

# DESIGN AT THE FRONT

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## ABSTRACT

Over the last year, fierce discussions have raged about the trend of socially engaged design, where such projects have been scolded as new forms of “design imperialism” (cf. Nussbaum 2010; Pilloton 2010; Sinclair 2010). Resonating with this discussion, the latest US Army Field Manual has included “design” as a central feature in the core battle doctrine. Are we seeing the birth of a “social design doctrine” employed to wage war?

It is tempting to draw parallels between design and the developments of military thinking to reflect some of the issues at stake as design turns to address social, cultural and ethnic issues. As its point of departure this text examines how design and warfare strive for opening new “fronts” in conflicts, new dimensions to strike the enemy, and also use games to train and expand tactical thinking. Today, trans-disciplinary “Human Terrain Teams” of ethnographers, anthropologists and military personnel are engaged in counterinsurgency warfare. Similar to the latest doctrines of warfare, design explores the use of interfaces, fronts and conflict zones, and social design might soon be the next social “surrogate warfare”. As design goes social it urgently needs

ethical research and reflection.

## DESIGN AS A FRONT ENGAGEMENT

The connection between design and the military industrial complex has a long history and most designers know the history of Ferdinand Porsche’s design of German tanks in World War II as well as Hugo Boss’ design of Nazi uniforms. In a similar vein, today no Italian soldier today would enter war in anything else than a uniform designed by Giorgio Armani.

As highlighted by Adrian Forty in his celebrated book *Objects of Desire*, design has always run the errands of power, legitimizing power and the formation of human subjects by desire, force and influence (Forty 1986). Capital, in Forty’s case first exemplified by Wedgwood porcelain, used designers in an instrumental way to integrate fast and streamlined methods for mass production, often against the will of the workers, which satisfied the taste of the market (Forty 1986; 29ff).

Much of design consists of shaping surfaces, façades or interfaces. Design concerns the front. It is a front as in an outer shell, the look or interface, but it is also a front in the meaning of a conflict zone. Indeed, one could say that design is a weapon in an arms race where we designers are the warmongers. Let’s examine how.

The designed interface is a conflict, or perhaps even a battle zone. It is a territory split between two or more conflicting wills. Take for example clothes, the outer surface of our dressed body. My clothes are a battlefield, a conflict engaging my will of expression and the intentions of the designer, but also, as Dick Hebdige pointed out in his seminal *Subculture, the Meaning of Style*, the symbolic tactics of subculture (Hebdige 1979). As Hebdige points out, I am a victim, but also an irregular fighter, caught in the frontline in a war of codes and meaning.

I also encounter the fronts at the war of everyday undertakings as I struggle against “affordances”. I fight with getting the pram up the stairs. I fight with the sensor registering movement to open the automatic

doors. Especially interaction design provokes conflict: everyday I wrestle with Microsoft Word. And it really fights back. For example; I try to write some abstract Dadaist poetry, and Word counterattacks by correcting my spelling. I erase and rewrite. Word retaliates and underlines my words in red, blood red.

This behaviour of Word is a typical counterinsurgency tactic created by interaction designers, and we can see it everywhere: the pre-programmed “correct behaviours” firing back at us innocent users. This unjust battle recruits honest users to become guerrilla fighters in an asymmetric war of interactions. Most of us only want peace, but the front calls us. We desperately seek a diplomatic solution in the preferences menu, trying to stop some corrective grammar function, but most often to no avail.

The struggle with Word is similar to what the influential military theorist Carl von Clausewitz called the “friction” of war; the complexity of battle as unpredictable events evolve and the “fog of war” increases. To Clausewitz “friction” is the “factors that distinguish real war from war on paper.” (Clausewitz 2008: 83) Due to friction “the light of reason is refracted in a manner quite different from that which is normal in academic speculation.” (77) The struggle for military command is to make sense of the information from the battlefield and make wise moves. In a similar vain, designers try to reduce the “friction” of use, by “user-friendliness” or “form-follows-function”.

## A BRIEF GEOMETRIC HISTORY OF THE FRONT

With a quick look at the history of warfare we can easily draw parallels the evolution of design. It seems like war, just like design, is always fighting for new dimensions to open new fronts. The different geometries and dimensions do not follow a strict historical evolution, as they reach different intensities at different times, but a rough generalization can be made to highlight the “abstract thinking” of each war era. To use Deleuzoguattarian terminology, the battlefields were “smooth” or “striated” at various points in time and in different dimensions (Deleuze & Guattari 2004). The opposing “war machines” tried to open new smooth dimensions to cut decisive blows into the enemy’s striated defences.

