Introduction

Discipline and obedience are inextricable from the history of the military institution, to the point where both seem absolutely necessary in order for it to function. Like the other noted disciplinary institutions that formulate a society - the prison, the school, the factory, the church - the military both creates and mirrors a code of behaviour according to a wider ideology defined by an authority. In the factory, for example, the ideology is defined by the industrialist, whereas in the military, it is ultimately defined by the head of state. In this text, there will be an exclusive focus on the latter institution, specifically on exploring the use of drones (also reported as Unmanned Aerial Vehicles, or Remotely Piloted Aircraft, in the mass media) as a tool for both surveillance and the targeted killing of militants as part of the *War on Terror*. Although certainly having its roots in the Cold War, the sort of military strategy that has been developed to combat a "a stateless enemy, prone to shifting operations from country to country", employs all the logic and advanced technologies of the contemporary control society. (Holder, CFR) But do these technologies of control – namely the increasingly automated methods of warfare, the use of dynamic databases and systems as predictive engines, and the institutionalisation of networked/immaterial power - contribute to resetting the asymmetries of power that exists in the very definition of *The War on Terror*? Furthermore, how do these emerging networked forms of US military strategy fit into a wider historical narrative of military-institutional conflict, control, and obedience?

The text begins by looking at the traditional army as a cybernetic system, exploring how the hierarchical structures and language that forms the basis for the military institution can be used to maintain a homeostatic (that is, an equilibrium) state of obedience. This point is expanded through an analysis of the language and protocol outlined in a US military document titled *Procedure for Military Executions*, dated from 1947, and explores if the formulation of a military vernacular assists in the establishment of a precedent of control, and thus rendering language itself a form of *biopower*. The latter half of the text examines the contemporary developments of US military strategy, particularly the reasons for and the effects of the increased use of drones in the insurgent territories in the Middle East and how they effect the control structures within the US military itself.

Producing Obedient Subjects

The notion of a disciplinary system is inextricably linked with the military throughout recorded history, featuring in the works of countless scholars from Ancient China to the modern era. Protocols, laws, penal codes, and various other procedural/judicial systems have seemingly always formed the basis for military institutions. One of the most influential European publications that deals with the topic is Niccolo Machiavelli's *The Art of War*, published at the height of the Renaissance and with a lasting legacy still felt today. In Christopher Lynch's introduction to his translation of the text, he emphasises Machiavelli's belief that the strategies of recruitment are key to a successful army. A military unit should be populated by soldiers who go to war for patriotic reasons, and who remain obedient to the upper strata of the military hierarchy out of fear. The system of control is implemented from the very beginning of the conscription process – the soldiers are selected by the *prince* ('prince' in this case meaning a royalist or republican figure of authority), rather than the army being formed out of volunteers or a total conscription policy. This relates to Machiavelli's theory of the importance of a non-professional military - as Lynch states in his introduction: "Machiavelli is entirely averse to any form of military professionalism, for professionals, like mercenaries, are presumed to be motivated by the desire for personal profit." (2005: xxi) J.G.A. Pocock, writing in his book *The Machiavellian Moment*, elaborates on how the professional mercenary can become a dangerous disruption to the established hierarchy: "Because the citizen has his own place in the body politic, he will understand that the war is being fought to preserve it; a mercenary with no home but the camp may become the instrument of tyranny over the city he was hired to defend." (Pocock, 1975: 200-201) Thus, Machiavelli's selected conscription system breeds obedience to a political authority rather than an economic authority, through the establishment of the citizen-soldier as a subordinate of the prince. The citizen's consent should neither be forced, nor entirely willing, but in any case given out of fear and respect for the prince.

