

**The Self-De(con)struction of the Western Way of War
or
Losing their Minds: The NATO War for Cognitive Dominance**

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Abstract

The military imaginary of AI in the Anthropocene is a fearful one. For the military imaginary the key problem is not the environmental crisis, global warming etc, but the loss of meaning and purpose. The possibility of ‘losing their minds’, their capacities as actors, as subjects in the world, with a clear sense of purpose. This paper engages with approaches to overcome this problem, to re-establish ‘cognitive dominance’, focusing on two questions, that of the integration of AI in HAT (Human-Autonomy Teaming) and the need for a new mode of thinking, moving beyond binaries and strict, reductionist cuts and separations. In essence, these imaginaries are military imaginaries of adaptation. In the first case, the imaginary of adaptation to the mode of thinking of the machine, in the second case, the imaginary of adaptation to the mode of thinking of the non-Western, ‘Asian’ or ‘Chinese’ mind (a relational approach). The paper argues that both responses could be understood as ‘pharmakons’ potentially intensifying this crisis of meaning and identity.

Introduction: Cognitive Dominance in Question

It is the thesis of this paper that military imaginaries of AI in the Anthropocene are a fascinating object of study because they process and project the crisis of the modernist episteme through their own modes of operation. In this case, the fear is that the Western mind or Western will to act will be **undermined not so much by false information but by false modes of thinking.** A first and most obvious point, that will become clear, is that this problematic of defending a mode of thinking against external threats expresses a very clear sense of ontological insecurity. Of more interest is the subsequent point that attempts to address this sense of insecurity, through opening a new military problematic, a new military imaginary of defending a mode of thinking, necessarily deepens the crisis of the modern episteme and the sense of self-identity key to **the meaningful existence of NATO itself.**

The crux of the problem is that military superiority is not in question, rather the capacity to act itself, the problem is in the mind rather than in the materiality of the West’s military dominance. The problem is that problems of the mind are not directly visible, they are only

apparent in their effects. Thereby, they tend to come to forefront to explain policy failures as due to invisible and internal questions of will. As two NATO advisors advocate: 'military threats are no longer necessarily the main factor affecting the national security of a country. The intent is not necessarily to defeat the West on the battlefield, but to weaken democracies to such a point, "they are unable, or unwilling, to respond to aggression".' (Orinx and Swielande 2022, 8.2, citing Zeman 2021). This crisis of meaning, of 'grand narrative' as Lyotard (1984) would have said is openly on display:

Since Vietnam, despite military successes, our wars have been lost, in particular because of the weakness of our narrative (i.e., 'win hearts and minds'), both regard to local populations in theatres of operations, and with regard to our own populations. (Autellet 2022, 1.2)

Losing the battle for minds thus becomes more important than thinking about war as a purely kinetic activity, so the hugely ambitious project of cognitive warfare becomes central:

...we must be able to "penetrate" the brains of our adversaries in order to influence them and make them act according to our wishes. As far as our friend is concerned (as well as ourselves), we must be able to protect our brains as well as to improve our cognitive capabilities of comprehension and decision-making capacities. (Autellet 2022, 1.2)

The military imaginary of war in the twenty-first century is thus a holistic one, where the battlefield is indistinguishable from a spatial imaginary of the world itself, including outer space and the 6th dimension of the mind itself.¹ 'Cognitive Warfare is the most advanced form of human mental manipulation, to date... [i]n this domain of action the human brain becomes the battlefield' (Montocchio 2022, x). The battle for cognitive dominance at its most basic level is a battle for healthy minds. What's at stake was clearly articulated in a 2021 NATO 'Cognition Workshop' report (NATO 2021). The section 'Building a Healthy Cognitive Community' argues:

Democracy is under attack today by groups that excel at creating and distributing infectious social media-ready viruses. They are designed to compromise our ability to think rationally and judge fairly. This makes us susceptible to misinformation that raises prejudices, fears and beliefs, working against a healthy democratic system. To preserve democracy, we need to upgrade our cognitive immune system both at an individual and community level. (NATO 2021, 9)

¹ The first four domains are land, sea, air and space, the fifth domain is cyber, held to connect them all, the sixth domain of cognitive warfare, is the human mind itself (Claverie and Cluzel 2022, 2.1).

