Towards a genealogy of precision in discourse on drone warfare

by:
Marcus Curran

EuroISME's thesis of the year 2019

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by:
Marcus Curran

student at:

University of Portsmouth,
United Kingdom

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Table of contents

Introduction

Targeted killings are a key tactic of the United States' (U.S.) counterterrorism operations against al Qaeda and its affiliates in various parts of the world.[1] Armed unmanned aerial vehicles, commonly and hereafter referred to as drones, are the weapon that have come to define this tactical policy. Their use is justified, in part, because they enable the commander to distinguish between combatants and civilians.[2] Armed drones are therefore potentially very important weapons systems for ensuring conformity with, amongst others, the principle of distinction. Precision lies at the heart of the armed drone's ability to distinguish between combatant and non-combatant on the battlefield. Precision is also therefore at the heart of justifications for the use of armed drones to conduct targeted killings.[3] Whilst much has been written about the ethics and legality of targeted killings the concept of precision — central to these debates — has received minimal attention. Yet precision plays an important role in securing claims that the use of armed drones are ethical and legal. Consequently, this thesis seeks to place precision at the centre of an analysis that considers how precision has emerged in historical discourse on war, and how this emergence has influenced not only the conception of precision in contemporary discourse on drone warfare but also how precision is used in this discourse.

This research design is guided by the ideas and research methods of Michel Foucault, particularly his thought on genealogy and the relationship between knowledge and power. As such,

[1] Walsh, J. (2017) "The Rise of Targeted Killing", *Journal of Strategic Studies*, 41:1-2, p. 143.
[2] Sehrawat, V. (2017) "Legal Status of Drones Under LOAC and International Law", *Penn State Journal of Law & International Affairs,* 5:1, p. 185.
[3] McDonald, J. (2017) *Enemies Known and Unknown: Targeted Killings in America's Transnational War*, London: Hurst & Company, p. 197.

discourse will serve as the primary unit of analysis much like it was for Foucault.[4] A key to genealogical analysis is the idea that "rather than aiming at a full description of the past at a given point in time or attempting a complete historical explanation of an issue, a genealogy underscores past markers that help us understand the present".[5] Through studying the emergence of precision in historical discourse on war and thinking about this emergence problematically we can question the presumed natural status of the concept and trace its emergence as an object in historical discourse.[6] By doing so we will be able to better understand how the current conception of precision has come to be constituted as such and how precision functions in discourse on drone warfare. This will hopefully better inform the ethical and legal debates on the use of armed drones, by demonstrating that the concept of precision is a fundamental constituent of such debates.

After a brief consideration of the literature on precision in drone warfare this genealogy starts by considering the history of the laws of war in the late 19th and early 20th Centuries. This was a time when the rules governing the conduct of war in the contemporary era were first agreed upon by a concert of great powers. This episode also marks a movement away from a theologically inspired law of war towards a more secular law of war grounded in the rationalism of the Enlightenment. We then turn to consider precision in the context of World War Two and more specifically the conduct of strategic bombing by the U.S and Great Britain, for this was a time when civilians suffered a great deal as a consequence of targeting decisions. Form here we

[4] Phillip, M. (1985) "Foucault" in Skinner, Q (Ed.) *The Return of Grand Theory in the Human Sciences,* Cambridge: Cambridge University Press, p. 68.
[5] Bourbeau, P. (2018) "A Genealogy of Resilience", *International Political Sociology*, 12, p. 20.
[6] Bacchi, C. (2012) "Why Study Problematizations? Making Politics Visible," *Open Journal of Political Science*, 2:1, p. 3.

turn to precision in the Vietnam war and the first Gulf war, two episodes in the history of Western warfare that continue to have reverberations for the conduct of war today. This, albeit brief, history of precision is then considered in light of contemporary practices of drone warfare.

The desire to limit civilian casualties in war has achieved normative status: in the norm against targeting civilians. This norm ultimately acts to restrain the use of force. Quite how the protection of civilians has achieved normative status in Western society is hotly contested, with the principle of distinction and the concept of the civilian sitting at the heart of the debate. Helen Kinsella, in her genealogy of the principle of distinction, illuminates the history of the principle and demonstrates that whilst the protection of civilians is today the modus operandi of the principle this has not always been the case.[7] For example some argue that the desire to limit civilian casualties in war might stem more from counterinsurgency thinking in recent decades than the widely held belief that killing civilians is itself inherently wrong.[8] Furthermore, the fact that the U.S. has sought to avoid killing civilians in conflicts since Vietnam might be less because they have become more virtuous and more because they have achieved technological superiority — the conflicts the U.S. has fought in since Vietnam have been characterised by an asymmetry in the use of force that advantages the U.S. that gives advantage to the U.S.[9] Nevertheless, despite these arguments it remains that precision is praised as ethical by political and

[7] Kinsella, H. (2011), *The Image Before the Weapon: A Critical History of the Distinction Between Combatant and Civilian*, Ithaca and London: Cornell University Press.
[8] Conway-Lanz, S. (2014) "Bombing Civilians After World War II in the Early Twentieth Century" in Evangelista, M and Shue, H (eds) *The American Way of Bombing: Changing Ethical and Legal Norms, From Flying Fortresses to Drones*, Ithaca and London: Cornell University Press, p. 62.
[9] *Ibid.* p. 63.

military leaders alike.[10] This means that the ability to strike at specific targets is considered by the U.S. as demonstrating their ethical superiority in the conduct of war. This idea led Maja Zehfuss to argue that the particular kind of ethics praise for precision produces is based on the idea of non-combatant protection.[11] It is this sentiment which guides the focus of this genealogy, for we are here interested in how and why precision is constituted as it is in discourse on war. Furthermore, we are specifically interested in the effects this constitution has on how a state conceives of itself as ethical in war.

The U.S. conduct of targeted killings via armed drone has prompted fierce debate in the legal and ethical discourse on war.[12] Precision is an oft used word when describing drone strikes, whether that be because some refer to them as a fundamental part of "precision warfare" or because the weapons they deploy — typically hellfire missiles — are commonly referred to as "precision-guided missiles" (PGM). As a consequence of this, whether it be a reference to the nature of something or simply used as a descriptor, "precision" appears sporadically in much of the ethical and some of the legal literature. This has resulted in a fragmentation of the consideration of precision in literature on drone warfare, not necessarily because precision is a topic of lesser academic value but because other issues — such as the morality or legality of drone use — has preoccupied much of the academic and policy interest over the last decade. However, as this genealogy seeks

[10] *See* Zehfuss, M. (2011) "Targeting: Precision and the Production of Ethics*", European Journal of International Relations*, 17:3, p.545-547.
[11] *Ibid.* p.544
[12] *See* Boyle, M. (2015) "The Legal and Ethical Implications of Drone Warfare", *The International Journal of Human Rights*, 19:1; Enemark, C. (2014) "Armed Drones and the Ethics of War: Military Virtue in a Post-Heroic Age," Abingdon: Routledge; Finkelstein, C. Ohlin, J. and Altman, A. (eds) *Targeted Killings: Law and Morality in an Asymmetrical World*, Oxford: Oxford University Press.

to demonstrate, precision is a central yet largely neglected area of drone warfare that underpins much of the arguments about the ethicality, morality, legality and thus legitimacy of drone strikes as a tool of counterterrorism policy. Whilst previously precision has only been considered piecemeal by various scholars, there is now a growing literature within the wider discourse on drone warfare where precision, and the issues it raises for contemporary warfare, are being considered. Precision discourses related to drone warfare call upon a number of topics, and because precision is typically dealt with as a corollary of ethical or legal issues it finds reference in a number of areas of the wider drone warfare debate. Accordingly, discussion of precision must consider literature that considers the ethical status of the policy of targeted killing, the nature of the armed drone itself, and the nature of risk in drone strikes.

Armed drones are considered by some to be ethical weapons, in as much as they enable states who seek to conduct war in accordance with the laws of war — to do so. Tamar Meisels argues that drones are inherently asymmetrical weapons that enable "good states" who seek to distinguish between combatants and civilians to do so.[13] By making this argument Meisels distinguishes between the armed drone as a weapon, the policy of targeted killing and those who conduct said targeted killings. Not only are drones suited to the sensibilities of the "good guys", but they have the "capacity to refine, rather than dull our moral sensibilities, and enhance compliance with the laws about distinction and proportionality, minimizing collateral damage". Because of this, when it turns out that civilians have been killed it isn't the weapon that is at fault but the people using

[13] Meisels, T. (2017) "Targeted Killing with Drones? Old Arguments, New Technologies", *Philosophy and Society*, 29:1, p. 9.

or the policy behind them that is to blame.[14] Thus, Meisels argues, "the surgical killing of identified enemy combatants is as good as war gets, certainly compared to the common practice of killing young conscripts in battle and incurring large scale collateral damage."[15] Meisels makes a very good point in distinguishing drones as a weapon from targeted killing as a policy, where one can disagree with the policy of targeted killing whilst admitting that drones might be an "ethical" weapon to use. However, as with all weapons, the inherent ability of a weapon to enable compliance with the laws of war does not make it necessarily so that the said weapon is "ethical" — for it is what is done with the weapon that counts for its "ethicality". Nevertheless, the idea that drones are inherently good weapons is one that we shall revisit later on in this genealogy when we come to consider discourse on drone warfare.

Another prominent argument that distinguishes the drone as an ethical weapon even compared to other long-range precision weapons is their ability to hover over targets for long periods of time. Thus, Jeff McMahan argues that this "better enable[s] the weapons operators to make morally informed decisions about the use of their weapons."[16] Michael Walzer agrees and further argues that in addition to this surveillance capability armed drones have the "capacity of precise attack".[17] However, Gregoire Chamayou argues that because the drone rules out the possibility of combat — because it is a form of remote warfare — there is nothing for the suspected terrorist to shoot at or pose

[14] *Ibid.* p. 10-14.
[15] *Ibid.* p. 15.
[16] McMahan, J. (2013) "Forward to Killing by Remote Control", in Strawser, B (ed) *Killing by Remote Control: The Ethics of an Unmanned Military*, Oxford: Oxford University Press, p. ix.
[17] Walzer, M. (2013) "Targeted Killing and Drone Warfare", *Dissent*, January 11th, last accessed 18th August, via: https://www.dissentmagazine.org/online_articles/targeted-killing-and-drone-warfare

an imminent threat towards, meaning that "the drone destroys the very possibility of any clear differentiation between combatants and noncombatants".[18] However, Walzer caveats his praise for the precision of drones with the condition that their ethicality isn't just premised on their precision but on who they precisely strike. For the moral and political advantage of their precision is only such that they are used against individuals who pose a critical threat to the state and who the state knows much about.[19] Walzer is uneasy with how easy drones make it to conduct a policy of targeted killing, and he balks at the idea of counting "all military aged males" in a strike area to be legitimate targets as the U.S. does. This, he argues, does not necessarily mean that the U.S. is targeting all military aged males, but that such a policy of counting has made all military aged males liable to attack for "we have turned them into combatants, without knowing anything more about them than their (approximate) age."[20] Thus, when we consider precision in this context one cannot but see the inherent contradiction in the nature and use of precision as a discursive practice that seeks to demonstrate that the U.S. seeks to protect civilian lives and conduct war in the most efficient of ways.

Walzer also makes the connection between the purported precision of the weapon with the effect such a weapon might have on how decision makers use them. In effect increased precision makes the use of force more likely, or as others have argued drones may degrade moral thresholds for the use of

[18] Chamayou, G. (2015) *Drone Theory*, London: Penguin Books, p.147
[19] Walzer, M. (2013) "Targeted Killing and Drone Warfare", *Dissent*, January 11th, last accessed 18th August 2018, via: https://www.dissentmagazine.org/online_articles/targeted-killing-and-drone-warfare
[20] Walzer, M. (2013) "Targeted Killing and Drone Warfare", *Dissent*, January 11th, last accessed 18th August 2018, via: https://www.dissentmagazine.org/online_articles/targeted-killing-and-drone-warfare

force.[21] Conway Waddington argues that the reduced risk to the operator and the ability to achieve enhanced levels of precision that armed drones afford are important facets of the moral evaluation of drone strikes by those who direct them.[22] Furthermore, he argues that the lack of empirical consensus on the actual effects of drones strikes — *i.e.* how many civilians are actually killed in them — results in a void that is filled by narrative interpretations concerning the efficacy of drone strikes.[23] This, combined with issues that drones throw up for the principle of proportionality and the morally contentious policy of signature and double tap strikes, highlights the morally contentious aspects of drone strikes — principally their highlighting of the "uncomfortable realities of wilful decisions to incur collateral damage as a necessary part of achieving certain security goals."[24] Ultimately the increased capacity for discrimination afforded by drones — their precision capability — brings forcefully to the fore moral and legal questions concerning what actually makes up the proportionality calculation in drones strikes and how this interacts with the lower political and military risk necessitated by their use.

Moving away from a focus on the armed drone itself and towards the precision that it purportedly enables, there is a small but growing literature that considers the nature, use and effect of precision in the context of drone warfare and the U.S. use of force more widely. James Rogers argues that during the Obama presidency precision was about more than just accuracy as it was

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[21] Walsh, I and Schulzke, M. (2015) "The Ethics of Drone Strikes: Does Reducing the Cost of Conflict Encourage War?", U.S. Army War College, Strategic Studies Institute.

[22] Waddington, C. (2015) "Drones: degrading moral thresholds for the use of force and the calculations of proportionality", in Aaronson, M; Aslam, W; Dyson, T; Rauxloh, R. (eds) *Precision Strike Warfare and International Intervention: Strategic, ethico-political, and decisional implications*, London: Routledge, p. 127.

[23] *Ibid.* p. 121

[24] *Ibid.* p. 128

"an ethos…that enshrined the liberal-American desire to be *just* in times of war while still ensuring victory. Armed drones and the precision missiles they deployed were said to epitomize this desire."[25] President Obama himself characterised the counterterrorism operations that he inherited — and advanced — as a "just war - a war waged proportionally, in last resort, and in self-defence."[26] In many ways precision does fit with this notion of conducting a just war, and by regarding precision as an ethos Rogers touches upon the idea of precision as not just a description of an object or event but as an overarching idea that informs the ethical, legal and strategic thinking of the U.S. over the last few decades.

Thinking about precision in this way leads us to consider Maja Zehfuss' argument that praise for precision produces Western — mainly American — warfare as ethical. The sort of ethics that Zefhuss identifies as being produced is that of the protection of non-combatants in war.[27] Zefhuss argues that the underlying assumption when governments and others praise precision is that increases in the ability to use force with greater precision can only be a good thing and that this increase necessarily makes the Western way of war more ethical. However, such a construction of precision as ethical fails to engage the ethico-political issues that are at stake in the use of armed drones. For "the idea that increased precision means increased ethicality implies…that ethics is if we only kill whom we mean to kill."[28]

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[25] Rogers, J. (2017) "Drone warfare: The death of precision", *Bulletin of the Atomic Scientists*, last accessed 12th July 2018 via: https://thebulletin.org/2017/05/drone-warfare-the-death-of-precision/

[26] Obama, B. (2013) Remarks by the President at the National Defense University, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2013/05/23/remarks-president-national-defense-university

[27] Zehfuss, (2011), p. 544.

