

Drones and Global Technicity: Automation and (Dis)individuation

SLIDE: Epigraph

In other words, being political today, which always means before anything else constituting a political *thought*, and a thought that could only ever be a *collective intelligence*, that is, an intelligence that does not take those to whom it addresses itself to be simpletons, has the task before any other of publicly posing the question of the *effort* that must be made in a situation of not-knowing, and that constitutes the task of elaborating the psycho-social doubling up of that epochal redoubling that is automatically constituted by computational technology, insofar as it is the final epoch of grammatization characterizing Western individuation.

Stiegler, *The Decadence of Industrial Democracies*, 54-55

Introduction

What Gregoire Chamayou calls the “tendency inscribed in the material development of the [drone] weapon-system” is one toward the disappearance of warfare as a human activity submitted to rules (however tenuously or “intermittently” applied as Bernard would perhaps say) to be replaced by more “sombre machinations” of “crime and punishment” regulated by an increasingly automated apparatus.¹ The relative “sombreness” of war and crime and punishment might be debatable, but what Chamayou means here is that the automation and remote control of tracking and targeting and killing the enemy (currently termed “going kinetic”—signalling an ultimately mechanistic animating of the chains of processes, communication links, software, hardware and distributed military operators, legal advisors, decision-makers, in regional, domestic and global command centres, etc), the automation of all this involved in the drone weapon-system removes the citizen-warriors from the scene and the risk of combat, and this is what is more sombre. For it tends to close off not only the application of rules of combat, the conventions and “laws of warfare” (LoW) that attempt to regulate the exercise of extreme violence, to limit the killing of the enemy to the combat situation, to protect non-combatants, and to circumscribe the territory (in time and space) subjected to temporary redefinition as the “battlespace”

SLIDE OF BATTLESPACE

(what used to be known as the theatre of war).

Not only this then, but for Chamayou the closing off is also the rezoning of the battlespace as a space of existing and potential conflict, of insecurity rather than war, one which is to be controlled rather than contested, where regulation (if not exactly law) and sanction (if not exactly punishment) replace the commitment (and risking) of forces and the contestation of space with the “manhunt” for individual targets, and the monitoring of collectives for emergent challenges to the imposition of control. And this rezoning necessarily implies a deterritorializing of territories understood as ethnocultural, national, or even regional and a reterritorializing as scalable elements in a global zone, a zone of control in realtime, one whose machinations ideally control the future—realizing the dream that Philip Lawrence identified as the “watchword” of modernity.²

I will explore dimensions of the onset of this tendency, approaching them through Bernard Stiegler's thematics of automation and autonomy. From this perspective, the threat of the increasing automation of military violence should be approached as part of a broader unbalancing of the technocultural dynamics composing tendencies toward automation and tendencies toward a greater autonomy for human individual and social-political development. As a constitutively technical form of life, human life is always a process and a question of composing autonomy and the automatic. The question posed by "our" default condition of technicity is simultaneously what to become, and how to become. "What?" inasmuch as we humans are in default of an essence which is always and necessarily *prosthethically* conditioned and realised (conditionally) through technical artifactuality. And "how?" inasmuch as technics is the medium of human individuation as a dynamic of psychic and collective individuals. What and how are not only simultaneous but composed in an ongoing relation—the how of technics conditions the possible answers to what or who we could or should be, and the who inflects the becoming of technics in adopting its possibilities, realising it in the service of ethnocultural and other collective programs, and in idiosyncratically iterating their reproduction and opening up new paths from past potentials toward future innovations.

This ongoing relation of human and technical individuation is an ensemble of forces or tendencies and counter-tendencies—and this is why Stiegler's work is a necessary supplement to Chamayou's excellent philosophical response to the development of drones. And here I would like to acknowledge the contributions of my friend Dan Ross to the formulation of this paper in at least 2 ways; firstly through his 'editing' together of selected passages from across Stiegler's work where the issues of autonomy and automation are explicitly addressed, and the ensuing conversations we had about these. And secondly his interest in exploring the theme of the tendency, and the method of tendential analysis, influenced my approach to this paper through our exchanges—inflecting my own engagements in this theme which began with interest Virilio's thematising of the tendency and the accident.