Cognitive warfare is seen distinct from aligned domains, such as the cyber domain. Cyber warfare 'uses digital information to gain control, alter or destroy [digital information] tools. However, cognitive warfare goes beyond information to target what individual brains will do with this information' (Claverie and Cluzel 2022, 2.1). As Claverie and Cluzel go on to argue:

The main goal is not to serve as an adjunct to strategy or to defeat without a fight, but to wage war on what an enemy community thinks, loves or believes in, by altering its representation of reality. *It is a war on how the enemy thinks, how its minds work, how it sees the world and develops its conceptual thinking. The effects sought are an alteration of world views,* and thereby affect their peace of mind, certainties, competitiveness, and prosperity. (Claverie and Cluzel 2022, 2.3, emphasis added)

Cognitive warfare is a war waged in order 'to attack, exploit, degrade or even destroy how someone builds their own reality, their mental self-confidence, their trust in processes and the approaches required for the efficient functioning of groups, societies or even nations' (Claverie and Cluzel 2022, 2.3). With stakes this high, there is little surprise that offensive and defensive approaches to cognitive warfare, to the battle for the human mind, are necessary, including mapping and preparing for potential threats:

The Cognitive Immune System Map is a guide to the dilemmas, drivers and future forces that will play important roles in the battle between disinformation tactics and healthy immune responses... This model is based on the idea that *we have a cognitive immune system that can be trained to defend ourselves from disinformation and bias.* (NATO 2021, 10)

Bad news for those engaged in defending democracy and healthy minds is that 'the brain sciences' or 'neurosciences' are being developed by nations 'resistant to surveillance' using private companies to develop new technologies and keeping them secret under commercial laws of 'proprietary information'. Even worse:

On a world stage, the current key players are China, Russia, Iran and North Korea, virtual nations and non-state actors. Neuroscience has been and is currently viewed as a leveragable capacity to engage power on a variety of levels, from the cellular to the social, from the individual to the international. (NATO 2021, 25)

However, for some NATO research advisors, the threat is not only the state-backed or under-the-radar development of neuro-technologies but, something much worse, a sense of intellectual, cognitive and cultural superiority: 'Our adversaries do not only perceive their comparative advantages in technological terms, but in terms of identity, cognition, culture, collective psychology and popular will.' (Orinx and Swielande 2022, 8.5)

This paper is structured...

The Pharmakon

There is a recognition of the 'internal' problems or side-effects associated with cognitive warfare. Cognitive warfare is necessary to defend the Western way of life against the outside, the non-Western, but there are two threats to the use of technical and epistemological means to overcome these threats. Both of these 'solutions' are dangerous to Western identity and self-understanding itself, and in this sense are pharmakons (a concept introduced by Derrida to denote something that could be a poison as much as a cure). These necessary 'others' modes of thinking that need to come to the West's assistance, these pharmacological additions, necessarily lead to a problematising of Western identity in the present and pursued to their logical extension, question the very existence of essence of the West itself. These two others are AI itself that needs to be brought into 'partnership' with human operators. The 'partnership' problematic is posed in terms of the need to defend the human mind from the machine at the same time as necessarily augmenting what it means to think in human ways. The second, and related problem, is the introduction of an 'Asian', 'Chinese' or relational methodology that often is part and parcel of algorithmic regulation, the logic of correlation, of 'if this then that'.

At present, the recognition of the problem of loss of identity because of waging cognitive warfare, precisely in order to protect this identity at its most essential or 'inner' roots - of the inner sources of the autonomy of the Western subject - is somewhat veiled. The paradox, which this paper seeks to bring to the surface, tends to be focused around the unintended long-term consequences in terms of a technical or a biological understanding of the 'human'. As a NATO research document explains in its 'problem statement: 'As our understanding of human cognition advances, so too does our understanding of what "being human" means on a fundamental level.' (Bernal et al, 6) The ethical considerations are usually couched in terms of the dangers of creating a divisive hierarchy, within the human, of those who are normal and those categorised as "better than normal", "superhumans" (Bernal et al, 24). What is not so clearly grasped is that the 'human' is not merely a biological construct but imagined as thinking in a particular way. Discussions about augmenting the human with AI directly confront this question of the difference between the ways human brains work and computer 'brains' (Bernal et al, 23): 'For years, we have been trying to make computer brains more human... Attempts to alter our physiology or interface with computers, however, will open the doors to making human brains more like computer brains as opposed to the other way around.' (Bernal et al, 23) In making this distinction, and in seeking to defend the human although altering its mode of thinking, the human itself as a specific modality of being, as referent in need of securing, comes into question.