[28] *Ibid.* p.561.

Chamayou argues, in a related way, that precision is part of what he terms a necroethics of war. Necroethics is a "doctrine of killing well".[29] This doctrine is constituted by precision however this does not mean that the issue of who *is* a target is dealt with. Chamayou argues that when drone warfare is regarded as precision warfare talk of fundamental issues is relegated to a lower status than that of the debate concerning how many civilian casualties have resulted from particular drone strikes.[30] What it means to "mean" to kill someone is the harder ethico-political issue identified by Zehfuss, and is one that lies at the heart of the drone warfare discourse — and has been hotly debated in the legal literature. However, by praising precision the U.S. government is able to condition the discourse so that it only focuses on the conduct of the drone strike and not the underlying targeting decisions that effectively legitimate the drone strike in the first place. By drawing on Zehfuss' argument one can begin to start thinking about precision genealogically, about its productive effects in discourse on drone warfare and how the discourse enables the U.S. to be seen to be "ethical" in light of the means by which they conduct counterterrorism operations.

Drone warfare is warfare against individuals.[31] Jack McDonald argues that you can't get the kind of precision that that we witness with U.S. targeted killings without the kind of restraint that the U.S. demonstrates - McDonald pins this restraint on the U.S. interpretation of the laws of war and American social values.[32] He further argues that the type of warfare that precision mixed with restraint produces is individuated warfare, or warfare

[29] Chamayou, G. (2015) p. 146.
[30] Chamayou, (2015) p. 146-147.
[31] McDonald, (2017) pp. 137-164.
[32] McDonald, (2017) p. 9.

against individuals. This type of warfare is the result of a number of factors, chiefly when war is conceptualised as killing and not as combat, and when a rule-abiding state gains the technological proficiency to target accurately and develops the apparatus to wage war against non-traditional opponents.[33] Precision is therefore at the heart of individuated warfare for it is about distinguishing the individual suspected terrorist from "civilian clutter".[34] McDonald argues that the focus on precision in American warfare should make us consider not only the physical harm caused by drone strikes but also the "intangible harms to which this form of warfare gives rise."[35] The tangible harm that he cites is the constant fear for one's life that a civilian feels when living under a drone. The paradox that drones — and precision warfare — creates is that "civilians are protected to a greater extent from direct violence, while simultaneously deprived of the ability to discern for themselves if they are in danger."[36] This is one of the precision effects that stem from a reliance on drone warfare over other modes of warfare, such as ground forces who at least have a physical presence in the area they are operating in. Whilst the U.S. focuses its precision discourse on the protection of civilians, which it takes to mean the protection of life, the intangible harms such as feelings of terror and the longer term harms that result from certain air strikes provide a critical frame from which to consider precision in discourse on drone warfare.

Drone warfare, and the targeted killings they enable, are a form of what has been termed remote warfare — or warfare conducted at a distance.[37] A fundamental characteristic of this

[33] *Ibid.* p. 140.
[34] *Ibid.* p. 183.
[35] *Ibid.* p.196.
[36] *Ibid.* p.196.
[37] Watts, T. And Biegon, R. (2017) "Defining Remote Warfare: Security Cooperation", Briefing Number 1, Remote Control Project, Oxford Research Group.

form of warfare is its lack of risk for U.S. service personnel. As such "risk-free warfare" has emerged as a key term in the literature concerning the Western way of war since the 1990's.[38] The NATO Kosovo campaign, which took place from 1998-1999, was a significant conflict of the risk age not least because it saw zero NATO fatalities, a fact that Michael Ignatieff argues transforms "the expectations that govern the morality of war."[39] It does so not just because there emerges the expectation of zero U.S. combatant casualties in the future but also because it arguably voids the contract between combatants: that there is at least some risk of either of them being killed. This lack of risk for one side Ignatieff argues, allows one side to kill with impunity.[40] This impunity was dressed up as "moral superiority" by NATO which has been interpreted by some as a neat device designed to assuage guilt at the vastly asymmetrical nature of the combat.[41] The same could be said of the ethical claims that were made by the Obama administration in its justifications of the use of armed drones for targeted killings. Furthermore, the literature on precision also touches on the idea of risk-transfer in war. Martin Shaw defines risk-transfer militarism as bombing that is "undertaken in the firm knowledge that it will increase the risk to civilians compared with other possible means, military as well as non-military".[42] This understanding of modern conflict as essentially privileging our own troops over civilians in areas where force is being used has also been echoed by David Rodin who argues that states "use tactics and weapons designed to shelter their own troops from harm, but which impose avoidable

[38] *See* Coker, C. (2009) *War in an Age of Risk, Cambridge: Polity*; Shaw, M. (2005) *The New Western Way of War*, Cambridge: Polity.
[39] Ignatieff, M. (2000a) *Virtual War: Kosovo and Beyond*, New York: Picador, p. 161.
[40] *Ibid.* p.161.
[41] *Ibid.* 162.
[42] Shaw, M. (2002) "Risk-Transfer Militarism, Small Massacres, and the Historic Legitimacy of War", *International Relations*, 16:3, p. 352.

risks upon enemy non-combatants."[43] Shaw further argues that wars in the new [western] mode of warfare rely on precision for their legitimacy. He argues that precision "defines war, narrows it down, and makes it a discrete and manageable business."[44] Ultimately war is made "calculable" in that it "promises to make war like any other political, economic or social project" for precision makes the use of force clean and surgical and results in only minimal combatant and civilian casualties: which are mostly described as unfortunate accidents.[45] Andre Barrinha and Luis da Vinha take the debate concerning drone and risk warfare further by arguing that when viewed from a risk society perspective, the Obama administration's precision strike policy is fraught with major inconsistencies in terms of the attempts to materialise individual risks, to provide a sense of control through the use of micro-management techniques over what can't be controlled, and the rise of unintended consequences that stem from a policy that is founded in risk-transference.[46]

Now that we have surveyed the literature on precision in drone warfare we turn to consider the methodological foundations of this dissertation.

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[43] Rodin, D. (2006) "The Ethics of Asymmetric War", in Sorabji, R and Rodin, D. (eds) *The Ethics of War: Shared Problems in Different Traditions,* Aldershot: Ashgate, p. 165.
[44] Shaw, M. (2005) *The New Western Way of War*, Cambridge: Polity, p. 88.
[45] *Ibid.* p.88
[46] Barrinha, A and da Vinha, L. (2015) "Dealing with Risk: Precision Strikes and Interventionism in the Obama Administration", in Aaronson, M; Aslam, W; Dyson, T and Rauxloh, R (eds) *Precision Strike Warfare and International Intervention: Strategic, ethico-legal, and decisional implications,* Abingdon: Routledge, p. 14-28.

Methodology

First, we must distinguish between methodology and method, and how both are understood in relation to the work of Foucault. The guiding methodology for this research is Foucault's understanding of genealogy as:

> "a form of history which can account for the constitution of knowledges, discourses, domains of objects ect., without having to make reference to a subject which is either transcendental in relation to a field of events or runs its empty sameness throughout the course of history."[47]

A genealogy of precision will seek to question the transcendental qualities of the concept of precision in order to understand how it was formed from the past, and it will do so by tracing "the constitution of the present concept back in history to understand when and how it was formed as well as how it succeeded in marginalizing other representations".[48] This form of philosophical-historical inquiry into the history of an idea, and how it has been used in the past, enables the researcher to better understand the present constitution of the concept of precision and how it was formed out of the past. The critical faculty of genealogy is that it enables a particular perspective on the world to be formed by the researcher which challenges and critiques the contemporary discourse surrounding particular ideas or concepts. Furthermore, by probing the historically contingent nature of precision and how it has been constituted at specific

[47] Foucault, M. (1984) "Truth and Power", in Rabinow, P (Ed.), *The Foucault Reader: An Introduction to Foucault's Thought.* London: Penguin Books, p. 59.
[48] Hansen, L. (2006) *Security as Practice: Discourse Analysis and the Bosnian War,* London: Routledge, p. 53.

sites in history the researcher draws attention to the contingency and productive power of discourse.[49]

One of the key foundations of the Foucauldian method of analysis is radical historicism.[50] This is distinguished from the historicism of Hegel, Marx and Comte who held that history determines social and cultural phenomena, and that human societies can only be understood as the result of historical processes.[51] This is a form of developmental historicism which is centred on the idea that history is structured or guided by certain principles that give it unity.[52] Radical historicism on the other hand, influenced by Nietzsche and developed further by Foucault, rejects the idea of certain principles or ideas as guiding historical development and instead searches for the contingent and accidental sources of belief in any such principles.[53] Radical historicism appeals to the historical background or practices that inform ideas and regards tradition "as the particular slice of the past that best explains the relevant actions and practices" in the present.[54] This is the methodological foundation that guides this research. Through seeking to trace a genealogy of precision in war the historical background that informs precision in the present will be analysed to understand how precision has been constituted at specific points in time. These episodes, drawing on specific examples, will be outlined below.

One of the challenges, and some argue deficiencies, with basing a research methodology and method in Foucauldian ideas is that

[49] Vucetic, S. (2011) "Genealogy as a research tool in International Relations", *Review of International Studies*, 37:3, p. 1312.
[50] Bevir, M (2008) "What is Genealogy?", *Journal of the Philosophy of History,* 2, pp. 263-275, p. 268.
[51] *Ibid.* p. 265.
[52] *Ibid.* p. 265-266.
[53] *Ibid.* p. 266.
[54] *Ibid.* p.267.

Foucault himself never elucidated a clear method for conducting research. Instead, Foucault envisaged that his work would be used as "a kind of tool-box which others can rummage through to find a tool which they can use however they wish for their own area".[55] As such this research will use the method of poststructuralist discourse analysis, inspired and guided by Foucaultian ideas of the productive power of discourse, in order to understand the constitution of precision in discourse on drone warfare. Stuart Hall describes Foucault's understanding of discourse as

> "A group of statements which provides a language for talking about — a way of representing the knowledge about — a particular topic at a particular historical moment…Discourse is about the production of knowledge through language. But…since all social practices entail *meaning*, and meanings shape and influence what we do — our conduct — all practices have a discursive aspect."[56]

The guiding idea is that all social practices should be understood as discursive constructions, and because discourses shape and influence meaning at the same time as being constitutive of meaning itself, discourse is understood to set the limits of understanding about objects or knowledge.

For Foucault genealogy is "a matter of analysing, not behaviours or ideas, nor societies and their 'ideologies,' but the problematizations through which being offers itself to be,

[55] Foucault, M. (1994) "Prisons et asiles dans le mécanisme du pouvoir" in *Dits et Ecrits*, t. II (Paris: Gallimard) pp. 523-524.
[56] Hall, S. (1992) "The West and the Rest", in Hall, S and Gieban, B (eds.) *Formations of modernity*, Cambridge: Polity Press, p. 291.

necessarily, thought - and the practices on the basis of which these problematizations are formed".[57] For Phillipe Bourbeau a genealogy "uncovers how a present situation has become logically possible…A genealogy studies the historical conditions of a phenomenon's emergence".[58] As such this research is focused on analysing the "discursive and non-discursive practices that makes something enter into the play of the true and false and constitutes it as a object for thought".[59] This relates to Foucault's position on truth and truth games. He holds that "telling the truth is like playing a game because, as in a game, there are no outside criteria by which to judge its content; 'truth' is shaped by internal rules".[60] It is these internal rules governing discourse on precision, the things that enable what is said and importantly what isn't said, that guide the focus of analysis in this dissertation.

For Foucault:

> "truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its 'general politics' of truth: that is, the types of discourse which it accepts and makes function as true."[61]

However, as Bartelson points out, Foucault never defines power.[62] Despite this we can take from Foucault's work the idea

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[57] Foucault, M. (1992) *The History of Sexuality.* Vol. 2: The Use of Pleasure. Reprinted. London: Penguin Books, p. 11.
[58] Bourbeau, (2018) p. 20.
[59] Foucault, M. (1988) "The Concern for Truth", in Kritzman, L. (Ed.) *Michel Foucault: Politics, philosophy, culture. Interviews and other writings, 1977-1984,* New York: Routledge, pp. 255-267.
[60] Bacchi, (2012) p. 4.
[61] Foucault, M. (1980) "Truth and Power" in Gordon, C. (Ed.) *Power/Knowledge: Selected Interviews & Other Writings. 1972-1877. By Michel Foucault*, New York: Pantheon Books, p.131.
[62] Bartelson, J. (1996) *A Genealogy of Sovereignty*, Cambridge: Cambridge University Press, p. 81.

that "power produces, makes, and shapes rather than masks, represses, and blocks".[63] In this sense power is both constraining and productive. It is the productive element of power in discourse that is the focus for this genealogy of precision. Furthermore, the aim in studying discourse and the relations of power and knowledge is to "'make visible' the interrelatedness of power and knowledge, especially their mutually determining an enabling roles."[64] As such "to study politics becomes to trace the operation of power as it creates subjects, discourses, and institutions through time".[65] To achieve the aim of this study one has to trace how power and knowledge are co-constituted by one another and to understand how this constitution is a consequence of the past. Thus, this understanding of power/knowledge fits with the wider poststructuralist understanding of how language works in discourse to not just produce meaning but also "particular kinds of objects and subjects upon whom and through which particular relations of power are realised.[66]

When Foucault speaks of the production of truth he is not talking about the production of true statements but rather "the 'administering of the realms' (setting up the 'rules of the game') in which the production of the true and false is regulated".[67] The "realms" and the "game" are discourse, and by them being "regulated" one is led to a focus on problematizations. The purpose of analysis isn't to look for the one correct response to an issue but to examine how it is "questioned, analysed,

[63] Wandel, T. (2001) "The Power of Discourse: Michel Foucault and Critical Theory", *Cultural Values*, 5:3, pp. 368-382, p.369.
[64] Prado, C.G. (2000) *Starting With Foucault: An Introduction to Genealogy*, Boulder: Westview Press, p. 20.
[65] Bevir, M. (1999) "Foucault, Power, and Institutions", *Political Studies*, XL VII, p.353
[66] Luke, A. (1999) "Critical Discourse Analysis", in Keeves, J.P. and Lakomski, G. (Eds.) *Issues in Educational Research*. Oxford: Pergamon Press.
[67] Bacchi, (2012) p. 4.

classified and regulated [at] specific times and under specific circumstances".[68] What this means is that the object of analysis isn't necessarily what precision means at a particular point in history, although this itself will be an interesting thing to consider, but rather the "procedures, practices, apparatuses and institutions" that are involved in the constitution of the particular conception of precision at a point in time.[69] Thus, the researcher is "thinking problematically" about an object and its relation to the past.[70] The problematization identified for further discussion in this research is "precision" in warfare. In order to understand how precision has come to be constituted as it presently is in political discourse on drone warfare, we need to study the "practices, political structures and ethical forces which 'constitute'" precision as an object for thought.[71] This can be achieved by studying precision in war as a problematization. The reason for studying a problematization, rather than seeking to determine whether drone warfare is ethical or whether targeted killing enabled by drones is effective, is that you can dismantle a object that has a taken-for-granted essence - such as the idea that precision in war is good or morally necessary - and show how that object has come to be.[72]

It must be noted that because genealogy is a form of philosophical-historical inquiry it is rejected by both philosophers and historians. Historicism, critics argue, abandons objective standards of intellectual inquiry which leads

[68] Deacon, R. (2000) "Theory as Practice: Foucault's Concept of Problematization", *Telos*, 118, pp. 127-142.
[69] Carabine, J. (2001) "Unmarried Motherhood 1830-1990: A Genealogical Analysis", in Wetherell, M; Taylor, S and Yates, S. (Ed.) *Discourse as Data,* London: Sage Publications Ltd., p. 275-276.
[70] Bartelson, (1996) p. 185-186.
[71] Carelle, J.R. (2000) *Foucault and religion: Spiritual corporality and political spirituality*, London and New York: Routledge, p.131.
[72] Bacchi, (2012) p. 2.

philosophers to regard Foucault's claims as "entailing [the] denial of 'external' reality.[73]" However, through denying an external reality the researcher is acknowledging the "defining feature and biggest problem" of post-modernism — which is that of reflexivity.[74] Furthermore, radical historicism goes some way to remedying what Richard Rorty identified as a deficiency of historical scholarship: that by advocating for objective standards to govern research "we are unable 'to step outside of our current theory of the world' in order to evaluate whether it fits the world, so we have no standard to appeal to in checking the soundness of our methods of inquiry".[75] The historian criticises the historical aspect of genealogy as being *deficient history* because the researcher does not, in a genealogy, situate themselves outside of the history that they are writing. However, Jens Bartelson argues, inspired by Nietzsche, that we should abandon the quest for such a "supra-historical" form of history simply because "we cannot hope to recover true stories of this past without the aid of a meta-story telling us what to count as a true story, this meta-story itself being a historical artifice".[76] It is important to remember that the researcher is situated in the present, and not in the time they are writing a history of. As such the researcher should embrace their situatedness because they are writing a history of the present in "terms of the past" - with the aim being to understand how the past has conditioned and constitutes concepts in the present.[77]

Bartelson argues that in order for genealogy to be "effective history" it must:

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[73] Prado, (2000) p. 18-19.
[74] *Ibid.* p. 20.
[75] *Ibid.* p.20.
[76] Bartelson, (1996) p. 74.
[77] *Ibid.* p. 74.

