
Martial McLuhan II: The Military is the Massage

[Michael MacDonald](#), University of Waterloo

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Editor's Note: This is part two of an essay published in *Enculturation's* special issue on Marshall McLuhan, "[McLuhan @ 100.](#)" In "[Martial McLuhan I: Framing Information Warfare.](#)" Michael MacDonald argues that McLuhan's basic theoretical frame for understanding media was rhetoric. This rhetorical focus allowed McLuhan to see that war is about both the destruction of physical infrastructure and the shaping and reconfiguring of bodies and brains, affects and attitudes. In "Martial McLuhan II," MacDonald uses McLuhan's understanding of media ecology, embodiment, and information environments to examine military theory. That analysis presents a detailed account of how Info War strategies take aim at the body and brain by using information as a "soft kill" weapon.

In *On War*, Carl von Clausewitz argues that every battle revolves around a "central hub" of activity—a center of gravity or "heavy point" (*Schwerpunkt*)—that forms the nodal point of the enemy's material military power. Info War, however, makes civil society itself the center of gravity. Info War targets not only the physical infrastructure of information (nodes, cables, links, servers, towers, routers, electricity grids) but also the decision makers, "human or automated," plugged into the grid. "The *friendly* or *adversary* personnel who make decision and handle information," notes the *Joint Publication on Information Operations*, "constitute a critical component of the GII [emphasis added]" (Glossary GL-6). According to McLuhan, the "sheer inclusiveness" of information as a medium and as a concept expands both the field of battle and the semantic field of war. "Real, total war has become information war," notes McLuhan in *The Medium is the Massage*, "it is being fought by subtle electric informational media—under cold conditions, and constantly" (138). Building on *The Mechanical Bride* and its critique of advertising as a declaration of war on human subjectivity, McLuhan traces the emergence of a new species of war that makes civil society itself the target of a covert, unceasing "guerilla information war with no division between military and civilian participation" (*Culture is Our Business* 66). The Cold War, for McLuhan, was a *de facto* "hot war of information transferred to the domestic sphere" (69). Again, war in the global village is less about the physical destruction of military hardware than about the psychological control of subject populations, both foreign and domestic.

But Info War seeks to control not only what we know, but *how* we know. From a military point of view data only become information when interpreted correctly; information is the "meaning that a human being assigns to data by means of the known conventions used in their representations" (Dragon 4). For this reason Info War also takes aim at the data-processing capability of the mind by manipulating the cognitive frame or "prism" with which we make sense of the world. Wet war, soft war, gray war, knowledge war, neo-cortical war, perception-space war—all of these new war-fighting concepts target the information process itself, the "ideas, concepts and linkages that gather, sort, disseminate and apply information" (Hammond 12). In this sense, Info War is a form of transcendental war, war on the *a priori* network of categories (time, space, causality) that constitute the possible conditions of our experience of the world. Information "injuries" may be inflicted by "syntactic" attacks, which target the processing of data, and by "semantic" attacks, which target the meaning of information. What is called "neo-cortical warfare," for example, not only seeks to regulate everything a human organism holds to be true or real but, more insidiously, to control "every means by which an adversary arrives at knowledge or belief" by tampering with the "lexicon, syntax, and representational systems" with which they process information

(Szafranski, "Neo-Cortical" 408).¹ This holds true for an individual (the "neocortex") as well as whole societies (the "neo-cortical network"): Info War might even attempt to corrupt the "cognitive environment" of an entire culture. Here the old term propaganda, with its cultural and biological senses, usefully captures the vitalist and even "bio-political" strain of Info War theory (Foucault, *Society* 126): Info War is a mode of bio-politics in that it seeks to cultivate the information ecologies of "whole nations" and "entire populations" (U.S. Air Force, "Tomorrow's" 3).

