they were observed as signs of fatal destinies. II) A few months of fighting, in particular November, fairly well counted the number of dead but, as movements were sparse, additions of those numbers could be used. Thus casualties in those months can be multiplied to the whole war. III) The same applies to the relation officer

dead/soldier dead as officers normally were counted much more accurately. The Soviet army lost 784.000 officers (161 officers for every 12 German officers). IV) A list of 19 million names are recorded at the Great Patriotic War Museum that often, however, receive complaints about lacking names, and among the 5.000 servicemen found in 1994-95 approximately 30 percent were not in the Ministry of Defence's archives. V) Local descriptions of conscripted soldiers include far more soldiers than those officially recorded; often armies simply took those available, enlisted or not. The accounts of soldiers from the Baltic countries and the later Soviet part of Poland are rather unsatisfying. Finally, demographic accounts reckon human losses to 43.400.000 inside the later Soviet territory of which civilian losses were 16.4-16.9 million. The human losses outnumber the entire population in France or England in 1939. To these figures, we should, of course, add wounded, handicapped and mentally ill persons, not to say persons with post-traumatic stress (PTS). The flaws and lack of accuracy seem to be part of the contingencies of Operation Barbarossa. Yet of course, there are other recent analyses, most of them arrive to smaller numbers than Sokolov, but some, as the renowned US Russia expert David Glantz to even more dramatic accounts.

Even compared to more recent, rather bluntly described, overviews such as Colin Gray's *War, Peace and International Relations* (2007), this altogether tells us quite another story of not only the war but also its aftermath, the Cold War and the history of Eastern Europe, as well as the reasons behind success and failure of East and West. The East sacrificed so many lives compared to Nazi Germany (part of the West) that the First World (including post-war Germany) was far more successful than the Second World. The biggest historical catastrophe since the Thirty Years War resulted in the most prosperous era of mankind.

Such paradoxes are still beyond reach for normal evaluation; nevertheless, our factual history of the past has to judge and "stay cool" as a Danish-German POW in Arkhangelsk once ironically reported to me about surviving the Siberian Winter. The extremely cruel and cynical Soviet sacrifices under Stalin, Beria and NKVD were part of a struggle to survive a past Soviet dream of future life and/or a future regime against a pure destructive Thousand Year Reich. The figures could indicate that Nazi-Germany could have succeeded, for instance if the winter 1941-42 had been a little milder (December the 6th General Guderian measured minus 63 degrees Celsius; Clark 1965: 181; about 10 degrees below normal records), or if the Soviet regime had been less despotic and totalitarian, though perhaps not against a completely modern and functionally differentiated Soviet Union disposing of immense Soviet resources in the most utopian, rational and well educated ways, but anyway out of reach.

Let the lonely Jesus, but the more than 40 million Soviet citizens were paradoxically sacrificed in an extremely uncivilised way in order to save civilization. By any account, the West would

never have gone that far. The Eastern hemisphere including the Persian Gulf could have turned subject to the Nazi Regime and would then probably have suffered even more had it tried to rebel. This is not counterfactual history but factual history about the past by means of standards that is and were recognised in the West. This account furthermore suggests that, conventionally, the West is less capable of suffering human losses than other kind of regimes, perhaps even so when the West had a far more heroic self-esteem than at present and in the future. As Herfried Münkler states with Edward Luttwak, we live in a post-heroic age; and the sacrifices of earlier generations will be still less possible to understand along with the growing costs of PTSD among veterans from Afghanistan and Iraq (Münkler 2006: 310-354). Millions of disabled young, mainly, males will be unproductive for generations to come and be extremely costly to the US and the rest of the West, as Philip Stiglitz predicts in his *The Three Trillion Dollars War* (2008) about the Iraq War, to which costs for Afghanistan and to allies will follow (Swofford et al 2009; Korb 2009; Shinseki 2013). The unipolar power-structure of the world transformed incredibly fast into a predictable financial crisis. Wars are always extremely manifold more costly than optimist warfare planners hope for (Kindleberger 1984; Frieden 2006; Harrison 1998; Strachan 2004; Rockoff 2012).

The Second World War was beyond any comparison more expensive than any other war and would have led to a comparable financial crisis as most former wars, just more far-reaching. Apart from the overwhelming Soviet costs, the war was financed by transformation of classical gold standard to a dollar = gold standard. Dollars could be printed in unlimited numbers and could purchase, purchase and purchase. Gone were the hundreds of years when international trade depended on the production of silver and gold (Germain 1998). As long as the US did not enter into the repeatedly unfinanced practice of warfare, the credit system functioned. However, after the Korean War, Vietnam, Iraq and Afghanistan wars destroyed the credibility of US finance. Dollars printed to finance wars without a substantial export but too much import and tax decreases did not increase credibility (Eichengreen 2007).