> "start from an analysis of the present, and identify something as problematic in that present in order to write a history of it. As such, genealogy is strategically aimed at that which looks unproblematic and is held to be timeless; its task is to explain how these present traits, in all their vigour and truth, were formed out the past."[78]

This understanding of genealogy has been captured in the discussion concerning problematization, and we now need to briefly turn to what "effective history" is and how a genealogy produces this form of history. Genealogy must be episodical in that it "focuses only on those episodes of the past which are crucial to our understanding of what was singled out as problematic in the present".[79] The genealogist then narrows down their episodes to a focus on particular examples that accord with the focus of the research. The episodes singled out as important to a genealogy of precision in war are the late 19th Century when the Hague peace conferences were being convened, as these were the first time that European states came together to seek to regulate the conduct of war. Next we turn to World War Two and more specifically the U.S. and British policy of strategic bombing. This period in the history of war marked the culmination of the idea of total war which had certain implications for the conduct of the war, and also saw the marked use of the language of precision at a time when the reality of area, carpet or morale bombing appears to have been distanced from this language of precision. Then we turn our focus towards the end of the 20th Century and specifically the military operations conducted in Vietnam in the 1970's and the first Gulf War in the early 1990's. Both of these examples are times when the U.S. used precision-guided munitions to great effect and mark a

[78] *Ibid.* p. 73.
[79] *Ibid.* p. 8.

watershed in the conduct of warfare. These episodes and examples have been chosen because they are intimately connected to the present in as much as they are critical junctures in the history of war that have specific relevance for the concept of precision in discourse on drone warfare.

Language is the way in which humans create meaning in the world, and discourse is how that meaning is reproduced.[80] An important aspect of post-structuralist discourse analysis is the idea of intertextuality. This is the idea that texts are situated within and against other texts, meaning that texts draw upon one another in order to construct their identities and meanings.[81] The sources that are going to serve as the empirical basis for this genealogy are drawn from U.S. presidential speeches, statements and interviews, and other official governmental discourse including the statements of practitioners and governmental officials. Oppositional texts, from drone interest groups such as Reprieve and the Stanford/NYU research group on drones, will also be considered as a part of this analysis to chart the relations of power within the precision discourse. The goal of such analysis is ultimately to understand the hegemony of official discourse and how this is constituted in relation to oppositional forms of discourse.

This thesis now turns to consider the constitution and use of precision in discourse up to and during the codification of the first laws of war.

[80] Hansen, (2006) p. 18-19.
[81] *Ibid.* p.55.

Chapter One. War and law

This chapter considers how precision was conceived and used up to and during the codification of the nascent laws of war in the 19th Century, principally through an analysis of the relationship between precision and the principle of distinction. It does so in order to demonstrate that the contemporary laws of war, where the protection of non-combatants finds its clearest articulation, have a social and religious history in which civilians were not necessarily regarded as a wholly protected class in war. In sharp contrast to today. The chapter beings by considering the relationship between precision and distinction, then in the Middle Ages and considers how early laws of war were influenced by the religious thought of the Middle Ages up until the 19th Century. War is considered as an institution of law, which is pertinent to contemporary discourse on war not least because lawyers have a significant role in regularizing war and determining who is and isn't a legitimate target. The chapter ends by situating the early laws of war in their wider context, for they were being developed at the time when the great European powers were engaging in a scramble for Africa.

Contemporary discourse on war is concerned with the protection of civilians. In order to discriminate between civilian and combatant the concept of distinction comes into play, where combatants are regarded as legitimate targets whilst the targeting of civilians is prohibited. The civilian — or non-combatant — is a central idea in contemporary discourse on war. The concept of precision in contemporary discourse on drone warfare draws on the concept of civilian developed in the 18th and 19th Centuries, where the civilian is defined as a "non-military man

or official".[82] However, the civilian was first conceptualised in the 14th century where it referred to someone who practiced civil as opposed to canon law - the law of the Catholic church.[83] Consequently, those who would today be regarded as civilians were not granted immunity from attack by law in the Middle Ages. Today civilians are explicitly placed outside the realm of targeting by the U.S. government, and their death from drone strikes is lamented as regrettable. Because of this precision is praised for its ability to enable distinction on the battlefield which it is argued should result in fewer civilian deaths in war. However, the principle of distinction has a long and contradictory history which requires further consideration in order to provide the contextual background to a critique of contemporary discourse on precision in drone warfare that starts in chapter two of this thesis.

The two religious movements of the Middle Ages that sought to moderate warfare were the Peace of God and the Truce of God.[84] The Peace of God sought to perpetually protect priests and churches from the effects of warfare, whilst the Truce of God regarded individuals such as merchants and peasants as being temporarily placed outside the area of war. Those placed outside were a small group and each in their own way was vital to the future functioning and power of the Church. One reason why peasants were deemed immune from the ravages of war was that they were required to toil the land, and the merchants were necessary to ensure that trade would continue after war had been concluded.[85] They served instrumental purposes in ensuring the dominance the Church had over much of life in the Middle Ages

[82] Kinsella, H. (2011) p. 29.
[83] *Ibid.* p. 28.
[84] *Ibid.* p. 37.
[85] Johnson, J. (1981) *Just War Tradition and the Restraint of War: A Moral and Historical Inquiry*, Princeton: Princeton University Press, p. 127.

continued, thus distinction can be understood to have been constituted by concern for power rather more than the humanitarian ideals of the protection of civilians. Another overarching motivation for such distinctions was that the Church wanted to retain its role as the arbiter of good and bad, and more importantly between what distinguished legitimate violence from illegitimate violence.[86] Again, power and control are what can be said to have motivated the conceptualisation of distinction in the Middle Ages. Furthermore the immunity of the clergy from war was not some natural phenomena but a "complex social movement" that helped to distinguish the clergy from the knight and the peasants from the clergy, which thus casts the Peace of God as an "effort at social differentiation" motivated by concern for power and social dominance which was being challenged in the Middle Ages by the rise of the knights and their armies.[87]

The idea of war as punishment was a central tenet of the scholastic view of war well into the 16th century.[88] Francisco de Vitoria outlines this idea when he says that "the sole and only just cause for waging war is when harm has been inflicted".[89] Stephen Neff describes the just war tradition as being constituted by the idea that the unjust side to a conflict has no right to use force against the just side, "any more than a criminal has a 'right' to use violence against a magistrate."[90] Consequently, it can reasonably be assumed, that the unjust side would all be liable to be attacked. Any idea of precision is therefore thrown

[86] Kinsella, (2011) p. 38.
[87] *Ibid.* p. 40.
[88] Bartelson, J. (2018) *War in International Thought*, Cambridge: Cambridge University Press, p. 136.
[89] Vitoria, F. quoted in Bartelson, J. (2018) *War in International Thought*, Cambridge: Cambridge University Press, p.136, p.13-14.
[90] Neff, S. (2005) *War and the Law of Nations: A General History,* Cambridge: Cambridge University Press, p. 62.

out the window. Early modern jurisprudence wasn't so much concerned with restricting the use of force by an appeal to a universal normative order — such as the prohibition against targeting civilians in war — but was more concerned with harnessing law for the purposes of secular statecraft.[91] So war was, as David Kennedy argues, a legal institution more than anything else.[92] This suggests that the early laws of war, which have a direct link to international humanitarian law today, were less about prohibiting harm against civilians than they were constitutive of the very institution of war itself. With the rise of the codified laws of war, Kennedy further argues that "law now offers an institutional and doctrinal space for transforming the boundaries of war into strategic assets, as well as a vernacular for legitimizing and denouncing what happens in war".[93] The law is a powerful discursive tool, something that is particularly evident when considering contemporary drone warfare. If war is understood as a legal institution, much as it was from the 16th Century onwards, then we can better understand the power that lawyers have today on decision making in war. This is the case with drone strikes today, for armed drones enable the U.S. to use force in a new way. This new mode of warfare is centred upon the idea that you can conduct war solely via targeted killing, which are "useful for a form of bureaucratic warfare that is the product of a legalistic society."[94] Many argue that the origin of international law was mired in violence, moreover that it grew out of violence and as such a desire to order this violence emerged as a means of strategic statecraft.[95] However, as Bartelson argues, what matters for the history of international law is not whether violence was at its origin but rather that the

[91] Bartelson, J. (2018) p. 132-133.
[92] Kennedy, D. (2006) *Of Law and War,* Princeton: Princeton University Press.
[93] *Ibid.* p. 116.
[94] McDonald, J. (2017) p. 9.
[95] Bartelson, J. (2018) p. 131.

"possibility and necessity of violence are imagined by the law itself as a condition of itself."[96] It is in this sense that war can be thought of as an institution of the law, for there is no war without lawyers as they are the ones who give conceptual definition to "war" in order to justify in part the existence and maintenance of international law.[97]

In 1899 the Russian Czar convened a conference at The Hague that had the conduct of war as its focus. The 19th Century had been a bloody one, with the American and French revolutions demonstrating the power of total war and the destructive impact it could have on civilian populations. By the mid-19th Century many, including Lawrence writing in 1885, were calling for all measures to be taken to make war less frequent.[98] The Russian Czar specifically called the conference in order to "humanize war" by which he meant that war must be "regularized".[99] The aim was that when necessary acts of violence were to be carried out by state armed forces, they were not to cause unnecessary suffering to those targeted with violence.[100] The desire to stem the inhuman aspects of war was in part prompted by the fact that in 1849 the Austrian Army dropped fuse bombs over Venice from hot-air balloons.[101] The Russian conveners of the conference proposed the "prohibition of the discharge of any kind of projectile or explosive from balloons or by similar means".[102] Despite the effort to get a ban in place, it was only

[96] *Ibid.* p.132.
[97] *Ibid.* p. 132.
[98] Lawrence, T. quoted in Bartelson, J. (2018) *War in International Thought*, Cambridge: Cambridge University Press, p. 174-175.
[99] Kinsella, (2011) p. 105.
[100] McDonald, (2017) p. 200.
[101] Gillespie, P. (2006) *Weapons of Choice: The Development of Precision Guided Munitions*, Tuscaloosa: The University of Alabama Press, p. 12.
[102] Kennett, L. (1991) *The First Air War, 1914-1918*, New York: Free Press, p. 2.

designed to last five years.[103] This was because the American delegation hoped that in the interim advances in weapons technology would result in the production of munitions that were more effective than the current "indecisive quantities of explosives, which fall like useless hailstones, on both combatants and non-combatants alike".[104] It's almost as if the death of civilians from such indiscriminate projectiles was a mere inconvenience compared to the strategic effect this was having on the ability to aim firepower in an efficient manner. This point is illustrated by the fact that the Americans hoped that future weapons would be able to "localize at important points the destruction of life and property [and] decrease the length of combat and consequently the evils of war".[105] It appears that strategic concerns motivated the call for the conduct of war to be more restrained, however this call for restraint was couched in the language of humanity. This is something that is continuous with discourse on war today, for the Obama administration couched its justification of the efficacy of armed drone strikes in terms of humanity also.[106]

Whilst the European powers were debating amongst themselves how to make war more humane they were also engaged in a scramble for Africa. A conquest for territory that saw all of the nascent laws and customs of war they had agreed necessary for

[103] International Peace Conference at the Hague. (1899) "Prohibiting Launching of Projectiles and Explosives from Balloons, Hague, IV, last accessed 16th July 2018 via: http://avalon.law.yale.edu/19th_century/hague994.asp
[104] Kennett, (1991) p. 2.
[105] *Ibid.* p. 2.
[106] *See* Holder, E. (2012) Attorney General Eric Holder Speaks at Northwestern University School of Law, The United States Department of Justice, last accessed 26th August, 2018 via: https://www.justice.gov/opa/speech/attorney-general-eric-holder-speaks-northwestern-university-school-law; McDonald, (2017) p. 200.

civilized combat discarded by the wayside.[107] Not only that but non-European peoples of the world were excluded from the regime of international law because they were "uncivilized".[108] These discourses of civilization active during the 19th Century, and especially in relation to the 1899 Conference, have had a lasting effect on the boundaries of international law.[109] As W. E. Hall argued in 1890, "international law is a product of the special civilization of modern Europe, and forms a highly artificial system of which the principles cannot be supposed to be understood or recognized by countries differently civilized; such states can only be subject to it as are inheritors of that civilization".[110] In order to be admitted into the civilized world these uncivilized nations would have to accept the law in its entirety as developed by the Europeans.[111] However, in reality the only way this could be achieved was for the non-European peoples to acquiesce to the superior military might of the European powers.[112] As John Westlake, writing in 1894, explicitly states, the advances made in international law were to be celebrated whilst the uncivilized nations were "fair game for those practices of conquest and occupation that civilized states were proud of having made illegal among themselves".[113] A common feature of the justification for using indiscriminate and often inhumane means of warfare against uncivilized peoples was that they themselves were prone to uncontrolled violence and therefore couldn't be expected to understand and respect the laws of war.[114]

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[107] *See* Megret, F. (2006) "From 'Savages' to 'Unlawful Combatants': A Postcolonial Look at International Law's Other," in Orford, A (ed.) *International Law and Its Others*, Cambridge: Cambridge University Press, p. 265-317; Bartelson, (2018) p.176-178.
[108] Wheaton, H. (1864) *Elements of International Law*, London: Sampson Low, p. 16-17.
[109] Kinsella, (2011) p. 107.
[110] Hall, W. E. (1890) *Treatise on International Law*, Oxford: Clarendon Press, p. 42.
[111] Hall, (1890) p. 43.
[112] Bartelson, (2018) p. 173.
[113] *Ibid.* p. 175.
[114] *Ibid.* p. 176.