In their most ethico-political register, then, the what and how questions can be reposed together as "How to become (more) human as opposed to (more) "inhuman," how to adopt the extraordinary innovations in technologies for altering and extending "our" capacity to act, to think, and program "our" future. This ethico-political and technical question concerning the balancing of autonomy and automation can nowhere be more urgently and pertinently posed today than in regard to the deployment of remote and automated weapon-systems by the "advanced Western powers".

I have already said that the material tendency Chamayou identifies envisages a perfecting of the modern project of control, and particularly of controlling the future. And my thesis is that advanced Western powers here follow this project beyond its measure (and not for the first time, and perhaps as a further "after-shock" of the passage to the limits of total war and onto the threshold of absolute, thermonuclear war—but an aftershock that is also a fore-shock of its further ramifications). They follow it, in following each other—The U.S, following and now outstripping the Israelis, with the other advanced powers such as China, Japan, South Korea, India, powers both Western and now global—as the outcome of centuries of globalization that Derrida called globalatinization. They follow this pursuit of a technics of control

in pushing it out of balance within the military-strategic, economic and geopolitical project seeking a preserving of the peace, a metastabilization of global geo-politics, fostering political institutions able to sustain a representational function for their populations, establishing the rule of law, economic recovery and reform, socio-cultural normalisation (of trade, education, peaceful negotiation of difference), and so forth.

One could certainly debate whether the actions of the U.S and its NATO allies in Afghanistan, or the Israelis in Palestine and Lebanon, or of other recent military adventures by France, Australia, Russia, and others live up to or only cynically or conditionally subscribe to the rhetorics enunciating these kinds of goals. One could make (as several have) a compelling case that these military operations are better understood as part of post-colonial exploitation of the global south, with a rhetorical nod to the “nice guy” mask of Lyotard’s “nice guy totalitarianism.” My proposal here is that howsoever that debate goes, something beyond the (post-)colonial is going on here; or perhaps that the post-colonial project’s inherent contradictions are exacerbated, accelerating toward its demise as a coherent project, however subject to contestation, condemnation, and therefore still to be called to account and subject to review, reform. The drive to develop increasingly automated weapon systems, powered by massive state and private investment in a renaissance of the military-industrial complex, which was always a military-industrial-education complex:

SLIDES: drones article at imperial college London, Bristol robotics lab, Penn State etc

and has in more recent times formalised its longstanding relations with commercial media in the terms military-entertainment complex:

SLIDE Inst Creative technologies, Recent Pentagon and COD article; ref to Lenoir and Lowood, and to Stahl, militainment

This drive leads the project toward this exacerbation, one which I think is best captured in a reading of Chamayou and other perceptive commentaries on these developments that is annotated by Stiegler’s analysis of the tendential dynamics of human and technical individuation. And in particular in this case through his sustained and intensifying engagement in these dynamics through the autonomy and automation theme. The epigraph from *The Decadence of Industrial Democracies* elaborates the stakes of the going out of balance of these tendencies for politics and the political subject. The major challenge today for reviving a properly political engagement with our contemporary technocultural situation, is first to put ourselves in a position (or perhaps “posture”—as the situation is moving too quickly to be met appropriately from a stationery position), to adopt a posture that is able to encounter, take account of and collectively think through the automatic redoubling of technological developments that “computational technology” as the latest epoch of grammatization characterizing Western individuation programs for ‘us’ today.

Computational technology names here the default technocultural program for the elaboration of the technical possibilities of digital computing and communications technics—the predominant, assumed, paradigmatic “redoubling” of emerging technical forms, pursued with little or no reflection, thought or political deliberation,

as part of technoscientific advance, commercial and university R&D, state economic policy and infrastructure programs, and so on. Little or no reflection that is, on its general “direction of travel”; on its tendential reformation of the modes of spatiotemporalizing, of mediating between individuals and collectives, of “globalizing” cultures and economies, of reformulating knowledge, experience, inquiry in informational, database and “realtime” terms, and so on. Instead, there is a great deal of “reaction”, in the form of alarmist and even extremist articulations of a lack of comprehension and control over the course of technological “progress”, along with misidentification of the nature and stakes of developments, the search for scapegoats, the reinvestment in absolute, post-political value systems and beliefs, and perhaps most toxic and threatening of all, the cynical, nihilist acceleration of the disarticulation of human and technical individuation, to be seen everywhere from CDO trading to the expansion of fracking to the automation of military force projection.