Primitive battles were non-dimensional, it is the zero-degree of battle. Nomadic clans of hunter-gatherers move around in a smooth space and wage battle when accidentally set against a foe. But with specialization war could be waged more accurately and deadly.

Battles in classical and medieval times were about points and specific battlefields. Generals assigned places for battle, almost like duels, and forts or castles could be besieged. This was the one-dimensional war; combat was done at specific geometric points. However,

the tactics were linear and geometric, as the commander would manoeuvre various formations of soldiers into positions where the weapons would have the greatest effect on the enemy.

During World War I the points get extended into a second dimension and heavily defended and entrenched lines become drawn across the landscape. The aim of warfare was to seize and hold territory, preferably sacking the capital, or to destroy the opposing army through attrition. Especially at the western front, the war got pinned in two-dimensional contours dug into the soil, where armies had to conduct offensive operations on a single continuous front. This is the zenith of linear tactics.

For any success in a WWI offensive, it had to be meticulously organized and methodical as the advance of infantry depended the artillery fire. Creeping barrage, or rolling curtains of fire, preceded attacking infantry lines according to pre-established timetables. Even if an attack succeeded and sudden breakthrough was achieved in the first lines of trenches, the infantry could not advance further into enemy territory as moving on without artillery cover would be too costly. The problem was to move the heavy line of artillery through the landscape it, just moments before, so successfully had turned into a moon landscape of mud (Wiest & Barbier 2002).

In the WWI stalemate it required the invention of new dimensions of warfare; armed airplanes (to fly over the enemy trenches) and tunnel warfare (to dig and plant bombs under the enemy trenches). Thus to avoid the stagnated line the war became three-dimensional.

However, the WWI also saw the birth of infiltration tactics, especially associated by the “Hutier” tactics (after the German inventor, General Oscar Hutier) and the use of Stosstruppen (Storm troops). This approach tried to break the lines by concentrated fire, dodgy manoeuvres and combined arms. Hutier also made efforts to put command together with the infiltrating troops to better use the breakthroughs. Efforts like this formed the embryo for the German *Auftragstaktik*, or mission-oriented tactics, a keystone of the mechanized manoeuvre warfare actualized twenty years later. The Hutier tactics, while still using infantry troops and equipment, differed from the previous linear approach of mass assault,

Once located, the troops could use their own weaponry to achieve a breach in the line, with the goal of advancing to tactical depth. No longer was it necessary to attempt to overthrow the entire enemy defensive system utilizing the brute force of great numbers. The quickly advancing storm troops would attempt to disrupt the enemy defensive system by striking at supporting artillery and command centres. In many ways the style of warfare was *Blitzkrieg* without tanks. The enemy defences were now seen as a system. It was the job of the storm troops to

short-circuit the brain of the system rather than batter the body. (Wiest & Barbier 2002: 20)

As a form of appropriation the storm troopers “hacked” into the system of the enemy, used the dug infrastructure as a diagonal vector to cut deep into enemy territory and deployed forces. While still fighting on a two-dimensional surface, the Hutier tactics aimed at using the striated battlefield to their advantage.

By World War II the industrial paradigm of warfare reached its peak with technical warfare happening on land, at sea and in the air and in all three dimensions. This was the last great war between equally modern states and where the machines of mass production kept the war going until they finally broke down in a “total war”.

Today the ends in armed conflicts are often unclear, and the means are constantly changing. In most contemporary conflicts there is a multitude of political, economic and ethnic ingredients. Conflicts erupt at some places around the planet while the rest of the planet lives in a constant threat, of terrorism, bombs or other forms of violence. New frontiers and dimensions also open in new densities; nuclear war, cyber-war, bio-war, civilization-wars. The fronts dissolve into a continuous blur of constant insecurity and risk, as enemies seem to be everywhere and nowhere.

Except trying to outflank the opponent by new dimensions, war is a question of speed. Castles and bunkers are about digging down to stop time and petrify time and the opponent, to keep a status quo (Virilo 1995). Not too unlike copyrights or the blocking of access to Internet sites to strike down on protests (Kullenberg 2010). But new techniques are invented to fly over the fortifications, to increase the speed, to dig encrypted tunnels for dissident transmissions and circumvent the defences. Think of rockets, bitTorrent protocols for file-sharing, openDNS or cipher-hackers supporting protesting students in Iran or northern Africa.