Up until the Hague Conventions of the late 19th Century the conduct of war was regulated by religious dictate, and even when the European great powers came together to begin the process of secularising and rationalizing the religious doctrine of just war theory they adopted a regulation of war that was founded upon a distinction between civilized and uncivilized peoples. This is important because much of the modern international law developed in Geneva in the mid-20th Century is steeped in Hague law and the law of the Church developed in the Middle Ages. Contemporary discourse on precision draws heavily on the principle of distinction, ultimately arguing that precision enables distinction on the battlefield today. However, the concept of distinction during the middle ages and even up and until the late 19th Century was informed and conditioned by the prevailing moral and social views and practices of the time. This is important for the history of precision precisely because in contemporary discourse precision is so closely allied with the principle of distinction. The principle of distinction hasn't necessarily always been one that has sought the protection of civilians.

Having explored the relationship between precision and the principle of distinction from the Middle Ages up until the early codification of the laws of war in the 19th Century, the genealogy next moves to consider precision during World War Two. More specifically it focuses on the example of precision and the policy of strategic bombing. It finds that precision is used to distance policy makers and commanders from the effects their decisions have on civilians caught up in war. The civilian remains a legitimate target and strategic considerations, and technological deficiencies, prevent precision from being explicitly tied to a desire to protect civilians in war.

Chapter Two. Area bombing in World War Two: Precision in name only

The first example to which this genealogy turns is that of precision during the strategic — or precision — bombing of World War Two. It will be demonstrated that precision was a contested issue during the war. Furthermore, whilst the language of precision was used extensively in relation to the strategic bombing of European cities, this language was distanced from the effects on the ground for civilians were indiscriminately targeted on many occasions. It is important to consider the discourse of precision during the Second World War because it was a time when civilians were deemed legitimate targets, but also when the concept of precision was actively used to distinguish the American from the British forms of bombing. This chapter takes a look at how precision was used in discourse, specifically its use as a justification for bombing decisions and how the tortured language of precision was used to distance actors from the effects of their decisions. Ultimately, bombing during World War Two was precise in name only. With that name being "precision" or "carpet" or "strategic" bombing.

In 1917, the U.S. Naval Consulting Board approved an aerial torpedo project which sought to make air warfare more effective.[115] The problem, as the U.S. saw it, was that the "swarms" of aircraft used by the French and British in 1915 were only effective against large targets.[116] This was because only the leader of the swarm used a bombsight with the rest of the swarm just dropping their bombs on cue; one solution was for planes to fly lower in the sky in order to hit smaller targets, but this has the

[115] Gillespie, (2006) p. 15.
[116] RFC Headquarters policy paper on bombing, 1915, reprinted in Saundby, R. (1961) *Air Bombardment: The Story of Its Development*, New York: Harper and Brothers, p. 14.

potential to suffer significant allied air losses.[117] Thus, there emerged "a clear demand for an aerial weapon accurate enough to strike small targets of military importance, but resilient enough to withstand the punishment of continuously improving ground defenses".[118] The emphasis was on military effectiveness and even before air power really made its mark in modern war during the Second World War there was a concerted effort to make air weapons more accurate, to ensure that smaller military targets were able to be effectively destroyed. During the 1930's great emphasis was placed on precision by the U.S. Air Core.[119] U.S. air doctrine at the time was heavily influenced by the air power theory of Giulio Douhet. His technological determinism argued that there was to be no force that could prevent the bombing of cities, which for him meant that in future wars the distinction between combatant and noncombat would be non-existent. However, because of air power such wars would be by nature short.[120] Consequently, he argued that "these future wars may yet prove to be more humane than wars in the past in spite of all, because they may in the long run shed less blood."[121] The U.S. Air Core focused its concepts and doctrine around the idea of destroying an enemy's "key nodes", and technological developments in the 1930's - culminating in the Norden bombsight - provided a means of achieving the necessary precision that such a doctrine demanded.[122] Thus, as Frank Ledwidge argues, "much

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[117] RFC Headquarters policy paper on bombing, 1915, reprinted in Saundby, R. (1961) *Air Bombardment: The Story of Its Development,* New York: Harper and Brothers, p. 15.
[118] Gillespie, (2006) p.15-16
[119] Ledwidge, F. (2018) *Aerial Warfare: The Battle for the Skies,* Oxford: Oxford University Press, p. 138.
[120] Biddle, T. (2014) "Strategic Bombardment: Expectation, Theory, and Practice in the Early Twentieth Century", in Evangelista, M and Shue, H (eds). p. 35-36.
[121] Douhet, G. (1983) *Command of the Air*, Washington D.C.: Office of Air Force History (this is a reprint of of the 1942 edition translated by Dino Ferrari and published by Coward-McCann, Inc.) p. 61.
[122] Ledwidge, (2018) p. 48.

of the development of guided munitions [many decades later] was driven by the need to destroy such targets as bridges".[123]

During the Second World War the Anglo-American debate on bombing policy was focused on the effectiveness of night versus day-time bombing.[124] Shortly after the British began area bombing in February of 1942, British air staff noted that "USAAF [United States Air Force] was 'very firmly convinced of the inadequacy of…night bombing and consequently of the need to intensify the day bombing effort'".[125] U.S. bombing policy during the European campaign was guided by the "web theory of bombing" which called for "selective attacks on industries deemed vital to the German war effort" using "high-altitude daylight 'precision'" bombing.[126] Thus, the Americans believed in, or at least entered the war using the language of, precision. In terms of the conduct of the war this sentiment can be traced back to President Roosevelt's plea, at the outbreak of war when Germany invaded Poland on the 1st September, 1939, that all powers refrain from the "inhumane barbarism" that constituted the aerial bombing of civilians in cities.[127] Roosevelt probably had in mind at this time the German bombing of Guernica that occurred a few years earlier in 1937 during the Spanish Civil War. The town was reported to be "flaming from end to end", with eyewitness reports claiming that the German planes had plunged low in the sky in order to machine-gun those

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[123] *Ibid.* p. 138.

[124] Wolke, H. (2003) "Decision at Casablanca", *AIR FORCE Magazine*, last accessed 20th July, 2018 via: http://www.airforcemag.com/MagazineArchive/Documents/2003/January%202003/0103casa.pdf

[125] Biddle, T. (1999) "Bombing by the Square Yard: Sir Arthur Harris at War, 1942-1945", *The International History Review*, 21:3, p. 639.

[126] Biddle, (1999) p. 639.

[127] Roosevelt, F. (1939) An Appeal to Great Britain, France, Italy, Germany, and Poland to Refrain from Air Bombing of Civilians, The American Presidency Project, last accessed 20th July, 2018 via: http://www.presidency.ucsb.edu/ws/?pid=15797

civilians who has taken refuge in the fields surrounding the town.[128] Roosevelt goes onto say that the bombings that had taken place previous to 1939 had "sickened the hearts of every civilized man and woman, and…profoundly shocked the conscience of humanity".[129] His civilization discourse draws on Hague Law discourse where civilized – or great power – states came together to agree to limit the conduct of war in order to remedy its harmful effects.[130] The British agreed with Roosevelt's plea and stated that "it was already the settled policy of his Majesty's Government, should they become involved in hostilities, to refrain from such action and confine bombardment to strictly military objectives, upon the understanding that those same rules will be scrupulously observed by all their opponents".[131] At this point in time the Americans and British were not officially involved in the war, however the British did declare their involvement two days later on the 3rd September, 1939 along with France. The Americans however refrained from joining the war effort for many years, which suggests that the plea to refrain from aerial bombing of civilians in densely populated areas was more of an attempt to prevent the conditions under which a moral imperative might force America to join the war effort.

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[128] *The Times*. "Bombing of Guernica: original Times report from 1937", 26th April, 2006 last accessed 20th July, 2018 via:
https://www.thetimes.co.uk/article/bombing-of-guernica-original-times-report-from-1937-5j7x3z2k5bv

[129] Roosevelt, F. (1939) An Appeal to Great Britain, France, Italy, Germany, and Poland to Refrain from Air Bombing of Civilians, The American Presidency Project, last accessed 20th July, 2018 via: http://www.presidency.ucsb.edu/ws/?pid=15797

[130] *See* Chapter One of this dissertation.

[131] *The Telegraph*. "World War 2: Roosevelt hoping for US neutrality", 2nd September, 2009, last accessed 20th July, 2018 via:
https://www.telegraph.co.uk/history/world-war-two/6081015/World-War-2-Roosevelt-hoping-for-US-neutrality.html

The commander of British Bomber Command, Arthur Harris, having watched the Blitz take place in the skies above London, argued that the way in which to win the war would be to bomb Germany's "vulnerable points" and cause such destruction that the Germans would be unable to regain strength quick enough to retaliate.[132] Whilst today the idea of bombing cities would receive widespread condemnation, from World War One until the end of the war in Vietnam the dominant belief guiding strategic bombing was that civilians were a legitimate and essential target of bombing.[133] Despite this Harris' proposal was met with resistance from Churchill, but was supported by Churchill's scientific adviser who argued that "there seems little doubt that this would break the spirit of the [German] people".[134] However, many others in the British air staff were critical of such proposals and instead interpreted the February 1942 directive as being "a temporary measure until Bomber Command overcame the operational limitations that prevented it from attacking selective targets".[135] The "operational limitations" were technological in that the British — nor Americans — simply didn't have the ability to bomb selective targets with precision. Nevertheless, the directive authorized Harris to employ his forces without restriction in order that "the morale of the enemy civil population and particularly the industrial workers" be broken.[136]

Military effectiveness trumped the moral desire to engage in precision bombing against military targets at various points during the war, one such instance was when Dwight D.

[132] Harris, A. (1947) Bomber Offensive, London: Collins, p. 83, 86-89.
[133] Crawford, N. (2014) "Targeting Civilians and U.S. Strategic Bombing Norms", in Evangelista, M and Shue, H (eds). p. 86.
[134] Cherwell quoted in Biddel, (1999) p. 636.
[135] Biddel, (1999) p. 637.
[136] Ledwidge, (2018) p. 73

Eisenhower, Supreme Allied Commander, said on the 28th August, 1944 that "while I have always insisted…that U.S. Strategic Air Forces be directed against precision targets, I am always prepared to take part in anything that gives real promise to ending the war quickly".[137] The consequent order from General Carl Spaatz, a commander in U.S. Strategic Air Forces, to his subordinates was "that we would no longer plan to hit definite military objectives but be ready to drop bombs indiscriminately".[138] Furthermore, the American desire for "precision bombing" stemmed not from a moral repugnance at the effects of area bombing, but rather because it was considered "more efficient militarily, better suited to the image they wished to project, more likely to verify their theory of strategic air power and, for all these reasons, a more effective way of establishing the effectiveness of their service after the war".[139] This is not to say that the moral implication of bombing didn't feature as a factor in deciding what course of action to take, but instead to make the point that military effectiveness — as is the case today — was a powerful driver of the use of force. It must be acknowledged that this is so in every conflict but was particularly pertinent during the Second World War precisely because of the existential threat to the Allied powers that it presented.

At an Allied conference in Casablanca in January of 1943, the British agreed to conduct night-time bombing whilst the Americans agreed to conduct day-time bombing.[140] However, discussions between the British and Americans in the run up to

[137] D. D. Eisenhower to Spaatz, Aug. 28, 1944, Spaatz Papers; Spaatz to Dwight D. Eisenhower, Aug. 24, 1944, *ibid.;* Diary (Official), box 18, *ibid.*; Diary (Personal), Sept. 9, 1944, quoted in Schaffer, (1980) p. 325.
[138] Schaffer, R. (1980) "American Military Ethics in World War II: The Bombing of German Civilians", *The Journal of American History*, 67:2, p. 320.
[139] *Ibid.* p. 333.
[140] Biddle, (1999) p. 640.

the conference highlight that the debate about night- versus day-time bombing was about military effectiveness, and also a way for the Americans to continue to maintain that they did "precision bombing". The emphasis by the U.S. on "precision bombing", and what they called "pickle-barrel bombing", was a way for them to distinguish themselves from the British area bombing and as such was for public consumption.[141] There is a tension therefore in the language that the Americans used and the effects of their bombing operations, for on the 1st November, 1943 USAAF General Henry Arnold authorised a move towards "blind bombing" away from "precision bombing" because of operational difficulties in achieving the accuracy envisaged by "precision bombing", importantly however the Americans carefully avoided using the term "blind bombing" in public.[142] Following the Casablanca conference Arnold told U.S. Air Staff in Washington D.C. that

> "this is a brutal war and…the way to stop the killing of civilians is to cause so much damage and destruction and death that the civilians will demand that their government cease fighting. This doesn't mean that we are making civilians or civilian institutions a war objective, but we cannot 'pull our punches' because some of them may get killed."[143]

Thus, at the same time as explicitly maintaining the principle of no indiscriminate bombing of German civilians, Arnold is advocating that American bombing policy shouldn't be limited by the desire to see no civilian casualties. This concurs with

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[141] *Ibid.* p. 646.
[142] *Ibid.* p. 646.
[143] Henry H. Arnold to Assistant Chief of Staff, Materiel, Maintenance and Distribution, April 26, 1943, box 38, Henry H. Arnold Papers (Library of Congress); T. J. Hanley, Jr., to Assistant Chiefs of Air Staff, Personnel, et al., April 30, 1943, box 114, quoted in Schaffer, (1980) p. 333.

contemporary law of war, for whilst civilians cannot be intentionally targeted during war their death does not mean that the result itself is illegal. However, Arnold's message maintains that in order to prevent civilian deaths you have to cause them to such a degree that the civilians themselves pressure their government to cease fighting. Thus, we can see that whilst in the run up to and at the Casablanca conference the Americans demanded that they only conduct day-time bombing, and encouraged the British to do the same, the commanders in charge of setting and executing policy were of the mind that "precision bombing" was only so good as it achieved strategic results. Therefore, despite the claims to be implementing a policy of "precision bombing" and using the language of precision, the reality was that the desire for precision would often be relegated as a secondary requirement to the ultimate aim of military utility. These statements from Arnold are contrasted with his belief that the bomber "'when used with the proper degree of understanding…becomes, in effect, the most humane of all weapons' and, depending on how it was employed, could be either 'the saviour or the scourge of humanity'".[144]

After the war the power of the contorted language used during the war was evidenced in Hollywood movies that glorified "'pin-point bombing', 'precision bombing', and 'pickle-barrel accuracy'" despite the historical record and the technology of the day precluding such effects in military operations.[145] Such is the power of language in this case that we might be able to explain the common misconception that there was a real distinction to be made between American and British bombing policy during the war, for despite the language used the British have been

[144] Arnold to All Air Force Commanders in Combat Zones, June 10, 1943, box 41, Arnold Papers, quoted in Schaffer, (1980) p. 333.
[145] Biddle, (1999) p. 663.

shown to be more precise than the Americans in their bombing operations.[146] Whilst the Americans did have reservations about Harris' favoured policy of area bombing of German cities, it is the case that when the weather precluded other options they were more than happy to conduct area bombing themselves.[147] However, the distinction typically made between American and British bombing policy is that the Americans conducted "precision bombing" whilst the British conducted indiscriminate area bombing.[148] Whilst the major Allied powers did appreciate the value of "pin-point" accuracy in an effort to eliminate high-value military targets, there just wasn't the technological capability available to them at that time in order to actually achieve this desired level of precision.[149] During World War Two military effectiveness in reality trumped "precision bombing" for the devastation envisaged of the Germany economy could have only been achieved at the immense cost of civilian lives and infrastructure. Through using the language of precision military commanders and politicians were able to distance themselves from the awful effects of their policy choices.[150]

This chapter sought to explore precision during the strategic bombing campaigns of the U.S. and British during World War Two. The genealogy now turns towards an analysis of precision during the Vietnam War, where the language of precision finally begins to see tangible effects in reality. During the later stages of the Vietnam war precision discourse finally met up with nascent

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146 Wakelham, R. (2011) "Bomber Harris and Precision Bombing - No Oxymoron Here", *Journal of Military and Strategic Studies,* 14:1, p. 14-15.
147 Biddle, (1999) p. 647.
148 *Ibid.* p. 647.
149 Gillespie, (2006) p. 38.
150 *See* Lee, P. (2013) "Return from the Wilderness: An Assessment of Arthur Harris's Moral Responsibility for the German City Bombings", *Air Power Review*, 16:1, pp.70-90; Lee, P and McHattie, C. (2016) "Churchill and the Bombing of German Cities 1940-1945", *Global War Studies*, 13:1, pp.47-69.

precision weapons technology. During this time, as the consequence of pressure to end the dire war in Vietnam the U.S. government sought to emphasize efforts to protect civilians. This is the first time that precision weapons and precision discourse are combined in order for the U.S. government to justify their actions whilst maintaining that protection of civilians were at the heart of targeting decisions.

