# **On the 'War on War' in Modern Geopolitics** Written by Idriss J. Aberkane

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# On the 'War on War' in Modern Geopolitics

https://www.e-ir.info/2012/01/09/on-the-war-on-war-in-modern-geopolitics/

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Item urgeat ignem exstinguere in bactrianam Item urgeat pacem aedificere in bactrianam[1]

Peace is a continuation of politics by other means. The unilateral projection of peace could become a potent political lever and a game changer in international relations, yet 'peacefare' and a 'peace arsenal' (including confidencebuilding measures and a conflict-quelling capability) have seldom been looked into. This essay acknowledges there is a deep-rooted 'law of the instrument' in international relations, meaning an over-reliance on familiar tools. As Abraham Maslow has said, "It is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail."[2] We argue that because stakeholders of international relations do not have peacefare as a tool, this has brought them to an almost religious over-reliance on war. Furthermore, this essay suggests the advent of a 'war on war'—a global war effort solely directed against war as a reified enemy of mankind.

Ascendancy is usually gained in a through domination or bargaining, the first two steps in Galtung's typology of conflict resolution. The third—transcendence—is seldom used in practice by states in modern conflict-solving, essentially because it is a game-changer that could redistribute power even domestically, which states and established decision-makers tend to fear and avoid. Besides, there is no culture of transcendence worldwide. Thus from the protracted Korean conflict, to the Israeli-Palestinian one, to the many border conflicts in Central Asia, there is a long record to illustrate how modern diplomats and stakeholders of international relations lack the most basic culture of transcendence. If such culture were to spread, the world would be decisively changed.

Violence against enemies (physical, economic, or psychological, and including intimidation, coercion, deterrence, and cultural imperialism) rather than violence against violence (i.e. 'war on war') is still the primary means of projecting power as a prolongation of political intercourses by other means. There is a military-industrial complex, yet no peace-industrial complex, despite the fact that the latter would be tremendously profitable and, this essay submits, could very well be the 2.0 evolution of the former. Such a novel hard-power capability, aimed at muscling out conflicts themselves rather than enemies, could be a very practical tool of foreign relations. This essay explores this tool on which, it is hoped, nations will come to over-rely, just as they did for military might.

Peace is a form of violence against war. As Gandhi said, "I regard myself as a soldier, though a soldier of Peace".[3] This essay's approach will thus be to assert that a seamless transition can be made from a military-industrial complex to a peace-industrial complex, in the full interest of all stakeholders. It therefore clearly supports peace profiteering. This essay claims that peace is highly profitable even for the most particular interests; much more so than war will ever be.

This work is theoretical and combines the research of Francisco J. Varela, notably on social autopoiesis,[4] and that of Idries Shah on human potential and automatic thinking. It adds a novel dimension to classical conflict modeling by representing conflicts as autonomous entities that can be targeted and destroyed. Domination and the taking of strategic initiative thus do not necessarily mean the destruction of an enemy's assets, but the ability to unilaterally destroy any ongoing conflict. This essay considers such an approach in the cases of armed or economic conflicts, from the perspective of outlining a doctrine and a technological blueprint towards a global conflict-quelling capability, which in itself could be a very potent game changer.

Written by Idriss J. Aberkane

Primarily, the notion of a 'war on war' may be tracked back in modern times to William James' seminal essayThe *Moral Equivalent to War*. This essay proposes that conflict-quelling capabilities be precisely consolidated by the sorts of moral equivalent(s) James was researching, and that its psychology be also consolidated by that of a 'total resistance', in the sense of Major Hans von Dach. As such, the 'war on war' may be introduced as a post-Cold War concept connected to that of civilian-based defense although it goes beyond the classical 'Man against Man' paradigm. One of its philosophical premises is that of identifying Man's true enemy: is it man or war itself, as a disease of man?

Wars, viral and evolving processes, have been playing with man for millennia, pushing humanity into a milieu increasingly suited to war's sustainability and intensity, in a process man himself is barely, if at all, aware of[5] If there may be 'selfish genes', the cognitive approach of this essay consists of taking a look into 'selfish wars'. Wars are viral and from a cognitive point of view, any outside observer would easily be led to think that they actively adjust man's milieu into something that gives the illusion of control and free will. Such an autopoietic, cognitive approach to the study of war is the spirit of this essay, and it permits us to ask, before the war disease reaches its terminal phase, 'has man domesticated war, or has war domesticated man?'

#### 1. The Human Potential in the War on War

#### 1.1 The Notion of a War on War

"The war party is assuredly right in affirming and reaffirming that the martial virtues, although originally gained by the race through war, are absolute and permanent human goods."

"The war against war is going to be no holiday excursion or camping party. The military feelings are too deeply grounded to abdicate their place among our ideals until better substitutes are offered."

#### William James, The Moral Equivalent of War, 1906 [6]

In the Bush administration's concept of a 'War on Terror', the reification of terrorism, which is not an enemy but a means of fighting, has never been legitimate either practically, politically, or semantically, despite extensive media coverage. Conflicts, however, are very different entities to terrorism. Much as one may reify a fire, conflicts which are self-organized and self-catalytic may be singled out as manifest 'Ships of Theseus' within the grander self-organization of humanity's actions and emerging properties—that is, entities whose component parts (human beings and materiel, *inter alia* for conflicts) end up being replaced entirely over time, yet still retain their identity as a whole. International relations and wars a *fortiori* form what the physicist and biologist have long called 'complex systems', in the Latin sense of *com-plexus* (woven together) and thus 'interdependent'.

This essay is the fruit of an interdisciplinary reflection upon the following question: given an individual or a group, independently of its mean age, education, resources, or charisma, what is the maximum damage it can inflict not *within* a conflict but *to* a conflict? Since the human potential is virtually uncapped, one may already note that such damage is therefore not capped either. Around twenty men started the Cuban Revolution from the Sierra Maestra.

Here the following question is considered—'how can one or a group deal maximum damage to a conflict?'— as it relates to economic and/or armed warfare, in both symmetrical and asymmetrical situations. Based on the work of Idries Shah, Francisco J. Varela (notably, besides his scientific ones, for the Royal Dutch Shell Group[7]), and the US research and development (R&D) management from 1940-79, this essay analyzes non-linearity and transcendence in the evolution of conflicts.

It is submitted that the capability to make peace could be a means of deterrence superior to that of making war. The ability to destroy any ongoing conflict could constitute a potent strategic tool. One would like to theorize such a tool, offer conceptual advances towards its prototyping, and discuss the effect of its deployment in international relations.

Written by Idriss J. Aberkane

The scientific finality of this essay would thus consist of developing a genuine conflict-quelling *force de frappe*, a target-and-destroy capability for conflicts, which, interestingly, shall require the fighting party to target *itself* with its own arsenal for the first time in history. Earlier essays have already acknowledged that, after Ibn Khaldun and Arnold Toynbee, the main weakness of empires consists of their craving to change and control the world without changing or controlling themselves. The development of a peace arsenal is a self-changing attempt and thus requires a lot of courage; empires, much as individuals, seem to fear self-change and consider it a form of weakness. Empires, organizations, much like individuals, have their ego, their disastrous "commanding self".

This essay does not claim to be exhaustive or reasonably complete, but rather to provide an opportunity for other thinkers to add to, criticize, discuss, question, and surpass its content in a collectively constructive manner, and to focus over its substance rather than its form, which does not aim to be formal and academic. Wikis have demonstrated why modern scholarly articles should be discussed, improved, and peer-reviewed in a patient and humble manner, rather than expecting them to be perfect and flawless upon first submission, a regrettable delusion across the scholarly community. Like any essay, this one shall have its ore and nuggets which the curious reader is encouraged to freely extract, focusing on the spirit, which is eternal, rather than the letter, which depends on the times and circumstances of its writing and is thus never eternal.

#### 1.2 Man as a Milieu

Within an armed engagement, conventional or asymmetric, the prime question is that of liberating the maximum potential of a combat group against another. On both sides of the engagement, combat units are usually considered to be *things* rather than emerging *processes* of group bonding and group cognition, including peer-pressure and social autopoiesis.

At the higher level of a combat's self-organization, however, this essay would like to consider conflicts as individual, reproductive and evolving entities, processes that one can reify and that can be destroyed. Here the analysis focuses on systems and 'systems of systems', with man as the default mesoscopic scale. 'Group' and 'group of groups' thus correspond to the macro scale, while memes, trends, and viral ideas correspond to the micro scales. This essay concerns the capacity of man and the group to take initiative in a crisis situation, especially when the chain of command is broken. This may more specifically pertain to the circumstances of asymmetric warfare where, being more local, the influence of each individual's capacity to liberate potential cannot be ignored in models, just like in economics or finance.

The study of autonomy and its kinship with self-organization, notably in social systems, owes much to Humberto Maturana and Francisco Varela's notion of autopoiesis.[8] The study of human potential and automatic thinking in crisis situations much owes to the works of Idries Shah.[9] Combined, these works elicit a study of man as the diffusion medium—the host of virus 'war'—whose very own cognitive functions can be easily hijacked and tricked into believing they control the spread of the disease with which they are actually infected.