The structure moving financial strength from US to China is certainly strong. The dollar as monopolised reserve method of payment probably suffers although the Euro-zone also has some problems with a public debt. Commentators continue to claim that US military spending is nine times to the Chinese; but American salaries are ten times higher than the Chinese! Military transformations can take an incredible speed as is well-known from the American explosion in military investments and corresponding capabilities during the First and the Second World Wars. However, the more important question is whether future wars will take the structure of conventional warfare. Probably not. Thus, we have to take a long-term second order view on wars and observe our past as well as our future.

## III. Forms of war: Sun Tzu, Clausewitz and Lawrence of Arabia

Strategic theories of war are an amazing field of studies for many reasons. One is that very old treaties are indeed still used as classics necessary to understand modern warfare as another branch of war studies, at the same time, concerns sometimes very celebrated military revolutions that "forever will change the form of warfare" according to their proponents (Owen 2001; 2002). Tactical warfare undergoes incessant transformation while the strategic form of war fights the same problems of ungovernable contingencies, friction, planning turned into surprise, moral despair, public impatience and, above all, exhaustion in protracted wars of attrition (Gray 2005b). Hence strategy is not about meeting the future chaos or panic, but about using reflection; i.e., historically speaking to replace future war with a functional equivalent to Fredrick the Great's brain, and future peace with a reflection capacity similar to Immanuel Kant's (Paret 1976/2007; Pellegrini 1997).

Already Sun Tzu, reflecting on the Chin wars 400 hundred years before B.C., described the unavoidable occupation with the economy of resources in a more detailed sense than how economy is normally understood. The scope of involved resources is the weak point in protracted wars. Thus all major wars concern a scope of material resources including moral and public resources of will and motivation as well as a scope of temporality. According to calculation theory of fire power, many resources used in a short period of time are much easier to handle than the complexities involved if they were to be handled for a longer period (Biddle 2004). However, the longer period also leads to processes of professionalization and the evolution of learning (Bailey 2001: 154). Modesty in recognizing own weaknesses, blind spots and flawed cognition is decisive in order not to overstretch the use of armies. Later we have seen how Louis XIV, Charles XII, Napoleon, Hitler, Johnson & Nixon, and Bush the Younger overstretched their armies with too many campaigns, too far, for too long a time with too sophisticated materials and, in the offensive, too little public backing.

The false view on linear input-based technologically planned military revolutions is that these conditions change with insurmountable speed and firepower (Beckerman 1999). The weakness is that they invest too much for too long a time, since complexities in unknown countries destroy planning. As Harry Yarger from the US Army War College forcefully underlined in his *The Strategic Theory for the 21$^{st}$ Century*, strategic planning is about how to plan when plans are broken (Yarger 2006; 2010). The military organisation system does not

enter the functional system of war before that moment. Sun Tzu's advice is that

*those skilled in war avoid the enemy when his spirit is keen and attack him when it is sluggish and his soldiers homesick. This is the control of the moral factor. In good order, they await a disorderly enemy; in serenity, a clamorous one. This is control of the mental factor. Close to the field of battle, they await an enemy coming from afar; at rest, they await an exhausted enemy; with well-fed troops, they await hungry ones. This is control of the physical factor. They do not engage an enemy advancing with well-ordered banners nor one whose formations are in impressive array. This is control of the factor of changing circumstances* (Sun Tzu 400 b C/1998: 35).

Troops are never prepared to receive an attack. In that sense, one of the main principles of asymmetric warfare has always been part of warfare. The speed and strength of one part may be met with withdrawal, dispersal and slow-down. A peculiar battle of intelligence takes place and one of the most well-known phrases of Sun Tzu is the following résumé:

*Know the enemy and know yourself; in a hundred battles, you will never be defeated. When you are ignorant of the enemy but know yourself, your chances of winning or loosing are equal. If ignorant both your enemy and of yourself, you are sure to be defeated in every battle* (Sun Tzu 400b C/1998: 26).