Why have the questions of obedience and disciplinary methodologies dominated military discourse since antiquity? We can say that in order to fight a war (especially war in the 'traditional' sense) a soldier must place himself in the physical space of combat – *i.e.* the 'theatre' of war. Such a space is, by definition, a dangerous place where the soldier has to face the likelihood of sustaining a serious injury, if surviving at all. Consequently, to ensure a soldier's loyal participation in a war, his or her belief in the disciplinary system and ability to achieve the end-goal has to surpass the basic instinctual desire for self-preservation. Lynch writes: "At the basis of a soldier's military service is an ambivalence of will that is brought about by, on the one hand, his aversion to present pain, and, on the other hand, his fear of the prince's disdain." (2005: 203) In a conscription system such as the type Machiavelli advocated, many civil-soldiers fought a war reluctantly, and so some mechanism of power must be in operation in order to maintain a state of obedience in the army. For Machiavelli, this power manifested in fear of punishment from the sovereign.

The traditional brute-force view of military conflict follows that a larger army has a greater chance of overthrowing a smaller-scaled opponent. An increase in a military population also increases the complexity of its management, and so a system of some sort must be put in place to maintain a state of balance. To think of an army in cybernetic terms (that is, an assembly comprised of agents that act as *generators* and *receivers* of information), we are also reminded that a larger population increases the likelihood for this information to become disorganised. A message (a

military order, for example) must be directed and communicated to its recipients in a functional manner, so that its containing information retains its state of organisation as it is broadcast downward through the military ranks. Such a concrete and visible hierarchical structure contributes to maintaining an army's obedience in an equilibrium state during a time of war.

To contextualise this metaphor of an army as a cybernetic system, we must briefly explore the research of Norbert Wiener during the Second World War. While stationed at MIT in the early 1940s, Norbert Wiener began work on an anti-aircraft gun he called the *AA Predictor*, which would assist its human operator's accuracy by estimating the flight trajectory of the target aircraft. In order to do this, Wiener worked with the concept of *feedback*: that is, when the output of a system modulates its own input. He describes its implementation in his book *Cybernetics: Control and Communication in the Animal and the Machine*: "[...] when we desire a motion to follow a given pattern the difference between this pattern and the actually performed motion is used as a new input to cause the part regulated to move in such a way as to bring its motion closed to that given by the pattern." (Wiener, 1965: 6-7) As Wiener further expanded his research of feedback loops into a science he called *Cybernetics*, the *AA Predictor* experiment grew to have greater implications. It made Wiener re-conceptualise his view of the human: the complexity of human behaviour became *information*, governed by measurable feedback loops and statistical probability, and thus readily controllable and perhaps even predictable. Perhaps unsurprisingly, it was precisely these qualities that made cybernetics a valuable tactical science for the US Cold War strategists.

Wiener, in his book *The Human Use of Human Beings*, states:

> "Indeed, it is possible to treat sets of messages as having an entropy like sets of states of the external world. Just as entropy is a measure of disorganization, the information carried by a set of messages is a measure of organization." (Wiener, 1989: 21)

To apply Wiener's theories of communication to a military system, we can posit that the organisation of information is maintained through its medium of transmission: the hierarchy of military ranks. Obedience is encoded in the structure of a message's transmission and the military vernacular. A message might be sent from an 'authority', and referred to as an 'order' or a 'directive' and regard a 'duty' or a 'designation', and so on. So, to think of a given 'order' being transmitted through the military ranks, with each rank deferring power to the rank directly above and broadcasting directly below, we are reminded of McLuhan's aphorism: "*the medium is the message.*" This language and transmission structure is clearly apparent in almost any US Army pamphlet (one of which will be explored in depth below) but the alternative seems to suggest that, without a clearly defined communications hierarchy, the entropic potential of an army as a social system increases with respect to its population.