Considering humanity as a medium capable of acting by itself upon its own diffusion properties and its resistivity[10] to the propagation of a war will be a defining conceptual specificity of this essay. It will enable it to lay the foundations of conflict-quelling on a larger scale.

Just as trends and representations in the cognitive sense can be modeled as propagating entities having humanity for a medium (like in the Bass diffusion model, Dawkin's memetics, or Sperber's *contagion des idées*), conflicts may be reliably modeled by self-organized entities whose lifespan may also be well defined, depending upon the circumstances.

Self-organized systems spontaneously co-evolve with the environment in which they build niches ensuring their persistence. They do so in a manner that Varela *et al* consider as blurring the border between a self-organized being and its environment. Such is one of the traits of the autopoietic correlates of intelligence in the theory of Maturana and Varela. Here one shall study the milieu itself—man—in its capacity to act in a coordinated manner against the propagation of such trends which develop it into a niche at their own convenience (this at both the individual and

Written by Idriss J. Aberkane

collective levels). In this manner the coordinated movement of man becomes quite similar to that which characterizes civil disobedience and non-violent resistance. The first theater of operation of such resistance becomes that of man's individual consciousness, where each fighter in such a 'war on war' fights to reclaim his free will from such tyrants as automatic thinking and destructive peer pressure. Conflicts indeed may be seen as causing their material components—human beings—to transform into a state more fit to their integration and absorption, that of fighters, warmongers, war profiteers and war junkies in general, which may take the form of hatred or relative mindlessness with a general reduction of free will as a macroscopically observable correlate of the process.

If human potential has already been well studied in standard tactics, especially from the angle of civil-based defense,[11] one may study such potential in the non-standard case of the targeting of a conflict as an autonomous entity which is transversal to the distribution of forces.

The capacity of a group to deal damage to a conflict requires the capacity—much studied in asymmetric warfare—to liberate a maximum of one's own potential which is theoretically unlimited and practically underemployed. Any resource, the human one being no exception, owns an arbitrarily vast potential.

#### 1.3 Knowledge Management and Human Potential

"Most people live, whether physically, intellectually or morally, in a very restricted circle of their potential being. They make use of a very small portion of their possible consciousness, and of their soul's resources in general, much like a man who, out of his whole bodily organism, should get into a habit of using and moving only his little finger. Great emergencies and crises show us how much greater our vital resources are than we had supposed." William James, Letter to Lutoslawski, 6 May 1906[12]

'Man is asleep, must he die before he wakes up?'

#### Idries Shah (quoting a Hadith) in the BBC documentary One Pair of Eyes, 19 December 1970

Considering human potential leads to considering the potential of any resource. In knowledge management, the exploitation of a resource effectively poses a simple dilemma, which may be the root of all sustainable development as a discipline, since sustainable development is fundamentally based on the dilemma of either extracting resources or knowledge from Nature. A decision to use a resource may range anywhere between inactive contemplation of its many possible uses,[13] or impatient, immediate use which will be necessarily less fertile than other, more conceptually distant ones which it may also render unfeasible.

The *affordances* of a resource, that is, the diversity of their possible uses, constitute a universe which is explored partly by what we call knowledge and of which ignorance forms the *terra incognita*. This makes true knowledge management 'ignorance management', as our ignorance is always infinitely superior to our knowledge, which is true in any field. The manifestation of a resource's particular potential (which we may represent as an element of an infinite vector) breaks the symmetry of its possible uses.

The resource-use dilemma arises in situations of both economic competition and armed engagement. It is theoretically *possible* indeed, for any human being, independently of her rank and education, to have one genius idea that could allow for the opponent's total domination. The concrete probability that such an idea may arise and that good practical use be made of it in the limited time of engagement are also often insignificant.

In reality, then, standard military doctrine consists of letting the command outline the tactics of engagement (which from the viewpoint of the local fighter is a feed-forward approach, and from the command's perspective is a form of retro-control exerted upon its armed limbs and thus a feedback one) and then letting the command receive the local data that is necessary to a good return on experience (which from the local fighter is a feedback approach as his knowledge travels back to the command).

The fluidity of a return on experience requires that information pass quickly in an anti-hierarchical order—something

Written by Idriss J. Aberkane

that is fundamentally impaired by classical armies' stiff hierarchical structure. Thus such stories as the invention of hedge-cutting devices by Sergeant Curtis G. Culin and the subsequent fielding of the so-called 'rhino tanks' by the Allied forces in the bocage of Normandy[14] remain much rarer than they could be, and they take the rare simplicity and modesty of a General Omar 'the GI General' Bradley to come into life under normal command and control situations. Such cognitive impediment is also considered to be one of the greatest systemic weaknesses of modern armies. To understand its scope, one simply needs to remember how often Sun Tzu reminds us to "consider circumstances" in the *Art of War*, and how much Napoleon studied the field of Austerlitz prior to engaging the enemy. So would engraver Ambroise Tardieu document the bas-relief of Paris' Trajan-like Vendôme column in quoting Napoleon's advice in Austerlitz:

"Messieurs [...] regardez-bien ceci, étudiez ce terrain, car, sous peu de jours, ce sera votre champs de bataille."[15]

Like any resource, the human one has an arbitrarily vast potential. A kilo of dirt for example may be used for the extraction of clay. It could also be used—if we possessed the adequate knowledge of physics adapted to this precise case—to liberate the more than 9.10<sup>13</sup> kilojoules of its mass energy. The high-level R&D that such a 'kilo of dirt' example would require may seem remote from the real constraints of the tactical situations one tries to study here, yet the principle it subtends—exploration versus exploitation—is ubiquitous. It intervenes, for example, in the case of putting an Mk2 pineapple grenade and an ordnance shirt to potent use in a guerilla engagement. One of the possible uses of such resources could be to manufacture a sling for the grenade with the shirt, thus tripling its effective throwing range. Concretely, this is just what the Afghan guerilla have sometimes resorted to during the Russo-Afghan war.

#### 1.4 The Use of Resources in Competition

The resource-use dilemma, which intervenes in numerous situations, consists of deciding how to use a resource knowing that on the one hand, targeting its absolute potential would be chasing rainbows, while on the other, targeting its immediate use would surely waste most of its potential.

Yet if two competitors have the same resource, there are two ways for one to prevail: either increase the quantity of this resource or increase the quality of its development. As this essay shall explore in further detail, the first is approach linear and the second is nonlinear; it corresponds to the so-called 'leaps and bounds' innovation in which the People's Republic of China is wisely investing. As for the human resource, in attempting to control it enough to develop it in a pre-established way, organizations (NGOs, armies, parliaments, companies, universities, school systems and so on) almost always come to largely waste it. They waste its autonomy, its cognition, and thus its infinite, super-profitable potential. Man is a fruit which may be either squeezed or planted. Squeezing it, which is linear, is predictable and unprofitable. Planting it, which is nonlinear, is unpredictable yet potentially hugely profitable. Thus stakeholders, policy-makers and researchers constantly have to choose between profitability and predictability. But planting man remains the very best way of using them in organizations, although it requires an attitude towards uncertainty which fundamentally goes against mans's natural risk aversion.

Such are the stakes of defining a new form of socially autopoietic organizational management, for which the Royal Dutch Shell Group was so eager to commission Francisco Varela, though it remained an early adopter of the concept and reaped very little of it. If the use of resources is the key to all competitions, human resources are the key of all keys.

On the one hand, linear competition opposes two *same* modes of exploiting a resource. The winner is he who possesses the greatest amount of the resource. For example, in the case of the confrontation of the British and German Air Forces in WWII, linear competition consisted of say, increasing the parameters of flying hours and number of aircrafts. On the other hand, nonlinear competition opposes two *different* modes of exploiting a resource. In the same example, it would be a confrontation between conventional propeller aircraft and jet-powered ones, or between the atomic bomb and all other WWII arsenal.

What makes the picture of a conflict more complex is that nonlinear developments emerge at all levels, and therefore

Written by Idriss J. Aberkane

at any level of a competition, be it local or global, and armed or economic warfare. The Shanghai Cooperation Organization represents attempts to solve the problem of dominating the Caspian Sea area in a nonlinear way; with the Russian Navy fielding its famous Ekranoplans (massive ground-effect planes) or deploying its VA-111 « ШКВАЛ » super-cavitation torpedoes, or with the People's Liberation Army Navy deploying DF-21 anti-ship missiles in the Pacific. On NATO's side, they go from the attempt to deploy anti-missile technology in Eastern Europe, to the Colored Revolutions along the former Soviet sphere of influence, to the much-debated High Frequency Active Auroral Research Program (HAARP).[16]

To all this one may add of course many other secret technologies that could span the whole spectrum of strategic scales, from ethnic bioweapons[17] and political social engineering at the global level, to non-ballistic guided ammunitions, nano-scale engine and microchip bugs, pervasive worm and computer virus technologies, or even such extensions of the old PROMIS software and the means of action of the US Information Awareness Office. Many novel technologies can also be extremely simple and obtained after very little R&D from out-of-the-box thinkers, often rather independently by different teams of researchers either civilian or military. Let us also add that, strategically speaking, securing a time window for the deployment of enough Me-262, the first known jet-powered plane, and its earlier hasty transfer to Japan as the future Nakajima-Kikka, was a decisive interest of the waging the Battle of the Bulge for Germany in WWII.

