

In his 1973 book *Legitimation Crisis*, Jürgen Habermas described a transformation mechanism that can lead an economic crisis into an administrative crisis, if the capitalist economy and state administrations do not reorganize themselves to handle the problems facing the economy. This transformation accurately describes what happened from 1974 to the mid 1980's, to say nothing of what has been happening ever since.

However, Habermas developed the transformation hypothesis still further and took it to the realm of politics. If the public administration could not simply reorganize, it would have to invoke a number of reforms that involved claims for legitimacy. This shift from the economic system to the administration system and to the political system could happen smoothly, and not entail a transformation of the lifeworld of citizens. Accordingly, Habermas only conceived crisis as a phenomenon that in the lifeworld involves a legitimacy crisis in the motivational resources that are involved in those reforms undertaken in the political system. This transformation machinery can be re-described and applied in many contexts. Critical systems theory describes how it is difficult, if not impossible, to govern self-referential systems functionality differentiated from political systems: Accordingly, they may pose severe problems for their environments, and eventually lead to legitimation crises. Modern functionally differentiated systems are probably more difficult to govern than we use to think. In between Habermas' theory of crisis transition and the work of his German contemporary, sociologist and leading systems theoretician Niklas Luhmann, a reconstruction of legitimation crisis theory has taken place. This is articulated in Poul Kjaer, Guenther Teubner and Alberto Febbrajo's co-edited volume *The Financial Crisis in Constitutional Perspective - The Dark Side of Functional Differentiation* (2011). My aim here is to add a still darker side to this critical systems analysis.

In the present article I will first describe the classical problem of political transformations and revolutions that occur due to financial constraints. As we will soon observe, those crisis scenarios historically often develop in the aftermath of wars. Hence, I proceed to analyze the structural coupling between the wars in Iraq and Afghanistan and the overall game of superpower strength. In order to get the problem right with regard to the dynamics of war and its resulting financial costs, I turn to Carl von Clausewitz's form analysis and his concentration on the transformation of the center of gravity from the battlefield to the costs of war. This, finally, leads to an analysis of the structural couplings between wars, state-building and financial crises.

## **The classical problem of war and credit**

Ernst Hinrichs (1986) used these same ideas to interpret the crisis that led to the French political revolution in the second half of the 18<sup>th</sup> century. Whereas Habermas also, albeit briefly, mentioned ecological crises and military crises as two differently induced crisis phenomena, Hinrichs developed the transformation from war to finance to reorganization, political reforms and motivational transformation. In the present article, the point is to deal with the structural coupling from war systems to military organizational systems to financial systems, and the critical limitations imposed upon such a transformation. The actual background, of course, is the present financial crisis that began in 2007-8 and its links to the Afghanistan and Iraqi wars, as well as to the currency and credit systems that have developed in the capitalist world since the end of the Second World War. My main point is that the present crisis was extremely foreseeable from the end of the 1980's, since it repeats the structure of those relations that have imposed themselves on the modern social order since the 16<sup>th</sup> century. The heritage of that long-term form and path dependency imposed a self-referential system of wars that could only be developed if government organizational systems took absolutist power over the 'reason of state' and asked for a financial revolution in the structural coupling between tax systems and credit systems. Those systems came to a decisive breaking point at the end of the 18<sup>th</sup> century. They had already by the early 18<sup>th</sup> century implied a functional differentiation of the social order that imposed itself in opposition to an absolutist state in an estate society.

A centrally placed observer of those developments such as Immanuel Kant concisely saw what was at stake in such a modernized society. In his 1793 treatise *On the Common Saying: 'This might be true in theory but does not apply in Practice'*, there is a short but an extremely accurate analysis of a number of paradoxes in the relation between politics and war, including the following description of the structural coupling between finance and war:

The increasing culture of the states, along with their growing tendency to aggrandize themselves by cunning or violence at the expense of the others, must make wars more frequent. It must likewise cause increasingly high expenditure on standing armies, which must be kept in constant training and equipped with ever more numerous instruments of warfare. Meanwhile, the price of all necessities will steadily rise, while no-one can hope for

any proportionate increase in the corresponding metal currencies. No peace will last long enough for the resources saved during it to meet the expenditure of the next war, while the invention of a national debt, though ingenious, is an ultimately self-defeating expedient. Thus sheer exhaustion must eventually result, in what goodwill ought to have done but failed to do: each state must be organized internally in such a way that the head of state, for whom the war actually costs nothing (for he wages it at the expense of others, i.e. the people), must no longer have the deciding vote on whether war is to be declared or not, for the people who pay for it must decide. (This, of course, necessarily presupposed that the idea of an original contract has already been realized.) For the people will not readily place itself in danger of personal want (which would not affect the head of state) out of a mere desire for aggrandizement(...) And thus posterity will not be oppressed by any burdens which it has not brought upon itself, and it will be able to make perpetual progress towards a morally superior state. (Kant 1793-1977: 170)