Indeed, we can recognize the same patterns if we re-examine design, for example fashion design. Once the struggle was about the dominance of one frontline; the meaning exposed at the surface of the garment. The designer had an intention, a proposed meaning, and the user could choose to wear and identify with this meaning (Barthes 1983). But subcultures came to undermine this meaning. The denim jeans of the US miners were worn by artists and rebels and became ubiquitous fashion. Over the years some ethnic garments become guerrilla statements; some colours become loaded with explosive meaning (Barnard 1996).

Today fashion has so many fronts and meanings the voice of the designer is almost unheard among all magazines, blogs and forums. And not only meaning or identity; today the fashion fronts cut through ecological materials, ethical production, chemicals of various sorts, new fibres, composting and cradle to cradle product

service systems. Marketing gurus look for even more dimensions; every brand wants a break through. Fashion design seems impossible to overview, ends and means mixed, all styles coexist at the same time and only a fragment seems to be about the clothes themselves. How did we get here, and how did the military respond to the growing complexity of their battle operations?

## THE DEVELOPMENT OF MILITARY THINKING; FROM ENGINEERING TO COMPLEXITY

As elaborated on by theorist Antoine Bourquet, military development of doctrine follows overall scientific discoveries and discourse, affecting strategies and tactics as well as military theory in general (Bourquet 2009). The clockwork armies of Frederick the Great were later replaced by the thermodynamic order or industrial motor armies, striving for density, mobility and firepower, coming to the German *Blitzkrieg* of World War II. To reach maximum effect on the steel density of tank armies, control was moved to the front, as in the German *Auftragstaktik* (mission-oriented tactics) or, as discussed by military theorist and general Shimon Naveh, in the Soviet doctrine of “deep battle” (Naveh 2006).

To Naveh, the manoeuvre in industrial warfare follows certain engineering logics. The overall logic is of striking with force at the weak parts of the enemy; in the middle-lines, communications and vectors of movement, aiming at a deep breakthrough to eliminate the enemy force with high-density firepower and a density of mass. Such tactics, or fire and movement, following Euclidean geometry, works towards creating operational shock, preferably simultaneously throughout the enemy force. According to Naveh, this traditional manoeuvre paradigm saw its eclipse in the Soviet Operation *Bagration* in 1944, which led to the destruction of German army group centre and the final loss of German strategic advantage on the eastern front (Naveh 2006).

The current order of modern warfare, for example in the US and Swedish armies, called “Network Centric Warfare”, follows developments in information technology, computers, surveillance and satellite communication (cf Albers, Gerstka & Stein 1999). Using technology to reduce the “fog-of-war” on the battlefield this information driven warfare is designed to thrive on the chaos of war. However, these doctrines also resonates on a theoretical level the ideas of chaos and complexity theory.

As opposed to the industrial doctrines, Naveh proposes a nomadic “rhizomatic manoeuvre”, based on contemporary war experiences where a high-density army meets a dispersed and clouded enemy (2006). To Naveh, the rhizomatic manoeuvre is executed in a theatre of war with no clear borders or frontiers and evolves into complex fractal-like geometry rather than

tracing Euclidean lines. It defines as its space of praxis a self-regulating ecology or auto-poietic system which means that the aim is not to strike deep into enemy territory (as that has no meaning to the enemy) but instead to pursue potential, to build possible exploitation for actors in the environment and to reveal their form to the other combatants. Like fire ant colonies, it operates without hierarchy but a force being constantly present (Naveh 2006).

In today's complex conflict environments the engineering or surgical precision of smart bombs is complementary to the "swarming" tactics of ever-present drones and non-linear operations where the forces are spread out rather than concentrated (Edwards 2005).