Fundamentally, it is *exploration*. Whether it is administered through a formal R&D organization (which inevitably makes it less creative and more predictable) or whether it is just the 'eureka' moment of your local Archimedes, exploration allows progress to occur in leaps and bounds within a competition. The problem of R&D remains that its outcome is unpredictable, while linear competition is just the opposite. Many attempts are thus made by states and organizations to linearize non-linearity. Notably, this is done by trying to quantifying quality, which gives such things as bibliometrics or modern institutional research assessment; such attempts to quantify quality are a widespread symptom of the post-industrial 21<sup>st</sup> century, a trend that Sufi René Guénon had well anticipated.[18]

The problem is also that the more one organizes R&D, the more one makes it predictable, and the more one misses out on its unpredictable, highly nonlinear outcomes. To a large extent, the Manhattan Project knew where it was going as the fundamental theoretical advances it lied upon had been made decades earlier, and though it quickly put the game theory it elicited to extensive use, Vannevar Bush's visionary contemplations of a 'MemEx' were but a side effect that would emerge as the Internet more than forty years later.

There is nevertheless a simple method to formalize what R&D is in its alternating nonlinear and linear progressions. We may call this the KICK and KISS methodology. KISS is already widespread and is attributed to Clarence 'Kelly' Johnson, a former team leader of the Skunk Works at Lockheed Martin. It stands for 'Keep It Simple, Stupid!'—an imperative any engineer should follow when *developing* a new idea into something practical. When *researching* is at hand, however, the mirror image of KISS should be followed: KICK, for 'Keep It Crazy, Kid'. Staying crazy and original should be the absolute imperative of any researcher, yet the organization of research into a tightly peer-pressured (and indeed, peer-reviewed) community fosters groupthink and censors most interesting Da Vinci-like ideas. Indeed, peer review produces the linearization and predictability of research and it is no accident that paradigm shifts are then often produced by those outside these research programs. KICK thus stands for research, which must be open, large and crazy, while KISS is for development, which must be narrow, clean, simple and practical: R&D is KICK & KISS.

In conflict situations, linear and nonlinear competition constantly cohabitate, yet time and again the winners of a conflict[19] are those who secured a protected operating regime for nonlinear competition, by containing or countering the advance of the enemy in a linear manner. The Manhattan Project was still a nonlinear project (the US knew what it wanted, but not what would come out of it and how long it would take), aiming to develop an exploitation of resources that was largely superior to all others.

As a rule of thumb, one may then say that in general it is nonlinear competition that allows someone to both dominate a conflict and to solve it, because nonlinear competition is basically a form of transcendence, which is itself the most potent way of killing a conflict. Its absence at the higher strategic level typically characterizes low-intensity conflicts,

Written by Idriss J. Aberkane

which are almost 'made to last', hence Afghanistan, the 'Grave of Empires', being the theater of the most protracted open war ever waged by the USA.[20] In the situation of a total war, however, nonlinear competition always comes to prevail over the linear one, hence the many inventions that were born from WWI to nowadays.

Given a human resource then, individual or group, what is the maximum damage this resource may inflict upon a conflict? The capacity of a group to spontaneously grant itself the means of dealing damages to a conflict are, in part, well known by the experts of asymmetric warfare and notably those of civilian-based defense and total resistance. Invariably, they are psychological and depend on the complex individual-group-society interaction, with such levers as groupthink and peer pressure.

#### 2. Man and the Group

"Soviet military units appear to have failed to develop strong primary-group attachments among the soldiers and between leadership elements and their men. This represents a potential for instability and fragmentation under combat stress. Therefore the effectiveness of Soviet military units in prolonged battle, when quick victories are not forthcoming [. . ] is open to question. Soviet military units could well begin to unravel if pressed hard enough in a conventional battle environment. From this perspective, Soviet units contain a great systemic weakness."

Richard Gabriel, The New Red Legion, 1980[21]

#### 2.1 Exploration versus Exploitation

The principle of separating qualitative and quantitative competition, nonlinear from linear, is a general one that applies as much to a prey-predator coevolution within a confined niche as to the organization of industrial competition and innovation management. In the former case, the study of a snake-newt (*Tamnophis sirtalis* and *Taricha sp.*) prey-predator couple has, for example, revealed that a nonlinear genetic innovation has allowed the predator to escape a poison/resistance arms race with its prey.[22]

Nonlinear competition offers a new margin of maneuver by redistributing the ascendancy within a given competition, and sometimes by *transcending* the very reasons for the conflict, which is the best means of conflict-solving presently available to humanity. However, transcendence often scares great powers away from conflict resolution because it has the potential to fundamentally dwarf their own ascendancy. In any case, the political and economic interest of nonlinear competition is undisputable, and is for example what prompts China to invest in 'leaps and bounds' innovation within a grand Noopolitik stance.

One could also, in the case of economic competition, study how transcendence and nonlinear competition could solve social conflicts because, for a given equity ownership, the distinction between the two competitions has opposite consequences on employees. In linear competition, man may be seen as a fruit that one merely squeezes, in which case the aim is to work more in order to earn more. In contrast, in nonlinear competition man becomes a fruit that one is interested in planting, in which case the aim is to work better rather than more, in order to earn potentially much more.

Nowadays, enterprises whose survival depends on maintaining a constant flow of creativity (like Google, Bing, Apple, Blackberry, and Silicon Valley ventures in general) are the most likely to invest in their employees' well-being as a means of fostering their creativity. The relative exemplarity of the Googleplex's working conditions much contributes to the company's soft power. Comparing the working conditions of France's Orange Telecom and its infamously high suicide rate with those of Google Inc. already gives a very reliable clue to understand why France remains totally unable to foster the emergence of its own Silicon Valley. Besides, economic niches where financial stakeholders are only interested in short term profits will also typically display a focus towards linear competition, as is the case in the US domestic airfare market for example.

Written by Idriss J. Aberkane

In the cognitive sciences one knows of a general principle that corresponds well to the dilemma of how to best use a resource within a competition (either armed or economic). This principle is that of *exploitation versus exploration*, which, given its remarkable ubiquity among cognitive systems, seems absolutely fundamental, well beyond the little that is known of it in applied mathematics, robotics, artificial intelligence or systems engineering. It applies as much to the behavior of foraging bees as to the deployment of combat units in situations of advanced autonomy (hence the huge interest of network-based warfare and biomimical swarm-like organization in the US so-called Revolution in Military Affairs and France's development of the network-based *dispositif FELIN*) or the optimization of management policies in oil companies.

An oil company indeed constantly adjusts its policy between the search of new deposits (exploration) and the added value of existing deposits (exploitation). In the case of the 20<sup>th</sup> century's 'big oil' competition one knows how much the knowledge and control of an easily exploitable deposit constituted an immediate means of ascendancy, which applies to the sector of resource exploration at large (gold, coltan, rare earths, lithium, emeralds, and so on.)

The idea of linking autonomy and knowledge, which in modern science comes from Maturana-Varela's paradigm (the so-called Santiago School of cognitive sciences), implies that the intelligence of a group depends on its autonomy and then, critically, on its capacity to alternate exploitation and exploration. Typically, a group that is under tight control from its central command has little autonomy, unless it is granted the right of resorting to atactique de *mission*, which is a minimal though vital level of autonomy within a top-down deployment. It is a rule of thumb of intelligence agencies that while intelligence collection is structurally biased by an excess of optimism, local circumstances are much more palatable to a group that is on the ground.

In particular the higher autonomy of guerilla units grants them a huge superiority over conventional forces which, among other things, have little room for maneuver to adapt their doctrine and rules of engagement to the particular circumstances, and thus a much smaller intelligence. In that one may explain among many other cases, how much the French military units were obviously strong in their weakness and weak in their strength from 1939 to 1962. Though one may leave this to another article, it is also typical of the French officer that he is strong when he is weak (like in the WWII Resistance) and very weak when he is strong (like in the Algerian War of Independence), which applies to any counter-insurgency situation in general although the very structure of the French officer's education exacerbates this general principle of the strong/weak alternation. The US troops abroad indeed are strong when they are weak and weak when they are strong.

From an epistemological point of view, there is a very fundamental philosophical and practical dilemma—beyond strategy and international relations—between planning and emergence. The more units are controlled, the more their use is linear, the more their actions are planned, the less intelligent they become, and the more predictable they become. The less units are controlled, the more their use is nonlinear, the more their actions are emergent, and the more intelligent and unpredictable they become. Any good commander and good reader of Sun Tzu should remember these principles in auditing his enemy's forces. Control is often a correlate of central strength. Yet control is weakness and emergence is strength. Nature for example, a very robust system, does not plan the actions of its agents. Nor do ants plan their actions when facing a colony-threatening situation.