The problem is that the strong part relies on its strength which of course is important to induce moral self-reliance to soldiers and officers, especially if they have to go abroad in some kind of offensive. They trust their strengths instead of doubting their weaknesses, their false opinions, their flawed knowledge not to say empathy of their enemy situation, language, history, religion, norms, everyday life. An even worse problem is that wars are not about "winning" and "victory" in battles and in warfare, but about winning the peace in such a way that their "present enemy must be seen as a future associate" (Rawls 1999: 101). On this point, Sun Tzu's thought is not on the level of Carl von Clausewitz'. Tactics might be about winning a battle, but if there are no battles such forms of victory make no sense and communicating about them only offers false viewpoints, and failed communication codes

thus weaken the stronger part to the point of deception and even moral dissolution. To know about knowledge is to preserve a clear judgment and what Clausewitz calls prudence ("Weisheit") referring to Fredrick the Great as the greater strategists compared to the tactician Napoleon, "to bring peace about was his goal" (Clausewitz 1832/1952: 246). From Napoleon over his historian and general chief of staff, Antoine-Henri Jomini, the generals of the First World War and to the US way of warfare, this lack of reflective long-term strategic prudence and their first order observation of warfare might be their weakest point (Record 2006). As the distinguished scholar Martin van Creveld has said remarkably precise, "For a decade the US armed forces had talked about the Revolution of Military Affairs until they were blue in the face" (Creveld 2007: 246).

This tradition of introvert observation has been inherent in nationalist warfare policies and is surely backed by the blind spots of the military-industrial complex and interests in its own continuous growth (Eisenhower 1961). But we have to distinguish between military organisation and the functional system of war. As many revolutions we might have in the first one and maybe even in warfare, from an inductive and abductive point of view, not a deductive point of view, it will still be possible to observe the form of war (Gray 2009b). Despite this we cannot be sure that Sun Tzu's insights in every respect will not be challenged in the future to come. But we cannot only rely on our own transformations in order to understand future wars. Wars are always about double contingencies, i.e., how one part tries to disturb how the other part tries to disturb and how both parts absorb contingencies. The difficult tactics of warfare is to imagine the imagination of the other.

*An army may be liked to water, for just as flowing water avoids the heights and hastens to the lowlands, so an army should avoid strength and strike weakness. And as water shapes its flow in accordance with the ground, so an army manages its victory in accordance with the situation of the enemy. And as water has no constant form, there are in warfare no constant conditions (…)The enemy must not know where I intend to give battle. For if he does not know where I intend to give battle, he must prepare in a great many places. And when he prepares in a great many places, those I have to fight will be few* (Sun Tzu 400b C/1998: 31, 30).

Whereas Sun Tzu here used water as a metaphor in order to show the form of dissolved forms and contours, T.E. Lawrence used gas which of course was a provoking metaphor after the First World War. In his fiction- or faction-like description of the Arab insurgency against

the Turks in 1916, he reflected upon his own ideas about a successful insurgency against a military stronger enemy, and he established a description of irregular warfare that has been one of the most successful lessons over the last hundred years, a lesson often judged to be one of two strategies for warfare in the 21$^{st}$ century. After few reflections regarding the use of Clausewitz, Jomini, Guibert and Moltke that was "making me [Lawrence] critical of all their light", he reconstructed the spatial scene using Jominian – or one might even say Kantian – variables of contingencies in space and time, since space and time are not absolutes; rather, they are contingent on their observers. Military forces depend on space and time, which in turn are contingent on the observing system bringing them into use:

*The Algebraic element looked to me a pure science, subject to mathematical law, inhuman. It dealt with known variables, fixed conditions, space and time, inorganic things like hills and climates and railways, with mankind in type-masses too great for individual variety, with all artificial aids and the extensions given our faculties by mechanical invention. It was essentially formulable.*

*Here was a pompous, professorial beginning. My wits, hostile to the abstract, took refuge in Arabia again. Translated into Arabic, the algebraic factor would first take practical account of the area we wished to deliver, and I began idly to calculate how many square miles: sixty: eighty: one hundred: perhaps one hundred and forty thousand square miles. And how would the Turks defend all that? No doubt by a trench line across the bottom, if we came like an army with banners but suppose we were (as we might be) an influence, an idea, a thing intangible, invulnerable, without front or back, drifting about like a gas? Armies were like plants, immobile, firm-rooted, nourished through long stems to the head. We might be a vapour, blowing were we listed. Our kingdoms lay in each man's mind, and as we wanted nothing material to live on, so we might offer nothing material to the killing. It seemed a regular soldier might be helpless without a target, owning only what he sat on, and subjugating only what, by order, he could poke his rifle at.*

*Then I figured out how many men they would need to sit on all this ground, to save it from our attack-in-depth, sedition putting up her head in every unoccupied one of those hundred thousand square miles (...) If so, they would need six hundred thousand men to meet the ill-wills of all the Arab peoples, combined with the active hostility of a few zealots* (Lawrence 1935/1997: 181-182).