This approach to media technologies as vectors of force, power, and persuasion sheds light on one of McLuhan's most infamous aphorisms: the "medium is the message." Although the message is often taken to refer to the aesthetic pleasures of media, the caressing touch of sounds and images, McLuhan views electric media as rhetorical machines that "engrave" their images on the private and public sensorium. Far from being Edenic, the media environment is a "vortex" or "maelstrom" of material and immaterial forces in constant flux—a "whirlwind of violence." The Greek word for environment, McLuhan often notes, is *periballo*, or to "strike from all sides." According to McLuhan, media work us over both mentally and physically. If the medium is the message it is because the media ecology is an "environmental blitzkrieg" on the senses and nervous system: "media work us over completely. They are so pervasive in their...consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message" (*Message* 26). For example, television—originally designed as a radar system for guiding ballistic missiles—turns the viewer into an inscription surface to be "tattooed" by waves of light and sound energy that "paralyze" the eye and irradiate the body like an "x-ray machine."² One of the key strategies of Info War, McLuhan argues, is therefore to use media to impose new "sensory plans," "sensory programs," and "sensory mandates" on civilian populations. War, and Info War in particular, aims at keeping "sensory life" at once "in line" and "out of touch" (*National Archives* 000657).³ It is important to note here that McLuhan's seemingly narrow approach to media aesthetics, confined to the effects of media on sensation (*aisthesis*), has deep roots in Aristotelian and Thomistic epistemology. Sensation, for McLuhan, is central to the process of knowledge-making, or *noesis poietikos*: "touch is not just skin contact with things but *the very life of things in the mind* [emphasis added]" (*Probes* 257). McLuhan therefore devised his later books as "sensory tool kits" for coping with the "vortices of power" at work in the media environment. McLuhan's little known *The City as Classroom*, for example, is a manual or "sensory toolkit" for "training perception" (1) to decipher the "language of technological environments" (*City* 5).

How does the military message work us over today? In general, Info War doctrine divides reality into three interpenetrating domains: the physical, the informational, and the cognitive. The information domain, the space in which information is created, stored, manipulated, and shared, is of paramount strategic value because it mediates between the physical and the cognitive dimensions as both "input (stimulus, sense, etc.)" and as "output (intent, decision)" (U.S. Army, *Information Operations* 2). The mind is thus doubly vulnerable to Info War strategies because it can be affected through both the physical and informational dimensions. At the physical level, the medium is indeed a message that "works us over in a savage way" (*Essential* 77). Military theory does not view the human being as a political subject but as an open system bombarded by an influx of waves, signals, and forces from the information environment (Keuhl; Dragon; Hammond; U.S. Army; U.S. Air Force; Defense Science Board, *Managed, Psychological, Information, Creation*). Military engineers are therefore developing "psychotronic" weapons that use kinetic energy—signals, pulses and waves of all kinds, from acoustic, microwave and X-ray to ultrasound and low frequency radiation—to message, degrade, and even destroy the body's psychological and data processing capabilities: "the data the body receives from external sources or creates through its own electrical and chemical stimuli can be manipulated or changed just as the data (information) in any hardware system can be altered" (Thomas, "Russian" 2; Wood; Babacek). At its highest level of sophistication, this application of physics to Info War ("engineering information aimed at the senses and brain") aims at erasing, distorting, and even replacing thoughts—electro-chemical "information packets" subject to the laws of physics, after all—with waves (and "anti-waves") of carefully engineered information packets (Wood 2). Recall McLuhan's *periballo* and its microphysics of power: the medium is the message because it is environmental *Blitzkrieg*.