Chapter Three. The Vietnam war: from Napalm to no harm

This chapter considers how the language and technology of precision combined to produce precision as the protection of non-combatants in the Vietnam war. The war in Vietnam saw the first concerted use of precision weapons by the United States. It was a turning point in the conduct of war, and also saw a concerted effort from the U.S. government to place the U.S. conduct of war on an ethical footing. This chapter considers the context within which precision was used, specifically towards the later stages of the war, and how the technological developments of the 1970's and 80's enabled precision strike to become a reality on the battlefield. Whilst the technology was available to the United States Air Force before 1960 it took the American experience in Vietnam to catalyse the research and development programmes that were necessary for precision weapons as we know them in the present to emerge.[151] Thus, it was in Vietnam that *viable* precision emerged.[152] During the last few years of the war in Vietnam, from the 1972 Linebacker campaigns onwards, the United States attained the technological capability to conduct air strikes against specified targets.

In 1972 the political objectives of the U.S. government and the military strategy used by the North Vietnamese had changed, for since 1967 the U.S. had been pursuing a policy of "Vietnamization" aimed at helping the South Vietnamese to "develop the capability of defending themselves",[153] and in 1972

[151] Gillespie, (2006) p. 6.
[152] Hickey, J. (2012) *Precision Guided Munitions and Human Suffering in War*, Farnham: Ashgate, p. 75.
[153] Nixon, R. (1972) Address to the Nation on Vietnam, 26th April, 1972, The American Presidency Project, last accessed 25th July, 2018 via:
http://www.presidency.ucsb.edu/ws/index.php?pid=3384&st=vietnam&st1=

the North Vietnamese launched a large-scale conventional attack on the South known as the "Easter Offensive".[154] In response to the Easter Offensive, on the 26th April, 1972 President Richard Nixon addressed the United States and called the North Vietnamese offensive "a clear case of naked and unprovoked aggression across an international border" that amounted to "an invasion".[155] As a consequence, in May 1972, the U.S. launched a series of bombing operations collectively called Linebacker and Linebacker II.[156] In announcing the response Nixon underlined that the only targets U.S. missiles would be aimed at were those military ones which supported the invasion of South Vietnam by the North. During the months of June and July 1972 President Nixon emphasised in a series of press conferences that "the new bombing campaign…was only targeting military targets in order to avoid civilian casualties."[157] This saw the crystallization of the norm against targeting civilians and a move away from the legitimate targeting of civilians that was prevalent during World War Two. The U.S., as a consequence of its technological ability to target specific targets, now stated publicly that civilians were not the intended targets of air strikes. This marks the beginning of an explicit desire by the U.S. to use its weapons to not only achieve military objectives but avoid civilian casualties — something that is prevalent in contemporary discourse on drone warfare.

The Linebacker campaigns were contrasted by Nixon to previous bombing campaigns such as operation Rolling Thunder, which involved the controversial use of napalm that

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[154] Hickey, (2012) p. 84-85.
[155] Nixon, R. (1972) Address to the Nation on Vietnam, 26th April, 1972, The American Presidency Project, last accessed 25th July, 2018 via:
http://www.presidency.ucsb.edu/ws/index.php?pid=3384&st=vietnam&st1=
[156] Hickey, (2012) p. 85.
[157] Gillespie, (2006) p.118.

resulted in the indiscriminate killing and harm to civilians. However, the realisation that the U.S. could "apply decisive military force at key points" without "high costs and political risks" — read civilian casualties — meant that the restrictive rules of engagement put in place during Rolling Thunder were relaxed.[158] These rules of engagement prevented targeting military objectives that were located close to civilian areas, however with the availability of weapons that could target precisely the proximity of a military objective to a civilian area no longer precluded that military objective from being targeted.[159] Precision therefore didn't necessarily result in greater protection for civilians, but instead made those civilians more vulnerable to attack especially if they were located near "military objectives". Precision was being used in a similar vein to its use during World War Two, as a rhetorical device to assuage public concern about the nature of the bombing campaign that was being undertaken. Precision in this case actually made civilians more vulnerable to being the indirect victims of an air strike. The political implication of this was that precision weapons offered the U.S. government the ability to strike military objectives whilst minimizing collateral damage which itself enabled military operations to fit with the tone of wider political discourse concerning harm and suffering during war.[160]

In the 1970's and 1980's there was, what is commonly referred to as, a Revolution in Military Affairs [RMA]. This discourse conditioned how precision was understood during the Vietnam war, but was also to affect future discourse on war. For the technological developments that resulted in precision weapons,

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[158] *Ibid.* p.118

[159] *Ibid.* p.118; Porter, M. (1973) *Linebacker: Overview of the First 120 Days*, HQ PACAF, Directorate of Operations Analysis, p.9

[160] Digby, J and Dudzinsky, S.J. (1976) *Qualitative Constraints on Conventional Armaments: An Emerging Issue*, Santa Monica: RAND Corporation, p. 42.

and the ability to strike specific targets, resulted in discourse on war focusing on the individual. The RMA was born out of a desire to overcome the strategic reality that the United States and Russia both found themselves in. Both had nuclear weapons which made them each invulnerable to attack which itself made war unusable as an instrument of policy.[161] If war between the two rivals was impossible because of mutually assured destruction, and if war was a tool of statecraft that states were not willing to forgo, then the U.S. and Russia needed to find a way in which to use force but without the chance of escalating tensions irreparably. The U.S. consequently sought the ability to use force in a limited manner but with maximum efficiency, which is what spurred the development of precision strike capability.[162] The strategic climate wasn't the only consideration motiving the RMA, for the U.S. also had to make the use of conventional weapons morally and politically acceptable to their public. The U.S had to minimise collateral damage and reduce the risks to those who fired the weapons to prevent combat lives from being lost, as "war that could actually be fought had to be as bloodless, risk-free and precise as possible".[163] If it wasn't there was a risk, given the strategic climate at the time, that any use of force could escalate to the nuclear level which would result in mutually assured destruction.

The RMA was motivated by a desire to achieve superiority over an adversary and minimise the risk to one's own forces, the fact these efforts minimised civilian casualties might have been a positive by-product. Based on this understanding of the RMA precision again takes on a strategic conception rather than a

[161] Ignatieff, (2000a) p. 165.
[162] Mahnken, T. (2011) "Weapons: The Growth & Spread," *Daedalus,* Vol.140, Issue 3, Summer 2011, p. 45-57.
[163] Ignatieff, M. (2000) *Virtual War. Kosovo and Beyond*, New York: Picador, p. 164.

necessarily humane one. Nevertheless, as a consequence of the experience of the war in Vietnam the American public developed an unwillingness to accept vast losses of blood for causes that were not intimately tied to national interests.[164] This sentiment speaks not only to the idea of remote warfare, which is ever present in the contemporary use of armed drones, but also marks a turning point for the political, military and civilian perception of conflict and specifically the risks Western forces are willing to accept in order to achieve military objectives. This turning point was characterised by the melding of a desire to exert overwhelming force in such a way that it is able to thwart the will of the enemy with the political sensitivity towards casualties to one's own troops, and also to the enemy's civilians. As one Air Force commander in Vietnam remarked: precision weapons had enabled and will continue to enable the U.S. to "strike point targets in heavily defended zones, using only a few aircraft, with very high probability of success and very low probability of collateral damage".[165] Thereby enabling the use of force to meet the political, legal and other restrictions that are imposed by Western standards of jus in bello, or as Gillespie puts it, precision weapons enable a reliance on air power to overcome the limitations that are imposed on the use of force by the West and its social and political ideas.[166] Precision both reduces the potential harm of war to civilians, whilst at the same time is a method by which the U.S. can use force in new ways in order to maintain adherence to the laws of war.

Having explored what the emergence of viable precision in the Vietnam war was to have on the justification for the use of force,

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[164] Ignatieff, (2000a) p. 188.
[165] Momyer, W. (1978) *Airpower in Three Wars,* Washington D.C: U.S. Government Printing Office, p. 339.
[166] Gillespie, (2006) p.122.

and also considered the technological context within which that war was fought, we now turn to the first Gulf war where precision was to prove to be a key ingredient for both political and military success. During this conflict precision was witnessed on the TV screens of millions of Americans, precision was praised as being the key to protecting civilians whilst achieving military objectives and precision was conditioned and used in the context of risk free warfare.

Chapter Four. The first Gulf War: precision as lethal but ethical

> *As news and, in particular, video accounts of the air war over Iraq reached the rest of the world, a remarkable transformation in popular attitudes towards air power took place. The scepticism, doubts, and outright pessimism that had characterized previous judgments were at once swept away. Pictures of bombs threading their way down ventilator ports, elevator shafts, and bunker doors demonstrated more eloquently than any amount of written analysis how effectively and devastatingly air warfare could strike.*
> United States Air Force report "Reaching Globally Reaching Powerfully", 1991.[167]

> *Gulf lesson one is the value of air power…Our air strikes were the most effective, yet humane, in the history of warfare.*
> President George Bush, 29th May, 1991.[168]

This chapter examines precision during the first Gulf War and how the combination of technological ability, the mediated nature of war through the TV and the concern for preventing civilian casualties saw precision take on the ethical status is enjoys today. The first Gulf War was the first war that saw precision praised as ethical. It was over the skies of Iraq and Kuwait, and in the press conferences in Saudi Arabia, that precision was presented to the world as enabling both the lethal

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[167] USAF. (1991) *Reaching Globally, Reaching Powerfully: The United States Air Force in the Gulf War*, last accessed 16th July, 2018 via:
https://www.globalsecurity.org/military/library/report/1991/
desstorm.htm

[168] Bush, G. (1991) "Remarks at the United States Air Force Academy Commencement Ceremony in Colorado Springs, Colorado, 29 May, 1991", transcript George Bush Presidential Library and Museum, last accessed 15th July, 2018 via:
http://www.presidency.ucsb.edu/ws/index.php?pid=19632&st=&st1

use of force and the protection of non-combatants. In the official discourse surrounding this conflict precision was intimately tied to the principle of distinction, and it is through the praise for precision from both military commanders and official reports that this genealogy now considers how precision was constituted and used.

The first Gulf War, the U.S. Air Force argued, illustrated the revolutionary capacity of precision weapons for "the natural partnership of smart weapons and stealth working together gives the attacker unprecedented military leverage".[169] "Smart weapons", a product of the RMA, were one of the defining features of the war leading to it being described as "the first *hyperwar* in history because of its unprecedented precision bombing".[170] Another aspect stemming from the RMA that transformed the experience and conduct of the war was information technology. The sensors on air craft and weapons systems revolutionised how the commander saw the battlefield, producing reams of data that was to be poured over and fed into strategic decision making. Praise for precision was a significant feature of the official commentary on the first gulf war. The Department of Defense, in its final report to Congress on the conduct of the war, lauded precision weapons for their role in enabling a quick and decisive victory in Operation Desert Storm.[171] Whilst precision weapons were nothing new in 1991, their use surprised much of the American population for they were unaware that such a capability existed let alone that it was

[169] U.S. Department of Defense. (1991) *Reaching Globally, Reaching Powerfully: The United States Air Force in the Gulf War: a report*, last accessed 16th July, 2018 via: https://www.globalsecurity.org/military/library/report/1991/desstorm.htm

[170] Coker, C. (2009) *War in an Age of Risk, Cambridge*: Polity, p. 3.

[171] U.S. Department of Defense. (1992) *Conduct of the Persian Gulf War*, Final Report to Congress, Washington D.C, p. 179.

possessed by the United States military.[172] This surprise was in large part the result of the mediated nature of the conflict, as for the first time Americans could watch a war unfold on their TV screens - in this sense the first Gulf War was the first "TV war".[173] One of the implications of this for the conduct of war, James Der Derian argues, is that "you can no longer do something on the battlefield and expect someone not to see it".[174] The combination of precision weapons and the ability to broadcast your "successes", or hits, on the TV networks enabled the U.S. government to argue that the use of force had been not only lethal and effective but also humane. The concept of precision takes on an ethical aura, whereby it is the only way to use force and adhere to ones values.