Asymmetric warfare is as old as warfare based on military revolutions. They are almost all based on evolutionary reforms on one side of a conflict and the experience of something sudden and revolutionary by the inferior part (Murray & Knox 2001). In his important

analysis, *The Sling and the Stone*, Colonel Thomas Hammes therefore does not define the form of asymmetric warfare as "revolutionary": it was hardly possible to predict that the technologically superior Western forces would meet a superior form of warfare, which was not about winning tactic battles but about creating fear and a sense of hopelessness among military actors. Inferior forces quickly learn to cope with superior forces – otherwise they lose (Record 2005). Already the Spanish insurgency, the so-called *guerrilla* or "little war", imposed a kind of military revolution on Napoleon's army.

Clausewitz wrote about guerrilla warfare and about asymmetries in warfare, since warfare is always, to different degrees, asymmetric (Thornton 2007; Chaliand 2008). The myth of symmetry was probably morally perfected with warfare of knights, heroised and honoured beyond any real warfare experience and established as a form of communication important to diplomatic affairs. Conventional experiences as the West Front 1914–1918 did certainly also do much to establish the longevity of the myth.

I will neither repeat Clausewitz' famous phrases on politics and war, the trinity of war nor his accurate analysis of asymmetries in attack, defence, and abstract and real war. The above discussion of Sun Tzu's conception could very well have been about Clausewitz' notion of centres of gravity ("Schwerpunkte") (Echevarria 1995; 2003; 2007). To fight the opponent's centre of gravity is not only, for a first order observation, to fix a certain target or threshold but to put into the move and disturb the opponent's second order observation:

*Alexander, Gustav Adolf, Karl XII, Friedrich der Gro?e hatten ihren Schwerpunkt in ihrem Heer, wäre dies zertrümmert worden, so würden sie ihre Rolle schlecht ausgespielt haben; bei Staaten, die durch innere Parteiungen zerrissen sind, liegt er meistens in der Hauptstadt; bei kleinen Staaten, die sich an mächtige stützen, liegt er im Heer dieser Bundesgenossen; bei Bündnissen liegt er in der Einheit des Interesses; bei Volksbewaffnung in der Person der Hauptführer und in der öffentlichen Meinung. Gegen diese Dinge muss der Stoß gerichtet sein. Hat der Gegner dadurch das Gleichgewicht verloren, so muss ihm keine Zeit gelassen werden, es wieder zu gewinnen; der Stoß muss immer in dieser Richtung fortgesetzt werden, da Ganze nicht gegen einen Teil des Gegners richten* (Clausewitz 1832/1952: 874-875).

Clausewitz based his theoretical conception of such considerations on Kant's analysis of forms, and his teacher in methodology was Kant's assistant Johann Kiesewetter. The

distinction form/matter concerns questions of what and where, of who, and of when and how long time, beginning and end. Ever since, form analysis has been used by sociologists as Georg Simmel (1908/1923), Pierre Bourdieu and most elaborated, Niklas Luhmann (2002: chap. II, 2; Baecker 2005). The social bond is also temporal.

In its first material dimension, form analysis is about reducing complexity as to what will matter as place, territory, materials, troop strength, losses, logistics etc. In its second social dimension, it concerns the observation of double contingencies about the conflict between the partners, how the conflict conception is if compromises, alliances and cooperation can be established, what is hatred and enemy perception etc. The third dimension concerns temporality: How will the conflict evolve, is the war one of attrition and exhaustion; what is the speed and the importance of speed, penetration, halt and rest; when does war begin and when does it end? Compared with contract theory, we may describe the material, social and temporal form of contracts. The difference between forms in law and in war is that in law contracts establish binding expectations, while in war they disrupt and destroy expectations. Surprises may follow, not only in the subject of conflict (from territory to water, air, credit of course and as usual, churches and graveyards as usual etc.), but also the dimension of alliances and opponents (networks, private military companies), and the speed and length of wars (minute short; generation long).

Now this triple conception is only the first order observation established by Clausewitz. In his philosophy of war, his abductive use of a reflective judgment (Kant) sends him searching towards a form of war that handles its own form: Wars may be wars about the form of the war, i.e. about the material, social and temporal form of the war. That is why he is occupied not only with tactics but with the strategy of will formation and re-formation of such will formations. At that point he is a real Kantian, searching for a form not of autonomous will formation, but of heteronomous will formation; this form analysis is also behind his conception of floating centres of gravity: The centre of gravity may change as the form of the conflict re-enters as medium and subject for the conflict itself. Hence, even the idea of the form and the form of the idea turns into a conflict dimension (Dobrot 2007; Echevarria 2008).