One may in that sense compare control to the history of arts' classicist movement and emergence to the modernist one.[23] In management as much as in warfare, from the perspective of rich countries, it is considered that the main risks of failure come not from strategy-making but from the application of strategic choices.[24] This *dirigiste* point of view was present in art history at least from the Renaissance:

[Varchi] indeed strongly emphasizes the critical role Michelangelo gives to the human hands, that is to say the act (operare) that gives effect to the idea, the "virtuality" (immaginare). When the work of the artist does not have the beauty he had conceived, says the academician, marble is not "at fault" because it contained all the possible beauties. "The flaws come from the master who was unable to express his thought by means of the chisel."[25][26]

Yet if the development of known life on Earth emerges out of a heuristic trial and error process which is limited by the rules of physics, it seems clear that human management does not want to follow the same process. Thus *dirigisme* 

Written by Idriss J. Aberkane

becomes perceived as a moral imperative even though it reduces the learning and adaptation capabilities of the group, be it a unit, battalion, department, enterprise, nation, or concert of nations. This essay shall not discuss here the extent to which dirigisme—not from a political point of view but from that of a CEO, who is still a *dirigiste* decision-maker within his own company—constitutes a critical mistake of economic policy regarding sustainable development.

Since the autonomy of military units still spontaneously emerges during armed engagements, this essay proposes to study the potential of groups and groups of groups (systems of systems) from the angle of autonomy. General systems theory is a source of inspiration, as much as discrete scale invariance in social systems which are endowed of certain self-similitude, and of course self-organization as a correlate of collective autonomy and intelligence. The critical point of the latter being that autonomy is correlated to intelligence and that intelligence is correlated to the capacity to explore, and therefore nonlinear competitiveness. As for self-organization in social systems, the critical role it played in the Arab Spring and the rising Indignés/Indignados/Tent Movement/Occupy Wall Street movements explain the interest of using it as a framework in the study of group-based human potential. The practical consequence of studying units from this angle is also that of developing new military formations beyond the much obsolete *ordre serré* and *ordre profond*.

One may consider a human group to display at least three states comparable to the first three known states of matter: solid, liquid and gas. The solid state corresponds to a well-bonded group which cannot accept new entrants; the gas state corresponds to no group at all (no bonding, that is), and the liquid state encloses the optimal group intelligence, where a synergistic *esprit de corps* can be defined while the group can still accept new entrants.

#### 2.2 Combat Units in the War on War

"The Eagle was getting a first-hand demonstration of the fragile esprit de corps of the Soviet Army [in Afghanistan]. Following the Second World War, all other modern armies had concentrated upon encouraging small bodies of men to form fighting groups. Such men remained together from their early training days and through active service. The result was an army made up of a large number of strongly bonded units, like the hunting groups of man throughout the ages."

"The Russians had rejected this formula because, as their own documents, closely studied by the CIA and other Intelligence agencies, showed, they feared combinations of people. Men were regularly moved from one unit to another, units were endlessly transferred. "Bonding" was never given a chance to happen, even by accident. In consequence, units easily fell apart. Captives joined the enemy, especially if the enemy had the camaraderie which the Russians lacked and no doubt craved."

#### Idries Shah, Kara Kush, 1986[27]

Forming combat units in the war on war should deserve an essay—and later army manual—on its own and this essay shall thus merely explore it. The forming of combat units in the war on war basically forms the backbone of peacefare as warfare 2.0; that is, war against man's true eternal enemy, war itself. And if it is acknowledged as natural that man be capable of self-destruction, it is not conceptually far-fetched to consider war be capable of destroying itself either, by evolving towards the war on war.

One has seen that the making of systems of systems had to be studied from the critical angle of autonomy, with due emphasis on the capacity of the group to preserve its *esprit de corps* (by the rigor of a linear competition method for example, which makes most of initial army training). Simultaneously, it was necessary to creatively explore—without any form of negative groupthink or self-censorship—the full spectrum of operational possibilities, so as to dominate any competition by being able to *rapidly* and *decisively* resort to nonlinear strategies and collectively run cycles of KICK and KISS problem solving.

How can a group release a maximum of its potential against an enemy is exactly the question of *total resistance* as it was practically explained (KISS) in the seminal manual of Hans Von Dach. This essay gives more of a KICK approach to it by the way. Total resistance is based on the self-organization of the war effort within small combat

Written by Idriss J. Aberkane

groups, especially if they are cut from the chain of command, in situations of asymmetric warfare. The doctrine of a people in arms is a remarkable one from this angle. This essay proposes to extend it along two original lines

1) It is proposed that the doctrine of a people in arms be applied to economic warfare.

Such application is neither intuitive nor immediate, for reasons which make it very fruitful to study in the context of a war against war. The effect of an armed conflict on the individual and collective psychology is very different to that of an economic conflict. In general an economic conflict, be it a siege, a blockade, or a large-scale financial operation, has the effect of dislocating social groups or of federating them towards contestation (which was at least the aim of the US blockade of Cuba). Struggling against an economic adversity is not equivalent to struggling against a life-threatening one. In one case the instinct is at hand; in the other it is not. The same goes for a war on war, which is not instinctive, because although war is a life-threatening enemy of humanity at large, man is more equipped with animosity against his fellows than against the much more dangerous viral processes of war. Man hates man, not wars.

2) it is proposed to amend the finality of the doctrine of a total resistance in order to target not only the enemy but the conflict itself as an entity.

Here again, it is legitimate to believe that the nature of the psychological motives which will unite a group will be *priori* different when it comes to targeting a well-identified opponent rather than an abstract entity. Besides, targeting such an entity—war as a virus—requires a true effort of the self. Here the choice of words is absolutely fundamental to federate a war effort against war, as it must be clear, simple, and easily understood that war is the enemy; simple and crystal-clear words must also be chosen for people to quickly identify and thus act against the fine mechanisms of the propagation of violence.

There is indeed a lot of (subtle) spin and propaganda in the war on war, and Galtung called this *peace journalism*. Peace journalism's central tactical role is that of cutting wars' supply lines of hatred, ignorance, and violence. Idries Shah also acknowledged that violence is the result of pent-up feelings and therefore whoever can cut wars' supply of pent-up feelings will triumph in the war on war.

If war is the resolution of a conflict independently of the aspirations of an opponent, the purpose of all war is peace. Indeed, if one considers wars to be dissipative systems in the thermodynamic sense, they must have a finite lifespan, with their absence or terminal death—peace—being conversely unlimited as the equilibrium state. International relations form a far-from-equilibrium system; the only question, from this angle, is to ask whether stable dynamic peace is possible, other than the trivial solution of peace that is the annihilation of humanity. In other words, can man cause the extinction of all the species of wars without causing its own?

This essay proposes that the war effort against war be federated by the doctrine of total resistance. Conceiving that a conflict can be targeted and destroyed in a genuine war with its efforts, acts of gallantry and fury are the starting point of the present research into the 'moral equivalent' of war that William James postulated. Only such a moral equivalent can federate a total war on war at least as much, or even more, than in a war against a physical opponent which the human brain has evolved into recognizing more easily. Such recognition the war on war shall hijack, which gives a premium to *neuropolitik* in such endeavor.

#### 2.3. The Global War on War

This essay has seen that representing a conflict as a targetable entity required deep, novel psychological motives, especially at the local scale of small groups of individuals. One could as well study such paradigm shift from the mathematical angle at the global level, in the same way that the prevention of a third total war from 1945 to present has resorted to game theory and epistemic logic.

Humanity is then seen as a cognitive milieu, a sort of cognitive liquid that has the potential of acting on the propagation of the very trends that exist within it. These trends are ideas, opinions, fashions, behaviors, and of

Written by Idriss J. Aberkane

course wars, which all propagate in a manner we actually know very little of.

Galtung *et al* have already looked into the possibility of destabilizing violence by offering a coverage of it that does not elicit strong emotional responses. This intuitively leads to the representation of hatred as a cross-conflict propagating phenomenon. If peace journalism remains globally under-employed, it may be essentially the result of man's profound emotional addiction, and one may thus consider any audience of a news report as more the response of an emotional junkie than a group of people interested in objective learning.

The deontology of peace journalism indeed requires that its emotional content be somehow limited, since it attempts to trigger positive, constructive emotions only, while modern man seems profoundly addicted to negative, destructive emotions, as in John 3:19: *"This is the verdict: light has come into the world, but men loved darkness instead of light."* Strong destructive emotions being removed from peace journalism, even if it makes for a much better journalism than standard one, it does not sell.

Yet peace journalism could sell. That it does not sell merely proves that William James' moral equivalent has not been truly found. This essay postulates that strong constructive and positive emotions can be much more moving and addictive to man than strong destructive and negative ones. There is a tipping point to reach in the global sociology where a critical mass of individuals becomes contaminated with the moral equivalents to war and propagates them while being immensely motivated by them. Such a dynamic could lead to world peace. When peace journalism 2.0 takes off globally—that is, when there can be media moguls of peace journalism and an associated, lucrative peace-industrial complex—we shall observe a very reliable correlate that humanity is walking towards total peace.[28] Interestingly, the Internet could be the path of profitable peace journalism, as a 2.0 evolution of standard journalism. Indeed, peace journalism has the potential to become viral, which would mark a decisive victory in the war on war.