Material Power: Protocols for Capital Punishment

> *"It was the effect, in the rites of punishment, of a certain mechanism of power: of a power that not only did not hesitate to exert itself directly on bodies, but was exalted and strengthened by its visible manifestations; of a power that asserted itself as an armed power whose functions of maintaining order were not entirely unconnected with the functions of war; of a power that presented rules and obligations as personal bonds, a breach of which constituted an offense and called for vengeance; of a power for which disobedience was an act of hostility, the first sign of rebellion, which is not in principle different from civil war; of a power that had to demonstrate not why it enforced its laws, but who were its enemies, and what unleashing of force threatened them; of a power which, in the absence of continual supervision, sought a renewal of its effects of its individual manifestations; of a power that was recharged in the ritual display of its reality as 'super-power'."* (Foucault, 1995, 57)

The military vernacular within procedural pamphlets published by the US Army already encodes a degree of obedience through its selective vocabulary and emphasis on protocol as an *automative mechanism*. Further to its integration within the systems of communication, obedience is also encoded within the traditions and rituals that form the foundation of military service, with capital punishment being an obvious example. Various execution methods have been employed throughout the history of armed conflict, although only a small number – those that we still may consider to be somewhat 'humane' – survive as modern forms of capital punishment. The firing squad, now a mostly antiquated form of execution in the developed world, is emblematic of how morality can be mediated through protocol and its logic of rules and rituals.

To analyse a specific example, the *Procedure for Military Executions*, pamphlet number 27-4, published by the US Army in 1947 (albeit containing a lot of material from an earlier 1944 document), outlines the operational protocol informed by both legal, medical and military-traditional influences to be followed when a death sentence is imposed on a prisoner. The pamphlet details two forms of military capital punishment: execution by musketry (i.e. the firing squad), and execution by hanging. In *Section 1*, titled *General*, there are a series of 12 paragraphs that detail the protocol to be followed, common to both forms of execution. (US Dept. Army, 1947: 1-4) This document is particularly interesting when cross-referenced with its actual purpose: most of those who were executed according to its protocol were in fact US soldiers, for serious crimes committed during the second world war.
(DPIC statistics: http://www.deathpenaltyinfo.org/executions-military)

The first paragraph, subheaded *Authority*, immediately defines a hierarchical process. It states that the court-martial is the designator of the prisoner's sentence and the form of execution. The second paragraph, *Time and Place (a)*, describes that the conditions of the execution must be decided by the authority appointed by the court-martial. Under *(b)*, a hierarchy is described: it states the the designated officer in control of the execution will "designate at the earliest opportunity another time or place" (ibid) to proceed with the execution, in the event that the initial time and place is impracticable. The third paragraph, *Delegation of Authority*, further expands the hierarchy to include a subordinate officer, who the officer may delegate the responsibility of the execution to. The subordinate officer is "under the direct control of the delegating authority" and "will be duly and officially named by an order of the officer". (ibid: 1) In the events of a prisoner's suspected *Insanity* or *Pregnancy* (paragraphs four and five respectively), the execution will be stayed to allowed a board to convene and assess the prisoner, referring to the Adjutant General, or President of the United States if necessary to call for an exception.

In paragraph six, titled *Witnesses*, the pamphlet provides a rigorous set of guidelines regarding the presence of military or civilian witnesses. The designated officer must prescribe "whether the execution will be public or private, [and] rules of secrecy as to time, place". (US Dept. Army, 1947: 2) This paragraph also prescribes a specific protocol for military observers: the "troops will be paraded and formed into the three sides of a hollow rectangle, facing inward and towards the site on which the prisoner is to be placed" (ibid), forming an enclosure around the prisoner. It also states that no photographs are permitted, unless for official documentary purposes, that "no demonstrations will be tolerated", and that the "environs of the place of execution will be closely and securely guarded." (ibid) Furthermore, troops must stand to attention until the 'ceremony' has concluded.