The first task of political thought is to undertake the labour of making evident this lack of reflection, and its effect of rendering increasingly, tendentially ignorant, the individuals who are not stupid, but who need to struggle to remain so as the first task of our non-stupidity, in order to reformulate a genuinely political collective intelligence.

So politics is characterized here as an effort that must begin by addressing first the automatic adoption and implementation of digital technics, in order to open up a viable space and time for fostering reflection on the conditions of political intervention in this automatic adoption of computation. Politics recommences with opening up a space in which the autonomy of the psycho-social doubling up of the automatic can be achieved, with great effort. An effort which is getting harder as the digital automation of encountering the world, of thought, research, socialising etc extends the sphere of what Philip von Hilgers called the “discovery” of what can be calculated.³ And this is no more evident than in the case of the expansion of automated warfighting systems. The “grammatization” of war underway in the massive investment, experimentation and implementation of remote, semi-automated and automated surveillance, reconnaissance, targeting and strike systems is a particular case of this automatic program of “computational technology”. The discretization and reconstitution of experience, space, and the time of conflict, strategy and politics according to the computational dynamic is proceeding apace as a technoscientific, military-strategic and commercial program with profound linkages to the commercial, cultural, education and entertainment spheres of digital transformation.⁴

Three symptoms, three stupidities

In the time remaining I will sketch out three interrelated signs or symptoms of this going out of balance of human and technical individuation in the current and projected developments in the conduct of military operations by the “advanced powers” of this final “Western” character.

1. Automation of the Identification of the enemy.

Drones supply multi-spectral image data and the persistent flow of data-feeds from these various sensors are treated by video analysis software designed to selectively identify key information required for intelligence analysis and targeting processes. These softwares perform statistical, algorithmic procedures for making usable an overwhelmingly enormous database of pixels—set out to “distinguish ‘normal’ from ‘abnormal’ activity” in what Derek Gregory calls “a sort of militarized rhythm analysis that is increasingly automated” (Gregory 2011a, 10).

This cutting edge “big data” software development includes the NVS system (National System for Geo-Intelligence Video Services) being produced under the direction of arms manufacturer giant, Lockheed-Martin.

SLIDE NVS Lockheed-Martin

NVS will filter, sort and produce video-on-demand reports through software agent functions comparable to Netflix’s user profiling of preferences and related searches (Richfield 2011). Reports combine various statistics concerning the full motion video playback and resemble financial reporting on MSNBC or watching a football game on ESPN (Richfield 2011). Like all database processing software, the generation of useful reports depends on the quality of the metadata produced through the indexing of video data according to relevant categories. The allusion to ESPN is more than illustrative: Chamayou notes that the U.S. Army had licensed a version of the video analysis software ESPN uses in its football coverage to aid research and development of its drone-supported counter-insurgent targeting (Chamayou 2013, 61). The software is especially good for collecting and cataloguing videos associated with a particular player from a massive archive of game coverage, and this dovetails with the desire to map and characterize the past actions of individuals identified as insurgent or terrorist.

This software processing of the pattern of the enemy-as-player is becoming increasingly automated. Projects such as the Defense Advanced Research Projects Agency’s (DARPA) “Mind’s Eye” are working on Artificial Intelligence to analyse and annotate video automatically. The envisaged “visual intelligence” would be able to “learn generally applicable and generative representations of action between objects in a scene directly from visual inputs, and then reason over those learned inputs” (DARPA Information Innovation Office, 2011). Beyond machine vision developments in pattern recognition and object identification, the ambition of this project is to automate a cataloguing of actions and relations between objects. The ever-growing flows of multi-spectrum video scans from battlespace will necessitate the implementation of such programs able to “automatically translate the aggregations of pixels into nouns, verbs and propositions” (Chamayou 2013, 62).

Systems and software such as NVS and Mind’s Eye will supplement the suite of statistical and analytical software already in use. These include Geotime which gathers together and visualizes various forms of location surveillance data such as satellite monitoring and mobile phone signal tracking. Mobile phone tracking has become a significant contributor in the intelligence analysis supporting the targeting of individual “insurgents” in the deployment of drones to support or to execute targeted assassinations. It has also been at the centre of some of the more infamous mistaken strikes such as the alleged killing of an election campaign team in northern

Afghanistan by a joint operation relying on cell phone tracking to (mis)identify the target (Gregory 2011a, 13).