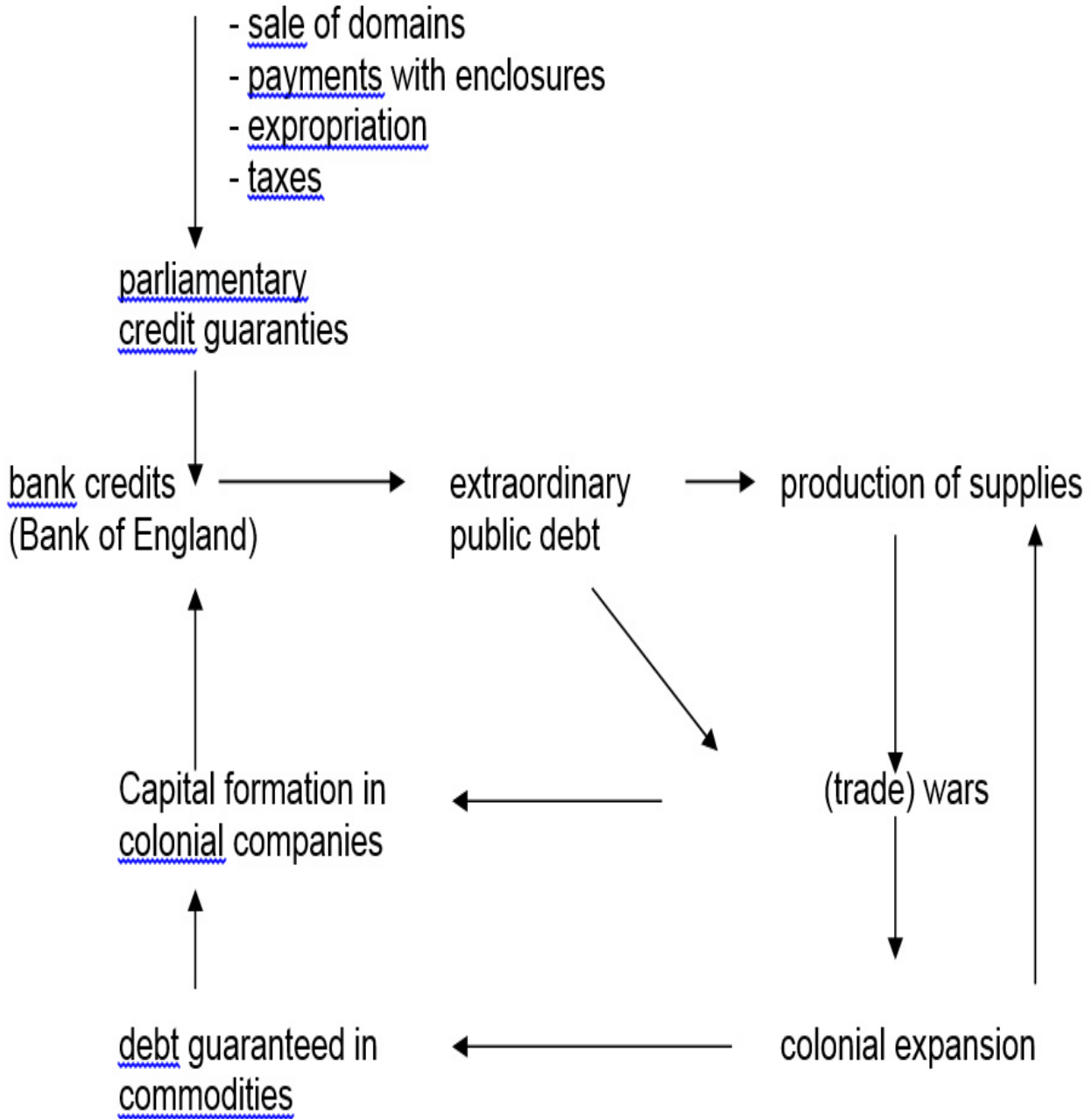
Accordingly, Kant is often celebrated as the inventor of the liberal theory of the so-called 'democratic peace' and this was certainly a liberal plea for a separation of power. This separation of power, its rule of law and legal state ('Rechtsstaat'), he saw as constitutive for a democratic representative form of the people's sovereignty. To Kant, the state and its separated powers developed according to extremely realist differentiations that imposed their principles and codes on what happened to the political order before a moral will could reconstitute what was already constituted (Harste 2009).

Kant saw that wars are overly costly and involve far more than just taxes. He several times warned against risks involved in credit systems (Kant 1795/1977: 198-199). Developments of credit systems advanced from the Dutch differentiations between Amsterdam's Wisselbank, its Actien, its Vereeingde Nederlandsche Geoctroyeerde Oostindische Compagnie, and its Beurse (Ferguson 2008: 128-135). The credibility of such internally differentiated subsystems enlarged and conditioned the possibility of creating a functional self-referential system of credits beyond the solidity of the single institution and organization. The differentiation principle seemed to have been decisive, since a non-differentiated and overly integrated system was developed a bit later in France under the ruling concept of an absolutist united idea in the Scottish 'John Law's system': in 1717 John Law was nominated for finance and tax minister, director of the Beurse, the central bank, and main shareholder. Whereas Louis XIV, before his death in 1715, could say 'L'État c'est

moi' and accordingly embark on a military overstretch that left France with an almost unpayable war debt, John Law could say that 'La finance c'est moi'. He overtook the French public debt - but his overly unified and integrated system broke, since everyone soon realized that the Mississippi Company, that only possessed the Central USA, had no real value to sustain the assets of the company - at that time (Ferguson 2008: 139-158).

The final form that took place with the so-called financial revolution (Dickson 1967; Brewer 1990) can be reconstructed as a circular form in which finance appeared as a self-referential system, to be distinguished from the French tax system and internal credit system (Dessert 1984; Vauban 1709/1988). Enclosures and colonies were successively used to pay creditors (Marx 1867-1894) whereas the parliament stayed as the guarantee that payments were sustained (Figure 1).

**Figure 1. The British external credit system and its financial revolution**



In 1988 Paul Kennedy published a widely read book, *The Rise and Fall of Great Powers*. Therein he at length presented an argument that all superpowers since the early 16<sup>th</sup> century have developed a so-called ‘military overstretch’. The Habsburgs did it and became

insolvent eight times within less than one hundred years. France embarked on an overstretch, not only with the War of Spanish Succession and Louis XIV's earlier wars, but also with the Seven Years' War (1756-1763) and the War of Independence (1776-1783). Great Britain after the Napoleonic Wars had to transform itself from an estate society into a class society, which involved a democratization of its parliamentary rule. Germany committed an overstretch, and did so twice, in the World Wars, as did the Czar's Russia with the First World War. The United States approached overstretch in the Vietnam War, and the Soviet Union could not sustain its campaign in Afghanistan (1979-1988). Hence the United States, yet another superpower, should be careful not to develop the same kind of overstretch. Furthermore, the risk for United States was to believe that it conquered the almighty power invested in the Cold War's infinite destructive power. The U.S. actually got far less power to impose its will on other countries after the fall of the Berlin Wall and the Soviet Empire.