In the interview he gave on 30 October 2009 to *Russia Today*,[29] Galtung made no secret that building a peace projection force—a sovereign means of unilateral conflict transcendence—would yield higher leverage than any other known means of prolonging political intercourse by other means for states.

#### 3. Peace is Metastable in Our World

#### 3.1 War and Peace, Fire and Water

So far the mainstream view on the utility of a war in geopolitics—a continuation of politics by other means—is that it allows strategists to remodel areas where peace is a static state, notably regarding the definition of borders and spheres of influence. Such is a view which is very dependent upon the current prevailing zero-sum paradigm. The US doctrine of a 'Greater Middle East' has largely drawn from this view—that war was the only way to reshape a geographic zone—which this essay clearly argues is absolutely obsolete. In the doctrine of "ordo ab chao" one may also very well ask: "of Man and chaos, who controls whom?"

First, in the case of the 'Greater Middle East' reshaping plan, it can only be applied with total ignorance of the hard, 'carnal' reality at the local scale. Or, in other words, it has a globalist and not a 'glocalist' (for 'think global, act local') view of the checkerboard of good and bad. Yet one may agree that *realpolitik* is basically motivated by an apparently sound *modus operandi*, which consists of defining the highest objective for global good (the 'high point' of strategy) and then doing absolutely anything physically possible (beyond law, ethics, and morality) to achieve it, in which the ends justify the means. Yet through the bias of the law of the instrument, it has established remodeling wars as the basic tool of modern geopolitics for a superpower, and this is maybe what has most exhausted empires to their terminal decline throughout history, as such empires have systematically proved malevolent to Humankind.

Considering wars and 'constructive chaos' as the standard ways of remodeling borders and regional balances of power is rich in nefarious consequences because it implies the *perpetual* existence of low-intensity war zones.[30] In all possible situations except one, indeed, for an imperialist geopolitics considering war as the primary tool for

Written by Idriss J. Aberkane

reshaping borders, war has always a fundamental *raison d'être*, which is a geostrategic imperative for the superpower. Thus in the perspective of 'selfish wars', much like Dawkin's 'selfish genes' paradigm, we may observe that wars *de facto* hijack most of the cognitive functions of such empires to foster their own survival, and they are quite good at it.

Under imperial hegemony (whether attempted or achieved) there are four situations where wars must exist:

- The imperial superpower is rising, in which case granted it has no peacefare in its arsenal war is the means to reshape the zones that fall under its influence.
- The superpower is declining, in which case war is the means by which zones leave the superpower's influence, unless nonviolent resistance (e.g. India) is substituted to independence wars (e.g. Algeria).
- The superpower is totally and flawlessly dominant (full-spectrum dominance) globally, which is an extension of *Pax Alexandrina*, *Pax Romana*, *Pax Sinica*, *Pax Napoleonica* or *Pax Britannica* to an unprecedented global scale that the context of a New World Order has mistakenly attempted to declare was *Pax Americana* (hence the *End of History*).
- Under hegemonic full spectrum dominance there is a single war zone, or even a single pent-up feeling, which precipitates the emergence of other wars—this is known as *metastable peace* and top-down peace achieved by full spectrum dominance is inevitably of this nature.

Indeed if one considers that border-remodeling is only done by war (e.g. Ex-Yougoslavia), then only the condition of an optimal, full-spectrum empire can bring total peace, because if the empire is not globally encompassing all of Mankind it must be either declining or rising, in which case wars are a necessary means for it to achieve its strategic imperative. Then the global *realpolitik* of today may be summed up in this way: the high point—the highest strategic objective, presumably for global good—is that of full-spectrum global governance (or a one-world top-down governance) and then the achieving of it, for all the prospective good it is supposed it could bring, is enough of a priority to justify abandoning morals and ethics. Just as the human brain – and from the immune system to anthills to biofilms no intelligent system in Nature at large – is never governed by a small number of top-down neurons only, such strategy would make a top-down oligarchic global governance fundamentally dumb, and incapable of answering the many complex popular aspirations of an intensely connected world.

An almighty empire is thus a metastable condition, as the smallest discontent within it can precipitate its decline, or, as it has been studied in a previous article, a global power can suffer a local defeat (for example, Imperial Rome against Brittany, Napoleonic France in Spain, or the US-led NATO in Afghanistan), which is made all the more likely by the fact that the *ultima ratio populorum* has always ended up stronger than the *ultima ratio regum* since the decline of pre-Columbian empires. Indeed, were a single antagonism to emerge to full spectrum dominance, its repression would create pent-up feelings of hatred, frustration, tension, and indignation, and thus violence, the propagation of which would federate a new war.[31] One attitude across time has proven to allow man to use his own free will against the domino effect of the propagation of violence, which is non violent self-sacrifice, à la Gandhi, Martin Luther King Jr. and à la Jesus: "But I am saying to you, you shall not rise up against an evil person, but whoever strikes you on your right cheek, turn to him also the other." (Matt. 5:39).

This essay thus proposes there be two main weapons, two means in the pursuit of a geostrategic imperative: war and peace. The use of one makes the other unstable, as if one had to choose, of water or fire, which to use to develop an area. In full-spectrum dominance, any prospective superpower should develop, and resort to, its peace arsenal, otherwise the law of the instrument will create a blind spot in the superpower's full-spectrum agenda, a small vulnerability somewhere that degenerates into a global vulnerability everywhere.

In a nutshell, this essay thus proposes that peace (and its derivatives of joy, popular mirth, solidarity, bonding, and so on) be a potent tool for geopolitical remodeling, besides its already well-known role in border stabilization. Then, regarding economic development, the works of George Kozmetsky[32] propose to see economic self-assembly as a phenomenon whose dynamic is closely comparable to that of life and ecosystemic self-assembly in particular. One may remember economics and ecosystemics share the same Greek oiko- from which 'economy' initially meant what we call 'ecology', from the Physiocratic movement in the 18<sup>th</sup> century, which considered economy to be a direct

Written by Idriss J. Aberkane

extension of Life. Conversely, what one call economics nowadays may be more considered what Aristotle called Chrematistics, the seeking after wealth for itself, not as a means to something else.

If war, fear and hatred can propagate across the milieu of humankind, peace and prosperity can also invade the realm of its current *zeitgeist*. On this, the preamble of the UNESCO's constitution is clearest:

"That since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed;

That ignorance of each other's ways and lives has been a common cause, throughout the history of mankind, of that suspicion and mistrust between the peoples of the world through which their differences have all too often broken into war."[33]

Great Gamer Richard Francis Burton also clearly recommends:

"With Ignorance wage eternal war, to know thy self forever strain, Thine ignorance of thine ignorance is thy fiercest foe, thy deadliest bane"[34]

The only difference between the propagation of stable peace and that of war across the collective mind of humankind is that even though optimism and pessimism seem to propagate in a comparable manner (one may compare Western Europe's *trentes glorieuses* post-WWII economic recovery to the self-spreading of pessimism after 1929), the propagation of hatred involves emotional stimulants which the modern propagation of peace is missing. Those stimulants altogether form the moral equivalent James was studying.

The global consciousness of the world's absolute, inevitable, physiological interdependence could be a good candidate, as indeed consciousness brings peace. The Internet is rapidly emerging as the global consciousness of humanity and that it contains violent pornographic content (as opposed to, say, contemplative erotica) testifies to humanity's frustration, not only sexually, but as a symptom of a more pervasive and dangerous disease. Indeed, frustration is volatility, and the 'off with their heads 2.0' phenomenon that is arising worldwide, which Brzezinski acknowledges as a global political awakening, is fuelled by the fact that popular aspirations have been frustrated for much too long. Its dynamic could be most horrible, unless global frustration becomes harnessed to constructive bottom-up entrepreneurship rather than destructive rioting.

For the world is a body, and conflict resolution is a 'grand slam' objective which must be flawless; for example, there cannot be stable peace in Canada when Somalia and the Middle East remain so desperately frustrated. We live in a modern civilization interested in segmentation and division, whose transient consciousness is not prone to such holistic thinking, yet such thinking is vital, as Einstein had stated:

A human being is a part of the whole, called by us "Universe," a part limited in time and space. He experiences himself, his thoughts and feelings as something separate from the rest—a kind of optical delusion of his consciousness. The striving to free oneself from this delusion is the one issue of true religion. Not to nourish it but to try to overcome it is the way to reach the attainable measure of peace of mind.[35]

Another good vector in the global peace propaganda could be the consciousness of the world's fraternity: that any two human beings, tortured and torturer, victor and victim, soldier and enemy, have a common ancestor, sometimes much closer than one thinks. Many Afghans are descended from the Greek Bactrian civilization; many Palestinians are genetic Jews who converted to Islam under Ottoman rule; and many Turks, now often considered inassimilable to Europe, are descended from those whom Francis Bacon called the "Gallo-Graeci"— the Gauls of Galatia (despite temptation in France to curl up to the fetal position of Gallic nationalism).