The first Gulf War was shaped by the revolution in military affairs and this revolution in turn was "itself informed by American culture, its concepts of war-fighting and its 'strong bias towards techno-centric warfare'".[175] Ignatieff argues that the effect of witnessing "cruise missiles 'turning left at the traffic lights'" ignited within the American, and wider Western, public the idea of war as laser surgery, moreover he argues that this perception of modern war has morphed into a demand for perfection from our technology - and weapons.[176] However the extent to which this demand stems from the U.S. public or what their politicians perceive as being demanded of them remains to be seen. Whilst the first Gulf War had such a monumental effect

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[172] Gillespie. (2006) p. 124.
[173] Kellner, D. (1992) The Persian Gulf TV War, last accessed 25th July, 2018 via: https://pages.gseis.ucla.edu/faculty/kellner/papers/gulfwar6.htm
[174] Der Derian, J. (2009) *Virtuous War: Mapping the Military-Industrial Media-Entertainment Network*, 2nd Edition, New York: Routledge, p. 195.
[175] McDonald, (2017) p. 5; Adamsky, D. (2010) *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel,* Stanford: Stanford University Press, p. 85.
[176] Ignatieff. (2000a) p. 92.

on public perception of how conflicts could be conducted, only around ten percent of the ordinance dropped in the conflict was precision or guided weaponry.[177] Nevertheless, it was the experience of seeing the strikes on TV combined with the minimal losses that resulted in the electorate discovering the "intoxicating reality of risk-free warfare".[178] This has led Christopher Coker to argue that the first Gulf War was "the first conflict of the risk age".[179] This is an age characterised by the fact that the decisive defeat of the enemy is too costly — in gold and blood — meaning that wars today are exercises in consequence management.[180] This idea has gained acceptance amongst the highest levels of the U.S. military as counterterrorism strategies focus on driving violence down to the lowest level in order that local police can manage it.[181]

Risk wars necessitate the *spinning* of the result.[182] This is because the West is less committed to attaining a definitive outcome because the risks involved are too great, meaning that we rely on the "illusion of success" that is made possible by the precise use of force combined with the ability to beam images of war around the world in an instant. The first gulf war can be considered a success because it achieved its limited objectives to repel the Iraqi army from Kuwait, but it fundamentally didn't solve the perceived problem of Saddam because it left him poised at the

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177 Sample, I. (2003) US gambles on a 'smart' war in Iraq, *New Scientist*, last accessed 25th July, 2018 via: https://www.newscientist.com/article/dn3518-us-gambles-on-a-smart-war-in-iraq/
178 Ignatieff. (2000a) p. 168.
179 Coker, (2009) p. 2.
180 *Ibid.* p.102.
181 *See* Goldfein, D. quoted in Zenko, M. (2018) "US lays down the law for war", *The World Today*, Chatham House, last accessed 8th August, 2018 via: https://www.chathamhouse.org/publications/twt/us-lays-down-law-war; Zenko, M. (2018) "US lays down the law for war", *The World Today*, Chatham House, last accessed 8th August, 2018 via: https://www.chathamhouse.org/publications/twt/us-lays-down-law-war
182 Coker, (2009) p. 9.

border to invade Kuwait again in the future.[183] Daniel Bryman observes a similar outcome in his study of Israeli counter-terrorism policy, for he argues that the aim of targeted killing via drone is not to achieve a decisive result, such as the defeat of Hamas, but to disrupt the group so that it is no longer effective.[184] Thus, as McDonald argues, "Israeli targeted killings demonstrate that the utility of targeted killings might be their contribution to political goals by wearing down and disrupting terrorist groups, rather than as a means of decisively defeating them".[185] With the age of TV war, much like in the first Gulf War, the legitimacy of drone warfare is in part predicated upon the ability to beam images around the world and claim victory from even the smallest of tactical operations.

From the outset of the war official discourse was centred on civilian casualty avoidance, with Defense Secretary Dick Cheney saying that the initial targets were chosen for attack to "do everything possible to avoid injury to civilians."[186] The memory of Vietnam lingered, as President Bush vowed that the Gulf War would not become "another Vietnam". He also stated "that casualties will be held to an absolute minimum…and they [U.S. troops] will not be asked to fight with one hand tied behind their back".[187] One sense in which the gulf war was different to Vietnam was in the ability of military commanders to demonstrate that they knew what they were doing, which was

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[183] *Ibid.*

[184] Bryman, D. (2011) *A High Price: The Triumphs & Failures of Israeli Counterterrorism*, Oxford: Oxford University Press, p. 365.

[185] McDonald, (2017) p.107

[186] Rosenthal, A. (1991) *War in the Gulf: The Overview - U.S. and Allies Open Air War on Iraq; Bomb Baghdad and Kuwait Targets*; 'No Choice' But Force, Bush Declares; No Ground Fighting Yet; Call to Arms by Hussein, *The New York Times,* last accessed 15th July, 2018 via: https://www.nytimes.com/1991/01/17/world/war-gulf-overview-us-allies-open-air-war-iraq-bomb-baghdad-kuwaiti-targets-no.html

[187] *Ibid.*

particularly effective when it came to "stating their case to the public and making the war seem winnable."[188] In another sense the ability to view the war from a distance, Hickey argues, implanted in the minds of TV viewers that the gulf war was a "sanitized, 'push button' precision war".[189] This has led others to go further and argue that the gulf war was "a war without the symptoms of war, a form of war which means never needing to face up to war".[190] The mediated nature of the gulf war enabled the U.S. to display to the world its ethical credentials, not least its technological superiority. Precision weapons were presented as a technological fix for ethico-political issues that had years before plagued the U.S. use of force in Vietnam.

Whilst President Bush contrasted the war with Vietnam the evaluative reports provided to Congress from the U.S. military contrasted the bombing campaign in the Gulf War with the strategic bombing that took place during World War Two. In both instances the discourse of precision was similar. In World War Two the language of precision was used but there wasn't the technological ability to strike with the accuracy that would enable small targets to be struck with precision. In the Gulf War precision was praised for its ability to ensure the protection of non-combatants, namely civilians, from the harms of war. As one former Secretary of the Air Force said: "In World War II it could take 9,000 bombs to hit a target the size of an aircraft shelter. In Vietnam, 300. Today [May 1991] we can do it with one laser-guided munition from an F-117".[191] Furthermore, the

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[188] Browne, D. (1991) quoted in Shales, T. "On the Air", *The Washington Post,* last accessed 27th July, 2018 via: https://www.washingtonpost.com/archive/lifestyle/1991/01/31/on-the-air/a6838ebf-d86b-4b69-bb80-d84fcc4a1879/?utm_term=.a9ef14920a71

[189] Hickey, (2012) p. 111.

[190] Baudrillard, J. (1995) *The Gulf War Did Not Take Place,* Sydney: Power Publications, p. 43.

[191] United States General Accounting Office. (1997) *Operation Desert Storm: Evaluation of the Air Campaign*, Report to the Ranking Minority Member, Committee on Commerce, House of Representatives, p. 125.

Air Force itself describes how in the Gulf War the achievement of military targets was possible without "carpet bombing Baghdad or inflicting massive civilian casualties as, say, the bomber raids on Berlin".[192] The progression in precision capability is undeniable, however the direct comparison between the conduct of the Gulf and second world wars is not necessarily one that sustains scrutiny. Not least because the technology available to the U.S. military in both conflicts was vastly different but also because the aims of the conflicts and their wider contexts were different. Furthermore, the contrast between Strategic Bombing and the bombing conducted in the Gulf war belies the fact that it was only in the Kuwaiti theatre that the technology had finally caught up with the doctrine of precision bombing.[193]

The use of precision weapons was noted by the U.S. Defence Department as being one of the factors that helped minimise Iraqi civilian casualties: "Careful targeting and use of PGMs minimized collateral damage and civilian casualties, reflecting US policy that Saddam Hussein and his military machine, not the Iraqi people, were the enemy."[194] Through the practice of minimizing collateral damage the U.S. claims it is able to demonstrate that the Iraqi people were not the enemy. In this sense precision, or "careful targeting", becomes more than just protecting civilians. It is used as a tool to individualize the conflict and to designate who is and isn't the real object towards which force is being exerted. This individualization of war has

[192] USAF. (1991) *Reaching Globally, Reaching Powerfully: The United States Air Force in the Gulf War,* last accessed 16th July, 2018 via: https://www.globalsecurity.org/military/library/report/1991/desstorm.htm
[193] Kelly, M. (2002) "The American Way of War," *The Atlantic*, last accessed 15th July, 2018 via: https://www.theatlantic.com/magazine/archive/2002/06/the-american-way-of-war/302513/
[194] U.S. Department of Defense. (1992) *Conduct of the Persian Gulf War,* Final Report to Congress, Washington D.C, p. 189.

become more pronounced through the use of armed drones, given their ability to linger and the technical ability of the weapons to strike at individuals, that makes precision a powerful discursive device demonstrating the commitment of the U.S. to protect civilians.

However, despite not regarding the Iraqi people as the target the report laments the "regrettable" civilian casualties that did nevertheless occur during the conflict and focuses on one of the "more publicized" incidents where a bomb shelter containing hundreds of civilians was bombed. The shelter became a target because intelligence reported that the bunker had been activated as a military communications post, however despite further intelligence assessments being carried out by the U.S. they failed to identify the presence of civilians in the bunker. The report lays the blame with the Iraqi authorities who had allowed civilians to enter the bunker, just as it also lays the blame for civilian deaths with the Iraqi armed forces. It argues that despite the U.S. "conducting the most discriminate military campaign in history", the Iraqi government located military assets close to civilian areas in order to use the civilian losses as evidence that the U.S. was not conducting the war as they claimed to be - in a discriminate manner.[195] Such incidents were used by the U.S. government as learning exercises where the loss of civilian life "led to a review of targeting policies, which were determined to be proper". Despite this being a case of intelligence failure, the targeting processes that in large part rely upon intelligence gathering and assessment were still deemed to have been operating correctly and in need of no modification in light of this event. A similar argument is made when drone strikes result in civilian casualties, for whilst the intelligence machinery is so

[195] Human Rights Watch. (1991) *Needless Deaths in the Gulf War*, New York: Human Rights Watch.

essential to preventing the loss of civilian life it is the precision of the strike that is praised whilst the loss of civilian life is lamented. Praise for precision enables the U.S. government to gloss over the trickier questions of why intelligence failed and how to prevent this in the future.

The report also speaks of the additional requirements that precision weapons bring, for "it is no longer enough for intelligence to report that a certain complex of buildings housed parts of the Iraqi nuclear program; targeteers now want to know precisely which function is conducted in which building, or even in which part of the building, since they have the capability to strike with great accuracy".[196] The melding of information and precision capability demand that intelligence not merely provide details of the target, but give exceedingly intricate details of the intended target. Nevertheless, despite high levels of precision it is still hard, if not impossible, for the U.S. military to know the levels of damage inflicted upon the enemy. Yet this limitation is off set by the fact that no "American commander has had more information available about the battlefield and enemy forces than the commanders of Operation Desert Storm."[197] There is a juxtaposition at work here for on the one hand we have the government praising the precision of a strike, even when it turns out to have resulted in the preventable killing of many civilians, whilst on the other hand despite the reams of information generated from the battlefield the commander is still unable to identify all those who are killed as a result of strikes.

The war was not just a TV war in the sense that viewers got to see the conflict up close, but it was also a TV war in the sense

[196] U.S. Department of Defense. (1992) *Conduct of the Persian Gulf War,* Final Report to Congress, Washington D.C, p. 30.
[197] *Ibid.* p. 167.

that "personalities" were given centre stage. One such personality to emerge from the war was that of General Norman Schwarzkopf, who was hailed as a "captivating performer", his personality and enthusiasm was tailor made for live broadcast to millions of TV sets across the world.[198] Upon his death in 2012 he was lauded a one of the most acclaimed military heroes since Eisenhower and MacArthur.[199] He was described as being "barely able to contain himself" as he described the "'remarkably light' casualties, [and] said his troops were doing 'a great job'[claiming a] 'dramatic success'".[200] However, despite the enthusiasm for the technological capability that enabled "dramatic success", without the cost of civilian lives, the reality was that the precision [and non-precision] strikes caused great harm to the Iraqi economy.[201] The repeated claims of only targeting military targets is brought into question when you consider that Iraqi national infrastructure didn't only support the Iraqi military, but also - of course - the Iraqi people themselves. Thus, for some the culpability of the military commanders and civilian leaders who directed the war lies not that they fought the war in the only way they knew, but rather in the way they "presented the bombing as a clean and chaste exercise, as if to soothe the consciences of the people back home or perhaps their own."[202]

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198 Shales, T. (1991) "On the Air", *The Washington Post*, last accessed 27th July, 2018 via: https://www.washingtonpost.com/archive/lifestyle/1991/01/31/on-the-air/a6838ebf-d86b-4b69-bb80-d84fcc4a1879/?utm_term=.a9ef14920a71

199 McFadden, R. (2012) "Gen. H. Norman Schwarzkopf, U.S. Commander in Gulf War, Dies at 78", *The New York Times,* last accessed 16th July, 2018 via: https://www.nytimes.com/2012/12/28/us/gen-h-norman-schwarzkopf-us-commander-in-gulf-war-dies-at-78.html

200 Apple, R. W. (1991) "The General Tries Not to Seem Too Confident", *The New York Times*, last accessed 27th July, 2018 via: https://timesmachine.nytimes.com/timesmachine/1991/02/25/111891.html?action=click&contentCollection=Archives&module=LedeAsset&region=ArchiveBody&pgtype=article&pageNumber=14

201 Ignatieff, M. (2000b) "The New American Way of War", *The New York Review of Books*, 47:12.

202 Draper, T. (1992) "The True History of the Gulf War", *The New York Review of Books,* 39:3.

Having explored how precision made the use of force more lethal but also more humane in the first Gulf War, we now turn to consider precision in contemporary discourse on drone warfare. Precision is used by the U.S. government to justify the use of drones over other modes of warfare, often precision is conditioned by a medical discourse that describes drone strikes as surgical and clean. Furthermore, precision enables the government to lament civilian casualties when they do occur as "accidents" and unintentional. As a consequence of precision being praised as ethical by the government discourse on civilian casualties is forced into a debate about numbers, where casualty statistics are hotly disputed. This results in the U.S. government profiting from the lack of focus on other ethico-political issues at stake in drone warfare more broadly and targeted killing specifically.

Chapter Five. Drone warfare

> *A hallmark of our counterterrorism efforts has been our ability to be exceptionally precise, exceptionally surgical and exceptionally targeted in the implementation of our counterterrorism operations…all of our efforts, counterterrorism efforts, are designed with precision as an essential component.*
> White House Press Secretary, Jay Carney, 31st January, 2012.

> *What I can say with great certainty is that the rate of civilian casualties in any drone operation are far lower than the rate of civilian casualties that occur in conventional war.*
> President Barack Obama, remarks at the University of Chicago Law School, 8th April, 2016.

> *"The Obama administration's assumption that drones cause less collateral damage than piloted aircraft is simply untrue".*
> Zenko and Wolf, "Drones Kill More Civilians Than Pilots Do", Foreign Policy, 25th April, 2016.

This chapter serves as the final episode in this genealogy of precision, and it considers precision in the context of drone warfare. Precision was, as the above quotes demonstrate, at the centre of debate concerning the Obama administration's use of force in counterterrorism operations. The U.S. bases its overarching defence of the use of armed drones for targeted killings in the claim that they are more precise relative to previous military campaigns.[203] Precision shall be investigated in this chapter through the justifications and public statements made by the Obama administration in relation to drone warfare,

[203] McDonald, (2017) p. 202.

more specifically the use of drones for targeted killings. The U.S. government was at pains to underline the fact, as they saw it, that they used force in a surgical, targeted and precise manner. In fact the "premium" that the U.S. put on protecting human life was something top Obama officials felt distinguished the U.S. use of force from that of other states.[204] The precision discourse arose out of a desire for the Obama administration to distinguish itself from its predecessor administration, and to heed the mounting pressure emanating from the public discourse on drones that was denied official recognition for quite some time.[205]

In 2011 John Brennan, in his speech launching the new National Strategy for Counterterrorism, outlined how the administration sought to restore a positive vision of American leadership in the world. This is a reference to the criticisms that were levelled against the Bush administration in their conduct of the war on terror up until that point. The legal basis upon which the U.S. was conducting its counterterrorism operations, and the policies and practices that were central to that previous strategy — torture, rendition, use of Guantanamo Bay — were all points of criticism from the perspective of American moral and legal leadership in the world.[206] Precision was seen as an antidote to these criticisms. Rather than defining counterterrorism efforts as a "boundless 'global war on terror"' Obama argued that these

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[204] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Centre, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

[205] Boyle, (2015) p. 105.