However, the trap has developed to include several topics that should be distinguished. First, the U.S. as an economic system led the information technology revolution and widely increased its economic and cultural power during the 1990's. Second, the IT revolution was linked to a so-called Revolution in Military Affairs (RMA) (Owen 2001; Vickers & Martinage 2004). The PC and the internet were invented by DARPA due to military needs for transiting information by multiple information highways in case of general war. Yet paradoxically the military trap developed as a consequence of the risks embedded into the successes of the internet and the RMA: the U.S.'s war strategists became more and more susceptible to ideas of invincibility due to inventions in tactics - not in strategy (Knox & Williamson 2001: 175-194). Along with the strengthening public discourse about globalization, the provocation became still stronger with debates about who ruled The McWorld vs. Jiihad, as Benjamin Barber's 1995 book was titled (Tibi 2001a; 2001b).

According to U.S. military strategists such as William Lind (1989), Thomas Hammes (1994; 2006), and Arreguin-Toft (2001), the only power strong enough to destroy the almighty powers of U.S. was U.S. itself. However, U.S. forces were already, at that moment, embedded into the trap created by American advices and finances to the Mujahedeen fighters in Afghanistan who also robbed the Soviet Union of its upper hand. The U.S. partook in the financing of the Mujahedeen with the Saudi Arabians and invested three billion dollars (Kolko 2001: 45-85); accordingly, the Mujahedeen and its subgroup al-Qaeda

learned to reflect on and use U.S. tactics and strategies. They learned how to involve American forces in a military overstretch. The tactics that were to form the core of the overall strategy for dismantling the U.S. McWorld were to provoke the new neo-conservative to believe in the U.S.'s almightiness and embark on a military overstretch. In fact, the British colonel Thomas Lawrence (Lawrence of Arabia) had already developed that strategy of the trap in order to establish an Ottoman military overstretch (Lawrence 1928/1997: chap. 23).

Then, after 9/11, a U.S.-led coalition embarked on Operation Enduring Freedom, OEF, and Operation Iraqi Freedom, OIF. From this point, it is possible to observe the military quagmire imposed by asymmetric warfare (Mao 1955; Mack 1975; Hammes 2006; Gray 2005; Harste 2011). Such arguments can be developed with analyses well-known to informed military strategists today. If we, however, wish to open the analysis more widely for a deeper understanding of the structural couplings between the war system, the financial system and the political system, we could learn the lesson from classical analyses of modern society and the role of war in it. Here I will first introduce Carl von Clausewitz's theory of abstract and real warfare and its transformation of the gravity center of war. Then I will outline the main points from the historical sociology of the links between war, state-building and finance. Finally I will shortly describe some of the motivational and moral shadows of wars and describe their costs and conclude about those implications the costs have had for the differentiation of the credit system.

## **Clausewitz and the second order realities of war**

Carl von Clausewitz, better than anyone, in his masterpiece *Vom Kriege* (1832/1952) elucidated the no-governmentality of war. His famous phrase that "war is the continuation of politics conducted in another medium" (1832/1952: 888) is not a master plan about how the political system could control war. On the contrary, it is a description of a much more complex and tragic relation that concludes from his basic assumptions about the interchanges ("Wechselwirkungen") undertaken in war and how they lead from ideal and abstract plans to the transformations that occur in the realities of war. In the course of these transformations, the center of gravity moves and the culmination point in war is when this center ("Schwerpunkt") undergoes such a transition.

The form of the interchanges is a form Clausewitz takes from Immanuel Kant's Critique of Pure Reason (1781/1787/1966: B 256), probably inspired by his mentor in methodology Johann Kiesewetter, who was Kant's assistant. With later sociological form analyses developed by Georg Simmel and especially Niklas Luhmann (1986; 1991; 1997), it is possible to discern a far clearer idea about Clausewitz' conception than military strategists so far have conceived. Clausewitz conceives three forms of interchanges and observes what happens with them at two levels - the abstract and the real war - or, explained with Luhmann's theory of self-referential communication systems, the first order observation and the second order observation.

#### AI. The material interchange

A very common view of tactical rules prevails in the eyes of the public, the political system and idealizing military planners such as Napoleon's chief of staff Antoine-Henri Jomini in *Précis de l'art de la guerre* (1838/1855/2001). He was literally and intellectually Clausewitz's adversary and told a suggestive narrative about victorious warfare. The view is that war is that kind of tactical warfare that fights about a material battlefield such as piece of land, borders, or access to sea or resources. According to this view, the number of troops, cars, airplanes, and battleships can be calculated, and the party who has the most of such instrumental means to be used as input into the system of warfare will be sure that the output of fighting leads to guaranteed victory. The outcome of warfare can be calculated (Biddle 2004; Beckerman 1999).

#### BI. The social interchange

In a battle between opponents there is a clearly identifiable conflict between those who enter the battlefield. Classical warfare is about symmetric troops and armies opposed to each other in a continuation of states in conflict and political systems that are adversaries according to clearly identified goals. Of course, such a state governed conflict scheme has not always been the case, but since the Thirty Years' War (1618-1648), that scenario has ruled and wars have been identified and planned according to this ruling narrative. Accordingly, this is also what ruling ideas of just war (*jus ad bellum* and *jus in bello*) are about, and the narrative corresponds to the basic form of the Westphalian System of sovereign states (Knutsen 1997; Teschke 2003; Tuck 1999).