Software / Softwar

By the early 1950's McLuhan had already come to realize that the digitization of media and information—the reduction of letters to numbers or, more precisely, a sign (1) and its absence (0)—establishes a new media imperium that renders typography the “ghostly paradigm of a former power” (*Understanding Media* 110). The electric implosion of the Gutenberg galaxy and its “monarchy” of print give way to an even more powerful “oligarchy” of new information technologies, above all the computer. In *War and Peace in the Global Village* and elsewhere McLuhan argues that the lightning transmission of colossal data loads—a new form of *Blitzkrieg* or lightning war—has turned information itself into a weapon. According to McLuhan, a weapon is essentially a means of “accelerating the processing of matter” (*Understanding Media* 375). And since any technology is a means of “storing and speeding information . . . all technologies can be regarded as weapons” (375). The crucial difference with digitized information, argues McLuhan, is that it “etherealizes” power, making it soft, light, ductile, almost metaphysical. For McLuhan, etherealization is the “trend toward more and more power with less and less hardware” (*Understanding Media* 374). The Defense Science Board therefore recruits McLuhan to describe how digital media are “new world” technologies that decouple content from its transport mechanisms: “McLuhan’s claim that the medium is the message is especially true of digital information and its marriage of channel and content” (*Information Warfare* 45). This softening or etherealization of power means, for McLuhan, that war will increasingly become an affair of media and information technologies. Much as conventional war is a matter of throwing mass and energy (steel, bodies, radiation) at an enemy, Info War is about hurling information at an enemy through all available transmission channels. As McLuhan puts it in *Counterblast*, “the moving of information into psychic gaps and the ‘scrubbing’ of old psychic programming have become the biggest business in the world” (*Culture* 40).

McLuhan’s reflections on the “inclusiveness of information as a weapon” also resonate in the contemporary military literature on Info War (*Understanding Media* 376). For example, John Arquilla and David Ronfeldt, two of the preeminent theorists of Info War, quote McLuhan approvingly when they describe war as a matter of “hurling messages and ‘memes’ at an adversary’s society” (159). The U.S. Air Force offers an even more inclusive definition, describing a weapon as “anything that alters the processes of systems (physical, biological, social, informational, etc.) according to the intention of the entity using the weapon [emphasis added]” (*Information Operations* 98). And although U.S. military doctrine classifies information as a “non-kinetic” weapon, in practice words, sounds, and images are indeed kinetic energy weapons with profound physical and psychological effects. The history of rhetoric, of course, abounds in images for words as weapons—the *logos* has always been a war machine.⁴ Nevertheless, the range, velocity, and precision of digitized information make it a weapon unique in the history of war-fighting. Digitized information traveling on “wings of energy” makes military power almost immaterial: “knowledge, the ammunition of Info War, is inexhaustible and can be used repeatedly...it even increases. Digital knowledge can be copied and never missed. It can be given away but still kept...distributed instantly. It is nonlinear; it defies the theory of the economy of scale...it is mediumless” (Neilson 12). The military discourse on Info War therefore bristles with images and metaphors for information as a kinetic wonder weapon. Its rhetorical *armamentarium* (Quintilian) extends from “silicon spears,” “cyberswords,” and “information bullets” to “mental munitions,” “wet weapons,” and “soft kill weapons” (Rowe; Cronin; Dragon; U.S. Army; U.S. Air Force). Even the precision-guided munition finds its rhetorical analogue in the “precision-guided message,” which employs narrowcasting, personalization, and tailored media streams to deliver precisely targeted “influence strikes,” “PSYOP fires,” and “nonlethal information munitions” (Szafranski; Keuhl; Molander; Keuhl; Libicki; Helmus et al.).

Here again the “sheer inclusiveness” of information as a trope or strategic concept expands the parameters of the battle-space and the very concept of war. On one of the coveted *Dew-Line Newsletter* playing cards, McLuhan asks, “Is the War Winning?” As this provocative reversal of terms suggests, war here refers less to the conflicts in Vietnam and South East Asia—“an extravagant pedagogical effort to Westernize the East” (*Counterblast* 58)—than to the progressive institutionalization of the military per se at the heart of American society. After all, for McLuhan the truly significant discovery of the Second World War was the discovery of war itself as a “new way of life,” a permanent social, military, economic, and technological revolution that becomes “total culture in action” (*Letters* 219). Throughout his work, McLuhan argues that the information revolution is dissolving the boundaries