[206] President Obama said that in the early stages of the war on terror America compromised its values through the use of torture, rendition etc. which ran counter to the rule of law. *See* Obama, B. (2013) Remarks by the President at the National Defense University, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2013/05/23/remarks-president-national-defense-university

efforts should be seen as "a series of persistent, targeted efforts to dismantle specific networks of violent extremists that threaten America".[207] Consequently precision was to play a significant part in this new counterterrorism strategy. Furthermore, Brennan underlined that the most powerful tool the U.S. had to combat terrorism was the "values and ideals that America represents to the world".[208] Precision was imbued with its ethical content by the Obama administration, for the precision capability afforded by armed drones enabled the administration to give a physical reality to the values their use of force was guided by. The killing of individuals, individuals who were affiliated with al Qaeda and its associates, was ethical because inherent in precision was a discriminating capability that ensured the U.S. only killed those it intended to.

The precision discourse was somewhat forced into existence. In order for President Obama to fulfil some of his election pledges, which included ending the wars in Afghanistan and Iraq and the closing of Guantanamo Bay, he needed to radically overhaul American counterterrorism operations. The government chose to adopt a light-footprint approach which has at its core the concept of remote warfare, a concept that is characterised by amongst other things the use of armed drones. As a consequence of these policy decisions the public discourse on drone strikes, which were at first denied official recognition by

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[207] *Ibid.*

[208] Brennan, J. (2011) Remarks of John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, on Ensuring al-Qa'ida's Demise — As prepared for Delivery, The White House, last accessed 4th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2011/06/29/remarks-john-o-brennan-assistant-president-homeland-security-and-counter; *see also* Brennan, J. (2011) *Strengthening our security by adhering to our values and our laws*, Office of the Press Secretary, The White House, last accessed 14th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2011/09/16/remarks-john-o-brennan-strengthening-our-security-adhering-our-values-an

the Obama administration, was dominated by the media and other interested groups. This led to the difficult position for some overseas U.S. diplomats who were not permitted to publicly recognise a policy of the United States that was being plastered over newspapers.[209] This then led to academics calling for the government to provide more details, and transparency, on the issue of drone strikes for "the more credible will be its [the U.S. governments] claims about the accuracy of its factual determinations and the soundness of its legal ones".[210] As a result of this the Obama administration felt compelled to enter the drone discourse in order to dispel the misconceptions it saw being perpetuated.[211]

The constitution of precision in drone warfare

Precision is closely tied to accuracy and targeting in discourse on drone warfare. When President Obama first publicly referenced drone strikes his justification for them came in the form of their precision capability, as he defended them by saying "they have not caused an unusual number of civilian casualties" and that they are "precise" and part of a "targeted, focused effort" aimed at al Qaeda and its affiliates.[212] In 2012 President Obama made

[209] Former U.S. official quoted in Schwartz, M. (2018) "John Brennan, Former C.I.A. Spymaster, Steps Out of the Shadows", *The New York Times*, last accessed 8th August, 2018 via: https://www.nytimes.com/2018/06/27/magazine/john-brennan-president-trump-national-security-state.html

[210] Goldsmith, J quoted in Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Center, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

[211] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Centre, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

[212] Hill, K. (2012) "Obama Talks Drones And Wedding Anniversary Plans In First Presidential Google+ Hang-Out", *Forbes*, last accessed 6th August, 2018 via:

one of his most widely remarked upon statements concerning drone strikes: "I want to make sure that people understand: actually, drones have not caused a huge number of civilian casualties. For the most part, they have been very precise precision strikes against al-Qaeda and their affiliates". However, the interesting thing is that whilst precision is the focus, targeting isn't — it is precision that serves as the main justification for the use of drones. But precision is simply just when ordinance hits the intended target, the target that has been aimed at - precision is a quality of being accurate. It is here that Zehfuss' critique comes into play, for ethics can't just mean killing people who we intend to kill, for that overlooks the ethico-political issue of what it means to "mean to kill" those who we do.[213] Furthermore, those deemed "affiliates" by the U.S. government are not precisely defined.[214] As a result of this imprecision in definition all military aged males in a strike area are liable to attack, meaning that precision only extends as far as the weapon system itself. Precision, it appears, does not stretch to the architecture of precision, the decision making process the consequence of which produces a target. In a way the precision of the weapon system is left to do all the ethical heavy lifting in justifications for the use of armed drones.

In 2016 President Obama referenced the mission that killed Osama Bin Laden. In this operation not only was Bin Laden killed but so too were some members of his family. This operation wasn't conducted with an armed drone but by a special forces unit, nevertheless it was described by President Obama as a "precise" mission. Having said this President

https://www.forbes.com/sites/kashmirhill/2012/01/30/video-chatting-with-obama-the-first-president-to-host-a-google-hang-out/#1e66b01d65e1

[213] Zehfuss, (2010) p. 561-562.

[214] Boyle, (2015) p. 114.

Obama goes on to say that if you were to also include the family members killed in the casualty count then you would rightly conclude that "there was actually a pretty high civilian casualty rate for their extraordinarily precise mission."[215] It is this contradiction that lies at the heart of the Obama discourse on precision. For on the one hand the operation was targeted and resulted in no civilian casualties, outside of the aforementioned family members. However, by President Obama's own admission the civilian casualty count was high despite the precision nature of the operation. There appears to be a semantic confusion surrounding the use of precision in discourse on drone warfare.[216] This was also made apparent when Brennan said:

> "With the unprecedented ability of remotely piloted aircraft to precisely target a military objective while minimizing collateral damage, one could argue that never before has there been a weapon that allows us to distinguish more effectively between an al-Qaida terrorist and innocent civilians."[217]

It can be argued that the linking of precision with distinction perpetuates a misunderstanding of precision. The misunderstanding is that precision enables distinction, when in fact precision enables hitting the target that has been aimed at — it does not necessarily enable distinction. Precision is sold as this tool that minimizes risk to civilians, and as such it becomes "hard to

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[215] Obama, B. (2016) Remarks by the President in a Conversation on the Supreme Court Nomination, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2016/04/08/remarks-president-conversation-supreme-court-nomination

[216] Chamayou, (2015) p. 141.

[217] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Centre, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

imagine a tool that can better minimize the risk to civilians than remotely piloted aircraft."[218] Yet it is important to distinguish the weapon from the policy. By this argument you can be pro-drone, or pro precision weapons, and anti-targeted killing. However, when the Obama administration praises precision in this way, by conflating it with distinction, they are establishing rules of the precision discourse which result in the distinction part being subsumed into this easily identifiable ethical weapon. However, distinction is really the crux of the matter here, for you could have a precision strike that kills someone whom isn't actually a threat to the U.S. Thus, by focusing on the precision-distinction nature of drone strikes the U.S. has a get out of jail free card when confronted with, often disputed, civilian casualty statistics.

A surgeon visiting Iraq after the first gulf war remarked that the air strikes must have been conducted with "neurosurgical precision".[219] The use of medical language to describe U.S. air strikes has been reproduced in the precision discourse related to drone strikes as Brennan stated in 2011 that "going forward, we will be mindful that if our nation is threatened, our best offense won't always be deploying large armies abroad but delivering targeted, surgical pressure to the groups that threaten us".[220] White House Press Secretary Jay Carney later remarked that a hallmark of the U.S' counterterrorism efforts was their ability to be "exceptionally precise, exceptionally surgical and

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[218] *Ibid.*

[219] USAF. (1991*) Reaching Globally, Reaching Powerfully: The United States Air Force in the Gulf War*, last accessed 16th July, 2018 via: https://www.globalsecurity.org/military/library/report/1991/desstorm.htm

[220] Brennan, J. (2011) Remarks of John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, on Ensuring al-Qa'ida's Demise — As prepared for Delivery, The White House, last accessed 4th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2011/06/29/remarks-john-o-brennan-assistant-president-homeland-security-and-counter

exceptionally targeted".[221] The surgical metaphor became a key ingredient for the justification of drone strikes, especially those conducted by the CIA in places such as Pakistan, Yemen and Somalia, places where the U.S. is not engaged in any identified armed conflict but where it is targeting al Qaeda and their associates.[222] However, the surgical metaphor didn't arise solely in the context of the justifications for the use of armed drones, for the second core competency of the U.S. Air Force is Precision Engagement, which is "the 'scalpel' of joint service operations — the ability to forgo the brute force-on-force tactics of previous wars and apply discriminate force precisely where required".[223] Medical discourse is invoked in order to convey the idea that the military only conducts operations with the highest level of efficiency, and to underline the notion that nothing more than the military objective is sought. However, whilst the surgeon might occasionally make a mistake which results in the death of their patient, they are never going to arbitrarily kill all those in the operating theatre with his scalpel.[224] The surgical metaphor is simply for public consumption, for it enables the government to condition the discourse such that the contained

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[221] Office of the Press Secretary. (2012) Press Briefing by Press Secretary Jay Carney, 1/31/12, The White House, last accessed 6th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2012/01/31/press-briefing-press-secretary-jay-carney-13112

[222] A senior official said, in the context of the CIA seeking to expand the drone campaign in Yemen, that "there is still a very firm emphasis on being surgical and targeting only those who have a direct interest in attacking the United States". *See* Senior White House official quoted in Miller, G. (2012) "CIA seeks new authority to expand Yemen drone campaign", The Washington Post, last accessed 6th August, 2018 via: https://www.washingtonpost.com/world/national-security/cia-seeks-new-authority-to-expand-yemen-drone-campaign/2012/04/18/gIQAsaumRT_story.html?utm_term=.d14072a43ff7

[223] U.S. Department of Defense (1997) *Air Force Basic Doctrine: Air Force Doctrine Document 1,* Maxwell Air Force Base, AL: Air Force Doctrine Center, pp.29–30.

[224] Friedersdorf, C. (2012) "Calling U.S. Drone Strikes 'Surgical' Is Orwellian Propaganda", *The Atlantic*, last accessed 5th August, 2018 via: https://www.theatlantic.com/politics/archive/2012/09/calling-us-drone-strikes-surgical-is-orwellian-propaganda/262920/

and controllable world of the surgeon is mirrored onto counterterrorism operations.

The surgical metaphor has also been explicitly tied to the protection of civilians, as Brennan stated that "it's this surgical precision, the ability, with laser-like focus, to eliminate the cancerous tumour called an al-Qaida terrorist while limiting damage to the tissue around it, that makes this counterterrorism tool so essential".[225] As a consequence of the surgical precision of drone strikes they are not just ethical but also necessary, for they are designed to only target that which threatens the rest of the body (politic). The surgical metaphor suggests that the environment within which these strikes are occurring is sterile and clean, much like a hospital operating theatre. This leads to the assumption that drone strikes can be conducted not just with *minimal* civilian casualties but with *no* civilian casualties. In 2011 Brennan claimed that because of the technology available to the U.S. not a single civilian death had occurred in the previous year from a drone strike.[226] This claim is based on the fact that the U.S. government considers all military aged males in the blast area to be combatants unless it can determine after the fact that they are innocents.[227] Various drone related groups have refuted this claim, with the Bureau of Investigative Journalism (TBIJ)

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[225] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Centre, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

[226] Woods, C. (2011) "US Claims of 'No Civilian Deaths' are Untrue", *The Bureau of Investigative Journalism*, last accessed 4th August, 2018 via: https://www.thebureauinvestigates.com/stories/2011-07-18/us-claims-of-no-civilian-deaths-are-untrue

[227] Bryman, D. (2013) "Why Drones Work: The Case for Washington's Weapon of Choice", *Brookings Institution,* last accessed 16th August, 2018 via: https://www.brookings.edu/articles/why-drones-work-the-case-for-washingtons-weapon-of-choice/; Becker, J and Shane, S. (2012) "Secret 'Kill List' Proves a Test of Obama's Principles and Will", *The New York Times*, last accessed 11th September, 2018 via: https://www.nytimes.com/2012/05/29/world/obamas-leadership-in-war-on-al-qaeda.html

calling it "untrue". They found this claim on leaked intelligence documents obtained by news agency McClatchy, where analysis shows that at least 265 of the 482 people killed by the CIA during the 12 month period ending in Sept 2011 "were not senior al Qaeda leaders but instead were 'assessed' as Afghan, Pakistani and unknown extremists". Furthermore, during the same period intelligence reports claim that a single civilian was killed, on the 22nd April, 2011, in a strike in North Waziristan.[228] This was two months prior to Brennan's claim. When TBIJ presented its own findings on civilian deaths in the Waziristan region of Pakistan — including a list of 45 civilians that had been killed by drone strikes — a U.S. official stated that "the most accurate information on counter-terror operations resides with the United States".[229] The United States government believes that it is the only one who knows exactly how many civilians are killed in drone strikes, yet many of those who are recorded as being killed are unknown enemy insurgents. Thus, the government either doesn't know precisely who is killed, or their view of who an insurgent is very imprecise indeed.

The U.S. government claims that the use of armed drones for targeted killing results in minimal civilian casualties. However, the NGOs and drone interest groups such as Reprieve and Stanford/NYU claim that the civilian casualty figures that the U.S. releases are not accurate, that more civilians die as a consequence of drone strikes. Precision is a myth, and the

[228] Landay, J. (2015) "Obama's drone war kills 'others,' not just al Qaida leaders", *McClatchy Newspapers*, last accessed 4th August, 2018 via: https://www.mcclatchydc.com/news/nation-world/world/article24747826.html

[229] Searle, J and Woods, C. (2015) "Secret US Documents Show Brennan's 'No Civilian Drone Deaths' Claim Was False", *The Bureau of Investigative Journalism*, last accessed 6th August, 2018 via: https://www.thebureauinvestigates.com/stories/2013-04-11/secret-us-documents-show-brennans-no-civilian-drone-deaths-claim-was-false

narrative that supports claims to precision are a lie they argue.[230] They substantiate this claim against the government by producing independent civilian casualty assessments of particular strikes, however these figures are disputed by the government. This, combined with the government conflating precision and distinction, closes down debate on the central the real issue — concerning who is a legitimate target and how they have come to be considered as such. This results in the NGOs and drone interest groups having to focus on statistics. As Chamayou argues, once the idea of drones as a more precise weapon is implanted in the minds of the people the discourse on fundamental issues falls by the wayside and instead focus is placed on statistics. This has the effect of making critics of drone strikes, who have to concede in principle that the drone can be more ethical than other weapons, to prove with numbers that in fact drones are unethical.[231] Nevertheless, Reprieve has highlighted that many civilians get killed in drone strikes.[232] Stanford and NUY have also highlighted the terrorising effects that drones have on those who live under their all seeing eye.[233] They challenge the narrative that drone strikes involve minimal downsides and limited collateral damage. They focus not only on the civilian casualties that result from drone strikes — which drawing on data from TBIJ, New America and the Long War Journal they conclude are underestimated/reported by the Obama administration — but also on the destruction to property, broad impacts on daily life, education and mental health. The "fear of death or injury", whilst not necessarily being

[230] International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law). (2012) *Living Under Drones: Death, Injury, and Trauma To Civilians From US Drone Practices in Pakistan,* p. v.
[231] Chamayou. (2015) p.146-147
[232] Reprieve. (2014) *You Never Die Twice: Multiple Kills in the US Drone Programme*, London, p. 2.
[233] International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law). (2012) *Living Under Drones: Death, Injury, and Trauma To Civilians From US Drone Practices in Pakistan,* p. 147-152.

prohibited by the laws of war, is produced by the use of drones at a distance.[234] Which serves to highlight the imprecision of drone strikes.