## IV. The present risk system of temporal bindings

Clausewitz' point is that the form of conflict about matter might turn into a conflict about

temporal dimension and from there on again into logistics and supplies, but often public opinion and morality is as important. The point is that everything that seems safe might be false. Tactical linear warfare is embedded in myths about own power, about calculated use of resources used in an isolated act, implemented in a single or a short series of blows with a decisive victory, final results and clear costs (Watts 1996: chap. 2; Fleming 2004). The problem with these myths is that not only are they false and obsolete, mostly stemming from Napoleonic warfare and inherent in Jomini's linear conception of warfare (Jomini 1838/1855/2001), but also that such myths of storytelling and imaginary realities go for real among soldiers, public media, movies and entire populations; even officers can be endowed with such myths if the very same officers are central to enormous investments in a military-industrial complex with thousands of jobs, family lives, careers, regional growth and political ambitions (Smith 2005; Record 2010). Those myths have a "second nature" (Hegel) to such a degree that military organisations even continue to develop a "new speak" about abbreviations as if they could professionalise a rationalisation of scientific warfare even in organisational, political and social systems where they were inadequately overexposed as if the military organisations knew exactly what they were talking about. The extreme manifold use and abuse of military acronyms is only the most visible sign of a communication form comparable to Admiral Nelson using a telescope as a technological tool to observe, but what is it worth if the observer observes with eyes that are unable to observe. Telescopes and satellites can be tactically useful. But for strategic purposes translators and interpreters are often more useful.

According to Luhmann's theory, the first risk of any social communication system is that it observes its environment with its own codes of communication and not with those immanent in the environment. Those codes might be more or less adequate, but foremost, they are established in order to facilitate the system's communication with itself. It might inform itself about the environment, and even send or receive messages, but it interprets according to its own codes and facilitates those codes reproducing the self-reference of the system communication historically well known since the semantic of "reason of state" established sovereign forms of communication in state building. In the case of ISAF and the US forces entering into Afghanistan penetrating analyses show that the coalition tactics of usual American way of warfare ruled for so long time that it was too late to coordinate another form of counterinsurgency (Irwin 2012; Grissom 2013).

More dramatically, the respected war historian Gabriel Kolko states that "at no time has the United States entered a war aware of the time, material, and tragic human costs it would have to pay or demand of others" (Kolko 2002: 53). I have mentioned the asymmetric losses of the US and Soviet forces in the Second World War. The three wars in Vietnam, Iraq, and

Afghanistan suffers from the same casualty ratio (1/50–1/200), not to mention "clean" high tech aerial attacks (drone, missile etc.).

Hence, such coded communication systems suffer from lacking recognition of own weaknesses. Their blind spots were that they did not know themselves and their own lack of capacities. This is the second risk and corresponds to Sun Tzu's warning against the failure to know oneself. In fact, the military organisation system is also quick to learn from its failure and new counterinsurgency strategies (COIN), and civil-military cooperation (CIMIC) has developed (Patreus 2007; Nagl 2007; Cerami & Boggs 2007; Jalali 2009).

The third risk is that war systems operate wars in a world with very conflicting temporal bindings. Most famously, the asymmetries of speed and slow-down display the conflict between short-term bindings and investments on the one hand and long-term protraction on the other. The "nowhere man" (John Lennon, 1965) is also the "now here" and the "no-where?" whether he is a soldier, partisan, strategist or political observer; inside or outside. The ontological insecurity (Giddens 1984) and existential dissolution in Lennon's text very well resembles the despair in asymmetric war. Military systems try to control wars through warfare, but they are themselves subject to political control and financial, moral, educational, scientific and all kind of logistic supplies. Therefore Clausewitz can say that "war is nothing else than the continuation of political interaction mediated by other means" (Clausewitz 1832/19952: 888). However, each of those supplying functional and organisation systems operate with very different and often opposed temporal bindings. The temporal horizons for their future transformation into other temporal bindings might be very different. For some, the reality of the mass media, the temporal horizon can be a few days, as their "raison d'être" and code of communication is "news", and their function is probably to synchronise the society with itself as a present *Gesellschaft* able to include itself here and now and exclude everything "irrelevant" to that perspective. Political systems have longer temporal bindings, e.g., four years. Financial systems of credit, interest and rent, say seven years. Organisation systems of careers and reforms, say 20 years. Paradigm shifts, a generation of university careers, from 10 to 40 years; education, socialisation some 10-20 years, but childcare and care for grandchildren's old age, the long perspective of say 100 years. These temporal bindings operate for real; they dissent and cannot establish any consensual complementarities perceived in an objective or absolute harmonious spirit (Hegel). According not only to Luhmann, but also his sociological predecessors Marx, Simmel and Weber, they follow their own self-referential logics.