It is worth contrasting the directives in paragraph six with Michel Foucault's descriptions of capital punishment in his book *Discipline and Punish*. Similar to the aforementioned paragraph, Foucault's examples also incorporate strong visual displays of power, manifested in the uniform, symbolic gestures, and weapons handled by the soldiers around the site of execution. Foucault talks about the dual-effects of their presence: firstly, they assist in the control of the crowds of civilian witnesses (in the case of a public ceremony), and could intervene in the case of an attempted escape or other such disturbance; furthermore, and perhaps more importantly, the soldiers act as representatives of authority, and in their full performative presence, they come to symbolise the "physical, material and awesome force of the sovereign deployed there." (Foucault, 1995: 50) Foucault writes: "[the soldiers' presence] was also a reminder that every crime constituted as it were a rebellion against the law and that the criminal was an enemy of the prince." (ibid) The soldiers, being under the orders of the sovereign, remind all that the execution is being undertaken from the peak of the hierarchy.

Paragraph seven defines the protocol for *Multiple Executions*, stating prisoners can be executed simultaneously or in succession. In the case of multiple simultaneous executions by musketry, a "separate execution party will be provided for each of the prisoners", with each prisoner "placed in line at an interval of ten paces." (ibid) Paragraph eight describes the *Escort*: mounted, dismounted, or motorised. In paragraphs nine through eleven, guidelines relating to the provision of a *Chaplain*, *Medical Officer*, and *Interpreter* are described.

The final paragraph, with subsections *a* to *d*, is titled *Miscellaneous* and details extra protocol to be followed before the execution. It states that the prisoner must be notified of the time of execution at least 24 hours beforehand, informed by the designated officer with a chaplain present. Next of kin must also be notified where possible, providing an opportunity for claiming the body post-execution. Subsection *c* indicates that "all decorations, insignia, or other evidences of membership therein" must be removed from the regulation uniform of US Army soldiers who are sentenced to death. Soldiers of a foreign army may retain their military badges, insignias, etc. on their uniform, while "a prisoner not within the foregoing categories may be dressed in any clothing available." (ibid: 4) In the case of a soldier being committed to the firing squad, the removal of insignias is a physical and forceful decontextualisation of the soldier's actions. The soldier, clothed in an anonymised uniform void of identifiable symbols, no longer belongs to a military institution.

The final subsection of the 12th paragraph states that the designated officer should, if practicable, "approve any reasonable request for food, and permission to have in his possession a Bible, a Rosary, or similar religious articles during the execution." The prisoner should also be provided with writing paper and envelopes, and allowed to write as many letters as they wish. The subsection is finished with the qualification "all letters are subject to censorship and may or may not be forwarded." (ibid) The final allocation regarding letterwriting provides the prisoner with an illusion of power, while simultaneously controlling the prisoner's attempt to externally express dissent or objection to their sentence.

In this general overview of military execution protocol, we can see a recurrence of words such as 'order', 'duty', 'authority', and 'designation', and the establishment of a chain of command. Through the construction of a rigorous protocol-driven method, participation in the execution party becomes a *duty* - that is, an integral part of military service which all lower-ranked soldiers are obliged to follow without deviation. As the pamphlet moves on to the following two sections (focusing with great detail on *Execution by Musketry* and *Execution by Hanging* respectively), tradition and ritualistic protocol becomes increasingly important. The execution becomes a ceremonial event, with highly detailed and specific descriptions pertaining to personnel, physical arrangements of the prisoner(s), and the pieces of music to be played by the military band (if present) at specific times during the ceremony. As the execution follows a strict step-by-step protocol, a soldier's participation in a potentially problematic act is reduced to a ceremonial

procedure.