## CI. The temporal interchange

The classical conception observes conflict as the combination of a static interchange with a linear process that describes a transition from a time of peace to a time of war and back to a time of peace. Military campaigns can be planned (in peace) according to goals, and accordingly lead to a decision about battle; successively the battle follows; and afterwards the losses are counted and the winner takes it all. Time is linearly planned, although since Fredrick the Great's campaigns towards Saxony and Prague (1756), synchronization between separated troops (divisions) has led to a still-increasing speed in warfare. The side that can increase speed and synchronization the most will prevail if the number of troops and resources are equal. This has been the leading tactical idea from Fredrick the Great to Napoleon and Jomini to Helmut von Moltke's campaigns in 1866 and 1870, to the German Blitzkrieg and to the American RMA.

Yet this first order observation of warfare, according to Clausewitz, leads to a misconception of real war. Only very few wars, if any, have been conducted according to such a simple scheme. Initial warfare, as in the Gulf War (1991), Israel's Six Day's War, the U.S. attack on Granada or the Falklands War may have had such a form. In reality, wars transform themselves, and even often become wars about what is conceived and conceptualized as war. Hence, the basic first order form in almost all major wars is transformed into a second order form about what is conceived as war.

## II. The second order transformations in the material dimension

According to Clausewitz, wars lead to a transformation of the center of gravity into a multiplied and still more complex, not to say chaotic, combination of dissipative forms. The conflict about the battlefield becomes, first and rather directly in modern warfare, a fight for supply lines, centers of communication, airports, electricity supplies, bridges, main roads and so on. However, soon problems of finance appear, since wars are extremely costly. Every major war leads to greatly increased taxes; or whenever taxes do not increase, huge financial difficulties soon appear, and secondary solutions such as debt increases have to follow. The public may be resistant, especially, according to Clausewitz, in offensive warfare, since offensive attacks used to be conducted with an idea of surplus or justification. This paradoxical principle of the weakness of the offensive and the strength of the defensive

is less about the strength of surprise but about the weakness of finance. For example, neither Nazi Germany nor Japan initially increased their taxes substantially compared to what those two countries did in the later part of the Second World War, whereas the UK and the Soviet Union did (Harrison 1998: 20). In the First World War, the financial costs came as an immense surprise to all parties. After the first few days, the war was conducted according to tactical possibilities, and the strategic idea of the war became the first offer in that extremely fatal war.

Yet when finance turns into a messy affair, the gravity center once again shifts and public acceptance of the immensely increasing financial costs become the focus. The opposing parties fight to break their adversary's back of supplies, then finance and then the public. But additional supplies follow: the humane costs, including their long-term economic costs. Hugh Rockoff (2012) has demonstrated that more than half of U.S. financial costs of war are caused by the opportunity costs of casualties and war veterans. Disabled veterans who cannot contribute to the nation's wealth from, say, the ages of 25 to 65 are immensely costly for a country when they are counted in thousands, if not millions; and Rockoff does not even count the costs to the relatives. In sum, wars are not over when the truce comes and the peace is concluded. Wars have no conclusion. Accordingly, we have to account for the financial and humane costs of war much more accurately than is supposed in the first order analysis, and admit that calculations at a first order level are completely misleading. We are led into severe complexities of a second order.

## BII. The second order transformations in the social dimension

The social dimension of war does not only concern troops or members of the military organizational system. Victims and collateral damages are all over, including civilians, relatives, traumatized persons, raped women, starving persons, refugees etc. At the second order level, wars involve a wide range of other people far beyond those in the military. This implies a number of transitions in warfare.

Precision strikes are not a very adequate answer to such complexities, since with drones they seem to easily increase the number of strikes, seeing as how the spots of collateral damage concern quite a number of innocent people placed far from anything looking like a war zone. At the same time, precision is demanded by the national and international public,

which somehow should accept the legitimacy of offensive strikes against an enemy that is hoped to become a future friend (Rawls 1999), and who rather often is not the cause of conflict but innocent, and even perhaps the cause of a campaign with a responsibility to protect (R2P).

The social dimension of warfare also includes transitions to so-called asymmetric warfare (Thornton 2007). Whereas the rich and strong parties to a conflict easily can afford fortifications, compounds, trucks, tanks and protective uniforms, the weaker have to find other solutions. Hence they look towards sabotage, guerilla tactics and what U.S. Colonel William Lind termed fourth generation warfare. In a somewhat famous article from 1989, he saw warfare as a kind of entropic system that spread the confrontation from a concentrated battlefield (1<sup>st</sup> GW) to longer lines, as in the Napoleon Wars and especially the First World War (2<sup>nd</sup> GW), to the synchronized in-depth attacks as with the Blitzkrieg (3<sup>rd</sup> GW), and to a completely different form with the 4<sup>th</sup> GW. This form is not as recent as was supposed by Lind, however. It is well known from the Spanish resistance to Napoleon (the Spanish “guerilla” = little war), the Languedoc Camisards in early 18<sup>th</sup> century and the Danish Snaphaner fighting against the Swedish superpower. Theoretically, Lawrence (1935/1997) explained how the Ottomans, a major regional power, could not conquer and secure the whole Arab peninsula despite its immense number of troops and great financial costs. Hence, simply to attack here, there and everywhere, now or later, stressed the troops as well as the finances and resources meant to supply the troops. Accordingly, the strong had to draw back. The conclusion is that the strong loses and the weak wins. As Henry Kissinger said in 1969 during the Vietnam War, “the strong will lose, if he does not win, and the weak will win if he does not loose” (Mack 1975; Arreguin-Toft 2001; Thornton 2007).