The future of war is fraught with uncertainty. Among the few points that experts agree on is that the future battlefield will be relatively empty as military operations become more dispersed. This is due to the increasing lethality of weapons, in particular precision guided munitions (PGMs), which render concentrations of mass on the battlefield vulnerable. Long-range fires can now be delivered by a variety of means because of recent improvements in command and control and in sensor technologies. Even direct fire is now much more lethal. Warfare is becoming a hide-and-seek struggle where units must remain elusive in order to survive. (Edwards 2005: 1)

This dispersed battlefield is the opposite of the industrial paradigm, which could be summed up in German *Blitzkrieg* general Heinz Guderian's quote "Klotzen, nich Kleckern" ("boot'em, don't spatter 'em" or "strike concentrated, not dispersed") (Guderian 1996: 316).

Swarm tactics is a response due to the fact that the weapons of today are more accurate and deadly as well as a frequent asymmetric tactic by "insurgents" to counter the superiority of modern conventional forces. "Swarming involves the convergent action of several units that continue to attack by dispersing, manoeuvring, and reinitiating combat (pulsing)." (Edwards 2005: 68) Yet, swarming is not a classic guerrilla tactic as engaging and destroying the main field forces of a conventional army is usually unattainable by guerrilla tactics alone (Edwards 2005: 65). Likewise, guerrilla tactics usually aim at one attack to then disperse, while swarming uses "pulsing" behaviour, with repeated and reiterated pounding of enemy forces in a continuous flow. In contrast to the old uncoordinated swarms of the Mongols, who used the "Mangudai" technique with a simulated retreat of a weak centre, today's equivalents are networked and well informed, both high-tech US forces in Afghanistan as well as satellite telephone equipped pirates outside Somalia.

The networked swarms of today form emergent systems, similar to the Complex Adaptive Systems,

which is the use mass, iteration and technology to coordinate and harness complexity (Axelrod & Cohen 1999). This is the type of behaviour we see more common also in the civil world and especially design discourse. We see Complex Adaptive Systems in the use of "smart mobs" (Rheingold 2002), open-source programming (Raymond 1999), user-driven innovation (von Hippel 2005) and "crowdsourcing" (Howe 2006). But it is also common in the activist behaviours of the "multitude" (Hardt & Negri 2005) or "flash mobs" and "critical mass" bicycle protests.

The same type of abstract logic can be traced in the works of industrial designer Hella Jongerius in her works with porcelain producer Nymphenburg where she delegated design decisions to the painters who were "free to choose their own colours and images from the company's collection" (Jongerius 2004). Jongerius work is an excellent example of manoeuvre warfare, moving control to the front line, and using rhizomatic manoeuvre to produce non-linear decorative results.

## DESIGNING THINKING AT THE FRONTLINE

Clausewitz' remark that "war is the continuation of politics with other means" has formed the basis for conventional war studies over the last century and is still deeply engraved into the "Clausewitzian culture" of military thinking (Christiansson 2007: 9). However, as politics is a many-folded field of practice and discourse and changes with time, so do the parameters of conflict and war.

In the "industrial war", as General Rupert Smith frames it, war was waged by military experts supported by complex technocratic systems. Such systems focused on mobilizing and commanding concentrations of speed and mass into decisive battles and this was the recurrent image of future warfare during the Cold War. However, as Smith points out, "war no longer exists" (Smith 2005: 1). War is no longer fought between two opposed state machines, but today we see "war amongst the people" become the *dominant* form of armed conflict. Such armed conflicts engage civilian and non-state agents and makes no mutual distinction between combatants as it was defined in the Geneva Convention.

Perhaps most importantly, Smith suggests, the armed conflicts common today has no possibility of reaching a final victory but must rather end in a tolerable "condition". The use of military force can no longer win by conquering and holding territory but can only produce the conditions in which acceptable outcomes can be produced by political and social means. As Smith points out, "once an intervention has occurred a main preoccupation is how to leave the territory rather than keep it." (Smith 2005: 272) This situation, which in many ways directly opposes the common lines of thought about military intervention, creates a lacuna of conceptual models to understand military action in contemporary conflict.