Comparing Foucault's analysis of the *spectacle of the scaffold* with the precise duties outlined in the aforementioned 1947 US Army pamphlet highlights some interesting parallels. Sovereign power is symbolically manifest by proxy of hierarchical structures bound by law and protocol. The power is centralised – a *state of exception* is ultimately defined by the sovereign. As noted in the US Army protocol (as described in paragraphs four and five of the US Army pamphlet), it is the President's consent that must be sought in special circumstances, included a request for a pardon. In the described systems of capital punishment, a disparity emerges between the distributions of power and responsibility: power of defining the exception is ultimately centralised in the sovereign and through the hierarchy of representatives, whereas the responsibility rooted in the physical act of punishing is distributed amongst the guards. In the firing squad, this responsibility is abstracted further according to the protocol of the blank rounds and sharing the task amongst eight riflemen. According to the US Army Pamphlet, Section II *Execution by Musketry*, the officer charged with the execution will "cause eight rifles to be loaded in his presence. Not more than three nor less than one will be loaded with blank ammunition. He will place the rifles at random in the rack provided for that purpose." (ibid: 5) And so, when the execution actually takes place, the riflemen are unsure of the extent of their role in the execution.

Where Foucault's account diverges with the US military protocol perhaps illustrates how the morality of capital punishment altered in the 'developed world' in the interim centuries. In Foucault's descriptions of the scaffold, the visibility of the actual torture and/or execution was paramount. Societal discipline, he argues, was formed out of fear of the spectacular public display of punishment. The military execution, on the other hand, is more likely to be kept out of public view. The visual aspects of the ceremony would appear on first glance to have more to do with the discipline and obedience of the soldiers ordered to carry out the execution, rather than the prisoner to be executed. Following the ceremony, there would be no 'enemy' witnesses to fear the punishment. So, why does the military describe such a strict protocol in the aforementioned pamphlet if nobody is watching? The spectacle, then, is for the soldiers themselves, and produces two effects. Firstly, we can understand the military protocol as a transposition of the systems described by Foucault, except that the guards themselves become both witnesses and manifestations of the force of the sovereign. Furthermore, we can posit that the spectacle of the ceremonial tradition might serve a secondary function, that of abstracting motions for moral objection by placing the act of punishment within a great historical narrative.

Automatic Warfare

In Eugene Thacker and Alexander Galloway's book *The Exploit: A Theory of Networks*, the authors describe the symmetries of power bound with the narrative of 20th century U.S. Military actions: "a politics of symmetry rooted in opposed power blocs, a politics of asymmetry in which power blocs struggle against insurgent networks, and a second model of symmetry in which networked powers struggle against other networked powers. " (2007: 14) Galloway and Thacker's writing on the politics of symmetries parallels a century of major military-technological change, the most drastic transformation being in the very mediums through which war was fought. The politics of symmetry refers to the manner in which power is manifested in a conflict, and we thus can loosely describe the goal of war strategy to be the maintenance of a favourable *political asymmetry*.

By the outbreak of the second world war, new tactics had been incorporated into military strategy, with the advantages and weaknesses of the new 20th century technologies (the automobile, the plane, for example) in mind. While the political symmetry remained the same after the war - what Galloway and Thacker would describe as 'bloc against bloc', the medium of conflict had altered dramatically. The Cold War was fought through proxies that penetrated deep into the civil mindset. The battlegrounds became abstract concepts, such as architecture, mass media influence, technological prowess, and of course, political ideology. In the militaries of both the U.S and the Soviet Union, information became an important weapon of war, carried through space by the iconic technologies of the era. In the last decades of the Cold War, communication, attack and surveillance systems were sophisticated enough that they could be routed through satellite and computer networks, thus creating a space for a new kind of soldier – one that did not have to fight at the site of conflict. Instead, they could be situated in a remote bunker, taking decisive action based on information being fed back to the base by an array of sensors, drones, and other strategic transmissions. This 'evolution' of US military strategy reflected the deterritorialisation of warfare in the information age, with its primary concepts being redefined as the new technologies of control became central to managing Cold War conflicts.