## CII. The second order observation of temporalized war

In *Vom Kriege*, Clausewitz is thoroughly occupied with those realities in war that lead to protracted wars of attrition. Plans are blown to pieces and what Max Weber called the material rationalities obscure every idea of formal rationality, in the realities and complexities of war far more than in courts, in schools, at universities, in normal daily life and in other functionally differentiated systems of modern society. In war “everything simple becomes complex”, “friction” and “fog” characterize the normal catastrophic experience and nothing turns into normality or normal procedures and rules. Surprise is

everywhere, and rules do not hold for more than a day. This, of course, obfuscates every juridical idea about normal rule-following.

Time goes on and every matter becomes different. Human actors develop new visions about what they do and why; their judgment dissolves and transforms into abductive reasoning in complex situations. Above all, time changes, plans have to change, and the time horizon of bounded planned time becomes obsolete. With Luhmann, we may describe the war system as a risk system in which the system cannot observe that it cannot observe what it cannot observe (Luhmann 1986: 52, 59; 1991). The orderly relation between the present moment and the future moment becomes obscure, and the vision of the future looks different. Thomas Mann's 1924 description of time in *Der Zauberberg* certainly is also a comment on the temporal vision of transitions during the First World War: Time fades away. Days become weeks, weeks become months, months become years, and still more years. This is what protracted warfare is about.

This means that costs rise explosively. Not only do financial costs accumulate exponentially with the escalation and expansion of all those dimensions that warfare tries to control. The human costs also increase. Warriors turn into war veterans, and some veterans turn into disabled, crumbled, psychically terrorized, and traumatized non-individuals, in the sense that they are no longer coherently unified persons, or human beings not divided into pieces, as we could expect from in-dividuals (=non-divided). Their minds may be blown up; their nightmares and flashbacks destroy their bodily sensation of being themselves. They might cohere into their small units with their buddies, who will become the only people able to understand their experiences. The more often they are sent to the war zone, the more likely they will suffer from PTSD (Post-Traumatic Stress Disorder), and the more they long to unite with their buddies and companions (Harste 2014).

The huge wars of the early 20<sup>th</sup> century sent soldiers back in the tens of millions to a society with routine work, conventionally routinized norms, and given ideas of public and private life, including private suffering. During the Vietnam War this changed, and the so-called heroes went back to a post-heroic life. Since the 1970's people have had to deal with self-development, self-realization, competence innovation and an organizational culture where they have to sell themselves as coherent images of successful people with CVs and life trajectories to be told as decent biographies. Accordingly, the soldiers and their victims

are still more traumatized. The fight continues when they come back, and often it becomes still worse when the physically and psychically disabled are squeezed between disconnected welfare systems, turning their lives into protracted suffering. Wars take about three generations to end. The humane and financial costs continue to veterans' children and close relatives, and if entire regions have suffered from wars, the grandchildren have no way of escaping the traumas and become traumatized themselves. In Eastern Europe that has been the case, especially in Belarus, Ukraine and Russia, the three countries that suffered the most from wars in the 20<sup>th</sup> century, even more than Cambodia, Vietnam and Rwanda. According to more recent and accurate research, probably about 45 million people died in the Soviet Union due to the Second World War, and about 20 million starved to death since Ukraine, taken by the Nazis, was the breadbasket of the Soviet Union (Sokolov 2009; Collingham 2012).

To sum up, Clausewitz's thesis of the structural coupling between war and politics tells a story quite different than one about control and best case scenarios about just decision making, power and the will to power, to say nothing of heroes and rational strategies and strategists.

First, we observe that wars begin to feed themselves, but successively they run out of supplies. It is at this moment that the societal and political conditions for protracted warfare expose critical limitations for still more extended wars. The public and the creditors do not accept still increased burdens, and demand the political system end the wars. Political systems may control warfare in the very moment of decision to go to war, and have more or less mythological ideas about abstract successful and clean wars without suffering. Such best-case stories almost certainly never become long-term real history. Wars are functional systems and functional systems control themselves. According to Luhmann's great theory of self-referential social systems, organizational systems cannot control functional systems; churches cannot control religion; theaters and galleries cannot control art; legal administration cannot control law; universities cannot control research; schools cannot control education; and military organizational systems cannot control war (Luhmann 1997). Organizational systems of course have a major impact, together with other actors and their communications. But hierarchy, membership, and decision-making are only one form of inclusion and exclusion that is typical to modern western states and organizations. Elsewhere, in the failed empires that tried to rule the world, all kinds of different

segmentary and stratified social orders made arrangements and networks obscure and complex (Luhmann 1997: 618-708; Centano & Enriquez 2010).

In addition to Clausewitz's analysis, mythologies are all over (Smith 2005), and organizational systems seem to close themselves off from the disasters of war. Clausewitz and his contemporaries were somewhat occupied with this risk and its political and organizational friction. Military organizations reorganize and develop particular bureaucracies and organizational cultures in order to establish at least some form of self-control (Huntington 1957; Vandergriff 1999; Irwin 2012; Grissom 2013). More recently, in the last few decades, hybrid wars seem to result in hybrid states due to the fact that the famous Western wars - OEF and OIF - developed as coalition wars with a polyphonic coalition of goals, interests and strategies that cannot unify into anything like a coherent strategy. Accordingly, the military organization systems become hysterically occupied with a form of self-closure in order to decide upon how to decide. They turn themselves inwards and follow the paths of the RMA and its so-called "system of systems" (Owens 1995; 2001; 2002). Even before the so-called revolution in military affairs, military communication became crowded with massive bombardments of communication codes and acronyms (RMA, OEF, OIF, 4GW, COIN, CIMIC, etc. etc.) in order to synchronize communication still more and still faster; - and thereby win wars that are lost in almost every other kind of dimension (Gray 2006; Record 2006; 2010; Ritter 2007).