Obama directly referenced the fact that much of the criticism of drone strikes stems from disputed statistics on who is killed as a result of drone strikes. But he also argues that "the terrorists we are after target civilians, and the death toll from their acts of terrorism against Muslims dwarfs any estimate of civilian casualties from drone strikes."[235] The terrorists actions are directly contrasted with those of the U.S., where the implication is that even if civilians do die as a result of a drone strike we can rest assured that the use of force is more discriminate than the terrorists use of force. Concerning the mis-match between official and independent civilian casualty statistics, Brennan admitted in 2018 that the official numbers might not be exact and justified this by saying that "it's hard to convince people of the care that is taken, of the anxiety, of the rigor that is applied. Of the deep, deep consideration that is given to these decisions. Of the agony that decision makers or operators go through."[236] Whilst it is difficult to argue against this sentiment, that the taking of life involves deep thought and consideration, it does not mitigate the fact that on the one hand the government claims to be the only reliable source of civilian casualty figures whilst on the other it does not know precisely who has been killed. The discourse on statistics is futile and is perpetuated perhaps

[234] McDonald, (2017) p. 161.
[235] Obama, B. (2013) Remarks by the President at the National Defense University, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2013/05/23/remarks-president-national-defense-university
[236] Schwartz, M. (2018) "John Brennan, Former C.I.A. Spymaster, Steps Out of the Shadows", *The New York Times,* last accessed 8th August, 2018 via: https://www.nytimes.com/2018/06/27/magazine/john-brennan-president-trump-national-security-state.html

because it serves as a convenient distraction from other ethico-political issues at stake with drone strikes.

The discourse draws focus away from other ethico-political issues at stake with drone strikes

Armed drones, it appears, offer an alluring and simple technical fix to the ethico-political problem that has plagued military commanders and politicians for centuries in war: of "the need to distinguish between combatants and non-combatants on the battlefield."[237] The precision discourse of the Obama administration focuses on the protection of civilians, and the efforts that the U.S. goes to protect civilians in war zones. The use of the category of civilian when talking about the precision of drones is a way for the administration to craft the discourse as one centred around the idea that the U.S., in using force in counterterrorism operations, seeks to minimise civilian casualties at all times. This is in order for the focus to be drawn away from other issues, such as the jus ad bellum reasons for the drone strike, and issues concerning intelligence gathering methods and analysis. When a drone strike does result in civilian casualties they are described by the Obama administration as "accidents" and "regrettable", as was the drone strike that killed American and Italian citizens in 2015.[238] Throughout the discourse on precision there is a constant reference to precision being in service to protecting civilians in the local area where drone strikes occur. On the 23rd May, 2013, in his drone speech to the National Defense University Obama proclaims that

[237] Gregory, T. "Targeted Killings: Drones, non-combatant immunity, and the politics of killing", *Contemporary Security Policy*, 38:2, p. 212.
[238] Obama, B. (2013) Remarks on the Deaths of Warren Weinstein and Giovanni Lo Porto, The American Presidency Project, last accessed 8th August, 2018 via: http://www.presidency.ucsb.edu/ws/index.php?pid=110066&st=&st1

before a strike gets approval there has to be "near certainty that no civilians will be killed or injured" which he regards as "the highest standard we can set."[239] This idea of near certainty was something that he repeated again in 2016 when answering a question about the morality and legality of drone strikes.[240] This focus on civilians is interesting because it seeks to demonstrate to the American public, but also perhaps the citizens of Pakistan, Somalia, Syria, Afghanistan, Iraq and Yemen, that they are not the targets of drone strikes. Whilst on the other hand the terrorists are the ones who indiscriminately kill civilians and have no regard for the innocent. This has links to the "just war" discourse and contrasts with the idea of the "unjust" terrorist that permeates the wider discourse on the war on terror.

The deaths of Warren Weinstein and Giovanni Lo Porto by drone strike in 2013 is regarded by some as the most famous case when a drone strike went wrong.[241] The deaths of the American and Italian hostages held by ALQ were the result of intelligence failures. Despite this being described as an "accident" and deeply "regrettable" by President Obama, he goes onto the use sterile legal language to justify the strike.

> "This operation was fully consistent with the guidelines under which we conduct counterterrorism efforts in the

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[239] Obama, B. (2013) Remarks by the President at the National Defense University, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2013/05/23/remarks-president-national-defense-university

[240] Obama, B. (2016) Remarks by the President in a Conversation on the Supreme Court Nomination, Office of the Press Secretary, Washington D.C., last accessed 8th August, 2018 via: https://obamawhitehouse.archives.gov/the-press-office/2016/04/08/remarks-president-conversation-supreme-court-nomination

[241] Schwartz, M. (2018) "John Brennan, Former C.I.A. Spymaster, Steps Out of the Shadows", *The New York Times,* last accessed 8th August, 2018 via: https://www.nytimes.com/2018/06/27/magazine/john-brennan-president-trump-national-security-state.html

> region…we believed that this was an Al Qaida compound, that no civilians were present, and that capturing these terrorists was not possible."[242]

Despite the intelligence assessment that there were no civilians Obama blames the "fog of war", saying that because of this fog deadly mistakes can occur. When civilians are killed it is an "accident" on account of the "extraordinary precautions" that the US has taken.[243] With the emphasis being on the protection of civilians in discourse on precision the Obama administration is able to draw the focus away from other issues towards ones that are easy for them to justify and provide answers for. For example, the focus on civilians, whilst being necessitated some might argue by the restraints on the use of force — principally those of distinction and proportionality which undoubtedly refer to civilians in war — enables the administration to contrast the terrorist who seeks to kill civilians indiscriminately with the American military that seeks to protect and not kill civilians. In focusing on precision and its benefits for civilians the administration is able to side-step awkward questions about why civilian casualties are being caused. Just because a precision weapon is being used does not mean that there won't be any civilian casualties. However, because a significant amount of the legitimacy of the use of drones is bound up in their precision capabilities, talk of civilian casualties are always accidents. The couching of civilian deaths in the language of accident and regret enables the administration to side-step the sticky issue of intelligence failures. Thus, whilst the administration wants

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[242] Obama, B. (2013) Remarks on the Deaths of Warren Weinstein and Giovanni Lo Porto, The American Presidency Project, last accessed 8th August, 2018 via: http://www.presidency.ucsb.edu/ws/index.php?pid=110066&st=&st1

[243] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Center, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy

precision to be bound up with the protection of non-combatants, it is also the case that intelligence is essential to any precision strike not resulting in civilian casualties.

In this sense then the use of a precision weapon is beside the point, for the architecture of precision — the intelligence that provides a basis for the strike occurring — is the fundamental piece of the puzzle that ensures that civilians don't get killed. As Philip Alston has argued, "the precision, accuracy and legality of a drone strike depend on the human intelligence upon which the targeting decision is based".[244] Brennan himself attested to the "high degree of confidence" that the U.S. intelligence services have to determine that a target is in fact a member of al Qaeda.[245] This warrants a closer look, for despite the armed drone having a multitude of sensors, an ability to loiter and precision weapons, there is one seemingly fatal flaw to precision. As Lieutenant General David Deptula put it, with the vast increase of battlefield data that new technologies enable the U.S. is "swimming in sensors and drowning in data".[246] Thus, the "fog of war" that is often alluded to when mistakes happen in war does not appear to adequately account for the technological problems that are created by the architecture of precision strike weapons. For whilst a weapon can be aimed at a particular target, and that weapon be released and hit the designated target, the thing that is going to have a significant bearing on whether or

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[244] Alston, P. (2010) UN Special Rapporteur on extrajudicial, summary, or arbitrary executions, *Study on Targeted Killing*, Human Rights Council, UN Doc A/HRC/14/24/Add.6; *see also* Mayer, J. (2009) "The Predator War", *New Yorker* ("The precise video footage makes it much easier to identify targets. But the strikes are only as accurate as the intelligence that goes into them").
[245] Brennan, J. (2012) Transcript of Remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, Wilson Centre, last accessed 6th August, 2018 via: https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy
[246] Deptula, D. Quoted in Drew, C. (2010) "Military Is Awash in Data From Drones", *The New York Times*, last accessed 10th August, 2018 via: https://www.nytimes.com/2010/01/11/business/11drone.html

not civilian casualties occur is the intelligence assessment that facilities that strike in the first place. If therefore the intelligence is flawed or inaccurate there is an opening for civilian casualties to occur. However, it is easier for the Obama administration to only reference the intelligence failure as an accident and not the result of more fundamental flaws in the precision architecture.

Conclusion

This thesis sought to probe the historical emergence of precision in discourse on war, and how this emergence conditions precision in the present. It sought to draw inspiration from the methodology of Michel Foucault and his use of genealogy to trace the emergence of a concept in discourse. This genealogy demonstrates that precision is intimately connected with the principle of distinction. However, what this has meant in rhetoric and practice has not been consistent over the years. Today the norm that non-combatants — namely civilians — should not be targeted in war guides all use of force. The idea of precision, much like distinction, has been a feature of discourse on war for centuries, yet its use has varied over the course of many conflicts and its constitution today is contingent on its history.

One key point that emerges from this analysis is that precision has continuously been invoked when talking about the conduct of war. However, it hasn't been consistently invoked in relation to one idea concerning how war should be conducted. During the Middle Ages precision was arguably a tool of the Church, the institution which determined who or what was a legitimate target for violence. During World War Two precision was invoked as a strategic aim but it didn't translate into reality on the ground, there just wasn't the technological capability for precision to resemble anything like it does today. Moreover, given the circumstances within which the war was being fought — existential crisis — civilians were deemed legitimate targets. It is telling therefore that precision was invoked so steadfastly by U.S. and British commanders. The language of precision enabled moral distance to be established between military commanders and their political masters and the actions they

were undertaking. This also serves to highlight that precision hasn't wholly been constituted by a concern for the protection of civilians.

Nevertheless, since the Vietnam war precision has been conditioned by the norm against targeting civilians. This was made possible through the viability of precision in military operations — the technology was starting to live up to the strategic desire. Other contextual factors like the Cold War and declining public support for wars that put service personnel at risk resulted in the U.S. adopting the use of air weapons to achieve military objectives. From this point onwards precision was praised as ethical. The power of the precision discourse from Vietnam onwards has been such that the U.S. has always been able to claim that violence has been used in the most discriminating of ways. It is in this sense the use of force is said to be ethical. However, as Zehfuss argues, this only means that it is ethical to kill whom you mean to kill. It does not come near to answering the tricky ethico-political questions concerning what it *means* to mean to kill someone.[247] The precision discourse that the U.S. government perpetuates and engages in focuses debate on the contested issue of civilian casualty statistics. It does this by setting the terms of the debate: a debate steeped in the language of the surgical, the wise and casualty free. These boundaries of the discourse make it difficult for critics to argue against the presumed ethicality of armed drones, for they are forced to refute numbers with numbers all the while speaking the language of surgical precision.

Precision isn't just constituted by the values led U.S. discourse but also by the political and policy environment within which

[247] *See* Zehfuss, (2011).

warfare is being conducted today. Today the U.S. uses force, especially in counter-terrorism operations, in a risk-free way through armed drones and special forces. As a consequence of the Obama administration policy of light-footprint warfare the armed drone has become the weapon of choice for U.S. counterterrorism operations.[248] This has removed the soldier from the battlefield and arguably resulted in risk-transfer to civilian populations in the affected areas.[249] Whilst it has always been the imperative of the commander to seek to ensure force protection, so long as the operation does not suffer, some feel uneasy with the level of asymmetry evident in drone warfare.[250] It can therefore be posited that precision has in many ways filled the ethical void left behind as the soldier left the battlefield. When there was a degree of mutual risk between combatants there was a certain level of fairness to combat, however with the removal of the soldier there is concern that force may be used by the U.S. with impunity. And it is this impunity that crates moral unease. Praise for the precision of the drone somewhat remedies this as it reconfigures the ethical debate around the discriminating conduct of the war. As a consequence precision does a lot of the ethical heavy lifting in justifications for drone warfare, it plays a fundamental role that often goes unnoticed.

Precision is tied up in a web of military effectiveness, government policy and the laws of war. Praise for precision does produce Western warfare as ethical, as Zehfuss argues, and in doing so it legitimates a mode of warfare that is conducted away from the gaze of much of the Western public. Praise for precision also produces the idea that war can be clean and

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[248] Bryman, D. (2013) "Why Drones Work: The Case for Washington's Weapon of Choice", *Foreign Affairs*, July/August, last accessed 12th September, 2018 via: https://www.foreignaffairs.com/articles/somalia/2013-06-11/why-drones-work

[249] Shaw, (2005) p. 94-95.

[250] Walzer, M. (2016) "Just & Unjust Targeted Killing & Drone Warfare", *Daedalus,* 145:4, p. 12.

surgical, which in turn perpetuates the misconception that only the bad people will get killed and the innocent ones will be spared. War is very rarely this clear cut. Precision has emerged from historical discourse on war as a concept that is imbued with the ideas of hitting the target (efficiency) and the protection of non-combatants (ethicality). Ideas not necessarily in contradiction to one another, for they might even reinforce one another, but also ideas that are not necessarily tied to one another. This emergence hasn't been wholly consistent, however precision has and will continue to play a central role in the U.S. conduct of war. Further engagement with the concept of precision, as well as the use of precision weapons, will do more to further ethical debate on the use of remote warfare means such as armed drones.

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Armed drones are the weapons system of choice for the United States (U.S.) to conduct counterterrorism operations both on and off the battlefield across the world. Their use is largely justified because they enable the commander, through their precision technologies, to distinguish between combatant and civilian. Thereby enabling the U.S. and others to conduct the use of force by adhering to the principles of distinction and proportionality. Precision lies at the heart of the armed drone's ability to conduct justifiable targeted killings. Whilst much has been written about the ethics and legality of targeted killings the concept of precision — central to these debates — has received minimal attention. Consequently, this thesis seeks to place precision at the centre of an analysis that considers how precision has emerged in historical discourse on war, and how this emergence has influenced not only the conception of precision in contemporary discourse on drone warfare but also how precision is used in this discourse.

This thesis has been awarded the first prize of the year 2019 in EuroISME's annual contest for the best student's thesis (Master of Arts). For information about the contest, please visit www.euroisme.eu