The phone tracks are an important part of what is known as “pattern of life” analysis used across the drone operations of both the U.S Air Force and the Joint Special Force operations they are involved in and by the C.I.A’s targeted assassinations in northern Pakistan and elsewhere. A person’s activities, associations and electronic communications with others can be compared against a “normal” civilian set of routines and social exchanges for people in the surveilled territory in order to identify unusual “patterns” or associations. Such abnormal patterns indicate potential targets for further monitoring or possible assassination. The individual identified with such a pattern may find themselves graduating from the database of potential targets—the “Disposition Matrix”—to becoming a “nomination” on the “kill-list” under consideration in the Pentagon and ultimately by the U.S. President (Becker and Shane 2012).

It has been claimed that strikes based on pattern of life analysis represent a significant component of drone-based hunter-killer attacks on individuals who are only known as potential threats through a process reliant on software-based analysis (Becker and Shane 2012, 16). These targeted individuals no longer need to be identified except as a certain kind of deviation from a norm established through the statistical modelling of sets of data drawn from full-spectrum monitoring of the battlespace. Their names and lived reality are less relevant than this conceptualization of them as potential threat known as a “signature target” (as opposed to a “personality”)—the signature refers to the particularity of their abnormal data pattern of movements, habits and web of associations that marks them as threat (Becker and Shane 2012, 18).

In their anonymity and abstraction the “signature targets” are the output of the programmatic generation of a pattern from data processing that is used to produce the targets *in advance of their threatening movement or action*. As Chamayou notes this technical procedure instantiates a promise to “predict the future and be able to modify its course through preemptive action” (Chamayou 2013, 66).

2. Rezoning of battlespace as zone of preclusion

I’m starting from a specific technical procedure now to discuss the expansion and transformation of battlespace. This procedure—termed “joint fire area” today after a more colourful history as the “killbox”

SLIDES of Killbox and JFA and Killbox

This procedure exemplifies the tendency toward the global extension of battlespace as much as its becoming-perpetual, always on, 24/7 as Jonathan Crary would say. (In this I beg to disagree with Derek Gregory who thinks Chamayou makes a little too much of this technics of operational procedurality. And in this regard, when quizzed in a similar vein by M. Shane Riza recently—USAF fighter pilot squadron leader and author of *Killing without Heart*, a thoughtful reflection on the tendency toward automated military operations—I replied that it is in precisely such technics of implementation that values, propositions and projects are found in their most concrete form as systems of procedures, computational devices, communications networks, learnt and practiced automatically as part of the conduct of military operations. In

such automatic and semi-automated procedurality is materialized the disappearance of the distinction between war and peace, battlespace and sovereign territory, the time of living and time of “living under drones”—which is no longer living but surviving, subsistence not existence as Bernard has drawn the distinction.

SLIDE Living under drones report

“Joint fire areas” or “kill-boxes” are names for a procedural designation of physical space enabling the coordination of elements engaging targets within a specified area that is both temporary and scalable according to the nature of the target and the conditions and constraints of the operation.

SLIDE OF PROCEDURE TIMELINE

As Chamayou explains, the killbox describes a process as much as a space: “one opens, activates, freezes and then closes a killbox” (Chamayou 2013, 83). The killbox is a zone of temporarily and flexibly realized virtual space: virtual inasmuch as it comes into existence digitally thanks to the realtime technologies of modelling, monitoring, measurement and transmission. It puts into practice the redefinition of traditional geographical and strategic-political territory begun with the theory of battlespace.

SLIDE OF SCALABILITY

Killboxes can in principle (and in their virtuality as digital diagrams) be opened anywhere in the world, and be as small or as large as required, rendering irrelevant traditional geopolitical limitations such as national borders, city walls, and geophysical boundaries such as mountain ranges, rivers and so forth. Chamayou speaks about the killbox’s combination of precision measurement and flexible delineation enacting a dual principle of the “globalization and homogenization” of space (Chamayou 2013, 86).

It is in the technological implementation of such procedures that the redefinition of the theater of war as “battlespace” is concretized in the manner of the technical object: that is, as the ongoing materialization of a tendency that demands critical-theoretical as well as legal-humanitarian attention. This is made clear in the history of the “killbox” concept that Chamayou dates to a 1996 U.S.A.F report envisaging the future use of unmanned aerial vehicles in zones of “autonomous operation” (Chamayou 2013, 326).