## **The historical sociology of war finances**

In historical sociology, some of these short- and long-term costs have been analyzed under the umbrella of the Charles Tilly thesis 'War makes states, and states make war' (Tilly 1975). Much of the debate about this thesis has turned around another thesis, namely Michael Robert's analysis of 'the military revolution' from 1560-1660 (Rogers 1995; Downing 1992; Porter 1994). Earlier and later periods have been analyzed, and it has been debated whether they were more important. Yet Robert's main topic was about the organizational, financial, legal and political conditions for such a revolution, which he mainly referred to using the Swedish reforms under Axel Oxenstierna and Gustavus Adolphus (Roberts 1973). For the present article, the point is to draw attention to the structural coupling between the war system, the military organization system, and the

financial system. The Tilly thesis probably exaggerated the focus of war as an independent causal variable, although it was not Tilly's intention to establish such a causal analysis. Rather he tended towards a traditional functional multiple framework of mutual conditions, including political conditions (Tilly 1984; 1992; 1993; Harste 2013b). This implies that a simple statistical description of the number of troops that so often has been forwarded as the main characteristic of the Tilly thesis does not satisfy a more coherent theoretical analysis of war and crisis. Rather, the very point is in the mutual conditions and structural coupling of different functional systems and their organizational condition.

Thus we have to understand, firstly, the organizational background implied by the Reformation that secularized the formerly Catholic church organization and its corpus spiritus, transforming it into early bureaucracies with a form of esprit de corps and estate which became the porteur parole of a 'necessary' 'reason of state', even in Catholic countries such as France under Cardinal Richelieu (Thuau 2000; Cornette 1992). The precondition of the revolution was the establishment of an organizational framework that linked authorized legitimacy with law and with a coherent institution of representation, meetings, delegation and power. Power was already constitutionalized when the military revolution had its start (Quillet 1972; Thornhill 2011; Luhmann 1997: 565). But organizational power was not militarized, and the war system did not become a self-referential functional system before the Thirty Years' War. But in this more or less thirty year-long war, the war began to feed itself in a competitive escalation system (Brücher 2011).

Secondly, we can observe those transformations that took place in the systems of delegation and representation along with the military build-up in the self-referential war system. Wars could be transformed into competitions for still-stronger central administrative delegation systems, and into still-better representative estate and parliamentary systems that could guarantee future contributions in the form of resources, manpower and taxes, as shown above in Figure 1. With the Konstanz edicts from 1183, the church transferred its canonical law of contracts to towns that thereby became independent; and at the same time they accepted the credibility form of churchly networks (from credos = faith). This paved the way for contracts in trade and commercial agreements in towns and between towns. In this way the form of credibility systems emerged, for instance in the fairs of Flanders and in the banks of Florence and other Italian cities, with Lyon as the trading and credit center

between northern and southern Europe. Credit also developed among merchants (Braudel 1979; Dessert 1984; Grenier 1996; Germain 1997; Fontaine 2008; Stasavage 2011).

The problem of financing war was about easy money, fast and expedient. Taxes took years to gather, whether in the form of contributions from estates or as money gathered by tax administrations. In any case, also with the later innovation of parliament-guaranteed payments-to-come, a huge range of possible tax developments needed to be proposed. Taxation forms and still more tax reforms were proposed over and over during the 17<sup>th</sup> and 18<sup>th</sup> centuries (Bonney 1995a; 1995b; Collins 1995). However, once a war began, huge payments needed to be supplied immediately to those creditors who supplied the resources and, until the conscripted armies of the French Revolution, to the mercenaries, bought or rented from the condottieres. Under such circumstances, taxation soon became a medium for taxation forms and reforms (Braun 1975; Bonney 1995). Still in 1576, Jean Bodin in a classical account could describe that the government money came from five sources; the crown domain and sale of domain, conquest, allies, inflation, and taxes. His list was successively a description of less and less important financial measures; but then things changed.

The mass of the armies grew, especially with the still-increasing number of fortifications and garrisons that could house and train them to keep them available for defense or attack. In addition to the growth in logistics, weaponry, cannons, wagons, horses, uniforms, food, armament industries etc., armies and supplies became still more permanent following the first, the French royal (only 2000-man strong) companies d'ordonnances in 1440. In the early 18<sup>th</sup> century, Louis XIV disposed of not less than 400,000 permanent troops, many of them in about 200 fortifications and garrisons. Of course, such an army and a somewhat similar navy with more than hundred ships, built and supplied by naval bases, necessitated an immense state organization and tax administration. However, in times of war, the financial burden often was higher, and sometimes, as in the later world wars, far higher, than the tax revenue. The world wars were only financed by about 15-20%, in spite of extremely increased taxes. The Soviet Union is a particular case, since the Soviet state could not make use of a credit system of bankers similar to the French-British-American network (Harrison 1998; Strachan 2004); the Soviets simply used their planned economy to supply the war effort. They could not, in any case, buy supplies in the disrupted world market, but received huge quantities of still quite insufficient materials from the U.S.



In sum, we should describe the burden of wars according to three dimensions: the material dimension of logistics; the social dimension of the number of troops involved; and the temporal dimension of the permanency of wars and their protracted character. Hence, we have a three-dimensional form and figure as demonstrated in Figure 2, in which the financial burden of an imagined army anno 1570 is compared to an imagined army anno 1720.