Even in remote futures, such temporal bindings will probably still oppose each other, their temporal codes might alter a bit, and quite a few organisation sociologists propose that post-

bureaucratic network organisations may shorten their temporal bindings from Weberian bureaucratic long-term career planning to short-term "projects" (Boltanski & Chiapello 1999; Rosa 2005). Furthermore, in the future, we will probably still operate conflict perceptions using a complex set of functional, organisational and network interaction systems. Some systems could be more advanced, more developed with more codes and more self-referential internally closed codes (of their own codes); for instance a garbage collection system, which will structurally be still more coupled to for instance legal, economic, transport, aesthetic, political and war systems. In the future, we may observe both garbage and water wars (important to the Palestinian and Syrian/Israelian conflict) as we historically have experienced supply wars way back.

Since the Cold War, the US military organisation system and its followers, allied as well as the political and the mass media system perceived how the war system unipolarised power. However, its conception of power was flawed by misconceptions of power. I can only shortly state the problem here. As is well known from Weber's conception of domination and force ("Herrschaft", "Gewalt"), Talcott Parsons' reconstruction of the concept of power, Bourdieu's and Foucault's theoretical and genealogical analyses of power, and Luhmann's theory of self-referential power, political science has absorbed a simplistic uni-linear zero-sum game conception of one actor's transformation of will caused by another actor's behaviour. This reductionist conception originated from Weber and Clausewitz, but neither of them meant anything more than that the initial conception of a will determination ran opposite to a Kantian moral philosophy of will formation. That would never suffice to analyse complex societal power conceptions. "Power" has been a concept historically established in order to let communication systems organise and "empower" themselves and communicate about power (Quillet 1972; Thornhill 2008). The linguistic origins in the Latin verb *potere* can be expressed as for instance "Macht macht Macht", "le pouvoir de pouvoir", "Almighty might might …" etc.

The problem is that the reductionist misconception lead to the extreme false perception of what "power" was able to handle after the Cold War. The US military power never got hand on the metaphysical power of the cold conflict nor of the Soviet power. The power inherent in the risk of a nuclear disaster was an indeed "Almighty" power comparable to Medieval conceptions of God's Almighty power. From say 1957–1989/1991, Almighty power was all over, in every act, every person's opinion, on every spot on earth, and all communication was coded as left/right, pro/contra. But its metaphysical and even meta-biological and meta-social power was so penetrating that it even escaped our risk perceptions and reflexive apperception capacities. Afterwards, having escaped the Plato cave of possible disappearance before we could even perceive it, it took time to rediscover the blind spots of

that Almighty power. In her book, *The Mighty and the Almighty* (2007), Madeleine Albright has correctly, with Clinton, observed the subsequent neo-conservative misconceptions. The metaphysical power inherent in the Cold War was indeed difficult to handle in a reflexive thinking that had a hard time to think about long-term possibilities. The World as we knew it could disappear from one moment to the other, and, as Raymond Aron recognised, we could not think about our last thoughts without theological conceptions of souls, almightiness, eternity etc. Now, we may think about that.

Thus, US power thought much too easily that it could penetrate everywhere and learn normal behaviour as even former unipolar proponents admit (Kagan 2007; Ikenberry et al 2009). To follow Gabriel Kolko in his concluding sentences in *Another Century of War?*: "It [US] cannot. It has failed in the past and it will fail in this century; and attempting to do so will inflict wars and turmoil on many nations as well as on its own people" (Kolko 2002: 150). The disappearance of the Soviet and the dissolution of the Cold War was, according to military observers, if anything, a consequence of the digital revolution and its so-called revolution in military affairs, but also because of its additional financial and military overstretch in Afghanistan. "It was a great victory" according to Bill Casey, the former director of the CIA (Kolko 2002: 50). As Kolko explains, Afghanistan is "the trap" to both Soviet and NATO power, as US financed and trained the Mujaheddin to fight asymmetric war against the Soviet intervention and since paid the multi-doubled bill. But the trap also appears on a second order level.

If we apply Luhmann's general theory of a risky relation between system and environment ("Umwelt"), we will turn up with the scheme shown in Figure 1. I have identified six risks belonging to the particular military system described in Figure 1 (Harste 2003). The basic observation is the distinction between social systems and environment. The social system communicates above all with itself, and only with this epistemic background it can open its observations to get informed by events in its environment.