In this dialectic, one could oppose emotion to fascination, as both are very motivating and can mobilize the masses, yet the second is about consciousness, which is probably the only thing that can bring global peace. This could render peace journalism popular, notably by using the Internet and social media to offer a new motivating value of fascination rather than destructive emotions and to compensate for peace journalism's structural lack of

Written by Idriss J. Aberkane

sensationalism, the main source of its mainstream unpopularity.

It is then no accident that the famous verses of Saadi are engraved in golden letters at the Hall of Nations

Human beings are members of a whole, In creation of one essence and soul. If one member is afflicted with pain, Other members uneasy will remain. If you have no sympathy for human pain, The name of human you cannot retain.

Or that Burton racily admonish

And hold Humanity one man, whose universal agony Still strains and strives to gain the goal, where agonies shall cease to be.[36]

To do this, properly "*Hold Humanity one Man*", one would establish the basis of a practical propagation mechanism in psycho-sociology, a sort of constructive social engineering, in spite of the many abuses the latter has been put to, which for very good reasons have created public distrust. One such good reason is that normally and ethically social engineering requires the active and willing participation of the public, as it is about changing oneself to change the world, and any other form of it, the changing of the masses without their consent and participation, is merely a form of despicable alienation of man's free will.

A peace science and not peace studies (there is no 'life studies', but there are life sciences), similar to life sciences by its interdisciplinary scope and the strong unity of its scholarly objective (that is, peace), shall not go without the mathematical methods of dynamic systems analysis. These methods already allow us to characterize conflicts as entities endowed with a certain autonomy and could lay the foundation for a practical study—as there is one in ecosystem and biological population analysis—of their *lability* (their capacity to connect), their *prégnance* (in the sense of René Thom, their capacity to emerge), and most importantly their lifespan and metabolism—what fuels conflicts and what a conflict-quelling capability should most critically deny them (which shall include many 'soft' elements like hatred, mistrust, and ignorance). This essay has already underlined that the denial of pent-up feelings is one of the means of swiftly defeating conflicts and should be taught as a standard, eternal and most basic strategy in any "College for the War against War".

Such would constitute a first analytical step towards the development of a concrete means of action to influence and quell conflicts. The outline of a practical peace weapon shall probably be more mathematical at the global scale and more psychological at the local scale, with a mesoscopic study closely connecting the two points of view, given that "man is the measure of everything," as argued Protagoras of Abdera. However, such simplification would not last, as it does not last in economics, since psychological biases and viral behaviors freely percolate and self-assemble across levels of complexity, from micro to macro and alter the emergent behavior of Humanity in a non linear way.

Yet because of the strong similarities between peace sciences and economics, the destabilization of a conflict could be based on assumptions relatively similar to those of the econometric methods that assess the impact of economic policy at the local scale. As it was mentioned when introducing the works of George Kozmetsky *et al*, economic self-organization is comparable to biological self-organization, which itself is comparable to the self-organization of wars. If one knows how to measure the impact of economic and social policy on prosperity, one shall know how to assess the impact of a strategic measure on a conflict. There are still many 'soft' elements such as influence and creativity which the scholarly community does not know how to measure, as one sees today in the lack of scientific and philosophical rigor to bibliometrics and academic ranking.

Since WWII, strategy has essentially focused upon the prevention of a global, total conflict and the control of lowintensity wars. Therefore in spite of a rather rich return on experience (Korea, Vietnam, and so on), we are still lacking studies on low-intensity conflict-quelling with their complex local specificities. Since a global nuclear war

Written by Idriss J. Aberkane

cannot be quelled—its onset being equivalent to global destruction and thus irreversibly leading to the trivial peace solution—conflict-quelling is interesting for any conflict that is strictly smaller than this one, which includes low-intensity conflicts.

#### 3.2 A Peace Force de Frappe

*Force de Frappe* (strike force) is the name given to the French nuclear deterrence capability and, much as the nuclear capability of Israel or North Korea, it is based on the doctrine of 'weak-to-strong deterrence' *dissuasion du faible au fort*). That is, it is irrational to attack a small country—like France—when it is capable of inflicting a disproportionate retaliation on its attacker. Interestingly enough, although Switzerland has no nuclear deterrence capability (yet the world's best nuclear vaulting facilities for the public), its doctrine of a 'people in arms' ready for a total resistance rests on exactly the same principles: that occupying Switzerland would cause disproportionate damage to the occupier, thus making it a bad objective. To our knowledge Israel is the only country that combines this total resistance doctrine with a nuclear deterrent.

This essay would now like to focus on encouraging methods of targeting and destroying conflicts *per se*, specifically for armed and economic conflicts that are strictly inferior to total nuclear wars. One shall start by offering a few angles of attack towards the prototyping of a peace strike force and will then argue that states should urgently develop this capability and that it should proliferate globally (unlike nuclear capability). Whether or not a state should acknowledge its possession of the peace weapon should then be discussed as well.

This essay also proposes that the existence of low-intensity war zones should not anymore be the consequence of the sub-optimality of Nash equilibrium in international relations. Solutions to the problem of global productivity may be theorized, in which low-intensity conflicts are counterproductive to any individual stakeholder as much as they are to common good, even though the existence of national military-industrial complexes testifies to war's importance for national economies, especially those of weapons-exporting states. This essay shall of course also argue that these solutions would be more profitable than the *status quo*. It shall demonstrate that not only could a peace strike force be designed, but more importantly that it *should* be used, which has already been argued. That it would be geopolitically profitable for a nation to use a peace strike force in spite of the profitability of wars in the global 'free for all' economic competition is finally equivalent to the demonstration:

- that a peace-industrial complex would be strictly more profitable than a military-industrial complex
- that it would be profitable at the unilateral, sovereign-state level (since one knows it is profitable globally, for the common good, but one must also show that selfish individual stakeholders would consider it profitable too, so that a seamless transition can occur between war profiteering and peace profiteering)
- that a peace-industrial complex would be not the enemy of the military-industrial complex, but its natural evolution for the 21<sup>st</sup> century, a genuine, 'military-industrial complex 2.0'

The use of a peace strike force should then be legitimate and profitable for individuals as much as for groups, as one may easily argue that the very existence of low-intensity war zones (such as the protracted Coltan War in Africa, or the civil war in Somalia) is directly due to their *profitability* for certain national and transnational parties, which then hijack proximal causes (such as nationalism, frustration, poverty, political aspirations, and so on) to serve the distal, root-interest of war. One cannot kill war without killing its chrematistic profitability. Therefore a war on war is first and foremost a war on the profitability of war, as much as it is a war on war's fuel: pent-up feelings.

Peace weapons constitute a suite of strategic solutions that consider the destruction of a conflict as both a means of resolving it and dominating it. They are very different to the standard diplomatic solutions and truly consist of the strategic resort to a strike force. Indeed, the peace strike force is based on the same doctrine as war, which distinguishes it from diplomacy: its aim is the resolution of a conflict *independently* of the enemy's aspirations. This is the definition of war. Diplomacy involves the opponent by giving him reasons to take part in the termination of a conflict for his own good in either a zero-sum paradigm (that is making concessions reasonable to the opponent or concession-based diplomacy) or a non-zero sum one (that is, transcendence-based diplomacy). Since a peace strike force (or conflict-quelling capability) simply does not involve the opponent, it is a totally unilateral means of conflict

Written by Idriss J. Aberkane

resolution. It must therefore be considered a military technology. Peace is a continuation of politics; This essay simply wants to make this continuation more profitable and more modern and clean than war.

#### 3.3 Making Conflicts Unstable

A peace strike force does nevertheless share key tactical similarities with diplomacy. Like diplomacy, its deployment can be a delaying tactic to slow the evolution of a frontline (either physical or economic) or to redistribute the forces of a conflict. *Inter alia*, the unconditional capacity to make peace is at least tantamount to being able to control the emergence and collapse of theaters of operations in a conflict.

This essay has not yet demonstrated that it would be in the interests of a country endowed with the peace weapon to use it in a global war-denial doctrine. If one view war as a viral 'meme' in the sense of Dawkins, nothing forbids to consider that peace could be viral as well, and hijack the very intellectual, political, economic, and psychological resources that war constantly hijacks for the purpose of perpetuating itself. Accordingly, this essay would like to sketch the outline of a sort of 'synthetic viral peace', a peace Pandora's Box that, once opened, would self-propagate and decisively out-compete war in the colonizing of man's global and individual mind. This viral peace would be beyond a national peace strike force, and would correspond to the very hijacking of such force by peace itself to self-organize across the world in a manner that renders it unfit for wars to live and lies far above nations' individual willingness. In this global niche competition one wants peace to flawlessly prevail indeed, and such peace would be the nonlinear sum of all peace capabilities taken altogether. One would want the niche competition between war and peace to be winner-take-all.

Thus for any nation endowed with a conflict-quelling capability this essay would like to further argue that,

- · the nation would be willing to use it immediately
- its use would prevent the emergence of other conflicts, for example by deterrence
- the self-organization of other nations' decisions around such deterrence would have a decisively stabilizing effect on international relations at large.