between civil and military society. As a medium, electronic information, especially in digital form, tends to integrate commercial and military technologies, civilian and military media networks. McLuhan argues that the breakdown of geographic broadcasting and the emergence of a “single, world-wide, shared transport network” linked by satellites, fiber optic cables, and broadband wireless systems blurs the boundaries between civil society and military society, military and commercial technologies, and civilian and military media networks (Defense Science Board, *Information Dissemination* 42). For this reason “there is no longer any gap,” McLuhan argues in *Counterblast*, “between culture and business and military and civilian life” (49). For example, the revolution in military affairs itself is driven by open-source commercial (“dual use”) information technology, while 85% of U.S. military communications currently travel on public switched networks such as fax machines, the internet, and land line and cellular telephones. The info-sphere itself—not only what “lives” in cyberspace, but the totality of knowledge—has therefore become the “real war front—a surround-involving everybody—all the time-everywhere” (*Massage* 138). Info War may be waged anywhere there is information. Indeed, the “greater the amount of information that is available to the population, the more room there will be for psychological warfare” (Thomas, “Chinese” 5). Info War is thus a mode of “omnifrontal” warfare that “knows no boundaries, recognizes no sovereignties, and is hardly covered by international law” (Thomas, “Deterring” 3).

If Info War is a new species of total war that is “declared by no one, never ceases, is waged covertly, and knows no borders in space and time” (Thomas, “Russian” 7), then war has become, in McLuhan’s phrase, “environmental” (*National Archives* 000673). This expansion of the battle-space, McLuhan recognized, erodes the traditional legal and ethical distinctions between Public Affairs (information) and Public Diplomacy (propaganda). McLuhan’s account of the Cold War as a *de facto* hot war of information aimed at domestic audiences takes on new meaning as institutions like the Office of Strategic Communication conduct permanent campaigns of influence, persuasion, and military deception against foreign and domestic audiences alike: “The cold war may be over, but cold war must be the goal” (Szafranski, “Neo-Cortical” 407). What this means in practice is that Info War tactics and strategies have been “integrated” into every element of national power—diplomatic, informational, military and economic (“DIME”)—and every aspect of political communication. According to the Defense Science Board, for example, America can no longer afford to “build information instruments in wartime and allow them to rust when the war is over” (*Strategic Communication* 92). On the contrary, channels of dissemination and military “brand identities” must be “firmly established in peace so they can be used successfully in crisis and in war” (93): Info War must “operate across the spectrum, from peace to war” (24). Similarly, the standard U.S. military field manual on *Psychological Operations* (JP 3-53) likewise argues that PSYOP and Public Affairs share “many similarities, and if coordinated correctly, there are huge gains to be made by an organization that integrates information across the board as a part of an overall campaign” (73). Today PSYOP has become the “instrument of choice when communicating with hostile, neutral or friendly audiences—both military and civilian” (Defense Science Board, *Information Dissemination* 18). As a consequence, the military is multiplying networks of power and influence and infiltrating the social corpus—law, politics, economics, and, of course, entertainment—in ways that are subtle, covert, and even pleasurable. This is why it is necessary to “force war out of the silent, larval forms in which it goes one without anyone noticing” (Foucault, *Society* 268).

The Synaesthetic Machine

In a number of books and essays Kittler rejects what he calls the “old thesis” or “common opinion,” derived from McLuhan, that media are technical prostheses of the human body (mechanical media), central nervous system (electric media), and brain (electronic media). For Kittler, McLuhan’s thesis and its “anthropological *a priori*” amounts to a kind of neo-Protagorean instrumentalism that privileges man and his sense organs as the measure of all things technological: the extensions of “so-called” man are so many “pseudopods” or “gardening tools” (“Implementation” 1). But McLuhan envisioned a more complex evolutionary feedback loop between bodies and technologies—especially military technologies—than the phrase “extensions of man” suggests. McLuhan did not even draw a fixed distinction between the vital and mechanical, organic and machinic, often noting, for example, that the Greek word organon means “tool” or “instrument” (*Mechanical* 34). For McLuhan, bodies and technologies co-evolve through a spiraling series of couplings, hybridizations, and crosspollinations that blur the