'Natural' and 'Artificial' Intelligence

The key concern in military imaginaries of AI is how to integrate “intelligent” software agents, to “work as a team” with humans (Desclaux 2022, 5.1). The concept of “Human-Autonomy Teaming” (HAT) was proposed by NASA teams in 2018 to engage and analyse this “strange collaboration”, seeking to mix Artificial Intelligence (AI) and Natural Intelligence (Desclaux 2022, 5.1). One type of intelligence is creative the other is law-bound and fixed:

The decision-making process implemented by humans is radically different from that of intelligent machines. Identical cognitive architectures could facilitate communication, but unlike humans, machines are restricted to well-defined objectives and priorities, without the capacity for improvisation or interpretive adaptation, and without real inventiveness... Humans, on the other hand, can develop these qualities but remain mediocre in accurately describing their intentions, goals and priorities... (Desclaux 2022, 5.2)

The binary distinction between the human and machine is one that military documents seek to manage and to secure. In fact, the struggle for the human could be seen to be at the heart of questions of cognitive dominance, how to direct the thinking of the enemy while maintaining autonomy for the self. For Derrida, the world of human making, the world of artifice is the world of law (1992), this is the law of the machine, the law of the algorithm. In contrast, the world of nature, of excess, of autonomy, the world of which the human is at the pinnacle, is the world of creativity – the world of the subject, not the dead obedience of the object. The Western way of war is designed to preserve this division between being a subject and being other-determined (being, in effect, an object). Yet to preserve this divide it is important to rely on ways of knowing that appear only to be accessible to the machine. It is for this reason that NATO policy documents talk about the ‘strange alliance’, the strange but necessary collaboration between ‘natural intelligence’ and ‘artificial intelligence’.

The problem of externally and autonomously determined thought is one that Derrida focuses upon in his discussion of the force of law as an imposed, transcendent, institutional rule to be followed and as an immanent product of autonomous force in excess of rules. The problem is that in thinking through this distinction it becomes clear that the necessary divide between human and machine is not so clear cut. The contraposition of this binary exposes its vulnerability to deconstruction. How is it possible to think of the machine as an ‘objective’ rule follower, as if rules came from nowhere, and likewise but in opposite fashion, how is it possible to think the human or ‘natural’ intelligence as somehow constructed entirely *de novo*, as not rule-bound? Derrida calls this ‘the ghost of the undecidable’ (1992, 24). The cut between that which is rule-bound and that which is free or autonomous is made by a decision which must be considered neither free nor bound. For Derrida: ‘The undecidable remains

caught, lodged, at least as a ghost—but an essential ghost—in every decision, in every event of decision.’ (Ibid.)

In fine, the point that I seek to take from Derrida’s thinking, in his case, with reference to the artificial rule-bound character of institutionalised law rather than to the rule-bound character of artificial intelligence, is that the attempt to address the crisis of the Western way of war through analysing this ‘strange alliance’ is one that can have problematising consequences. ‘Its ghostliness deconstructs from within any assurance of presence, any certitude or any supposed criteriology that would assure us [of the correctness of such a cut]’ (1992, 24-25). To take liberties with Derrida’s particular reading and extend his analysis directly to the problematic at hand, I wish to argue that the threat to the Western Way of War is not an external one, the threat does not come from outside, but as Derrida might argue the Western Way of War ‘is both threatening and threatened by itself’ (1992, 41).

The precondition for the desire to enhance the Western military subject chemically or technologically is the desire to be more ‘objective’, to know more, to know faster and to know better. As NATO expert advisers argue:

Ultimately, the goal is that it will lead to an augmented human operator (or even a hybrid one), injected with amplifying substances or nanotechnologies, providing informational resilience and superiority. A number of enhanced soldier project are already underway... some projects are benefiting from real resources, programmed and in some cases tested, with for instance neurocomputing implants and perception augmenting technical hybrids (vision and hearing), or even genomic modifications. (Claverie and Cluzel, 9-10)