The question of secrecy is inevitable when considering a peace strike force. The self-organization of the Nash equilibrium in the negotiation between nuclear powers centrally involves an epistemic dimension,[37] whose place in the war on war's global balance of power must be discussed. Nuclear deterrence is based on the idea that the enemy knows of a nation's nuclear capability. What would be the corresponding nature and structure of a peace deterrent? The effort of starting a war represents a cost, which leverage is higher in economic warfare so far. If one supposes that a state possesses a peace strike force, then targeting it with a conventional war becomes counterproductive. This becomes a form of deterrence. Still, one should further study whether a state endowed with a conflict-quelling capability would keep it secret or not, or be interested in maintaining ambiguity.

Regarding the use of the peace weapon, notably for economic conflicts, it is not demonstrated either whether a state would want to use it or not, and if not whether it would strive to deny other states from developing their conflictquelling capability. What this essay has called *ece positivism* or earlier[38] *"erenologic positivism"* [39], is the acknowledgement that there is no formal limitation theorem that disproves the possibility that the concordance of all Nash equilibria between any subset of individual (national or transnational) stakeholders of international relations may also be Pareto optimal. Or, in other words, that there could be a solution where individual 'best possible' goods self-organize into the best possible common good.

The totality of conflicts, since 1945 at least, have been fueled by particular interests and geostrategic imperatives to which ideology, mass psychology, and other war levers were systematically subservient. It is not demonstrated that the interconnection of imperatives necessarily forbids global peace, ergo a scientific study of self-organized global peace is legitimate. This legitimacy rests on the fact that there is no limitation theorem to disprove the existence of a best possible common good that is the self-organization of best individual goods, whereas logic positivism was formally terminated by the Gödel-Cohen limitation theorems. Erenologic positivism could not be terminated in such a way simply because the sixth problem of Hilbert is open: namely, physical reality is not axiomatized.

Written by Idriss J. Aberkane

The initial situation is that we have the presence of low-intensity armed conflicts as a corollary of the global economic war, the globally pervading (viral) zero-sum paradigm, and the aspiration of great powers to control Eurasia. Such powers are, say, the empires of the Achaemenid, Mongol, Ottoman, French, British, Russian, US, and now for the first time since Alexander the Great, that of China, the awakened dragon that shall cross the Hindu Kush in any combination of military, political, or economic projection, yet which would never have done so had it been left in peace by the great powers of the industrial revolution.

When the permanent members of the Security Council are also the biggest arms dealers, their contribution (either direct or by proxy) to the fueling of a local conflict—such as the Iran-Iraq War—is typically a suboptimal Nash equilibrium, namely it could have been even more in their interest to avoid war, but this they could only have fully grasped in embracing transcendence. In modern international relations huge mutual damages are avoided for the nuclear powers but low-intensity conflicts[40] inevitably persist for the purpose of dominating certain competitions and the remodeling of exclusive markets for arms (incoming) and natural resources (outgoing). A central element of peace science is the ability to demonstrate that the self-organization of best individual good into a best common good is not only possible but also more stable than that of suboptimal war.

#### 3.4 Stabilizing Viral Peace

This essay shall now unite the global and local scales to consider the psychological making of a genuine 'total peace effort' – the moral equivalent to a total war effort – from individuals to groups and groups of groups, which would ensure an economic dynamism superior to that of a war effort and that would make low-intensity conflicts obsolete and irrelevant in the dynamic reshaping of the global balance of power. Indeed, one could see James' moral equivalent as the backbone of a global peace effort that would render the world more productive than the war effort of WWII ever managed.

This essay has explored that the doctrine of a 'people in arms' could be turned into that of a 'people in enterprise',[41] which could harness popular frustration into bottom-up entrepreneurship and foster collective creativity. Such a situation would be most fruitful for China to defuse popular frustrations, reduce income inequality, and foster opportunity-building in rural areas by empowering people psychologically. The self-organization of a 'people in enterprise' would require a moral equivalent to war, as powerful as that which can federate total resistance, but transposed to an economic purpose which would be easy to share and convey. The unconditional capacity to motivate and unite groups and groups of groups into a cohesion that would be as strong as that induced by a state of war is also an objective of the development of a peace strike force, because its moral equivalent is similar. Finally this essay has also considered that group cohesion and motivation, the making of a genuine and lasting *esprit de corps* in the war on war would critically require that conflicts be reified into a well-identified physical foe of mankind.

A superficial analysis of history may have tricked us into concluding that extreme economic and/or armed competition (such as that of total war) is the best way for mankind to excel. Before the two world wars, William James had acknowledged that man, facing the enormous challenges of total war, released 'absolute and permanent human goods.' Yet, in line with James, this essay argues that such goods may be released in the context of total peace. Notably, one could put humanity in the competition to cooperate, for we know competition is fundamentally a loss of energy, in that opposing efforts generate frictions. The US economy under the pressure of a total war effort from 1941 to 1946 spontaneously self-organized into massive cooperation which typically minimized such frictions and maximized the global utility of its individual efforts.

In the n-player prisoner's dilemma of international relations between nuclear powers, the empirical Nash equilibrium consists of not waging a total war while still retaining a nuclear arsenal. Thus total nuclear war has been prevented so far, be it at the regional level (between India and Pakistan, for instance) or at the global level (for example, between the USA and USSR). Often the stability of such equilibria has been upset by nonlinear innovations and the diversification of nuclear devices (neutron bombs, thermobaric weapons, transporter erector launcher and 'Davy Crockett'-class bombs, ballistic missile submarine, anti-missile systems), which has required that great powers constantly readjust their strategic ascendency. The possibility of micro-strikes and the evolving norms in the use of

Written by Idriss J. Aberkane

force (neutron bomb, thermobaric, pyro-radiologic arsenals, HAARP, bunker busters, ethnic bioweapons, and so on) has brought nuclear prevention to a much more local scale than in the 1950s.

If the quasi-permanent existence of intelligent and evolving low-intensity conflicts tends to demonstrate that global peace is not stable in our world, this essay has suggested that moral equivalents to war reveal human excellence in the manner of a crisis or armed conflict without the massive wasting of human lives and resources that total wars have required. It has defended the idea that the moral equivalents could federate the total resistance of groups and groups of groups against war, which would include a personal, inner peace effort or war effort against war within one's own self, and that this could be done even in extreme situations and those of asymmetric conflicts when the chain of command is disrupted, which corresponds to a condition of enhanced autonomy and thus cognition of combat groups in the war on war.

#### Conclusion: A Phase Transition between War and Peace

For a global and seamless transition between the phases of war and peace to occur, this essay has argued that military-industrial complexes around the world must transform themselves into peace-Industrial complexes in a correspondingly seamless manner. For this, it must be demonstrated that something grander, more productive, rewarding, fascinating, and inspiring than the current global economic and political competition awaits humanity to federate its ingenuity into absolute excellence, and that this brings war 2.0, which is the war on war—also known as peace. That peace be 'war 2.0' one may now consider one of the primary demonstrations for any peace scientist to attempt, and thus a founding problem of peace sciences.

One also knows that direct competition is suboptimal because it fundamentally involves the wasting of efforts and resources. The US economic space has already demonstrated, during WWII, a remarkable plasticity in its seamless transition from competition to cooperation, which it did in just a few months. Such phase transition could be reproduced, but it needs a global moral equivalent to competition, which should be palatable to any nation, region, city, or individual in the world. One cannot demonstrate that such a moral equivalent does not exist, which justifies peace positivism. The absolute priority of a peace science in terms of public health requires that more efforts be dedicated to it than to medicine or pharmacology. The small amount of investment in this global medicine of the world, peace science, reflects the very small amount of trust we have put in its research so far. Yet if medicine is interested in the survival of the individual, peace science is interested in that of humankind, and having a medicine that is more recognized than peace science is like considering that it is legitimate to narrow the study and the preservation of life to that of the individual cell. We know that cell medicine can never be enough to make for human medicine.

The moral equivalent to war consists of finding a stimulant other than the presence of a physical enemy to unite a group, a group of group, a nation or a concert of nations *and achieve the "permanent goods" James had identified*. Equivalents exist to the presence of an enemy to unite a total effort with its intensity, abnegation, solidarity, fraternity, gallantry, and emotional weight, and it is our duty to find it. This essay has proposed that 'selfish wars' be reified as the true enemies of humankind and that this be part of a moral equivalent. At the level of economic organization, individuals could be put in the (almost Stakhanovist) competition to cooperate and help each other.

Malian-born Caltech Jet Propulsion Lab scientist and possible runner for the 2012 Mali presidential elections Cheick Modibo Diarra recalls[42] how his mother rewarded him not on the marks he had gained at school but on the number of pupils he had helped. Such competition to cooperate can foster the self-assembly of 'circles of quality' which could form the unit of a more intelligent society that is capable of acting against the propagation of dangerous memes in a coordinated manner and ending the era of viral, selfish wars.

#### Acknowledgements

This article is an original improvement and translation into English from an earlier version published in French by the

Written by Idriss J. Aberkane

journal *Sens Public* on February 12 2010. The author wishes to thank Syed Shariq, Bhavna Hariharan and Colleen Quinlan-Saxen of the Kozmetsky Global Collaboratory (Stanford), Jean-Yves Heurtebise of National Taiwan University, Michael Struve of the *Gesellschaft für bedrohte Völker* and the invaluable edits of the editorial team of e-IR, notably those of Susie Taylor. The essay is dedicated to Brendan Simms, *il miglior fabbro*.