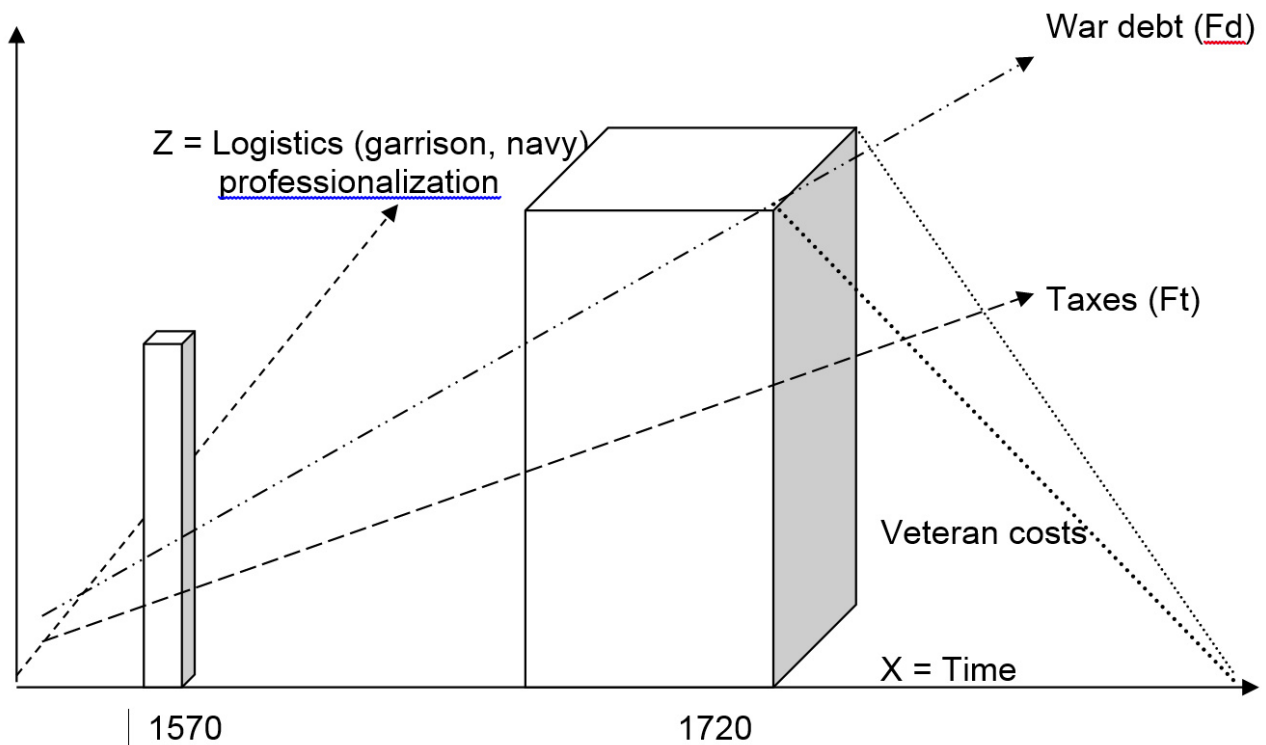
Yet we also have a similar three-dimensional evolution in the organizational form of the state that is to supply such a military form. The tax bureaucracies, and a number of additional organizations (e.g. transport), also have a material growth in their resources, the personnel employed, and the permanency of their staffs. Whereas the state in the early 16<sup>th</sup> century was constituted by a nominated estate governing and organizing from their homes, the staff increasingly was permanently employed and placed into official administrative buildings of the state. Hence we see a structural coupling between the war system, the military organization system and the state administration system, including its tax administration.

However, we should also add the more invisible credit system (Mann 1986; 1987; 1993). The idea of an invisible blind balancing of contracts and trade most certainly comes from the mythology of Justitia, who as an innocently dressed young woman was placed on commercial markets many places in Europe during the Renaissance. She carried a scale in one hand, a sword with the other, and had a band over her eyes, ready to cut off the trader who cheated her (Robert 1993). In addition to the three-dimensional figure we can add an increasing war debt that necessitated a still more complex credit system, which according to some interpretations hides future risks behind hedgings in order to establish a trade between present payments and loans in future (invisible) payments.

## **Figure 2. Growth in military organization and finance from 1500-1780**

Size of army/navy x logistics depenses x permanency =  
Fo(organisational size x professionalisation x permanency) =  
Ftd(Ft taxes + Fd debt) = F(bureaucratization)

Y =  
Quantity of servicemen  
Quantity of bureaucrats  
Taxes & War debt



With Paul Kennedy, we can depict the lesson learned from the historical sociology of war finance. When a strong state, say a superpower, sends a logistically overly supplied big army out far away for a long time, we can look at the classical model depicted in Figure 2 and see what happens. Clausewitz' warning is that the gravity center of war will be transformed from the battlefield to the fields of finance, humane costs and public support. When France sent an army to Indochina in the early 1950's and once again to Algeria at the end of the 1950's, and when the U.S. sent an army for more than eight years to Vietnam and repeated that story with OEF and OIF, it took on too heavy a burden and knocked itself out, as when George Foreman tried to hit Mohammed Ali hard in eight rounds in the 'battle of the century', the 1975 boxing match used as a model to explain why the strong will lose and

the weak will win (Collins 1978; Arreguin-Toft 2001).

Hence, the strength of the argument is that Figure 2 is not only about past history. It is indeed still a story about burdens of wars. Remember that the burden of war includes the cost of veterans. In fact, second- and even third-generation traumatized veterans protract the end of wars into a future that easily becomes as long as the debt burden. The debt is twofold; it is about long-term repayments of financial war debt and about the burden of disabled soldiers. After the First World War the first generation of disabled soldiers was still a burden into the 1970's, and their children are still alive today. In Hugh Rockoff's penetrating account of U.S. war economies, the burden of war veterans is, financially, as costly as the wars themselves (Rockoff 2012).