"Do you realize our Navy is now smaller than any time since 1917?" (Mitt Romney, third US Presidential Debate, as quoted in Estes, 2012)

On the 22nd October 2012, the third and final US presidential debate between Barack Obama and Mitt Romney was viewed on television by almost 60 million Americans, with many more all over the world following online and offering their commentary on social media sites. (Nielsen Wire, 2012) The two previous debates had offered moments of political surrealism, with Romney declaring his love for Sesame Street's Big Bird followed by Romney's bizarre turn of phrase "binders full of women" in the second debate. The supposed subject for the third was to be foreign policy, although Obama's US military policies were drawn into the spotlight on numerous occasions, eventually giving rise to a minor highlight of what was generally

deemed a dull debate. At one point, Romney pressed Obama on planned cuts to the US military budget. Obama replied: “You mention the Navy, for example, and the fact that we have fewer ships than we did in 1916. Well Governor, we also have fewer horses and bayonets.” (Estes, 2012) The noise that followed Obama’s wry comment drowned out his intended point that tells us a lot about the future role of technology and warfare. In January 2012, Obama announced the National Defense Review, stating that he was planning to begin a process of cutting $500bn from the Pentagon’s budget over the following ten years. (BBC News, 2012) The Pentagon’s “leaner” armed forces will rely on far fewer ground troops, but will use technologies such as Unmanned Aerial Vehicles (UAVs, also referred to in the media as drones) to make up the shortfall. (Alexander and Wolf, 2012)

The use of UAVs is certainly not new to the War on Terror, but rather is the culmination of decades of experimentation in a *utomatic warfare* – that is, the reduced active role of the human soldier in a war to 'observer' or 'operator', in favour of an increasing reliance on cybernetic technologies. A notable experiment in automatic warfare is a little-known intelligence operation during the Vietnam war called *Operation Igloo White*. Aware that the Vietcong were transporting arms from the communist North into US-controlled South Vietnam, a research and development department at MIT called the JASONS began to develop experimental strategies for disrupting the supply convoys. The idea was to create a network of sensors along the *Ho Chi Minh Trail*, a transport route of strategic importance that ran through the jungles of Laos and Cambodia known to be used by the Vietcong convoys. A variety of sensors were used in the operation: vibration sensors to detect movement of truck convoys, microphones to pick up the speech of the enemy soldiers, and even sensors that could detect the scent of urine. (Edwards, 1996: 3) The sensors were mostly dispersed by air – like seedlings, designed to embed themselves in the ground and appear like small plants, or get caught in the jungle canopy disguised amongst the trees, quietly emitting data streams via radiowaves. The result was a cybernetic jungle, a natural space invaded by micro-computers broadcasting a symbolic representation of their environment.

The network was controlled and observed from a US military command center (the Infiltration Surveillance Center – ISC) hundreds of kilometers to the North West in Nakhom Phanom, Thailand. By analysing the data collected from multiple sensors close to one another, the size of a convoy could be ascertained, the types of vehicles are being used, and their speed and direction. With this information, the soldier would then order an air strike: “The planes’ navigation systems and computers automatically guided them to the 'box', or map grid square, to be attacked. The ISC central computers were also able to control the release of bombs: the pilot might do no more than sit and watch as the invisible jungle below suddenly exploded into flames. In most cases, no American ever actually saw the target at all.” (Edwards, 1996: 4)

Through this remote system, the enemy is replaced by symbols, their behaviour reduced to flows of numbers or a glowing white light on a computer monitor. From the relative safety of their remote windowless bunker, the soldiers in the ISC could make strategic decisions in reaction to the information being fed back to the base. The operation consistently reported very favourable results, boasting the destruction of 35,000 trucks and 10,000 pounds of supplies. These statistics were later revealed to have been vastly exaggerated in order to justify the $1 billion annual operating costs of *Igloo White* – in fact, the operation was largely a failure, with the Vietcong managing to ‘field a major tank and artillery offensive inside South Vietnam in 1972.’ (Edwards, 1995)

In contemporary campaigns as part of *The War on Terror* situated in Iraq, Afghanistan, Yemen, and the Federally Administered Tribal Areas (FATA) of North Pakistan, the US Military is making unprecedented use of remotely piloted drones to execute insurgents who are suspected of posing an imminent threat to US territory or its citizens. The drone can be operated from US territory, while executing *militants* in the Middle East. The widespread adoption of drones as a weapon of war can be considered to be symptomatic a paradigm-shift post 9-11 military strategy, with far-reaching ramifications not only in the potentials of combat, but also in the fundamental construction of the military system itself: namely, its language, geopolitics, and psycholology.