The human rights and legal challenges to the expansion of targeted assassinations by drones and U.S. special forces has focussed on the way they abandon the legal and conventional delimitation of the theatre of war as they identify and pursue targets in the “global battlefield”.⁵ War becomes a “manhunt” in Chamayou’s thesis, conducted by the hunter on the basis of a unilateral claim to the right to pursue a suspected threat to the homeland anywhere it can be found (Chamayou 2013, 107-108).

At the same time, the inhabitants of the now everywhere battlespace become subject to a permanent regime of realtime surveillance, evaluating their movements, liaisons, communications, etc. in relation to the “patterns of life” ascertained (that is, modelled) to be normal, that is, non-threatening to the monitoring organization. They

have first hand experience of the capacity of this generalized battlespace to instantiate a well delineated zone in which the battlespace is intermittently actualised by the semi-automated coordination of strike capabilities—the contemporary “fleet-in-being” (cf Virilio on the British naval strategy of force projection) that is permanently on call in the global borderlands as Gregory calls them.

Derek Gregory proposes that the military adventures in remote counter-insurgency at the borders of the West’s zones of control in Afghanistan and Pakistan will produce a “vortex”: “If the battle space is now global, and if the United States claims the right to use lethal force against its enemies wherever it finds them, then what happens when other states claim the same right? And when non-state actors possess their own remotely piloted aircraft?” (Gregory 2011a, 15).

Chamayou captures best, perhaps, the systemic dimension of this contradictory production of the very opposite of the secured geo-political world future projected with and through the current deployments of drones. He criticizes the remote conduct of counterinsurgent operations, citing military strategist David Kilcullen’s condemnation of these as the misuse of an effective tactic that threatens the very strategy of counterinsurgency inasmuch as this depends on the building up of relationships and sympathies between armed forces and local inhabitants on the ground (Chamayou 2013, 100-103). Chamayou sees here the victory of an anti-terror doctrine over a counterinsurgent one. Moreover “dronified anti-terror” can be understood as employing a perversely strategic logic whose pursuit implies its own failure as strategy. The fact that drone operations tend to produce the conditions for the recruitment of more radicalized extremists—the core of the counterinsurgent strategists’ critique of their use—becomes the rationale for their expansion and technological “improvement.” The system incorporates its inherent contradiction in what Chamayou characterizes as an “endless spiral” that is unable to “decapitate the Hydra that it itself permanently regenerates by the productive effects of its own negativity” (Chamayou 2013, 108).

From my perspective, this endless spiral is not endless, and perhaps vortex is a better figure in this regard. For a vortex can suck in diverse elements and then disappear itself in a kind of self-destructive self absorption. The extension of the battlespace globally is a tendency toward a zone of pre-emption of threat, a zone of preclusion of the anomalous that fosters its growth. Like Tinguely’s

SLIDE self-destructing machine

It is an automatism without future, at least without a viable future as a machine component of a human future, one in which a politically worked out composition of autonomy with the extraordinary powers of computational automatisms manages to maintain a space for living not permanently contaminated by wartime. This political working out is a crucial element of this holding open of the possibility of questioning in the face of the “in-organic drive” Bernard speaks about in this passage from *What makes Life worth Living*.

SLIDE OF QUOTE on future and the question

The placing into question of the possibility of questioning would be the condition of any genuine question. This placing into question begins with the possibility, for the

questioned that *could* become the questioning, of being projected into becoming by that which puts into question through the threat of the impossibility of questioning, its prosthetic projection preceding its possibility of posing questions, as *a kind of inorganic drive*, that is, as an *essentially automatic* situation, and as a placing into question by an *Unheimlichkeit*.

What Makes Life Worth Living, p.108

3. The projection of the future of LARs [[to be done.]]

[[[[[Automation of war-fighting (having identified the enemy combatants) to comply with rules of engagement, 'laws of war', etc.]]]]]]]]]

¹ Chamayou, *Theorie du drone*, 2013, 230.

² Philip Lawrence, *Modernity and War*.

³ Phillip von Hilgers, *Wargames*.

⁴ Cite some stats, eg Arkin p. 8 on US Congress mandate for automated/remote systems.

⁵ See for example, Human Rights Watch (2010) and Stanford International Human Rights & Conflict Clinic and the Global Justice Clinic of New York University (2012).