However, as noted by management researcher Roger Martin, today “design thinking” has become a vital part of the complex theatre of operations in armed conflict and is frequently discussed in military journals, for example *Military Review* (Martin 2010). One such design-imbued doctrine is the “operational art” of Shimon Naveh (2007) and the “systemic operational design” of Huba Wass de Czege (2009). The latest US Army Field Manual (FM 5-0) on operations process, which includes a lot of “design thinking” frames the problems of contemporary warfare,

As learned in recent conflicts, challenges facing the commander in operations often can be understood only in the context of other factors influencing the population. These other factors often include, but are not limited to, *economic development, governance, information, tribal influence, religion, history, and culture*. Full spectrum operations conducted among the population are effective only when commanders understand the issues in the context of the complex issues facing the population. Understanding context and then deciding how, *if*, and when to act is both a product of design and integral to the art of command. (FM 5-0: § 3-17, italics added)

The addition of design thinking into military doctrine is an attempt to reduce the impact of reductive and mechanistic thinking within operations planning, stemming from the industrial paradigm of warfare. The ultimately goal of design here is to create better military “conditions”. Military organizations have always been complicated, that is many part arranged in linear and predictable ways, but for today’s complex conflicts the armed forces need to adapt to new environment of multiple “soft” factors, like culture, tribal alliances, civil governance etc.

To underline some of the complexity of a battle today, a US commander’s checklist before a brigade-size counterattack in Afghanistan can today look like this:

- What infrastructure damage could the counterattack incur?
- How would that impact on the different actors and tribal groups in the region?
- Are we creating a disaffected minority by upsetting the power balance, risking a refugee crisis that would overwhelm the regional humanitarian capacity, or create other unintended consequences? [...]
- What is the logic of the guidance?
- What are the sources of legitimacy of the different power bases within the enemy’s social system? (Banach & Ryan 2009: 108)

For acting within such complex operational environment, Wass de Czege, now retired Brigade General and founder of the School of Advanced Military Studies (SAMS) at the U.S. Army War College, proposes more adaptive learning cycles. These

adaptive learning cycles, which must be networked into the interconnected operational environment, coordinates a wide variety of decisions and units (Wass de Czege 2009) and there is called upon an associative “art of design” (Banach & Ryan 2009; Hernández 2010).

In this type of complex environment it might not be of surprise to notice how Naveh and the Israeli Defence Forces has had Deleuze and Guattari’s *A Thousand Plateaus* as his references, and also other theorists;

We are like the Jesuit Order. We attempt to teach and train soldiers to think. [...] We read Christopher Alexander, can you imagine?; we read John Forester, and other architects. We are reading Gregory Bateson; we are reading Clifford Geertz. Not myself, but our soldiers, our generals are reflecting on these kinds of materials. We have established a school and developed a curriculum that trains “operational architects”. (Naveh cited in Weizman 2006)

More notably to the design community, distinguished theorist are also among the writers used for war today, with names like Buchanan, Krippendorf, Margolin, Simon, Thackara and Papanek, not to mention the Gothenburg-based management theorist Barbara Czarniawska (Naveh 2007).

What these theorists offer are new ways to conceptualize war, how to form doctrine, perhaps most importantly; were do disband doctrine to form new diagrams of thinking (Weizman 2006). Here the connection between design and warfare comes to its clearest; in ways to conceptualize the future in simulation, scenarios, prototypes and games for training.

## PROTOTYPING WAR FOR NEW TACTICAL DIMENSIONS

The Prussian king Frederick the Great was fascinated with automatons, representing his meticulously ordered clockwork armies, as Michel Foucault (1991) and Manuel DeLanda (1991) both elaborate on. But as they both highlight, he was also very fond of miniature war games. Later, during the reign of Fredrik William III, war games, or *Kriegsspiel*, were developed by the Prussian general staff into a ubiquitous tool for officer education and strategy, and such games also later became war games for the gentry. An example could be the popular game *Stratego*, launched in France in 1908 as “L’attaque” a strategy game building on the “fog-of-war”, as the opponents pieces are hidden for the players. (Deterling 2008: 100) One famous civil proponent of more figure-like and playful games was British science fiction writer H.G. Wells, wrote two epic books on the matter, *Floor Games* (1911) and *Little Wars* (1913), and is considered the “father of miniature war gaming” (Wells 1977: 91).