The specificity of the language used in Bush-era press conferences and television appearances seems to serve a similar function as the military vernacular in the *Procedure for Military Executions*, and even more so with Obama's unprecedented use of new media channels to communicate with the American people, and indeed, the world. The phraseology surrounding *The War on Terror* contributed to the public opinion that the war was 'just', and that military intervention was ethically grounded. Linguistically speaking, we can say that the *War on Terror* has been a highly productive war, generating a lexicon of new terms and acronyms now firmly a part of American and European mass culture. Fred Halliday's *Shock and Awed: How the War on Terror and Jihad Have Changed the English Language* is a testament to the profound impact this war has had on the 21st century psyche. “Yet if this linguistic harvest of war was always the case, in some ways it may be even more the case in the contemporary world than before: the spread of communications, the importance of the 'information war', the chaotic enticements of cyberspace, all make this, in addition to being a war for security and control of states, a global 'vocabulary war'.” (Halliday, 2011: xi)

The language of the *War on Terror* contributed to the production of a new enemy – *the militant* - who, we are told, does not adopt the conventions of warfare: they are not contained by borders, they do not wear a uniform, and they will attempt to attack neutral targets in order to create a spectacular media event. It is important to note at this point that, according to a New York Times interview with a number of unnamed DoD sources, a militant

has an ambiguous definition: “It in effect counts all military-age males in a strike zone as combatants, according to several administration officials, unless there is explicit intelligence posthumously proving them innocent.” (Becker and Shane, 2011) The malleability of the word *militant* is convenient as it allows for a simplification of the news bulletin, and give the appearance of a successful operation. But to pause and unpack the headline “Militants Killed in Pakistan Drone Strike” (CNN) with respect our knowledge of the meaning of the word *militant*, the line between what we should consider a military success and a possible war crime becomes somewhat blurred.

In its beginnings, the *War on Terror* could be said to be an example of a power bloc struggling against an insurgent network, whose capabilities of employing spectacular guerrilla tactics tipped the assymetry in their favour. In the American and British media, the regular news reports of Improvised Explosive Device (IED) attacks became the symbol for this assymetry. The IED is, as its name suggests, a homemade explosive device that can be cheaply produced and deployed, and with devastating effects that surpass the relatively low investment of time and cost in its production. The full might of the United States military, whose presence in Iraq and Afghanistan had cost the United States $1.283 trillion by 2011 (source: FAS), could be substantially disrupted by a number of strategically IEDs along convoy routes. In 2007, the Washington Post ran an illustrated timeline of IED usage in Iraq and Afghanistan during the *War on Terror*, reporting that at the time of publishing, an IED attack occurred every 15 minutes in Iraq. According to the Washington Post report, a new anti-IED strategy was implemented in recent years, focusing on *prevention* of IED deployment. The Unmanned Aerial Vehicle appears to be a critical tool in this strategy.

The use of drones is an attempt to reset the asymmetry of power: the bloc can now mobilise itself via networks of airbases and Unmanned Aerial Vehicles - a deployment of guerrilla tactics against the guerrillas themselves. In the RAFs weekly operational reports published on their website (which inexplicably ceased in September 2012), they regularly describe successful UAV surveillance operations and attacks on militants deploying IEDs. On the RAF's *Intelligence and Situational Awareness* page on their website, they even go as far as to state the following:

> Air and space power provides the asymmetric advantage over the Taliban such that no matter where they choose to fight, coalition forces can bring to bear overwhelming firepower in a matter of minutes. Moreover; putting 500 to 600,000 troops into the country may achieve the same military effect, but it could have a negative impact on the population; such numbers could appear as an occupying force, rather than a security assistance force. In short, there is no substitute for effective air and space power.