The military imaginary of AI is not to magnify cognitive capacities understood as human but to supplement ‘human’ or ‘natural’ intelligence with a different type of intelligence, understood as ‘AI’. The imaginary is that in bringing two modes of intelligence, two modes of thinking together in a ‘strange alliance’ an outcome will be the best of both worlds. Creative and objective. **The crisis of the Western way of knowing is averted through adaptation to the machine.**

The problem with hybrid knowledge is that rather than drawing two alternative ways of knowing together there is a danger that it reveals that the distinctions upon which they are founded, the distinction between human and machine, do not hold. Work in critical black studies has been particularly adept at deconstructing this distinction, particularly when it comes to imaginaries that algorithmic calculation or Big Data can know otherwise – can be more objective – than the results gleaned from natural ‘human’ intelligence, allegedly open to bias and manipulation. In the work of Ezekiel J. Dixon-Román (2016) and Ramon Amaro (2019) for example, the idea that it is possible to code ‘with a universal gaze’ (Amaro 2019),

capable of overcoming human error, is put to question. Rather than correct for human error, 'objective' algorithmic computing can unintentionally enhance inequalities and exclusions which exist in the blind spots of Western understandings:

...artificial intelligences such as computer vision articulate a wider logic of reductionism... What we experience today as algorithmic prejudice is the materialization of an overriding logic of correlation and hierarchy hidden under the illusion of objectivity... In the drive towards coherence, computer vision is set in place "as if" it is human and the guardian of judgement. In operation, it is assigned the role of interpellator, assigning value (in terms of visibility) to the individual only in as much as he/she/they can be measured against a universalizing concept of being. (Amaro 2019, no pagination)

They do this not because the coding is necessarily problematic but because the world can only ever be interpreted through the lens of meaning and understanding of its operators. Big Data and algorithmic computing in the hands of Western ways of knowing – which is anthropocentric, rationalist and dependent on silos of linear causation - will reproduce Western ways of knowing, perhaps even magnifying their problematic approach. The problem is that of representation and the search for objectivity in itself.

The Rational West vs its Others

In the problematic of cognitive warfare, the key problematic is that the Western way of War is in crisis precisely because it is 'Western'. According to NATO policy research: 'The rise of populist leaders and increasing support for digital authoritarianism worldwide illustrates the penetration and success of cognitive warfare by authoritarian states.' (Orinx and Swielande 2022, 8.3) In fact, 'In a world in which the dominance of "Western values" is increasingly challenged by other cultures and models, it would be naïve to believe that the way of fighting, implying rules of engagement and codes of honour, will be maintained in the wars to come.' (Orinx and Swielande 2022, 8.3) The West has a major disadvantage in being rule-bound, while other, weaker, states will play rough and dirty. However, the West has a further disadvantage, one that is much more significant, for this paper. **That is the problem of the Western mode of thinking, the essence of the Western episteme itself.**

Orinx and Swieland argue that at the heart of Western strategic culture is a binary logic, 'leaving little room for out-of-the-box thinking' (2022, 8.4). On the other hand:

By refusing to see things through a binary reading (good-evil, democracy-dictatorship), it [China] leaves itself a continuous margin of maneuver, avoiding forcing or imposing the situation, allowing it to ride the wave of the situation's potential, which is not the case for the West. (Orinx and Swieland 2022, 8.4)

This binary logic permeates throughout the institutional and technological scaffolding of the Western way of war: the 'Western military is still too hierarchical, bureaucratic, slow, working in a logic of silos or tunnel vision, whereas society is more horizontal, networked, adaptive and flexible.' (Orinx and Swieland 2022, 8.4) What's even worse perhaps is that it's not just the military establishment that has a problem with its mode of thinking but Western society in toto:

...these differences of strategic culture between China and the West are also reflected in cognitive differences between Asians and Westerners... Easterners, compared to Westerners "have a contextual view of the world" and events are seen as "highly complex and determined by many factors," whereas Westerners will follow a logic of "objects in isolation from their context" and thus "control the objects' behaviour". (Orinx and Swieland 2022, 8.4)

As Norbou Buchler argues: 'As in the Wachowskis' movie "Matrix", we can choose the blue pill, and see nothing, or the red one to open our eyes and explore the world as a series of interconnected networks.' (Buchler 2022, 6.4) Thus in the military imaginary, a binary emerges of two military, strategic and societal cultures of thinking - a rationalist and a relational approach to understanding. Most often this binary is articulated in relation to the competitive threat of China (although as we saw above, this threat can also be mapped onto all potential enemy states and even non-government organizations). As Orinx and Swielande (2022, 8.1) state: 'Chinese strategic culture... is flexible, subversive, concentrates on the potential of the situation... and is better adapted to cognitive warfare than the Western strategic culture'.