Also the protagonist of situationism, Guy Debord, was a devoted war gamer. During the foundation of the situationist movement he developed the game *Le Jeu de la Guerre* (Game of War), invented in 1965 but first published in 1987, which he later exemplified as his key study in the “logic of war” (Debord 2005: 55). Debord’s Game of War exposes certain diagrams of the strategic possibilities in Napoleonic warfare, but the game also acts as a bastard sibling to chess, perhaps the prime strategic war game. It is not a coincidence that Debord developed a strategic game. Giorgio Agamben said about Debord; “once, when I was tempted (as I still am) to consider Guy Debord a philosopher, he told me: ‘I’m not a philosopher, I’m a strategist.’ Debord saw his time as an incessant war, which engaged his entire life in a strategy.” (Agamben cited in Wark 2008: 28) Media theorist Wark continues in his analysis of Debord’s relation to the game;

The strategist is not the proprietor of a *field* of knowledge, but rather assesses the value of the forces aligned on any available territory. The strategist occupies, evacuates, or contests any territory on pursuit of advantage. (Wark 2008: 28)

Here, the game of Debord reveals perhaps not only a matter of war or armed conflict but of how conceptual thinking and prototyping comes to define patterns of logics or “abstract machines”.

Also art groups proposed games to cut the stalemate of rigid thinking, perhaps most vividly the Surrealists (Brotchie 1991). Marcel Duchamp gave up art, carved himself a chess set from wood, and spent the rest of his life concerned with chess. He later wrote a book about chess. Duchamp meant,

The chess pieces are the block alphabet which shapes thoughts; and these thoughts, although making a visual design on the chess-board, express their beauty abstractly, like a poem.... I have come to the personal conclusion that while all artists are not chess players, all chess players are artists. (Duchamp quoted in d’Harnoncourt & McShine 1973: 131)

The Bauhaus teacher Josef Hartwig produced a series of updated cubist chess sets between 1922-24 as prototypes of the rational thinking of the modern times envisioned at the Bauhaus. Also here, chess was a game to conceptualize deeper logics of society and the machine age. Fascinated by the robotic moves of the pieces (also reflected in Oscar Schlemmer’s Bauhaus theatre), Hartwig’s chess set “embodies a utopian quest for the new subject to be self-determining in ludic and linguistic culture.” (Buchloh 2009: 148)

In his renowned study of everyday life, Michel de Certeau also strives to reveal the logics behind the practices of the everyday through abstract logics he calls “strategies” and “tactics” (Certeau 1988; 1998). Certeau links strategies with institutions and structures of power which produce the environments of the everyday. On the other side he puts the tactics of individuals

consumers acting and “making do” in the environments defined by strategies, reverting and undermining them by creating own meanings. In his example of walking through the city, the pedestrian takes tactical shortcuts instead of following the strategic grid system. Indeed, to Certeau, the everyday is made up of tactical “social games” and the carnival, where spectators are actors at the same time, is a common tactic for reclaiming the everyday. (Certeau 1998: 33) Like the Hutier storm troopers, appropriating the enemy’s communication lines as scenes for battle, Certeau’s everyday people fight to misuse the strategic system in order to produce possible futures.

Certeau’s tactics, the *Kriegsspiele* of the general staff, and the civil games examined above are the equivalent of the scenarios and prototypes of designers. They propose “what-if” course of events and settings that are aimed at informing new practices and provoke new thinking about the possible *as well as* the impossible. As argued by design theorist John Wood, the scenarios of designers facilitate discussions and visualizes proposals about the possible, thus aiming to inspire and render new worlds attainable, or denounceable (Wood 2007). This “design for micro-utopias” is the tactical thinking of design, to prototype future scenarios and thinking the new. The designer’s training, to visualize and abstract the possible new, is a core element of the highly desirable “design thinking” which is now seeping into military operational planning. This is especially apparent in the operational parts which are dependent on the “tactics” of civilian intelligence and cooperation; counterinsurgency.

## COUNTERINSURGENCY AND SOCIALLY ENGAGED WARFARE

Breaking the moral of enemy units has always been an important part of warfare. From war painted faces to propaganda, and from whistling arrows to sirens at dive-bombers. Psychological Operations, Psy-ops, have strived at affecting military personnel as well as civilians.

In recent years, as the US Army has been engaged in complex overseas missions of counterinsurgency, there has been a call for the education of more “culturally literate soldiers” to further the building of trust with local inhabitants (McFarland 2005). As a quick response to this urge, the US has created a system of embedded anthropologists in their combat units to better understand the “human terrain” of the conflicts. The teams are multi-disciplinary research groups of two anthropologists and three military personnel and are trained to gather cultural intelligence from the theatre of operations. Starting in 2006, the teams go through a short military training at the Human Terrain System centre in the US before being deployed in combat theatres in Afghanistan and Iraq. Such teams of academics from the social sciences are supposed to be

similar to police community outreach programs, mediating in conflicts, enabling the development of governance and supporting the goals of the military engagement.