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Written by Idriss J. Aberkane

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[1] "Again it is urgent to extinguish the fire in Bactria"; "Again it is urgent to build peace in Bactria". Just as Cato the Elder urged for the destruction of Carthage before or after every discourse of his at the Roman senate, the author shall urge for the de-Balkanization of the 'geographical pivot of history' before each article, as the author believes this

Written by Idriss J. Aberkane

is the very most vital objective of international relations at the moment; One knows what Balkanization brought at the beginning of the 20<sup>th</sup> century, what it brought in Africa with the horrendous Coltan War, and what septicemia it can bring once it has reached the "Heartland".

[2] Abraham H. Maslow (1966). The Psychology of Science. p.15

[3] Saturday Review, Vol. 48, Saturday Review Associates, 1965, p.268

[4] The definition of autopoiesis is "self-organization within a boundary of its own making."

[5] Or such awareness is partial, while a viral paradigm to war studies attempts to zoom out and take a broader unifying perspective on the propagation of wars since they have been reported to the historian's investigations.

[6] William James *The Moral Equivalent of War* #4 of Revolutionary Pamphlets, The William James Association 1975 p. 1

[7] Varela, F. Invitation aux sciences cognitives Paris : Seuil 1996 p. 5

[8] All known living organisms are autopoietic, but Luisi *et al* (1993) have isolated self-replicating micelles which may not be called cognitive and are yet autopoietic, thus leading them to postulate that life is equivalent to the intersection between autopoiesis and cognition. See Luisi P-L & Bitbol M (2004) *Autopoiesis with or without cognition: defining life at its edge* J. Roy. Soc. Interface 2004 1. 99-107

[9] Stanford University Psychologist Robert Ornstein, founder of the Institute for the Study of the Human Knowledge, was notably designated by Idries Shah as his appointee in the United States. See Westerlund, David (ed.) (2004). *Sufism in Europe and North America*. New York, NY: RoutledgeCurzon. p. 53.

[10] By that we mean in a sense close to the physical one, the inertia of a medium to the propagation of a collective flux, like for the electrical resistivity.

[11] For either a historical or operational point of view, see Hans von Dach. *Total Resistance*. Panther Publications, 1968; Richard Gabriel. *The New Red Legions: (Vol. 1) An Attitudinal Portrait of the Soviet Soldier*. Greenwood Press, 1980; and Gene Sharp, *Making Europe Unconquerable: The Potential of Civilian-Based Deterrence and Defence*. Ballinger, 1965.

[12] William James, Henry James (ed.), The Letters of William James Cosimo, Inc., 2008 p. 253

[13] From a mathematical point of view such heuristic of man contemplating the possible uses of a resource is a socalled "potential infinity". The given universe of all the possible uses of a resource however is an "actual infinity".

[14] James Jay Carafano, GI Ingenuity, Greenwood Publishing Group, 2006, p 125,

[15] La colonne de la Grande Armée d'Austerlitz, ou de la victoire: monument triomphal erigé en bronze, sur la place Vendôme de Paris : description, accompagnée de 36 (38) planches – On Bas-Relief N°59 – p. 60 Chez Ambroise Tardieu Paris 1822. « Gentlemen, look well at this, study this field, for in a few days, this shall be your battlefield ».

[16] Sharon Weinberger (23 April 2008). "Atmospheric physics: Heating up the heavens". Nature.

[17] William Cohen (1997-04-28). "Terrorism, Weapons of Mass Destruction, and U.S. Strategy". Sam Nunn Policy Forum, University of Georgia.

[18] René Guénon. Le Règne de la Quantité et les Signes des Temps. Paris: Gallimard 1945.

Written by Idriss J. Aberkane

[19] Very importantly here, we remain in the classical zero-sum game conflict paradigm and thus ignore the possibility to transcend a conflict, which would have left both parties winners and made competition, linear or not, simply irrelevant. We shall come to this part later on.

[20]Seth G. Jones In the Graveyard of Empires: America's War in Afghanistan W. W. Norton & Company, 2009

[21] Richard Gabriel. *The New Red Legions. Vol. 2 An Attitudinal Portrait of the Soviet Soldier.* Greenwood Press, 1980.

[22] Hanifin CT, Brodie ED, Brodie ED. Phenotypic mismatches reveal escape from arms-race coevolution. PLoS

*Biol.* 2008 Mar 11;6(3):e60.

[23] Indeed, T.S. Eliot's *Waste Land* has already been considered the result of an emerging rather than a planned process which was compared to autopoiesis by scholar Philip Kuberski. *See* Philip Kuberski *Chaosmos: literature, science, and theory* Albany (NY) SUNY Press. P.47

[24] So argued François-Henri Pinault of the PPR luxury group in an interview to Air France Magazine (Lagardère media Group) #111 01/07/2006

[25] Benedetto Varchi, Lezioni, in http://www.bibliotecaitaliana.it, p.16, my translation

[26] Corinne Lucas Réflexions sur les images corporelles dans l'oeuvre poétique et figurative de Michel-Ange in Michelangelo poeta e artista Atti della giornata di studi (21 gennaio 2005) a cura di Paolo Grossi e Matteo Residori Paris: Istituto Italiano di Cultura 2005 p. 71, my translation

[27] Idries Shah. Kara Kush: A Novel of Afghanistan. Overlook Press, 1986. p. 70

[28] The moral equivalent to total war

[29] In which, comparable to Emmanuel Todd, he notably argued that the US Empire was in terminal self-inflicted decline. See http://www.youtube.com/watch?v=SfcoNlhxRow. Brzezinski argues there is a *second chance*.

[30] Since conflicts are dissipative systems there is no such thing as a perpetual conflict so we use "perpetual" to rather say that the existence of conflicts, in this paradigm of the remodeling war, becomes fundamentally conditioned to the existence of mankind, and thus the only global peace solution is the trivial one of humanity's extermination.

[31] Which would interestingly start as a low-intensity war, as it seems that only then can nations, united by nationalism, solidify their social fabric enough to wage total wars.

[32] See The Technopolis Phenomenon (collective work) and Immigrant and Minority Entrepreneurship.

[33] Constitution of the United Nations Educational, Scientific and Cultural Organization Adopted in London on 16 November 1945 and amended by the General Conference at its 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 12th, 15th, 17th, 19th, 20th, 21st, 24th, 25th, 26th, 27th, 28th, 29th and 31st sessions.

[34] Richard Francis Burton. The Kasidah of Haji Abdu el Yezdi. London : 1880 Song IX

[35] Alice Calaprice The New Quotable Einstein Princeton University Press, 2005 p. 206

[36] Richard Francis Burton. The Kasidah of Haji Abdu el Yezdi. London : 1880 Song IX

[37] That is, a dimension of epistemic logic where predicates take such form as "A knows that." or "Not "A knows

Written by Idriss J. Aberkane

that"

[38] I. Aberkane. Yin or Yang? China and the Muslim World. e-International Relations, 29 April 2011.

[39] This wording was used to emphasize the philosophical kinship of this positivism with the logic one.

[40] The Iran-Iraq war still annihilated around 1.3 'megalives', to use the RAND Corporation's counting in "megadeath". It also obliterated around 1 trillion dollars.

[41] For this, among others, a legislative background exists in France which is the status of "auto-entrepreneur" *LOI n* ° 2008-776 du 4 août 2008 de modernisation de l'économie), although the soft powers of self-confidence and idealism are desperately low in the French entrepreneurial environment which is typically centralized and confident in either the state or big companies but easily distrustful of small ventures and private initiatives. An American entrepreneur can and will leave a top university without graduating to pursue his dream of creating a company (Steve Jobs, Mark Zuckerberg, Bill Gates, Sergey Brin, and Larry Page), but one has never seen a French student suspend studies in a Grande Ecole to incorporate a company. Such a trend has much contributed to the well-observed dwarfing of dotcom entrepreneurship in France, whose sociology is typically that people distrust their own potential and massively censor themselves until they have been awarded the psychological imprimatur of a *Grande Ecole*, the State, and a major company, which usually comes too late. Distrust, morosity, and self-censorship are very high in France. See Peyreffite, A. *La société de confiance: essai sur les origines et la nature du développement* Paris : Odile Jacob 1995 and Algan, Y. and Cahuc, P. *La société de défiance : comment le modèle social français s'autodétruit* Paris : Editions Rue d'Ulm 2007

[42] Cheick Modibo Diarra, Jacqueline Raoul-Duval : *Navigateur interplanétaire: l'extraordinaire aventure d'un enfant du Mali parti à la conquête de Mars* Paris : Albin Michel 2000.

Written by: Idriss J. Aberkane Written at: Centre d'Etudes Diplomatiques et Stratégiques, Paris Written for: Lt. Col. Alain Burnet (French Foreign Legion) and Prof. Brendan Simms (Cambridge) Date written: 2010-2011

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