This binary division, which the military tends to articulate in terms of a Western vis-a-vis an Asian or Chinese approach is one that tends to emphasise the importance of context and relation rather than framings of entities with fixed essences and linear causal understandings:

Asians see the big picture and they see objects in relation to their environments – so much so that it can be difficult for them to visually separate objects from their environments. Westerners focus on objects while slighting the field and they literally see fewer objects and relationships in the environment than do Asians. (Orinx and Swielande 2022, 8.5, citing Nisbett, 2003)

To tackle this problem of cognitive disadvantage rather than technical or military disadvantage, NATO scientists suggest that the social sciences are necessary and 'have the advantage to open our minds to complexity, and, in fine, to a neo-Clausewitzian world'. The problem that is not addressed, the aporia at the heart of the struggle for cognitive dominance is that if the Western way of war, the Western mode of thinking is the problem then victory

and defeat become indistinguishable. We have already seen above that there cannot be a hybrid mixture of 'human' and 'machine' intelligence, if the only approach to cognitive warfare is that of rejecting the Western mode of thinking what exactly is being defended?

Conclusion

In going to heart of the Western self-imaginary of difference – the imaginary of the autonomous and free 'mind' – NATO discussions of the need for 'cognitive dominance' and the strategic discussion of war in the 6th domain of the human brain itself potentially bring into question the meaning and self-identity of the West itself. In my reading, this war of the 6th domain is a mediated reflection of the desire to disinvest the Western mind of its 'Westernness'. This is the military imaginary of AI in the Anthropocene. If we understand the Anthropocene as the crisis of modernist thought and human exceptionalism, then translated into military understandings and terminologies we can see that Anthropocene imaginaries are wars of self-destruction.

References

- Amaro, R. 2019. As If. *E-flux architecture* 97. Available at: <https://www.e-flux.com/architecture/becoming-digital/248073/as-if>.
- Autellet, E. 2022. Cognitive Warfare – Contribution of the French Armed Forces Deputy Chief of Defence. IN Claverie, B. et al, 1.1-1.2.
- Bernal et al. *Cognitive Biotechnology: Altering the Human Experience*. NATO.
- Buchler, N. 2022. Technical Maturity of Human Network Cognitive Systems. IN Claverie, B. et al, 6.1-6.12.
- Claverie, B. and Cluzel, F. de. No date. The Cognitive Warfare Concept.
- Claverie, B. and Cluzel, F. de. 2022. "Cognitive Warfare": The Advent of the Concept of "Cognitics" in the Field of Warfare. IN Claverie, B. et al, 2.1-2.8.
- Claverie, B., Prébot, B., Buchler, N. and Cluzel, F. de. (eds). 2022. *Cognitive Warfare: First NATO scientific meeting on Cognitive Warfare, Bordeaux (France), 21 June 2021*. NATO-CSO-STO.
- Derrida, J. 1992. Force of Law: The "Mystical Foundation of Authority". IN D. Cornell, M. Rosenfeld and D. G. Carlson (eds) *Deconstruction and the Possibility of Justice*. London: Routledge, 3-67.
- Desclaux, G. 2022. Trust between Humans and Intelligent Machines and Induced Cognitive Biases. IN Claverie, B. et al, 5.1-5.6.
- Dixon-Román, E. J. 2016. Algo-Ritmo: More-Than-Human Performative Acts and the Racializing Assemblages of Algorithmic Architectures." *Cultural Studies ↔ Critical Methodologies* 16(5): 1–9.
- Lyotard, J.-F. 1984. *The Postmodern Condition: A Report on Knowledge*. Manchester: Manchester University Press.

Montocchio, P. 2022. Foreword – By the Deputy Director of the NATO Collaboration Support Office (CSO). IN Claverie, B. et al, x-xi.

NATO. 2021. *Cognitive Workshop: Innovative Solutions to Improve Cognition, 1-3 June*. NATO.

Orinx, K. and Swielande, P. T. S. de. 2022. China and Cognitive Warfare: Why is the West Losing? IN Claverie, B. et al, 8.1-8.8.