Paradoxically, this fact is hidden after major wars, since they also create extreme opportunities for organizational and technological innovations (Rogers 1962/2003; Mazzucato 2011). Wars are destructive as well as innovative, and nothing has been as paradoxically destructive and innovative as the two world wars. Their immense costs were embedded in stories about technological and economic growth, and even in the Soviet Union, the most destructed country with the highest losses of manpower among all warring parties, its propaganda machine demonstrated growth and prosperity. However, the negative savings, i.e. the long-term destructive first, second and third traumatization effects, continued to have their impact and demoralized the populations for generations to come. The paradox is most visible in states like Japan, Germany and Northern Italy: some of the countries who suffered most happened to establish the highest growth rates, known by the German phrase 'Wirtschaftswunder', during the 1950's and 1960's, including South Korea, which was thoroughly destroyed in the Korean War; in fact, North Korea also had initially high growth rates.

## **Conclusion: The transformation of the gravity center**

With the Vietnam War, the Bretton Woods system, initiated in 1944, almost collapsed. Because the United States received almost all liquid gold as payments during the Second World War and came out of that war far more prosperous than any other country, the dollar was equalized with gold. Hence dollars could be used for payments all over the world and

became the currency of reserve, at the same time as the Federal Reserve Bank became the lender of last resort (Kindleberger 1984; Frieden 2006; Eichengreen 2007; 2011). The Korean and Vietnam Wars drained the Fed of gold, and Belgian economist Robert Triffin's paradox turned into more than a theoretical model: the US trade deficit could be paid with dollars, since every country continued to believe that something useful could be bought for dollars. In 2011, Germany was the biggest exporter in the world (219 billion dollars, followed by Russia with 198 billion dollars and China with 155 billion dollars), whereas U.S. imports stood at 784 billion dollars, about five times as much as the second biggest importer, the U.K. Nevertheless, the dollar remains the reserve currency, although the Euro easily could take that place and sometimes does function as a reserve currency. Yet the peculiar problem to understand is the impact of the Iraq and Afghanistan Wars on the public debt and the financial crisis that began in 2007-8.

Joseph Stiglitz and Laura Bilmes published their book *The Three Trillion War* about the Iraq war in March 2008, almost at the very same moment as the financial markets began to break, with the Lehman Brother's insolvency in September 2008 as the major starting point. Yet the three trillion figure is a very conservative underestimate, in the sense that Stiglitz believed five to six trillion was more probable, in addition to the Afghanistan war, which happened to be almost as expensive, to say nothing of other countries' expenses. About 10 trillion is closer to the final expenses for the coalition partners, in addition to the Iraqi's and Afghani's own expenses. Stiglitz foresaw that the low rents policy established by the Fed in order to keep domestic U.S. investments high in spite of the drain from the combined wars, of course led to over-borrowing among homeowners.

Debtors were guaranteed loans with a new mechanism that was invented after the Smithsonian Agreements that followed the Gold Standard. In the 1980's and 1990's international trade and prices could be guaranteed by insurance on future prices for commodities such as oil sold in Rotterdam. These so-called swap contracts were a financial product established by leading bank networks and had the form of insurances. Yet since the Reagan and Thatcher years the financial markets were still more deregulated, and in 2008 there was, unbelievable, only one employee in the U.S. institution for financial regulation. As early as 1988, the leading World Bank economist Eugene Versluysen wrote a report warning that deregulation was so pervasive that a rapid meltdown could take place. The problem was, that deregulation made it possible literally to create money out of nothing, in

the sense that credit markets sell credibility. The crucial point is that credibility is trustworthy if a great range of institutions establish guarantees that they will pay for contracts at a given price, at the same time as they take insurances that those prices will hold, and thus earn money even if the price does not hold. Accordingly, the market created a mechanism for success even in the face of failure. And such a mechanism happened to be worth money; it could be sold or used as a guarantee and for borrowing, as if it were a solid commodity. Accordingly, the credit system was decoupled from the production economy. Credits turned into a self-referential system, which sells trust and time (Luhmann 1988; Baecker 1991; Krugman 2009; Esposito 2011). Trust is a form of communication, which tries not to inflate its credibility (Luhmann 1968; Ahamed 2009).

Of course, some firms and some householders became overly indebted; indeed, they were encouraged to do so by firms that sold loan assurances. But then smaller risk-taking banks became insolvent, only to send the bill from their sub-prime loans, accredited by Fannie Mae (Federal Annual Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) for two trillion dollars, to still bigger banks. At the end, the bill ended up at the Fed, which would not pay and sent it to the U.S. Congress. These costs are added to the war costs of, say, 10 trillion dollars. Yet, beforehand, the Bush administration took some account of the future costs of an Iraq war and asked a commission, led by Carl Kaysen (2002), to write a report about future costs of the Iraq war. The Republican estimate in 2002 was 49 billion dollars, the Democratic estimate 59 billion dollars, and a worst case told about 99 billion dollars. Kaysen and his associates, however, found that the risk for an economic crisis due to rising oil prices and lower stock markets could increase the total cost to 1.9 trillion.

Altogether, war has a major impact on economy and credit systems. Wars have very immediate effects on the functioning of credit and taxes. When taxes rose so quickly during the world wars it was because of the need to absorb the excess money with which supplies were bought. Nevertheless, George W. Bush and some of his coalition partners, such as Denmark's Anders Fogh Rasmussen, who became Secretary General of NATO, lowered taxes during the Iraq war. The political narrative seemed to have been a form of securitized risk story, e.g. that a crisis could not come, the warnings were wrong, and the combination of RMA and financial derivatives would assure a combined neo-conservative and neo-liberalist almighty power into the future, eventually backed with a religious faith about the

right world order, as when the good should fight the evil (Albright 2007; Smith 2005). Niklas Luhmann warned in 1991, in his book *Soziologie des Risikos*, that the political system is coded in such a way that it tells stories about best cases and neglects worst cases. In wars, there are no best cases and no good stories, only stories about losses. The truth will be lost, finances will be lost, and human traumatization is the neglected hidden story underneath the invisible hand of history (Coker 2001; 2009).

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