Figure 1. The six risks of systems – in general and in particular

| General theory about system risks | The military system |
|---|---|
| | |

| | |
|---|---|
| 1. The risk not to observe the environment | 1. The military system cannot observe the environment as it is, in its complexity and own dynamics. The system primarily observes its own narratives and interpretations (whether military analyses or propaganda). |
| 2. The blind spot of the system and its limits to self-correction: It cannot observe that it cannot observe what it cannot observe | 2. Internal to the military system, there are conflicts between observers and those who make decisions. There are limits to self-corrections of this differentiation. |
| 3. Conflicts between the different temporal horizons of functional systems | 3. The military-industrial complex stays committed to inertia of armament and the economy in jobs and investments as well as their programmes and codes of observation |
| 4. Dissent in communication between functional systems: Functional systems do not communicate with each other | 4. The war system does not communicate with the political system that addresses itself only to the military organisational hierarchy. Structural couplings, as between electoral groups and lobbyists, do only reinforce miscommunications in other areas. |
| 5. There is no recursively entrance to a system of total vision that morally transcends and visualises everything totally. The whole is less than the sum of its parts. | 5. The prevailing military system still observes itself as almighty on the level of the total power that reign conflicts in the years around 1956-1991. The prevailing system did not observe that this metaphysical form of power has escaped its power. Still, for some time, this exaggerated power perception might stay in power and strategists conflict about this. |

| 6. In modern society there are only those systems that operate and no other. All observations and possible reforms only establish meaning by and through the systems. | 6. There is no other military superpower than that of the US and its organisation of the military system is structurally coupled to other functionally differentiated subsystems. But the US military system has overstretched its manpower resources and financial supplies. |
|---|---|

During the Cold War, the long-term future was dissolved by the short-term suspense. Apart from a few lunatic utopians, the future did not exist in the present: not as planning, not as will, not as long-term forecasts, but mostly as myths of revolution. Economic macro models established the so-called "wisdoms" of the future since anyway no view beyond a few years could be taken seriously. Short-term strategic conceptions of war ruled among tacticians, for instance known from John Boyd's – in military circles – rather famous Observation-, Orientation-, Decision-, Acting-cycle the OODA-cycle, prevailed and dominated the so-called strategies (Osinga 2006). But after the Cold War, the long-term future was reinvented. long-term strategic considerations were reinvented. Asymmetric wars are not about winning battle space, but about not losing in terms of long-term exhaustion and "the strong losses" (Record 2005). The US has no strategic interests in Afghanistan and cannot – in terms of military social cohesion nor financially – afford that war and will retire together with the coalition forces which will establish a major moral-political blow to NATO (Gray 2009a). As the veterans and winter soldiers will remain a burden in the risk structure of future welfare systems for a long time, and as their traumatic experiences will claim further expenditures, the long-term costs of the Afghanistan and Iraq wars, though nothing compared to the exhausted populations of those countries, could sufficiently cover the costs of the Iraq "Three Trillion Dollars War" several times (Stiglitz & Bilmes 2008).

## V. Conclusion and paradoxical perspectives

By now we can return to the long-term risk structure and take a look back on the future history of Soviet Russia in the Second World War. If Stiglitz' conservative estimates of the

long-term costs of the Iraq war is used to characterise the Soviet costs in the Second World War according to different criteria, we approach astronomic figures as 150-350 years of Soviet BNP. Payback time is long, long and long, and path dependencies are beyond imagination. If US forces should have fought the Wehrmacht alone, it would only have been able to do so after the invention of the atomic bomb. We also now know why Soviet could not by any means succeed in the complex construction of a modern society. Hannah Arendt is surely right that Stalinism anyway, beforehand, was disastrous to the Soviet people, and the Red Army could have done much better without the horrible cleansings of about 80 percent of the officers in 1937-38. The afterthoughts of the Second World War have not ended yet. On the contrary, future generations sufficiently emancipated will ask questions about their lack of emancipation and about the heavy path dependencies put on their shoulders. If we compare with the repercussions of, probably the best example, the Thirty Years War that by any measures was disastrous to especially the German Empire (Rystad 1994), we can observe a range of temporal bindings stretching well into the late reign of Fredrick the Great more than four generations later, when the reform fever of Enlightenment finally took over from despotically enforced armament policies, fear, asceticism, pessimism and depression.

Today, the temporal bindings in the Middle East endure generations. I have focused on the temporal bindings of functional systems. However, one of the longest and most enduring bindings can be found in the socialisation of generations which apparently remains a much too remote and marginalised part of sociology and political science. Traumatized populations may give birth to terrorists.