The Human Terrain System uses empirical socio-cultural research and analysis to fill a large operational decision-making support gap. This research provides current, accurate, and reliable data generated by on-the-ground research on the specific social groups in the supported unit's operating environment. This human terrain knowledge provides a socio-cultural foundation for the staff's support to the Commander's Military Decision Making Process. (Human Terrain System)

The US Army now has "Human Terrain Teams" in each of its deployed 26 combat brigades in Iraq and Afghanistan to help provide commanders with a sense of cultural understanding when making decisions.

Critics have questioned the ethical practices of embedded civilians for research and called this development "mercenary anthropology" that exploits social science for political gain by means of violence (cf Rodhe 2007, Gonzalez 2009, Lucas 2009).

Anthropologists have been sceptical of the ethical responsibilities of researchers, questions of secrecy, voluntary informed consent, adequate training and misuse of data. Resistance is also met from inside the military, where the teams are seen as merely a quick fix that obstructs the repair of a wider gap of cultural terrain training (Connable 2009). Others, like David Kilcullen, an Australian anthropologist focused on counterinsurgency and architect of the Human Terrain Teams strategy, calls the program positively "armed social work." Kilcullen further argues,

Conflict ethnography is key; to borrow a literary term, there is no substitute for a "close reading" of the environment. But it is a reading that resides in no book, but around you; in the terrain, the people, their social and cultural institutions, the way they act and think. You have to be a participant observer. (Kilcullen 2007)

The argumentations in this critical crossfire sound much like the discussions surrounding participatory design in the 80s and especially the current "design doctrine" of social design. Where Kilcullen argues that current wars are "population-centric", and the military thus needs to control the people, it may seem like to design for "the other 90%" (Smith 2007) or "like you give a damn" (Sinclair 2006) might be some of the best tactics to wage war with the "soft power" favoured by president Barack Obama.

One critique of the Human Terrain Teams is that they are not hired by the Army *per se*, but through subcontractors like BAE Systems and thus managed in military-commercial settings (Gonzalez 2008). Similarly, social design might become a new "surrogate warfare", where hired locals become engaged in

military operations, paid by external interests which might not share the same ethical values. Beyond the hype of "socially engaged practices" the design field taking on outspoken social issues in complex human terrain is doomed to step into imperialist footsteps, as commented by Bruce Nussbaum in his article which triggered the hot debate in summer 2010: "Are designers the new anthropologists or missionaries, come to poke into village life, "understand" it and make it better--their "modern" way?" (Nussbaum 2010). In Pilloton's response to Nussbaum she highlights local connectedness as a key component of success, not too dissimilar to what the Human Terrain teams are after, or the tactics of "surrogate warfare". However, to save the day, Pilloton enthusiastically lifts forward the social salvation of creativity;

This is the power of humanitarian design: When it's not about design anymore, it's about an educational process that produces creative capital where it did not exist before, in beautiful ways, by underestimated individuals. (Pilloton 2010)

As earlier highlighted by Forty, design has a tacit tradition of politicized capital, control through standardization, and commercialization through modernist utopianism (Forty 1986). Today, perhaps the greatest imperialist endeavour of design is to fuel the arms race through the "creative imperative" and tacit complicity with creative capital, as this is considered essential for survival in the current labour, attentiveness and relations markets in service of the creative industries (von Osten 2002). Likewise, "social innovation", facilitated by flown in designers or local educators, might have its merits, but it also an effective tool at hand for the surrogate warfare of creative capital.

## CONCLUSION AND SUGGESTED FURTHER RESEARCH

Design and warfare has been intertwined as long as man has made weapons. Just like the ethical discussions that have lately concerned anthropologists about the Human Terrain System, design needs to examine the ethics, methods, tools and consequences of socially engaged practices. What ethical principles should be employed when discussing social design, and what role does guidelines from, for example, the UN play?

Further research could take as point of departure the discussions concerning the Human Terrain Teams, as well as discussions from development studies, and reflect onto some case studies of social design projects. However, avoiding cynicism can a tough task in the design world, as imperialism, power, creative capital, cognitive globalization and design blur into each other.

Just like *civil* engineers set out to differentiate from *military* engineers about a century ago, we might one day need to start considering to make demarcations

between *civil social design* as distinct from *military social design*. But is this where we want to go?

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