The Unmanned Aerial System would appear to be the logical conclusion to Norbert Wiener's early experiments with the *AA Predictor*: a man-machine system comprised of information-driven feedback loops, sensors, and networked datastreams. The drone can be on a mission over the FATA regions of North Pakistan while its team of pilots could be housed in a shipping container at Creech airbase in the Nevada desert.

There is also a strict division of labour in the piloting of the drone: the tasks of take off and landing, surveillance, operating sensors, and firing missiles are handled by separate people. As with the firing squad protocols outlined earlier in the text, the operational responsibility is distributed amongs a small network of soldiers, while the decision to fire is ultimately centralised, travelling through the military ranks right up to the President and advisors.

The increasingly regular use of drones in place of ground troops indicates a radical change in defense policy, and appears to address this assymmetrical power relationship between the monolithic US Military structure and the modulable terrorist networks.

Bibliography

Books

Barbrook, Richard Imaginary Futures (2005)

Carey, John The Faber Book of Utopias (1999) Faber and Faber, London.

Deleuze, Gilles and Guattari, Felix Anti-Oedipus (2004) Continuum

Edwards, Paul N. The Closed World: Computers and the Politics of Discourse in Cold War America (1996) MIT Press, United States.

Foucault, Michel: Discipline and Punish (1991), Vintage, New York.

Galison, Peter The Ontology of the Enemy (1994)

Galloway, Alexander The Exploit: A Theory of Networks (2007) University of Minnesota Press.
Halliday, Fred *Shock and Awed: How the War on Terror and Jihad have changed the English language* (2011) Tauris, New York.

Karatzogianni, Athina Power, Conflict and Resistance: Social Movements, Networks and Hierarchies (with Andrew Robinson) (2010)

Karatzogianni, Athina The Politics of Cyberconflict (with Andrew Robinson) (2010)

Machiavelli, Nicollo (trans. Christopher Lynch) The Art of War (2002) University of Chicago Press.

Milgram, Stanley Obedience to Authority (1974) Tavistock, UK.

Poster, Mark and Savat, David (Editors) Deleuze and New Technology (2009) Edinburgh University Press, UK.

Spufford, Francis Red Plenty (2010) Faber and Faber, UK.

Wiener, Norbert The Human Use of Human Beings: Cybernetics and Society (1988) Da Capo Press.

Wiener, Norbert Cybernetics, or Control and Communication in the Animal and the Machine (1965) MIT Press.

Articles
Becker, Jo and Shane, Scott *Secret 'Kill List' Proves a Test of Obama's Principles and Will* New York Times http://www.nytimes.com/2012/05/29/world/obamas-leadership-in-war-on-al-qaeda.html?pagewanted=1&_r=2 accessed 27/04/13

Holder, Eric *Attorney General Holder's Speech on Targeted Killing, March 2012* http://www.cfr.org/terrorism-and-the-law/attorney-general-holders-speech-targeted-killing-march-2012/p27562 published 05/03/12 by Council on Foreign Relations, accessed 28/04/13

CNN Wire Staff, *Militans Killed in Pakistan Drone Strike* CNN http://edition.cnn.com/2012/01/12/world/asia/pakistan-drone-strike published 03/01/2012, accessed 05/05/13

Lectures
Lundestad, Geir *The Rise and Decline of the American Empire*, London School of Economics: Ideas, Public Events, 22/11/12. Accessed 30/04/13. http://www2.lse.ac.uk/IDEAS/events/events/2012/121122Lundestad.aspx

Websites
RAF, *Ops Update: Intelligence and Situational Awareness* Publication date unknown, accessed 04/05/13 http://www.raf.mod.uk/rafoperationalupdate/opsupdate/intelligenceandsituationalawareness.cfm