boundary between physis and techne: "Like bees in the plant world, man has always been the sex organs of the machine world" (*Understanding Media* 239). Furthermore, McLuhan develops a more radical account of the retooling of the "apperceptive apparatus" that begins in the nineteenth century. Dilations, projections, amputations, implants, incorporations, macro-surgeries, servo-mechanizations—as much as "we shape our tools," McLuhan argues, "our tools shape us" (*Essential* 211). Indeed, for McLuhan the body itself is becoming an obsolete piece of hardware. "When the evolutionary process shifts from biology to software technology," he argues in *Culture is Our Business*, "the body becomes the old hardware environment. The human body is now a probe, a laboratory for experiments" (180). But how do these technological extensions and incorporations of man apply to contemporary approaches to Info War?

First, McLuhan's concept of media as extensions of the body and sensory interface has become a generative metaphor in the military literature on Info War. It is important to note, in this context, that for McLuhan media are not merely prosthetics (substitutes) but extensions, dilations, and amplifications that augment the range, speed, and power of the body, nervous system, and brain. Electronic Warfare (EW), for example, is conceptualized as degrading the informational "nervous system" of a city by assaulting—"deafening," "blinding," "stifling," "choking," and "paralyzing"—its electronic "sensory organs," "solar plexus," and "sensory ganglia." At a more literal level, McLuhan's augmented sensorium finds a more practical deployment. According to military planners, the "ascendancy of light over power" in deciding the outcome of conflicts now makes it possible to illuminate (and target) the whole surface of the earth with an integrated mesh of sensors, emitters, and weapons platforms ("global swarming"; Libicki, *Illuminating* viii). The U.S. military is therefore spinning a "global spider web" of sensors and emitters—a planetary mesh of "sensory organizations"—that extend and amplify the sensory interface and central nervous system by "mimicking the human senses" (Libicki 142). This military "dominion of synaesthesia," as McLuhan would call it, will employ "omni-sensorial" satellites that fuse data from all sensory inputs (optical, olfactory, gustatory, tactile, acoustical, infrared, and multispectral) and store these sensory signatures in an ever-expanding, real-time ("living") database (Steele; Libicki). As these new media of inspection and surveillance suggest, we are no longer in simply in the "panoptic machine" (Foucault, *Discipline* 207) but in the synaesthetic machine as well. This "tyrannical womb to tomb surveillance," notes McLuhan in 1967, "is [already] causing a serious dilemma between our claim to privacy and our need to know" (*Massage* 12).

And second, McLuhan's approach to electronic media as extensions of the brain and consciousness also finds its military application in what military theorists call, after H. G. Wells, the "world brain." The world brain is a Global Information Management system ("universal global network") that enlists academics, corporations, and military coalitions around the globe in the collection, analysis, and dissemination of intelligence harvested from "universal coverage, 24/7, waged in all languages, extending down to the tribal and neighborhood levels of granularity" (Steele 1). The objective of creating the world brain is to cultivate an "information ecology" (and here again we detect McLuhan's influence) in which information "attracts more and more information, makes more and more sense, and ultimately changes the American way of war and the American way of commerce" (Steele 39). Of course, new media are constantly changing the nature of commerce. The intranets, proprietary networks, and transnational flows of goods and services made possible by e-commerce, for example, are even eroding the concept of territorial sovereignty, creating in its place a diffuse, "aterritorial, neomedieval system of overlapping jurisdictions and loyalties" (Bollier 21). How, then, will this "Meta-System" or "System of Systems" change the American way of commerce? While the world brain will exploit open source networks and, indeed, the "distributed intelligence of the whole world" (Steele 13), it will operate with proprietary American information technology and be controlled by the U.S. military, which will "push its data as the firmament that makes sense of all others attempts to paint the battle-space" (U.S. Air Force, "Tomorrow's" 7). And since information is a staple or strategic resource that can "limit the survival or freedom" of nations (Thomas, "Deterring" 87), the information collected, analyzed, and disseminated by the world brain will be the ultimate commodity for militaries and corporations around the world. This fusion of militarism and capitalism in a kind of neo-feudal corporatism (Graham and Luke) recalls McLuhan's claim that societies tend to make war the way they make wealth (see Toffler; Szafranski): much as industrialized mass production gave rise to wars of mass destruction in the first half of the twentieth century, new modes of immaterial production are creating new war-fighting concepts that exploit the unique value and power of digitized information.