The consequence is that the military organisation systems do not respond adequately to the war system, when wars turn radically asymmetric. The tragedy of the so-called "peace dividend" after the Cold War is not only that it was difficult for military organisation systems to decrease their activity levels (also because Russian fascism could turn into a real threat). But that they for almost two decades succeeded to convince that RMA-investments were necessary to a take-off for the West and for an unchallenged monopolized uni-polarity; they were so convincing that when once the financial crisis came because of financial overstretch, it was not possible to make cut downs in those employments sectors. The "peace dividend" turned out to be a "wartime surplus", and military budgets grew as never before since the Second World War. But the economic and moral disaster is that only few surplus innovations have followed from those last decades of military investments. Internet, mobile phones etc. was invented in the last decades of the Cold War. The World Wars offered extreme diffusion of usable innovations, not only in technology, but also in organisation, politics, morality, law, research etc. (Rogers 1961; Burns & Stalker 1962). Innovation followed because its back was to the wall. This was somewhat, although probably also somewhat falsely, believed to be the

case during the Cold War. But the Global War on Terrorism (GWOT is here used as a professional/dilettante abbreviation) has not yet lead to any usable innovations. Anyway, of course technological innovations cannot in any way at all justify war or even increased armaments. Drones, very much used by US Air Force since a decade, were invented after the First World War and do, by the way, not represent a sustainable strategy since they are cheap and easy to copy for about everyone.

As the opposite, peace constructions can be observed as self-referential and self-organising systems. (Harste 2013). We cannot escape how communication systems have evolved and still will evolve. When military systems and the diabolic war system pave the way for peace and federalism, it is because war systems induce and oblige forms of convergent practices. Kant describes how a rather complex network of con-federal, federal and treaty organisations could evolve in the future, and this, still, is probably a quite adequate prospect of what is on the way and will happen in the future. If military competition, trade spirit ("Handelsgeist") and overloaded credit systems, as Kant thought, will continue to lead world development, then functional differentiation of systems and separation of powers will follow as implied developments, and we will observe convergences between USA, Europe, China, Russia and even Brazil and India. The states do as the other states in about every functionally differentiated detail, hence we may question whatever could be meant by sovereignty in such a world; but anyway freedom, autonomy and will-formation is in any Kantian or post-Kantian conception impossible if not headed by obligations and rule-following.

To such a picture "new wars" (Münkler 2007), civil wars, terrorism and irregular warfare will not change as much as Jürgen Habermas suggested in his 1995 reappraisal of Kant's theory of roads towards perpetual peace. His 2004-reconstruction of a Kantian road to convergence and cooperation is more probable. Future warfare is about compromising and ruling regular warfare and about how to avoid political utopian or rather strategically dystopian dreams about how to rule in nowhere lands. Even the US national strategies become normal (Korb & Bergman 2007; White House 2010). Yet, this, let us call it Chinese challenge of normal responses will maintain symmetric answers, also to be taken in use in asymmetric wars. The Middle East and Africa will develop still growing numbers of refugees, because of past and present disasters, repressive regimes, and especially scare ressources for populations that may double in a few decades. The West, probably will not be able to admit and to handle its responsibilities for present and past disasters in the Middle East. This entire region is still embedded in the First World War's "peace to end all peace", when the Ottoman Empire was dissolved with the Sevres and Lausanne Treatises in 1920 and 1923 (Irwin 2012; Kamolnick 2014; Fromkin 1989).

Another development might be more risky from the point of view of this political, legal, financial, public and moral accountability that is so important to Clausewitz' dictum about war as a continuation of politics. Several authors point towards the commercialisation of war in the form of private military contractors or PMCs (Singer 2004a; 2004b; 2008; Leander 2004; Rosén 2008a; 2008b). The failure of the United States to intervene in Iraq and Afghanistan has resulted in a steep growth in privatisation and the practice of outsourcing warfare and logistics into private companies (Blackwater; Halliburton etc.). This could display another vision than a Kantian network of federal and confederal governance, NGOs and *lex mercantoria* (Verschraegen 2010; Teubner & Fischer-Laescano 2007). If the trends continue, a serious futurology enters a paradox. The future we face is as close to the military contractors or *condottieri* well-known from Machiavelli and the early renaissance (Rogers 1995; Machiavelli 1521/1991) as the internet is in its capacities to synchronise information to the capacities of the Holy Spirit in the high medieval era when it should synchronise interpretations. If the "next society" (Baecker 2008) is a network society, we should carefully study the medieval network, *corpus spiritus*, in order to find out what forms of communication, power and corporate spirit such a society could display (Quillet 1972; Spruyt 1994; Thornhill 2008; Harste 2009c).

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