McLuhan's rhetorical approach to media war helps us understand, and possibly resist, emerging modes of Information Warfare that take aim at civil society in a permanent campaign to manage its perceptions, mold its beliefs, and control its behaviour. McLuhan's rhetorical analysis of Info War provides an invaluable critical framework for analyzing current trends in the battle for hearts, minds, and nervous systems in the global village or "internet galaxy" (Manuel Castells). Digitized information and the etherealization of military power; information as a kinetic weapon that reprograms the sensorium; civil society as the principal target of Info War; sensorial satellites as new media of inspection and surveillance; information as the new locus of military conflict; the link between military power and media transmission speed – many of the trends McLuhan perceived in the Cold War of "information exchange" have been deepened, intensified, and accelerated by the Revolution in Military Affairs.

What is more remarkable, McLuhan developed many other prescient arguments about the nature of war and peace in the "information megalopolis": computer networks and the emergence of networked organizational designs in the military; the "decentralizing" power of global media and the rise of mini-states (and with them, "multiple civil wars"); the integration of military and academic affairs, to the point that the "Bomb, as pure information, consists of higher learning...[an] extension of the modern university" (*Understanding Me* 47); and others. McLuhan's reflections on media technologies as sources and conditions of politico-military power appear timelier than ever.⁵ Yet McLuhan was not a seer or futurist. McLuhan was not concerned with presaging the future but with understanding, by means of an "arduous vision," the technological environment of his own time. After all, "the future of the future is the present" (*Take Today* 134).⁶ Responding to Alvin Toffler, McLuhan argues that "future shock" is in fact "culture lag, the failure to notice what is happening in the present" ("The End of the Work Ethic" [1972; *Essential* 205]). More than eighty-one years after his first publication (1930)⁷, the martial McLuhan is still teaching us how to perceive the lines of force and power at work in our media environment, those larval forms of war that go on without anyone noticing.

Notes

¹ Neo-cortical war, for example, strives to control the behavior of target audiences ("hostile brains," "enemy organisms") by "influencing, even to the point of regulating, the consciousness, perception and will of...the enemy neocortical system" (Szafranski 408).

² Baudrillard radicalizes this view of television in *The Ecstasy of Communication*, arguing that television—the "prototypical" technology of semiorganic society—transforms our skin into a "smooth and functional surface of communication" (19): our bodies have become "monitoring screens" (27).

³ Each new technology reconfigures the "sense ratios" and brings about a "reprogramming of sensory life" (*Probes* 163). It is important to note that rationality, for McLuhan, is the harmony or *ratio* of senses and faculties—*sensus communis*.

⁴ In Aristophanes' *Clouds*, for example, Socrates, that master of "tongue warfare" (*glotte polemizon*), deploys his dialectic as a *mekhane* or "siege machine" against the old farmer, Strepsiades: "what do you think I am," he cries under the barrage of Socratic questions, "a military objective?" (234).

⁵ For all his delirious tribal optimism, it seems that McLuhan—or at least the martial McLuhan—still managed to write the epigraph to our political present: "Every day is Mayday in the Global Nursery" (*Essential* 123).

⁶ "I make predictions all the time," McLuhan points out, "but I make absolutely sure they've already happened" (*Essential* 275).

[7](#) "McAuley: What a Man!" in *The Manitoban* (University of Manitoba Student Newspaper), October 28, 1930.

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